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T Z . M O S United Republic of Tanzania  
Ministry of Water, Energy  
and Minerals

Kingdom of the Netherlands  
Ministry of Foreign Affairs  
DGIS

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# Morogoro Domestic Water Supply Plan

Volume VI

Village Data Handbook

Final Report

August 1980

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**DHV**

DHV Consulting Engineers

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# Morogoro Domestic Water Supply Plan

Volume VI

Village Data Handbook

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## 1. INTRODUCTION

The village data handbook provides for each village a number of basic data which are relevant for the planning and technical evaluation of village water supply facilities.

These basic data include:

- General village data
- Water demand and water resources potential
- Hydrological and hydrogeological data
- Present water supply facilities
- Specifications of piped water supply
- Appraisal of present water supply facilities
- Recommendations for improvement of water supply facilities (short, and medium/long term)

The present handbook is based on data collected during the studies and field surveys of the Morogoro Domestic Water Supply Plan, and hence describes the village water supply conditions as prevailing in the period 1977-1979. The output of the Morogoro Wells Construction Project (MWCP) has not been recorded in this review, as this first issue was compiled during the early stages of implementation of the MWCP.

It is suggested to update the village Data Handbook every two years, so that a proper record is kept of new water supply development projects in each and every village.

All data compiled in the village data forms are also contained in numerous Tables as presented in the Volumes II-V of the Final Report of the Morogoro Domestic Water Supply Plan. The village data handbook has been presented as a separate volume with the aim to provide a village-wise summary of these data for the purpose of easy and quick reference. As for practical purposes the forms had to be given a limited size, a more comprehensive description of the various aspects of village water supply is given in the respective Volumes dealing with Water Supply Conditions, Hydrology, Hydrogeology, and Water Supply Development.

## 2. DIRECTIONS FOR USE OF VILLAGE DATA HANDBOOK

The items of the various paragraphs of the village data forms will be briefly discussed below.

### 2.1. General village data

The meaning of most of the data is self explanatory. The Sheet No. refers to the topographical map (scale 1:50,000), published by the Directorate of Overseas Surveys for the United Republic of Tanzania (in general having reference No. D.O.S. 422m Series Y 742), on which the village is located. The coordinates refer to the international global degrees of longitude and latitude. The population and livestock-units are based on the 1978 census data as published by the Tanzanian government. One livestock unit has been defined to represent one head of cattle, or five heads of sheep or goats.

#### Legend:

##### Under settlement pattern:

X = dispersed settlement pattern  
 Y = houses in rows along road  
 Z = concentrated settlement pattern

##### Under village facilities:

PS = Primary School  
 DP = Dispensary  
 RHC = Rural Health Centre  
 GH = Guesthouse  
 RE = Rural electrification  
 AWR = All Weather Road  
 MH = Mission Hospital

### 2.2. Water demand and water potential

The water demand studies have been described comprehensively in Volume II, Water Supply conditions. The demand figures are based on the Maji Department's allowances for population (30 l/c/d) and livestock (22.5 l/L.U./d), whereas some additional allowances have been included for primary schools, dispensaries, and rural health centres. Moreover, all given figures include an allowance of 25% for losses due to leakage and wastage. The population growth has been assumed to be 50% in 10 years and 100% in 20 years, that of livestock 25% in 10 years and 50% in 20 years.

The water demand figures are given in l/s, and are expressed as a continuous water need (i.e. during 24 hours a day).

The water potential, in terms of prospects for water resources development, is based on the general judgement from the detailed hydrological and hydrogeological surveys during the MDWSP.

## Legend:

l/s = litres per second  
 G = Good  
 F = Fair  
 P = Poor

2.3. Hydrological and hydrogeological data

Some elementary hydrological and topographical data are presented for suitable surface water sources. The given low flows (5%-10% year) present the estimated flows at the end of the dry season of a 5% and 10% dry year respectively. The figures have a probability of non-exceedance of 95% and 90% respectively. See also Volume III, Hydrology.

The hydrogeological data summarize the various characteristics of aquifers with shallow, medium depth and deep ground water. See also volume IV, Hydrogeology.

## Legend:

N.I. = not identified  
 m-GL = metres below ground level  
 EC = electrical conductivity  
 mS/m = milliSiemens per metre  
 VLC = vertical lithological composition

2.4. Present water supply facilities

This paragraph summarizes a number of characteristics of water sources which are utilized at present (up to early 1979), and provides data in regard of the most essential water quality parameters of these sources.

## Legend:

## Under Type of Facility:

HDH = Hand-Dug Hole  
 SW = lined Shallow Well  
 SWHP = lined Shallow Well with Handpump

## Under Nos:

M = Many  
 S = Several  
 F = Few

## Under General Appearance:

G = Good  
 F = Fair  
 P = Poor

## 2.5. Specifications of piped water supply

This paragraph gives a short description of the technical layout of an existing piped water supply, based on either pumped or gravity diversion.

Legend:

Under Storage tank:

L = reservoir on ground level

H = reservoir on raiser

Under Additional facilities:

CT = Cattle Trough

CD = Cattle Dip

HC = House Connections

## 2.6. Appraisal of present water supply facilities

The present water supply conditions in each and every village have been assessed in accordance with six assessment criteria. The details of this assessment procedure are described in Volume II, Water Supply Conditions, Chapter 4.

The aggregate assessment score may vary between 6 and 18 points. A higher score indicates more serious constraints for the rural population to meet its domestic water needs.

In accordance with their aggregate score the villages have been classified into three different priority groups, group no. 1 having the highest priority.

## 2.7. Recommendations for improvement of water supply facilities

Separate recommendations have been formulated for short and medium/long term development projects. The short term recommendations have been related to the Government's 1981 targets for rural water supply, and the medium/long term recommendations to the 1991 targets.

The basic philosophy has been to recommend shallow wells for all villages where suitable hydrogeological conditions exist for this system. The shallow wells as constructed by the Morogoro Wells Construction Project are considered to be the most feasible solution to the current problems in rural water supply, in both technical and economical terms. Whenever shallow wells are considered not to be feasible, piped supplies have been recommended. Preference is given to gravity diversion schemes as they require lower operation and maintenance costs.

## Legend:

BH	=	borehole
ED	=	extensive distribution system
EXT	=	extension works
IW	=	intake works
G	=	gravity
PE	=	pumping equipment
RD	=	rudimentary distribution system
REH	=	rehabilitation
RP	=	pumped supply from river
RSWP	=	pumped supply from riverside well
S	=	storage tank
STIP	=	short term implementation programme
SWHP	=	shallow well with handpump
SWP	=	pumped supply from shallow well
T	=	transmission main

BH + 2 km + SRD = borehole supply with transmission main 2 km long, storage tank and rudimentary distributuin facilities.

"Rudimentary distribution facilities" refer to a single community water supply facility close the the storage tank. See Volume V, Figure E 3.3-3. "Extensive distribution facilities" include a number of domestic water points, designed in accordance with the current Maji standards, i.e. 400 people per domestic water point, and an average walking distance of 400 m to a domestic water point.

## 3. ALPHABETICAL LIST OF VILLAGES

<u>Village</u>	<u>Div.</u>	<u>Page</u>
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Bagiro	Mat	19
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Bigwa	Nge	22
Bonye	Bwa	23
Bumu	Mge	24
Bunduki	Mge	25
Bungu	Bwa	26
Bwakira Chini	Bwa	27
Bwakira Juu	Bwa	28
Bwila	Bwa	29
Chabi-Mgogozi	Mik	30
Chabima	Mas	31
Chagongwe	Non	32
Chakwale	Gai	33
Changa	Mat	34
Changarawe	Mas	35
Changarawe	Mla	36
Chanjale	Non	37
Chanyumbu	Nge	38
Chanzuru	Mas	39
Chogowale	Gai	40
Chonwe	Mik	41
Dakawa	Bwa	42
Dakawa Wami	Tur	43
Dibamba	Tur	44
Diburuma	Tur	45
Difinga	Tur	46
Digalama	Tur	47
Digoma	Tur	48
Diguzi	Nge	49
Dihinda	Tur	50
Dihombo	Tur	51
Dimiro	Mat	52
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Doma	Mla	54
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Hewe	Mat	61
Homboza	Mla	62
Hoza	Tur	63
Ibindo	Ham	64
Ibingu	Ula	65
Ibuti	Gai	66
Idibo	Gai	67
Ihenje	Gai	68
Ikwamba	Non	69
Ilakala	Ula	70
Ilonga	Mas	71
Italagwe	Gai	72
Iwemba	Mik	73
Iyogwe	Gai	74
Kalundwa	Mat	75
Kambala	Tur	76
Kanga	Tur	77
Kasanga	Bwa	78
Kauzeni	Mla	79
Kibaoni	Mge	80
Kibangile	Mat	81
Kibati	Tur	82
Kibedya	Gai	83
Kibigiri	Mge	84
Kibogwa	Mat	85
Kibuko	Mat	86
Kibuko	Mge	87
Kibungo (kib)	Mat	88
Kibungo (kir)	Mat	89
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Kifinga	Mik	102
Kifuru	Mat	103
Kiganila	Bwa	104
Kigugu	Tur	105
Kihonda	Mge	106
Kikeo	Mge	107
Kikundi	Mat	108
Kikunga	Ula	109
Kilama	Gai	110
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Kimamba		114
Kinda	Tur	115
Kinonko	Mge	116
Kinyolisi	Gai	117
Kipera	Mla	118
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Kirunga	Mat	120
Kisaki Kituoni	Bwa	121
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Kisanga Stand	Nge	124
Kisemu	Nge	125
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<u>Village</u>	<u>Div.</u>	<u>Page</u>
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Koloni	Bwa	145
Konde	Mat	146
Kondoa	Mas	147
Konga-Vikenge	Mla	148
Kongwa	Bwa	149
Kumba	Bwa	150
Kumbulu	Non	151
Kunke	Tur	152
Kwaba	Nge	153
Kwambe	Mam	154
Kwamtonga	Tur	155
Kwelikwiji	Tur	156
Kwipipa	Gai	157
Langali	Mge	158
Lanzi	Mat	159
Legezamwendo	Nge	160
Leshata	Gai	161
Logo	Mat	162
Longwe	Bwa	163
Luale	Mge	164
Lubasazi	Bwa	165
Lubumu	Nge	166
Lubungo	Mla	167
Lubungo	Nge	168
Lufukiri	Non	169
Lugeni	Mat	170
Luhembe	Mik	171
Luhindo	Tur	172
Luholole	Mat	173
Luhwaji	Gai	174
Lukange	Bwa	175

<u>Village</u>	<u>Div.</u>	<u>Page</u>
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Lukenge	Tur	177
Lukobe	Nge	178
Lukulunge	Bwa	179
Lukunguni	Mge	180
Lukuyu	Mge	181
Lulongwe	Nge	182
Lumango	Mik	183
Lumba Chini	Bwa	184
Lumba Juu	Bwa	185
Lumbiji	Non	186
Lumuma Idole	Ula	187
Lundi	Mat	188
Lusanga	Mat	189
Lusungi	Mge	190
Lutindi-Twatwatwa	Mas	191
Luwemba	Ula	192
Mabana	Mam	193
Mabula	Mam	194
Machatu	Mam	195
Madege	Gai	196
Madizini	Tur	197
Madizini	Mik	198
Madoto	Mas	199
Madudu	Mam	200
Madudumizi	Ula	201
Mafuta	Tur	202
Magali	Mla	203
Magela	Nge	204
Megera	Mam	205
Magogoni	Bwa	206
Magole	Mam	207
Magomeni	Mas	208
Magubike	Mam	209
Maguha	Mam	210
Magunga	Tur	211
Maguruwe	Mge	212
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Majawanga	Gai	214
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Makwambe	Mam	217
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Malani	Bwa	219
Malolo	Mik	220
Malui	Mas	221
Mambani	Mat	222
Mamboya	Mam	223
Mamoyo	Mas	224
Mandela	Mam	225
Mangae	Mla	226
Manyinya	Tur	227
Manza	Mla	228
Masalawe	Mge	229
Masenge	Gai	230
Maseyu	Mge	231
Maskati	Tur	232
Matale	Tur	233
Matuli	Nge	234
Mazimba	Tur	235
Mbamba	Ula	236
Mbigili	Mam	237
Mbili	Mam	238
Mbogo	Tur	239
Mbwade	Bwa	240
Mbwade	Mas	241
Melela	Mla	242
Meshugi	Gai	243
Mfulu	Mam	244
Mfuluni	Mas	245
Mfumbwe	Mat	246
Mgata	Bwa	247
Mhale	Mge	248
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Milawilila	Mat	253
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Mindu	Nge	255

<u>Village</u>	<u>Div.</u>	<u>Page</u>
Mirama	Tur	256
Misongeni	Nge	257
Mkalama	Gai	258
Mkambarani	Nge	259
Mkata Ranch	Mla	260
Mkata Ujamaa	Mla	261
Mkindo	Tur	262
Mkobwe	Non	263
Mkololo	Bwa	264
Mkonowamara	Nge	265
Mkulazi	Nge	266
Mkundi	Mam	267
Mkundi	Nge	268
Mkunghulu	Ula	269
Mkuyuni	Mat	270
Mlaguzi	Tur	271
Mlali	Mla	272
Mlilingwa	Ngw	273
Mlono	Mat	274
Mngazi	Bwa	275
Mnyanza	Mla	276
Morogoro		277
Msimba	Mik	278
Msingise	Gai	279
Msolokelo	Tur	280
Msolwa	Mik	281
Msonge	Bwa	282
Msongozi	Mla	283
Msowero	Mik	284
Msowero	Ula	285
Msowero	Mam	286
Msufuni	Tur	287
Mtamba	Mat	288
Mtega	Non	289
Mtombozi	Mat	290
Mtumbatu	Mam	291
Mugudeni	Tur	292
Muhenda	Ula	293
Muhungamkola	Nge	294
Mulunga	Mik	295

<u>Village</u>	<u>Div.</u>	<u>Page</u>
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Mvomero	Tur	297
Mvuha	Bwa	298
Mvumi	Mam	299
Mwalazi	Mge	300
Mwandi	Mam	301
Mwarazi	Mat	302
Mwasa	Ula	303
Mzaganza St.	Ula	304
Mziha	Tur	305
Ndogomi	Gai	306
Ndole	Tur	307
Ngerengere	Nge	308
Ngerengere Darajani	Nge	309
Ngiloli	Gai	310
Ngong'oro	Mat	311
Ngungulu	Mge	312
Nguyami	Gai	313
Ng'weme	Mat	314
Njungwa	Mam	315
Nongwe	Non	316
Ntala	Bwa	317
Nyachiro	Mat	318
Nyali	Ula	319
Nyameni	Ula	320
Nyamigadu-A	Bwa	321
Nyamigadu-B	Bwa	322
Nyandira	Nge	323
Nyangala	Mam	324
Nyarutanga	Bwa	325
Nyingwa	Mat	326
Pandambili	Tur	327
Pangawe	Nge	328
Peapea	Mas	329
Peko-Misegese	Mla	330
Pemba	Tur	331
Pinde	Mge	332
Ruaha	Mik	333
Rubeho	Gai	334
Rudewa	Mat	335

<u>Village</u>	<u>Div.</u>	<u>Page</u>
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Rudewa Gongoni	Mas	337
Rudewa Mbuyuni	Mas	338
Ruhembe	Mik	339
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Sagasaga	Nge	341
Sangasanga	Mla	342
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Seregete-A	Nge	344
Seregete-B	Nge	345
Sesenga	Bwa	346
Singisa	Bwa	347
Senyaulime	Nge	348
Tabu Hotel	Gai	349
Tambuu	Mat	350
Tandai	Mat	351
Tandari	Nge	352
Tandari	Mat	353
Tangeni	Mla	354
Tawa	Mat	355
Tchenezema	Mge	356
Tegetero	Mat	357
Temekero	Bwa	358
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Ukwama	Bwa	366
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Ulaya Mbuyuni	Ula	369
Uleling'ombe	Mik	370
Unone	Mas	371
Uponda Chini	Mat	372
Uponela	Mam	373
Usungura	Nge	374
Vidunda	Mik	375



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : AMINI

Names of Subvillages : -

District/Division/Subdivision : MOR/Mat/Kinole

Sheet No. : 183/4

Co-ordinates : 6°53'S 37°48'E

Population (1978) : 1116

Livestock-Units (1978) : -

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,53	0,67	0,80	1,07
Livestock demand (l/s)	-	-	-	-
Total demand (l/s)	0,53	0,67	0,80	1,07

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	Ø Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli (MPN/100 ml)	General Appearance
Streams	M											

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area, having the possibility for pumped supplies or gravity supplies from small perennial streams.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	: BAGA
Names of Subvillages	: -
District/Division/Subdivision	: MOR/Mat/Mtombazi
Sheet No.	: 201/1
Co-ordinates	: 7°09'S 37°44'E
Population (1978)	: 1276
Livestock-Units (1978)	: -
Settlement Pattern	: X <input checked="" type="checkbox"/> Y <input type="checkbox"/> Z <input type="checkbox"/>
Village facilities	: PS <input checked="" type="checkbox"/> DP <input type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																	
<b>WATER DEMAND</b>																	
	<table border="1"> <thead> <tr> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>0,61</td> <td>0,76</td> <td>0,92</td> <td>1,23</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	1978	1983	1988	1998	0,61	0,76	0,92	1,23								
1978	1983	1988	1998														
0,61	0,76	0,92	1,23														
Population demand (l/s)																	
Livestock demand (l/s)																	
Total demand (l/s)																	
<b>WATER POTENTIAL</b>																	
Prospects for																	
Suitable ground water sources	: G <input type="checkbox"/> F <input type="checkbox"/> P <input checked="" type="checkbox"/>																
Suitable surface water sources	: G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
<b>HYDROLOGICAL DATA</b>	<b>Potential surface water sources</b>	
Name of water source	N.I.	
Low flow (5% /10% year)	Perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
<b>HYDROGEOLOGICAL DATA</b>	<b>Shallow ground water</b>	<b>Medium-depth and deep-ground water</b>
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

0m  
10  
20  
30  
40  
50  
60  
70  
80

\*) VLC: vertical lithological composition

4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Streams	N											

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	: Pumped <input type="checkbox"/> Gravity <input type="checkbox"/>
Intake structure	: _____
Water lifting equipment	: pump : _____ engine : _____
Transmission main	: _____
Storage tank	: _____
Distribution lines	: _____
Domestic water points	: _____
Additional facilities	: CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	: _____

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES	
<b>SHORT TERM :</b>	Village water supply conditions comply with 1981 targets
<b>MEDIUM AND LONG TERM :</b>	Village located in mountainous area, having possibility for pumped or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : BAGIRO

Names of Subvillages : -

District/Division/Subdivision : MOR/Mat/Tegetero

Sheet No. : 183/3

Co-ordinates : 6°55'S 37°44'E

Population (1978) : 1473

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,70	0,88	1,06	1,41
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N. I.
Low flow (5% /10% year)	Perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Streams	M											

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x	x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area, having the possibility for pumped supplies or gravity supplies from small perennial streams.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : BALANI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Kasanya

Sheet No. : 201/2

Co-ordinates : 7°09'S 37°48'E

Population (1978) : 771

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,37	0,46	0,56	0,74
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		
*) VLC: vertical lithological composition		

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Streams	1											

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	X		
Quality of the water source		X	
Water accessibility (walking distance to facility)	X		
Reliability of facility	X		
Water Quality (EC)	X		
Village population dependent on facility	X		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets.

**MEDIUM AND LONG TERM :**

Village located in mountainous area, having possibility for pumped supply or gravity supply from small perennial streams.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : BEREGA

Names of Subvillages : -

District/Division/Subdivision : KIL/MAM/Magubike

Sheet No. : 165/1

Co-ordinates : 6°11'S 37°08'E

Population (1978) : 2890

Livestock-Units (1978) : 929

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
 GH  RE  AWR   
 MH  X

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,37	1.72	2.08	2,76
Livestock demand (l/s)	0,32	0.36	0.40	0,46
Total demand (l/s)	1.69	2.09	2,49	3,26

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	0-7.0	*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)	7.0	
Median waterlevel (m-GL)	0.3	
Permeability (m/day)	100	
EC (mS/m)	100	
Location	Berega valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Hand dug Boles	M							140	0,8	3-1		F. 781024
River Berega								20	0,2		∞	P. 790225
Piped supply*	1	1970	2,64	3,0	0-7.0	7.0		20	0,2		∞	P. 790225

\* Intake structure was washed away several times during periods with high flood flows

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
 : 1-88 l/s drw.no. 17113

Intake structure : riverside well

Water lifting equipment : pump : KSB(2)- WLK 40/4  
 engine : Lister(2)-SR1

Transmission main : 2,2 km

Storage tank : 22,5 m<sup>3</sup>/h (3x)

Distribution lines : 3,8 km

Domestic water points : 14

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : < 30 m

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	X		
Quality of the water source		X	
Water accessibility (walking distance to facility)	X		
Reliability of facility			X
Water Quality (EC)	X		
Village population dependent on facility			X

Village total score : 11

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Rehabilitation programma:  
 construction of new riverside well  
 as water intake structure; overhaul  
 of pumping equipment

**MEDIUM AND LONG TERM :**  
 Rehabilitation and extension:  
 - replacement of part of transmission  
 main (new diameter 3-4")  
 - extension to distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : BIGWA

Names of Subvillages : -

District/Division/Subdivision : MOR/MGE/Kingolwira

Sheet No. : 183/3

Co-ordinates : 6°49'S 37°43'E

Population (1978) : 1063

Livestock-Units (1978) : insignificant

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,50	0,63	0,77	1,02
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	River Bigwa	River MgoLoLe
Name of water source		
Low flow (5% /10% year)	0/0 l/s	14/17 l/s
Distance from village	1 km	3 km
Elevation with regard to village	40	50
Water quality	fair	good
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	all. fine sand	
Aquifer type	*VLC	
Aquifer depth (m-Gl)	2.4-6.6	
Aquifer thickness (m)	2.0	
Median waterlevel (m-Gl)	3.0	
Permeability (m/day)	1-10	
EC (mS/m)	15-150	
Location	Bigwa valley	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	Ø Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
BOH - River Bigwa	M											
Gravity River Bigwa *	1	1978										

\* Provided by Bigwa mission; one communal water point with 16 taps and washing slabs

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow Wells with handpumps nos. 5

**MEDIUM AND LONG TERM :**

- Shallow wells plus handpumps: + 2 Nos
- Extension of gravity water supply system of Bigwa RTC (from river MgoLoLe) to the communal water point of Bigwa village (to be agreed upon by Bigwa RTC)
- Proposed future independent village water supply system:  
Pumped water supply from riverside well along river Bigwa, provided that required hydrogeological survey confirms technical feasibility.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : BONYE

Names of Subvillages : -

District/Division/Subdivision : MOR/BWA/Bwakira chini

Sheet No. : 201/4

Co-ordinates : 7°23'S 37°48'E

Population (1978) : 2205

Livestock-Units (1978) : 16

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,05	1,32	1,59	2,12
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	1,05	1,32	1,60	2,13

**WATER POTENTIAL**

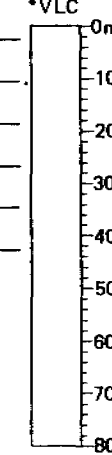
Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	River Dutumi	
Name of water source	0/0 l/s	
Low flow (5% /10% year)	0,5 km	
Distance from village	-10 m	
Elevation with regard to village	fair	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All.	*VLC
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Dutumi valley	



\* ) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
River Dutumi							see 3.	14,5	0.3	3,0		F.781103
HOH - River Dutumi												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 11

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 11 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: 4 NOS  
1. SWHP: + 4 Nos = 5  
2. Recommended future piped water supply system  
Pumped water supply form infiltration well in River Dutumi. Common supply with Mbwade village  
RSWP + 4 km + SED

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : BUND

Names of Subvillages : -

District/Division/Subdivision : MOR/MGE/Langa11

Sheet No. : 201/1

Co-ordinates : 7°05'S 37°34'E

Population (1978) : 1383

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :   $\alpha$    $\gamma$    $\geq$

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,66	0,83	1,00	1,33
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 7

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Village water supply conditions comply with 1981 targets.

**MEDIUM AND LONG TERM :**  
 Village located in mountainous area having possibility for pumped supply or gravity supply from small perennial streams.



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : BUNDUKI

Names of Subvillages : -

District/Division/Subdivision : MOR/MGE/Langa11

Sheet No. : 201/1

Co-ordinates : 7°02'S 37°37'E

Population (1978) : 1501

Livestock-Units (1978) :

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,79	1,01	1,23	1,63
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having possibility for pumped supply or gravity supply from small perennial strams.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : BUNGU

Names of Subvillages : -

District/Division/Subdivision : MOR/BWA/Kasanga

Sheet No. : 201/1

Co-ordinates : 7°12's 37°49'g

Population (1978) : 1183

Livestock-Units (1978) :

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,56	0,71	0,85	1,14
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Pumped supply form river  
RP + 2 km + SRD/ED

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : BWAKIRA CHINI

Names of Subvillages : -

District/Division/Subdivision : MOR/BWA/Bwakira Chini

Sheet No. : 201/3

Co-ordinates : 7°24'S 37°44'E

Population (1978) : 1379

Livestock-Units (1978) : 40

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,65	0,82	0,99	1,32
Livestock demand (l/s)	0,01	0,02	0,02	0,02
Total demand (l/s)	0,67	0,84	1,01	1,35

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Mgefa
Low flow (5% /10% year)	>500/>550 l/s	
Distance from village	5 km	
Elevation with regard to village	-20 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All. sand	
Aquifer type	*VLC	
Aquifer depth (m-GL)	0-3,0	
Aquifer thickness (m)	3,0	
Median waterlevel (m-GL)	0,5	
Permeability (m/day)		
EC (mS/m)	18	
Location	riverbed	
*VLC: vertical lithological composition		

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
BDB	M											
Pumped supply RSWP	1	1970	1 m	3,0	0-3,0	3,0		30	0,7	1,8	0	G.781103

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
3 l/s

Intake structure : riverside well

Water lifting equipment : pump : mother plott  
engine : kiloskar

Transmission main : 1 km

Storage tank : 45 m<sup>3</sup>/H } drw.no.17093A

Distribution lines : 2.8 km }

Domestic water points : 5

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : + 20 m

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets.

**MEDIUM AND LONG TERM :**  
Extension works:  
extensive distribution system.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : Bwakira JUU

Names of Subvillages : -

District/Division/Subdivision : MOR/BWA/Bwakira JUU

Sheet No. : 201/3

Co-ordinates : 7°18'S 37°42'E

Population (1978) : 2020

Livestock-Units (1978) : -

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,03	1,32	1,61	2,13
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All. fine sand	*VLC
Aquifer depth (m-GL)	0-4.0	
Aquifer thickness (m)		
Median waterlevel (m-GL)	1.5	
Permeability (m/day)		
EC (mS/m)	39	
Location	river valley	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
SW				2,4				39				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps (10 Nos)

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: + 4 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : BWILA

Names of Subvillages : -

District/Division/Subdivision : MOR/BWA/Serambala

Sheet No. : 202/3

Co-ordinates : 7° 16' S 38° 01' E

Population (1978) : 2331

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1.11	1.39	1.68	2.24
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Ruvu
Low flow (5% /10% year)	< 2000/ < 2200 l/s	
Distance from village	< 1 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 10

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 12 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: + 4 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : CHABI-MGOGOZI

Names of Subvillages : -

District/Division/Subdivision : KIL/MIK/

Sheet No. : 199/3

Co-ordinates : 7°16'S 36°32'E

Population (1978) : 1623

Livestock-Units (1978) : 709

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,77	0,97	1,17	1,56
Livestock demand (l/s)	0,25	0,28	0,31	0,37
Total demand (l/s)	1,27	1,25	1,48	1,93

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River Chali	
Low flow (5% /10% year)	perennial	
Distance from village	5 km	
Elevation with regard to village	45 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All.	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Mahazina valley	

**\*) VLC: vertical lithological composition**

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coll MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 8 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: + 3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : CHABIMA

Names of Subvillages : -

District/Division/Subdivision : KIL/MAS/Masanze

Sheet No. : 181/4

Co-ordinates : 6°50'S 36°50'E

Population (1978) : 458

Livestock-Units (1978) : -

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,22	0,27	0,33	0,44
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River chogwe
Low flow (5% /10% year)	perennial	
Distance from village	5 km	
Elevation with regard to village	50 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Gravity water supply from perennial stream  
G + 4 km + SRD/ED

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : CHAGONGWE

Names of Subvillages : -

District/Division/Subdivision : KIL/NON/Chagongwe

Sheet No. : 164/4

Co-ordinates : 6°23'S 36°53'E

Population (1978) : 1451

Livestock-Units (1978) : 1626

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,69	0,87	1,05	1,39
Livestock demand (l/s)	0,56	0,64	0,71	0,85
Total demand (l/s)	1,25	1,50	1,75	2,24

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River Mahindo	
Low flow (5% /10% year)	perennial	
Distance from village	1 km	
Elevation with regard to village	20 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Gravity water supply from nearby perennial stream:  
G + 1 km + SRD/ED



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : CHAKWALE  
 Names of Subvillages : 2 sub villages  
 District/Division/Subdivision : KIL/GAI/Chakwale  
 Sheet No. : 164/2  
 Co-ordinates : 6°04'S 36°57'E  
 Population (1978) : 4416  
 Livestock-Units (1978) : 2648

Settlement Pattern : x  y  z   
 Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	2,17	2,75	3,33	4,43
Livestock demand (l/s)	0,92	1,03	1,15	1,38
Total demand (l/s)	3,09	3,78	4,48	5,81

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P   
 Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All. coarse sand	*VLC
Aquifer type	0-4.0	
Aquifer depth (m-GL)	2.0	
Aquifer thickness (m)	2.0	
Median waterlevel (m-GL)	100	
Permeability (m/day)	350-500	
EC (mS/m)	> 500	
Location	? riverbed	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Gravity water supply	1	1975						7	0,1	3,2	6	G.790223
HDB	S							300	0,7			G.781025

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
 : 6,75 l/s  
 Intake structure : Weir + sandtrap, in tributaries  
 : River Kitange  
 Water lifting equipment : pump : -  
 engine : -  
 Transmission main : 6,1 km )  
 Storage tank : 135 m<sup>3</sup> ) drw, no, 17165  
 Distribution lines : 3 km )  
 Domestic water points : 15  
 Additional facilities : CT  CD  HC   
 Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

SHORT TERM :  
 Gairo gravity scheme

MEDIUM AND LONG TERM :  
 Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : CHANGA

Names of Subvillages : -

District/Division/Subdivision : MOR/MAT/Mkuyuni

Sheet No. : 183/4

Co-ordinates : 6°58'S 37°47'S

Population (1978) : 1274

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,60	0,76	0,92	1,22
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River Ruvu	
Low flow (5% /10% year)	>500/ >550 l/s	
Distance from village	< 1 km	
Elevation with regard to village	-20 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
 Pumped supply from river Ruvu together with two nearby villages.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : CHANGARAWE

Names of Subvillages : Miyombo

District/Division/Subdivision : KIL/MAS/Mosanze

Sheet No. : 131/4

Co-ordinates : 6°56'S 36°58'E

Population (1978) : 1590

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,75	0,95	1,15	1,52
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	River Miyombo	
Name of water source	>600/>560 l/s	
Low flow (5% /10% year)	2,5 km	
Distance from village	-10 m	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All.	
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Miyombo valley	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDH	M				0-2.7	2.7	very low	8				
SW	1			7.0			not used	200				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 8 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: + 3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : CHANGARAWE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MLA/MLa1i

Sheet No. : 183/3

Co-ordinates : 6°55'S 37°34'E

Population (1978) : 1305

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.62	0.78	0.94	1.25
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River Ngerengeze	
Low flow (5% /10% year)	39/49 l/s	
Distance from village	12 km	
Elevation with regard to village	50 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	∅ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Gravity water supply								5.5	0.1	1.8	70	G.790306

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
1.7 l/s (estimated)

Intake structure : connection from IDM Mzumbe

Water lifting equipment : pump : -  
engine : -

Transmission main : -

Storage tank : -

Distribution lines : 1.5 km

Domestic water points : 1

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Extension works: storage tanks and several domestic water points

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : CHANJALE

Names of Subvillages : Lukando, Mamvisi

District/Division/Subdivision : KIL/NON/Chanjab

Sheet No. : 181/2

Co-ordinates : 6°31'S 36°50'E

Population (1978) : 1856

Livestock-Units (1978) :

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,96	1,22	1,49	1,97
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Mkondoa
Low flow (5% /10% year)	perennial	
Distance from village	8 km	
Elevation with regard to village	50 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Gravity water supply from perennial stream:  
G+5 km + SRD/ED

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : CHANYUMBU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Mkulazi

Sheet No. : 202/1

Co-ordinates : 7°07'S 38°13'E

Population (1978) : 2272

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,08	136	164	2,18
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All. sand	sandstone
Aquifer type	*VLC	
Aquifer depth (m-GL)	0-2.4	
Aquifer thickness (m)	2.4	
Median waterlevel (m-GL)	0.6	
Permeability (m/day)		
EC (mS/m)	18	
Location	village	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDH	M							18				
SW	2			2,4	0-2,4	2,4		13				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)			x
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 11 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: + 5 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : CHANZURU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAS/Chanzuru

Sheet No. : Chekerent 182/3

Co-ordinates : 6°48'S 37°05'E

Population (1978) : 2297

Livestock-Units (1978) : 47

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,09	1,37	1,65	2,21
Livestock demand (l/s)	0,02	0,02	0,02	0,02
Total demand (l/s)	1,11	1,39	1,68	2,23

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All. sand	sand
Aquifer type		
Aquifer depth (m-GL)	2-10.0	0-50
Aquifer thickness (m)	4.4	5-15
Median waterlevel (m-GL)	1.5	5.0
Permeability (m/day)	10	140
EC (mS/m)	107	<200
Location	village	village

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDH	M			3,0				100				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility			x

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

- Pumped water supply from borehole BH + 2 km + SRD
- Shallow wells with handpumps (5 Nos)

**MEDIUM AND LONG TERM :**

Extension of distribution Facilities of borehole supply

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : CHOGOWALE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GAI/

Sheet No. : 165/2

Co-ordinates : 6°02'S 37°22'E

Population (1978) : 1430

Livestock-Units (1978) : 5743

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,68	0,85	1,03	1,37
Livestock demand (l/s)	1,99	2,24	2,49	2,99
Total demand (l/s)	2,67	3,10	3,52	4,36

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	1-3.5	
Aquifer thickness (m)	2.5	
Median waterlevel (m-GL)	1.0	
Permeability (m/day)	60	
EC (mS/m)		
Location	Chogovale valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDH	1							60				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 7 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: + 3 Nos  
or pumped supply from river:  
RP+2 km + SRD/ED



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : CHONWE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MIK/Kidodi

Sheet No. : 217/2

Co-ordinates : 7°36'S 36°55'E

Population (1978) : 1611

Livestock-Units (1978) : 43

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,76	0,96	1,16	1,55
Livestock demand (l/s)	0,01	0,02	0,02	0,02
Total demand (l/s)	0,78	0,98	1,18	1,57

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.J.
Low flow (5% /10% year)	Perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village water supply conditions comply with 1991 targets

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : DAKAWA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Bwakira Chini

Sheet No. : 201/1

Co-ordinates : 7°25'S 37°42'E

Population (1978) : 1871

Livestock-Units (1978) : 26

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.89	1.12	1.35	1.90
Livestock demand (l/s)	0.01	0.01	0.01	0.01
Total demand (l/s)	0.90	1.13	1.36	1.91

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	River Mgeta	
Name of water source	>500/>550 l/s	
Low flow (5% /10% year)	5 km	
Distance from village	-20 m	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All.	sandstone
Aquifer type	>8 m	*VLC
Aquifer depth (m-GL)		0m
Aquifer thickness (m)		10
Median waterlevel (m-GL)		20
Permeability (m/day)		30
EC (mS/m)	<200	40
Location	village	village
		50
		60
		70
		80

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
SW	4			7,5			dry in dryseason	91				
								125	0,6	2,7	∞	F.781103

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)			x
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Pumped supply from a medium depth borehole  
BH + 2km + SRD

**MEDIUM AND LONG TERM :**  
Extension of distribution facilities  
of piped supply

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : DAKAWA WAMI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Mvomero

Sheet No. : 166/2

Co-ordinates : 6°26'S 37°32'E

Population (1978) : 1774

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)				
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Wami
Low flow (5% /10% year)	1550/1930 l/s	
Distance from village	< 1 km	
Elevation with regard to village	-5 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	4-10	18-23
Aquifer thickness (m)	2.1	5
Median waterlevel (m-GL)	8.0	7.0
Permeability (m/day)	10-50	80
EC (mS/m)	60	22
Location	village	village

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
SW	1			7,1				32				
River Wami								20	0-2		200	P. 781113
Borehole (new)	1	1978		See 3.				32	0-4	0-4	0	G. 790313

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Pumped supply from recently constructed borehole: BH+ 2 km + SRD, or shallow wells with handpumps: 9 Nos

**MEDIUM AND LONG TERM :**  
Extension of distribution facilities of pumped supply, or shallow wells with handpumps.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : DIBAMBA

Names of Subvillages : MOR/TUR/Mvomero

District/Division/Subdivision : 165/4

Sheet No. : 6°18'S 37°28'E

Co-ordinates : 801

Population (1978) : \_\_\_\_\_

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	038	048	058	077
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.fine sand sand *VLC
Aquifer depth (m-GL)	5-7	42-68
Aquifer thickness (m)	0.6	15
Median waterlevel (m-GL)	5.2	8.0
Permeability (m/day)		8
EC (mS/m)	30	40
Location	village	village

\* ) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Colf MPN/100 ml	General Appearance
SW	1			6.8				175				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Pumped supply from a recently constructed borehole: BH + 2 km + SED, or shallow wells with handpumps: 4 Nos

**MEDIUM AND LONG TERM :**  
Extension of distribution facilities of pumped supply or shallow wells with handpumps.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : DIBURUMA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Kibat1

Sheet No. : 146/4

Co-ordinates : 5°50'S 37°27'E

Population (1978) : 879

Livestock-Units (1978) : 4933

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,42	0,52	0,63	0,84
Livestock demand (l/s)	1,71	1,93	2,14	2,57
Total demand (l/s)	2,13	2,45	2,77	3,41

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 4 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: 2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : DIFINGA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Kanga

Sheet No. : 147/4

Co-ordinates : 5°59'S 37°40'E

Population (1978) : 461

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,22	0,28	0,33	0,44
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Lusonge
Low flow (5% /10% year)	5/6 l/s	
Distance from village	2 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDB	5			4,5			almost dry	9				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)			x
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps (2 Nos)

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: + 1 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : DIGALAMA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOROTUR/Diongoaya

Sheet No. : 166/1

Co-ordinates : 6°03'S 37°35'E

Population (1978) : 549

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,26	0,33	0,40	0,53
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 6

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditons comply with 1981 targets.

**MEDIUM AND LONG TERM :**

Village located in mountainous area, having possibility for pumped supply, or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : DIGOMA

Names of Subvillages : Madanga

District/Division/Subdivision : MOR/TUR/Diongoya

Sheet No. : 166/1

Co-ordinates : 6°05'S 37°36'E

Population (1978) : 2190

Livestock-Units (1978) :

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1.24	1.31	1.58	2.10
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River Mjougua	
Low flow (5% /10% year)	>50/>75 l/s	
Distance from village	2 km	
Elevation with regard to village	0 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	X		
Quality of the water source	X		
Water accessibility (walking distance to facility)	X		
Reliability of facility	X		
Water Quality (EC)	X		
Village population dependent on facility			X

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Not sufficient available data.  
Most probably pumped supply from nearby river:  
RP + 2 km + SRD/ED



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : DIGUZI

Names of Subvillages : Lukose

District/Division/Subdivision : MOR/NGE/Ngerengere

Sheet No. : 184/3

Co-ordinates : 6°49'S 38°08'E

Population (1978) : 868

Livestock-Units (1978) :

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.41	0.52	0.63	0.83
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)	All. sand	sand-stone
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		200-500
EC (mS/m)		
Location	Diguzi valley	

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDR	1							70	0,3	3.1	∞	P. 781124

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)			x
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps (4 Nos)

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: + 2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : DIHINDA

Names of Subvillages : MOR/TUR/Konga

District/Division/Subdivision : 116/1

Sheet No. : 6°04'S 37°42'E

Co-ordinates : 1267

Population (1978) : 6

Livestock-Units (1978) : 6

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.60	0.76	0.91	1.22
Livestock demand (l/s)	0.01	0.01	0.01	0.01
Total demand (l/s)	0.60	0.76	0.92	1.22

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)		*VLC 
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	village	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDR	10			2.4			Low	6				
Swamp								13	0,2	2,7	150	P. 781027
River Lusonge								10	0,1		0	F. 781114

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference Intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source			x
Water accessibility (walking distance to facility)		x	
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 14		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps (6 Nos)

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : DIBOMBO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Hembeti

Sheet No. : 166/3

Co-ordinates : 6°16'S 37°32'E

Population (1978) : 984

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.47	0.59	0.71	0.95
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	River Di hombo	River Mkindu
Name of water source		
Low flow (5% /10% year)	8/10 l/s	320/360 l/s
Distance from village	8 km	10 km
Elevation with regard to village	30 m	40 m
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All fine sand	
Aquifer type		
Aquifer depth (m-GL)	2-9	
Aquifer thickness (m)	3.6	
Median waterlevel (m-GL)	1.7	
Permeability (m/day)	5-10	
EC (mS/m)	23	
Location	village	

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
BDH	3			3.0				15				
River Di hombo								6	0.1		10	P.781113

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 5 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpump: + 2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : DIMIRO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Kibungo

Sheet No. : 201/1

Co-ordinates : 7°02'S 37°41'E

Population (1978) : 1020

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.48	0.61	0.73	0.98
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	N.I.	
Name of water source	perennials	
Low flow (5% /10% year)	1-3 km	
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	*VLC	
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditons comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area, having possibility for pumped supply or gravity supply from small perennial streams.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : DODOMA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAS/Mosanze

Sheet No. : 181/4

Co-ordinates : 6°53'S 36°55'E

Population (1978) : 650

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,31	0,39	0,47	0,62
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  p

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 3 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: + 2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : DOMA  
 Names of Subvillages : Mkungumi, Mtavenini  
 District/Division/Subdivision : MOR/MLA/Msongozi  
 Sheet No. : 200/1  
 Co-ordinates : 7°05'S 37°14'E  
 Population (1978) : 2801  
 Livestock-Units (1978) : 30

Settlement Pattern : X  y  z   
 Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1.41	1.79	2.17	2.88
Livestock demand (l/s)	0.01	0.01	0.01	0.02
Total demand (l/s)	1.42	1.80	2.18	2.90

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P   
 Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All sandy loam	
Aquifer depth (m-GL)	2-8	*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)	3.0	
Median waterlevel (m-GL)	3.5	
Permeability (m/day)		
EC (mS/m)	140-180	
Location	Msangozi valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
BDB	M											
Sw	3			6,5				140-180				
								75	0,4	0,9	5	G.790306

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
 Intake structure : \_\_\_\_\_  
 Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_  
 Transmission main : \_\_\_\_\_  
 Storage tank : \_\_\_\_\_  
 Distribution lines : \_\_\_\_\_  
 Domestic water points : \_\_\_\_\_  
 Additional facilities : CT  CD  HC   
 Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source	x		
Water accessibility (walking distance to facility)		x	
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 11  
 Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

SHORT TERM :  
 Shallow wells with handpumps: 14 Nos

MEDIUM AND LONG TERM :  
 Shallow wells with handpumps: +6 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : DUMILA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/MagoLe

Sheet No. : 165/4

Co-ordinates : 6°23'S 37°20'E

Population (1978) : 2606

Livestock-Units (1978) : 250

Settlement Pattern :  x  y  z  x

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,24	1,56	1,88	2,50
Livestock demand (l/s)	0,09	0,10	0,11	0,13
Total demand (l/s)	0,32	1,65	1,99	2,63

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  p

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All coarse sand	coarse sand
Aquifer type	0-7,0	20-40 *VLC
Aquifer depth (m-GL)	7.0	5
Aquifer thickness (m)	0.5	9.0
Median waterlevel (m-GL)	10-50	
Permeability (m/day)	< 100	102
EC (mS/m)	Mkundi riverbed	village
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
BHDH	1			0,5								

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)		x	
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Pumped supply from a recently constructed borehole: BH + 2 km + SRD.  
or shallow wells with handpumps

**MEDIUM AND LONG TERM :**

Extension of distribution facilities of pumped supply or shallow wells with handpumps.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : FULWE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Mikese

Sheet No. : 183/2-4

Co-ordinates : 6°45'S 37°52'E

Population (1978) : 2212

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1.05	1.32	1.59	2.12
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)	2.4	
Permeability (m/day)		
EC (mS/m)	30	
Location	small valley south of village	

\*1 VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Sw	4			3-5-6.3				26-400				
HDR	5							17	0.1		2600	P-781122
								10.5	0.2		240	P-781122
								135	1.0	2.7	90	P-781122

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility			x
Village total score	: 13		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps (11 Nos)

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: 4 Nos



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : GAIRO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GAI/Gairo

Sheet No. : 164/2

Co-ordinates : 6°09'S 36°52'E

Population (1978) : 5008

Livestock-Units (1978) : 843

Settlement Pattern :  X  Y  Z  X

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	2.46	3.12	3.78	5.02
Livestock demand (l/s)	0.29	0.33	0.37	0.44
Total demand (l/s)	2.76	3.45	4.15	5.46

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
		fractured gneiss
Aquifer type		*VLC
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)	55.0	
Permeability (m/day)		
EC (mS/m)	200-500	
Location	village	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Gravity * water supply		1972						7	0.1	2.2	20	G.790223

\* originally a pumped supply from a borehole (constructed in 1966)

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
 See draw. existing scheme

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : 7 km Msingise-Gairo

Storage tank : 135 m<sup>3</sup> } drw.no. 17085

Distribution lines : 9.9 km }

Domestic water points : 11

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

SHORT TERM :  
 Gairo gravity scheme

MEDIUM AND LONG TERM :  
 Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : GOHERO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Kisaki

Sheet No. : 166/3

Co-ordinates : 7°28'S 37°36'E

Population (1978) : 2842

Livestock-Units (1978) : 39

Settlement Pattern :   $\alpha$    $\gamma$    $\beta$    $\delta$

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,35	1,70	2,05	2,73
Livestock demand (l/s)	0,01	0,02	0,02	0,02
Total demand (l/s)	1,36	1,71	2,06	2,75

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Mgeta
Low flow (5% /10% year)	530/580 l/s	
Distance from village	2,5 km	
Elevation with regard to village	-20 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	0-3,0	
Aquifer thickness (m)	3,0	
Median waterlevel (m-GL)	1,5	
Permeability (m/day)	10-100	
EC (mS/m)	70	
Location	Mgeta valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	$\phi$ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDH	M			1,5	0-3,0	3,0		70				
								100	0,2	2,7	6	P. 781103

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)		x	
Village population dependent on facility			x
Village total score	: 14		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Shallow wells with handpumps: 14 Nos

**MEDIUM AND LONG TERM :**  
 Shallow wells with handpumps: +6 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : GOZO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Ki semu

Sheet No. : 201/2

Co-ordinates : 7°03'S 37°47'E

Population (1978) : 1797

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,85	1,07	1,29	1,73
Livestock demand (l/s)				
Total demand (l/s)				

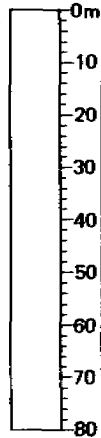
**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources		
Name of water source	River Muizigo		
Low flow (5% /10% year)	7500/>550 l/s		
Distance from village	2 km		
Elevation with regard to village	-10 m		
Water quality			
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water	
Aquifer type	All.	dolomite	
Aquifer depth (m-GL)		*VLC 	
Aquifer thickness (m)			
Median waterlevel (m-GL)			
Permeability (m/day)			
EC (mS/m)			50
Location	small valley		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
BDH	M											

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 9 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps:+4 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : HEMBETI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Hembeti

Sheet No. : 166/3

Co-ordinates : 6°16'S 37°31'E

Population (1978) : 1827

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.87	1.09	1.32	1.76
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Mkindu
Low flow (5% /10% year)	320/360 l/s	
Distance from village	8 km	
Elevation with regard to village	30 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All sand	sand
Aquifer type	2-9	25-40 *VLC
Aquifer depth (m-GL)	3.6	> 5
Aquifer thickness (m)	2.8	
Median waterlevel (m-GL)	10-30	5-50
Permeability (m/day)	41	< 200
EC (mS/m)	village	south from village
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDB	3							20				
								4	0,1	4,5	52	G. 781027
								110	0,5	22	10	F. 781027

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 9 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +4 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : HEWE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Tegetero

Sheet No. : 183/3

Co-ordinates : 6°58'S 37°43'E

Population (1978) : 789

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,37	0,47	0,57	0,76
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area, having possibility for pumped supplies on gravity supply from small perennial streams.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : BOMBOZA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Mlali

Sheet No. : 200/2

Co-ordinates : 7°04'S 37°28'E

Population (1978) : 1827

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,87	1,09	1,32	1,76
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having possibilities for pumped supplies or gravity supplies from small perennial streams.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : HOZA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Kibat1

Sheet No. : 146/4

Co-ordinates : 5° 56' S 37° 27' E

Population (1978) : 1542

Livestock-Units (1978) : 4145

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,73	0,92	1,11	1,48
Livestock demand (l/s)	1,44	1,62	1,80	2,16
Total demand (l/s)	2,17	2,54	2,91	3,64

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Shallow ground water	Medium-depth and deep-ground water
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 8 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : IBINDO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Magubike

Sheet No. : 165/1-3

Co-ordinates : 6°15'S 37°13'E

Population (1978) : 1558

Livestock-Units (1978) : 1262

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.74	0.93	1.12	1.50
Livestock demand (l/s)	0.44	0.49	0.55	0.66
Total demand (l/s)	1.18	1.42	1.67	2.15

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Shallow ground water	Medium-depth and deep-ground water
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All. coarse sand	
Aquifer depth (m-GL)	0-10	
Aquifer thickness (m)	10	
Median waterlevel (m-GL)	3,0	
Permeability (m/day)	700	
EC (mS/m)	130	
Location	Berega valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	Ø Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDR	M			0,5	0-10	10		130				
								90	0,8	3,0		F.781117

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility		x	

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Short term implementation programme:  
shallow wells with handpumps: 8 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +3 Nos



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : IBINGU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/ULA/Lumuma

Sheet No. : 181/3

Co-ordinates : 6°50'S 36°43'E

Population (1978) : 601

Livestock-Units (1978) : 137

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,29	0,36	0,43	0,58
Livestock demand (l/s)	0,05	0,05	0,06	0,07
Total demand (l/s)	0,33	0,41	0,49	0,65

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	N. I.	
Low flow (5% /10% year)	perennial	
Distance from village	2 km	
Elevation with regard to village	40 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

9m

10  
12  
14

0m  
10  
20  
30  
40  
50  
60  
70  
80

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Not sufficient data available.  
Possibly gravity water supply from nearby perennial stream:  
G + 2 km + SRD/ED

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : IBUTI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GAI/Gairo

Sheet No. : 6°08'S 36°54'E

Co-ordinates : 1245

Population (1978) : 61

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.59	0.74	0.90	1.20
Livestock demand (l/s)	0.02	0.02	0.03	0.03
Total demand (l/s)	0.61	0.77	0.92	1.23

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
BDB	1			2,5				100 l/day	29			

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source	x		
Water accessibility (walking distance to facility)		x	
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Gairo gravity scheme

**MEDIUM AND LONG TERM :**  
Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	: IDIBO
Names of Subvillages	: Iyandigwa
District/Division/Subdivision	: KIL/GAI/Chakwale
Sheet No.	: 165/1
Co-ordinates	: 6°01'S 37°05'E
Population (1978)	: 2715
Livestock-Units (1978)	: 3985
Settlement Pattern	: X <input checked="" type="checkbox"/> Y <input type="checkbox"/> Z <input type="checkbox"/>
Village facilities	: PS <input type="checkbox"/> DP <input checked="" type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																					
<b>WATER DEMAND</b>																					
	<table border="1"> <thead> <tr> <th></th> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>Population demand (l/s)</td> <td>1.36</td> <td>1.74</td> <td>2.11</td> <td>2.80</td> </tr> <tr> <td>Livestock demand (l/s)</td> <td>1.38</td> <td>1.56</td> <td>1.73</td> <td>2.08</td> </tr> <tr> <td>Total demand (l/s)</td> <td>2.75</td> <td>3.29</td> <td>3.84</td> <td>4.87</td> </tr> </tbody> </table>		1978	1983	1988	1998	Population demand (l/s)	1.36	1.74	2.11	2.80	Livestock demand (l/s)	1.38	1.56	1.73	2.08	Total demand (l/s)	2.75	3.29	3.84	4.87
	1978	1983	1988	1998																	
Population demand (l/s)	1.36	1.74	2.11	2.80																	
Livestock demand (l/s)	1.38	1.56	1.73	2.08																	
Total demand (l/s)	2.75	3.29	3.84	4.87																	
<b>WATER POTENTIAL</b>																					
Prospects for																					
Suitable ground water sources	: G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																				
Suitable surface water sources	: G <input type="checkbox"/> F <input type="checkbox"/> P <input checked="" type="checkbox"/>																				

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
<b>HYDROLOGICAL DATA</b>		Potential surface water sources
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
<b>HYDROGEOLOGICAL DATA</b>		Shallow ground water
Aquifer type		All coarse sand
Aquifer depth (m-GL)	0-7,0	*VLC 
Aquifer thickness (m)	5,0	
Median waterlevel (m-GL)	2,0	
Permeability (m/day)	800	
EC (mS/m)	70	
Location	Magera valley	
*) VLC: vertical lithological composition		

4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDH	1			0,5	0,5	5						
								70	0,4	0,4		P. 781023

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	: Pumped <input type="checkbox"/> Gravity <input type="checkbox"/>
Intake structure	: _____
Water lifting equipment	: pump : _____ engine : _____
Transmission main	: _____
Storage tank	: _____
Distribution lines	: _____
Domestic water points	: _____
Additional facilities	: CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	: _____

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES	
<b>SHORT TERM :</b>	
Shallow wells with handpumps: 14 Nos	
<b>MEDIUM AND LONG TERM :</b>	
Shallow wells with handpumps: +5 Nos	

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : IHENJE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GAI/Gairo

Sheet No. : 164/2

Co-ordinates : 6° 10' S 36° 55' E

Population (1978) : 1483

Livestock-Units (1978) : 340

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,70	0,89	1,07	1,42
Livestock demand (l/s)	0,12	0,13	0,15	0,18
Total demand (l/s)	0,82	1,02	1,22	1,60

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDH	2				0-2	2,0	day in dry season	150				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility		x	
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Gairo gravity scheme

**MEDIUM AND LONG TERM :**  
 Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : IKWAMBA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/NON/Chagongwe

Sheet No. : 164/4

Co-ordinates : 6°19'S 36°58'E

Population (1978) : 2594

Livestock-Units (1978) : 3210

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,23	1,55	1,87	2,49
Livestock demand (l/s)	1,11	1,25	1,39	1,67
Total demand (l/s)	2,35	2,80	3,26	4,16

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Milindo T.
Low flow (5% /10% year)	perennial	
Distance from village	8 km	
Elevation with regard to village	20 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Gairo gravity scheme

**MEDIUM AND LONG TERM :**  
Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : ILAKALA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/ULA/ULaya

Sheet No. : 199/2

Co-ordinates : 7°08'S 36°56'E

Population (1978) : 1502

Livestock-Units (1978) : 25

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.71	0.90	1.08	1.44
Livestock demand (l/s)	0.01	0.01	0.01	0.01
Total demand (l/s)	0.72	0.91	1.09	1.46

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All . sand
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Itete valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDR	4							5				
								55	0,2	3,5	40	P. 781115
								4	40,1			P. 781115

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source			x
Water accessibility (walking distance to facility)		x	
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 14		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 8 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : ILONGA

Names of Subvillages : Mkonowa Mare

District/Division/Subdivision : KIL/MAS/Chanzuru

Sheet No. : 182/3

Co-ordinates : 6°46'S 22°03'E

Population (1978) : 1881

Livestock-Units (1978) :

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.97	1.24	1.51	2.00
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River Ilonga	
Low flow (5% /10% year)	perennial	
Distance from village	2 km	
Elevation with regard to village	50 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All. sand, gravel	sand, gravel
Aquifer depth (m-GL)	2-10	25-40
Aquifer thickness (m)	4, 4	>15
Median waterlevel (m-GL)	3, 0	<10
Permeability (m/day)	100	10-100
EC (mS/m)	63	<100
Location	village	village

\*VLC

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
River Ilonga								19	0,1		∞	F.781114

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main :

Storage tank :

Distribution lines :

Domestic water points :

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 9 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +4 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : ITALAGWE

Names of Subvillages : Ilele

District/Division/Subdivision : KIL/GAI/Iyogwe

Sheet No. : 165/1

Co-ordinates : 6°04'S 37°08'E

Population (1978) : 2214

Livestock-Units (1978) : 2774

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1.05	1,32	1,60	2,13
Livestock demand (l/s)	0,96	1,08	1,20	1,44
Total demand (l/s)	2.01	2.40	2,80	3.57

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	2-7	
Aquifer thickness (m)	1,9	
Median waterlevel (m-GL)	2,3	
Permeability (m/day)		
EC (mS/m)	7,7	
Location	small valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Sw	1			4,2				75				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 11

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Shallow wells with handpumps: 15 Nos

**MEDIUM AND LONG TERM :**  
 Shallow wells with handpumps: +6 Nos



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : IWEMBA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MIK/KIldodl

Sheet No. : 217/1 - 218/1

Co-ordinates : 7°35'S 37°00'E

Population (1978) : 1425

Livestock-Units (1978) : 2

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.68	0.85	1.03	1.37
Livestock demand (l/s)	0.01	0.01	0.01	0.01
Total demand (l/s)	0.68	0.85	1.03	1.37

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Tundu
Low flow (5% /10% year)	90/96 l/s	
Distance from village	2 km	
Elevation with regard to village	50 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
River Iwemba								10	0-2	3, 5	50	P. 780228

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference Intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Tundu gravity scheme, or shallow wells with handpumps: 7 Nos

**MEDIUM AND LONG TERM :**  
Tundu gravity scheme, or shallow wells with handpumps

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : IYOGWE  
 Tjata-mission, Chamiha, "anonymous"

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GAI/Iyogwe

Sheet No. : 146/3 - 165/1

Co-ordinates : 6°00'S 37°12'E

Population (1978) : 2856

Livestock-Units (1978) : 926

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	143	182	221	293
Livestock demand (l/s)	0.32	0.36	0.40	0.48
Total demand (l/s)	1.75	2.18	2.61	3.41

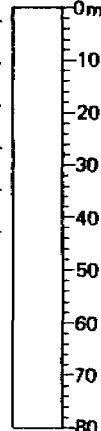
**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	2-6	*VLC 
Aquifer thickness (m)	2-4	
Median waterlevel (m-GL)	1,6	
Permeability (m/day)		
EC (mS/m)	123	
Location	Kinidisi valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDH	M			1,4				82				
Sw	1			3,6				3				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 14 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +6 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KALUNDWA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Kinoie

Sheet No. : 183/4

Co-ordinates : 6°55'S 37°47'E

Population (1978) : 1754

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,83	1,05	1,26	1,68
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets.

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KAMBALA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Hembeti

Sheet No. : 166/3

Co-ordinates : 6°19'S 37°35'E

Population (1978) : 1009

Livestock-Units (1978) : 9126

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,48	0,60	0,73	0,97
Livestock demand (l/s)	2,17	3,56	3,96	4,75
Total demand (l/s)	3,65	4,17	4,69	5,72

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources		
	Name of water source		
Low flow (5% /10% year)			
Distance from village			
Elevation with regard to village			
Water quality			
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water	
	Aquifer type	All. sand	sand
Aquifer depth (m-GL)		20-40	*VLC
Aquifer thickness (m)		5-10	
Median waterlevel (m-GL)		20	
Permeability (m/day)		5-10	
EC (mS/m)		250	
Location	village	village	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply borehole		1972										

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
2,06 l/s

Intake structure : borehole

Water lifting equipment : pump : Seha  
engine : lister

Transmission main : 7,8 km }

Storage tank : 45 m<sup>3</sup>/h } drw. no. 17120  
11,4 km }

Distribution lines : \_\_\_\_\_

Domestic water points : 6

Additional facilities : CT  CD  HC

Level difference Intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)			x
Village population dependent on facility		x	
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 5 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KANGA

Names of Subvillages : Bwage, KIsauke, Kwamwenda

District/Division/Subdivision : MOR/TUR/Kanga

Sheet No. : 166/1

Co-ordinates : 6°01'S 37°44'E

Population (1978) : 1166

Livestock-Units (1978) : 39

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,63	0,81	0,99	1,31
Livestock demand (l/s)	0,01	0,02	0,02	0,02
Total demand (l/s)	0,64	0,83	1,01	1,33

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	Ø Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 10

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

SHORT TERM :  
Shallow wells with handpumps: 6 Nos

MEDIUM AND LONG TERM :  
Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KASANGA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Kasanga

Sheet No. : 201/1-2

Co-ordinates : 7°12'S 37°45'E

Population (1978) : 1428

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,68	0,85	1,03	1,37
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	N. I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets.

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KAUZENI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MZA/Miali

Sheet No. : 183/3

Co-ordinates : 6°53'S 37°36'E

Population (1978) : 781

Livestock-Units (1978) : 52

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,37	0,47	0,56	0,75
Livestock demand (l/s)	0,02	0,02	0,02	0,03
Total demand (l/s)	0,39	0,49	0,59	0,78

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	River Ngerengere	River Mzingo
Name of water source		
Low flow (5% /10% year)	40/50 l/s	>35/>45 l/s
Distance from village	5 km	5 km
Elevation with regard to village	40 m	40 m
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	<p>Aquifer type</p> <p>Aquifer depth (m-GL)</p> <p>Aquifer thickness (m)</p> <p>Median waterlevel (m-GL)</p> <p>Permeability (m/day)</p> <p>EC (mS/m)</p> <p>Location</p>	

\*VLC

0m  
10  
20  
30  
40  
50  
60  
70  
80

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Gravity supply from River Ngerengere	1	1971						8	0,2	0-4	> 1000	F.790306

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity  : 0,63 l/s

Intake structure : Weir and sandtrap in River Ngerengere

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : 1,5 km )

Storage tank : 22,5 m<sup>3</sup> L ) drw.no.17121

Distribution lines : 2,2 km )

Domestic water points : 8

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : + 40 m

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	: 3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets.

**MEDIUM AND LONG TERM :**  
Village water supply conditions comply with 1991 targets.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIBAONI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MGE/Landa11

Sheet No. : 201/1

Co-ordinates : 7°02'S 37°34'E

Population (1978) : 979

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,46	0,580	0,71	0,94
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Mgeta
Low flow (5% /10% year)	533 l/s	perennial
Distance from village	< 1 km	1-3 km
Elevation with regard to village	- 10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 6		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area, having possibilities for pumped supplies or gravity supply from small streams.



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIBANGILE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Kisumu

Sheet No. : 201/2

Co-ordinates : 7°02'S 37°48'E

Population (1978) : 1162

Livestock-Units (1978) : 32

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,55	0,69	0,84	1,12
Livestock demand (l/s)	0,01	0,01	0,01	0,02
Total demand (l/s)	0,56	0,71	0,85	1,13

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA		Potential surface water sources	
Name of water source	River Ruvu		
Low flow (5% /10% year)	>500/>550 l/s		
Distance from village	< 1 km		
Elevation with regard to village	-15 m		
Water quality			
HYDROGEOLOGICAL DATA		Shallow ground water	Medium-depth and deep-ground water
Aquifer type		All. sand	dolomite
Aquifer depth (m-GL)			*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)			
Median waterlevel (m-GL)			
Permeability (m/day)			
EC (mS/m)		500	
Location		Kibilangili valley	

\*1 VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 6 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIBATI (SALAWE)

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Kibati

Sheet No. : 146/4

Co-ordinates : 5°56'S 37°26'E

Population (1978) : 2783

Livestock-Units (1978) : 4627

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,41	1,79	2,18	2,89
Livestock demand (l/s)	1,61	1,81	2,01	2,41
Total demand (l/s)	3,01	3,60	4,18	5,30

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Pumped supply under construction (Maji Project)

**MEDIUM AND LONG TERM :**  
Village water supply conditions will comply with 1991 targets after completion of pumped supply.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIBEDYA

Names of Subvillages : Ilinga

District/Division/Subdivision : KIL/GAU/Gairo

Sheet No. : 164/2

Co-ordinates : 6°06'S 36°55'E

Population (1978) : 3271

Livestock-Units (1978) : 4496

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	155	195	236	314
Livestock demand (l/s)	156	176	195	234
Total demand (l/s)	311	371	431	548

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Gairo gravity scheme		1974						7	0.1	2.0	20	G.790223

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
1,3 l/s

Intake structure : Weir (+ sandtrap) in tributaries River Kitange

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : 7,9 km )

Storage tank : 45 m<sup>3</sup> L ) drw.no. 17165

Distribution lines : 1 km )

Domestic water points : 4

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Gairo gravity scheme

**MEDIUM AND LONG TERM :**  
Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIBIGIRI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MGE/Langa11

Sheet No. : 201/1

Co-ordinates : 7°02'S 37°37'E

Population (1978) : 1978

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,94	1,18	1,43	1,90
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N. I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having possibility for pumped supply or gravity supplies from small streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIBOGWA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Kibogwa

Sheet No. : 183/3 - 201/1

Co-ordinates : 7°00'S 37°42'E

Population (1978) : 1718

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,89	1,14	1,39	1,84
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditons comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area with possibilities for pumped supply or gravity supply from small perennial streams.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIBUKO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Mkuguni I

Sheet No. : 183/4

Co-ordinates : 6°57'S 37°51'E

Population (1978) : 1482

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : Z  Y  Z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,78	1,00	1,22	1,61
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	N.I.	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	ALL.	
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	small valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Shallow wells with handpumps: 8 Nos

**MEDIUM AND LONG TERM :**  
 Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIBUKO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MGE/Tchenzema

Sheet No. : 201/1

Co-ordinates : 7°07'S 37°34'E

Population (1978) : 942

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,45	0,56	0,68	0,90
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	N.I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 6		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
 Village located in mountainous area with possibilities for pumped supply or gravity supply from small streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIBUNGO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Kibungo

Sheet No. : 201/1

Co-ordinates : 7°04'S 37°41'E

Population (1978) : 1053

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,58	0,74	0,91	1,20
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	River Kuvu	River Mvizi
Name of water source		
Low flow (5% /10% year)	2160/2400 l/s	>500 / >550 l/s
Distance from village	1 km	< 1 km
Elevation with regard to village	-15 m	-15 m
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	*VLC	
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	: 3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIBUNGO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Kiroka

Sheet No. : 183/4

Co-ordinates : 6°54'S 37°53'E

Population (1978) : 1135

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,54	0,68	0,82	1,09
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Shallow ground water	Medium-depth and deep-ground water
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All.	
Aquifer depth (m-GL)	0-4	*VLC
Aquifer thickness (m)	4	
Median waterlevel (m-GL)	0.8	
Permeability (m/day)		
EC (mS/m)	42	
Location	Kircha river bed	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 11

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 6 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	: KIBWAYA
Names of Subvillages	:
District/Division/Subdivision	: MOR/MAT/Mkuyuni
Sheet No.	: 183/4
Co-ordinates	: 6°56'S 37°49'E
Population (1978)	: 1406
Livestock-Units (1978)	:
Settlement Pattern	: x <input checked="" type="checkbox"/> y <input type="checkbox"/> z <input type="checkbox"/>
Village facilities	: PS <input checked="" type="checkbox"/> DP <input type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																					
<b>WATER DEMAND</b>																					
	<table border="1"> <thead> <tr> <th></th> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>Population demand (l/s)</td> <td>0,67</td> <td>0,84</td> <td>1,01</td> <td>1,35</td> </tr> <tr> <td>Livestock demand (l/s)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Total demand (l/s)</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		1978	1983	1988	1998	Population demand (l/s)	0,67	0,84	1,01	1,35	Livestock demand (l/s)					Total demand (l/s)				
	1978	1983	1988	1998																	
Population demand (l/s)	0,67	0,84	1,01	1,35																	
Livestock demand (l/s)																					
Total demand (l/s)																					
<b>WATER POTENTIAL</b>																					
Prospects for																					
Suitable ground water sources	: G <input type="checkbox"/> F <input checked="" type="checkbox"/> P <input type="checkbox"/>																				
Suitable surface water sources	: G <input type="checkbox"/> F <input type="checkbox"/> P <input checked="" type="checkbox"/>																				

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
<b>HYDROLOGICAL DATA</b>		Potential surface water sources
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
<b>HYDROGEOLOGICAL DATA</b>		Shallow ground water      Medium-depth and deep-ground water
Aquifer type		All.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		
*) VLC: vertical lithological composition		

4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	: Pumped <input type="checkbox"/> Gravity <input type="checkbox"/>
Intake structure	:
Water lifting equipment	: pump : _____ engine : _____
Transmission main	:
Storage tank	:
Distribution lines	:
Domestic water points	:
Additional facilities	: CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	:

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No.	: 2		

7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES	
<b>SHORT TERM :</b>	Shallow wells with handpumps: 7 Nos
<b>MEDIUM AND LONG TERM :</b>	Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIBWEGE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Mtombozi

Sheet No. : 201/2

Co-ordinates : 7°06'S 37°46'E

Population (1978) : 1006

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,48	0,60	0,72	0,97
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Mvuha
Low flow (5% /10% year)	>150/>200 l/s	
Distance from village	6 km	
Elevation with regard to village	> 50 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Mvuha valley	

\*1 VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Colf MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Mvuha gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KICHANGANI

Names of Subvillages :

District/Division/Subdivision : MOR/TUR/Khonda

Sheet No. : 166/1

Co-ordinates : 6°09'S 37°36'E

Population (1978) : 3593

Livestock-Units (1978) : 27

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	178	226	274	364
Livestock demand (l/s)	0.01	0.01	0.01	0.01
Total demand (l/s)	179	227	275	366

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	RIVER Diwale
Low flow (5% /10% year)	270/340 L/s	
Distance from village	< 1 km	
Elevation with regard to village	0 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply from river Diwale		1967						5,5	< 0,1		50	G.781113

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
2,5 l/s

Intake structure : pump sump in riverbed

Water lifting equipment : pump : Godwin (2x)  
engine : Lister (2x)

Transmission main : 1,4 km )

Storage tank : 45 m<sup>3</sup> H ) drw.no.17092

Distribution lines : 2,8 km )

Domestic water points : 10

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : + 20 m

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Rehabilitations intake works and pumping equipment

**MEDIUM AND LONG TERM :**  
Extension storage tank and extensive distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIDETE STATION

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/ULA/Kidete

Sheet No. : 181/1

Co-ordinates : 6°39'S 36°43'E

Population (1978) : 1382

Livestock-Units (1978) : 672

Settlement Pattern :  $x$    $y$    $z$

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,73	0,94	1,15	1,52
Livestock demand (l/s)	0,23	0,26	0,29	0,35
Total demand (l/s)	0,97	1,20	1,44	1,87

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	River Lumuma	
Name of water source	perennial	
Low flow (5% /10% year)	< 1 km	
Distance from village	-15 m	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All.	
Aquifer type		*VLC
Aquifer depth (m-GL)		0m
Aquifer thickness (m)		10
Median waterlevel (m-GL)		20
Permeability (m/day)		30
EC (mS/m)		40
Location	Mkondoa valley	50
		60
		70
		80

\*1) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Shallow wells with handpumps: 7 Nos

**MEDIUM AND LONG TERM :**  
 Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIDOGOBASI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MIK/Kidodi

Sheet No. : 218/1

Co-ordinates : 7°37'S 37°02'E

Population (1978) : 3424

Livestock-Units (1978) : 5

Settlement Pattern :  $\alpha$    $\gamma$    $\zeta$

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,62	2,04	2,47	3,29
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	1,63	2,05	2,47	3,29

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		

HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		5-35 *VLC
Aquifer thickness (m)		
Median waterlevel (m-GL)	2,0	5,0
Permeability (m/day)		
EC (mS/m)	150	150
Location	village	village

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	$\phi$ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDH	2							150				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility			x

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Pumped supply from borehole:  
BH + 2 km + SRD  
or shallow wells with handpumps: 17 Nos

**MEDIUM AND LONG TERM :**  
Extension of distribution facilities of pumped supply, or shallow wells with handpumps

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIDUDWE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Diongoa

Sheet No. : 166/1

Co-ordinates : 6° 10' S 37° 40' E

Population (1978) : 2183

Livestock-Units (1978) : 94

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,04	1,30	1,57	2,10
Livestock demand (l/s)	0,03	0,04	0,04	0,05
Total demand (l/s)	1,07	1,34	1,61	2,15

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	4-7	*VLC 
Aquifer thickness (m)	3,0	
Median waterlevel (m-GL)	4,5	
Permeability (m/day)		
EC (mS/m)	38	
Location	village	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDR	M			5,0	4,0-5,0	10		38				
Sw	3							40	0,3	31	10	G. 781027
								110	0,4	270	6	P. 781027
								40	0,4	45	0	P. 781027

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 11 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIDUDWE UJAMAA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Diiongoya

Sheet No. : 166/1

Co-ordinates : 6°10'S 37°41'E

Population (1978) : 649

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,31	0,39	0,47	0,62
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All. sand	
Aquifer depth (m-GL)	3-5	
Aquifer thickness (m)	2	
Median waterlevel (m-GL)	2,1	
Permeability (m/day)		
EC (mS/m)	130	
Location	village	

\*1) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDR	5			1,8								
Sw	2			3,0				60	0,1	3,1	6	P.781027
								170	0,2	4	0	P.781027

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility	x		

Village total score : 11

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 3 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIDUGALLO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Kidugallo

Sheet No. : 184/3

Co-ordinates : 6°47'S 38°12'E

Population (1978) : 2133

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,01	1,27	1,54	2,05
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		limestone
Aquifer depth (m-GL)		50-100
Aquifer thickness (m)		6
Median waterlevel (m-GL)		35
Permeability (m/day)		
EC (mS/m)		150
Location		village

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply borehole		1968		201	64-70	6	1,2	150				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
1.15 l/s

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : Mono  
engine : Lombardini

Transmission main : 1,7 km )

Storage tank : 45 m<sup>3</sup> B ) drw.no.17097

Distribution lines : 28 km )

Domestic water points : 5

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)		x	
Village population dependent on facility		x	
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with targets

**MEDIUM AND LONG TERM :**  
Shallow well with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIDUHI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAS/Masanze

Sheet No. : 200/1

Co-ordinates : 7°02'S 37°04'E

Population (1978) : 452

Livestock-Units (1978) : 17430

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,21	0,27	0,33	0,43
Livestock demand (l/s)	6,05	6,81	7,57	9,08
Total demand (l/s)	6,27	7,08	7,89	9,51

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)		25-50
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		<200
Location	village	village

**VLC: vertical lithological composition**

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply from river												
Miyombo		1978						11,5	0,1		18	G.781115

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
: 10,5 l/s

Intake structure : riverside well along river

Water lifting equipment : pump : KSB (2x)  
/ Lister (2x)  
engine : \_\_\_\_\_

Transmission main : 9,0 km )

Storage tank : 90 m<sup>3</sup> H) drw. no.17193

Distribution lines : 2,3 km )

Domestic water points : 3

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	: 3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village water supply conditions comply with 1991 targets

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIDUNDA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Mkulazi

Sheet No. : 202/3-4

Co-ordinates : 7°16'S 38°15'E

Population (1978) : 1402

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,67	0,84	1,01	1,35
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River Ruvu	
Low flow (5% /10% year)	>2020/>2200	
Distance from village	1 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All.	
Aquifer depth (m-GL)		*VLC
Aquifer thickness (m)		0m
Median waterlevel (m-GL)		10
Permeability (m/day)		20
EC (mS/m)		30
Location	Ruvu valley	40
		50
		60
		70
		80

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 7 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIEGEA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Mamboya

Sheet No. : 165/1

Co-ordinates : 6°11'S 37°05'E

Population (1978) : 1217

Livestock-Units (1978) : 1468

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,58	0,73	0,88	1,17
Livestock demand (l/s)	0,51	0,57	0,64	0,76
Total demand (l/s)	1,09	1,30	1,51	1,93

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All.	
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)	400	
Location	small valleys	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility		x	

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

SHORT TERM :

Gairo gravity scheme

MEDIUM AND LONG TERM :

Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIFINDIKE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : mor/MAT/Tawa

Sheet No. : 201/1-2

Co-ordinates : 7°03'S 37°45'E

Population (1978) : 1287

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,61	0,77	0,93	1,24
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Mviziyo
Low flow (5% /10% year)	>500/>550 l/s	
Distance from village	< 1 km	
Elevation with regard to village	-15 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference Intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Pumped supply from riverside well:  
RSWP + 2 km + SRD

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIFINGA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MIK/Kidodi

Sheet No. : 217/2

Co-ordinates : 7°37'S 36°59'E

Population (1978) : 1958

Livestock-Units (1978) : 6

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,93	1,17	1,41	1,88
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	0,93	1,17	1,41	1,88

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	River Kidodi	River Tundu
Name of water source		
Low flow (5% /10% year)	perennial	90/95 l/s
Distance from village	2 km	5 km
Elevation with regard to village	30 m	0 m
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	*VLC	
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
RIVER Kitinga								11,8	0-2	1,8	120	P.790228

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Tundu gravity scheme or shallow wells with handpumps: 10 Nos

**MEDIUM AND LONG TERM :**  
Tundu gravity scheme, or shallow wells with handpumps

# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	: KIPURU
Names of Subvillages	:
District/Division/Subdivision	: MOR/MAT/Kibagwa
Sheet No.	: 183/3 - 201/1
Co-ordinates	: 7°00'S 37°42'E
Population (1978)	: 806
Livestock-Units (1978)	:
Settlement Pattern	: X <input checked="" type="checkbox"/> Y <input type="checkbox"/> Z <input type="checkbox"/>
Village facilities	: PS <input type="checkbox"/> DP <input type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																					
<b>WATER DEMAND</b>																					
	<table border="1"> <thead> <tr> <th></th> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>Population demand (l/s)</td> <td>0,38</td> <td>0,48</td> <td>0,58</td> <td>0,77</td> </tr> <tr> <td>Livestock demand (l/s)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Total demand (l/s)</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		1978	1983	1988	1998	Population demand (l/s)	0,38	0,48	0,58	0,77	Livestock demand (l/s)					Total demand (l/s)				
	1978	1983	1988	1998																	
Population demand (l/s)	0,38	0,48	0,58	0,77																	
Livestock demand (l/s)																					
Total demand (l/s)																					
<b>WATER POTENTIAL</b>																					
Prospects for																					
Suitable ground water sources	: G <input type="checkbox"/> F <input type="checkbox"/> P <input checked="" type="checkbox"/>																				
Suitable surface water sources	: G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																				

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
<b>HYDROLOGICAL DATA</b>		Potential surface water sources
Name of water source	N.I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
<b>HYDROGEOLOGICAL DATA</b>		Shallow ground water / Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		
*) VLC: vertical lithological composition		

4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	: Pumped <input type="checkbox"/> Gravity <input type="checkbox"/>
Intake structure	:
Water lifting equipment	: pump : _____ engine : _____
Transmission main	:
Storage tank	:
Distribution lines	:
Domestic water points	:
Additional facilities	: CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	: _____

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No.	: 3		

7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES	
<b>SHORT TERM :</b>	Village water supply conditions comply with the 1981 targets
<b>MEDIUM AND LONG TERM :</b>	Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIGANILA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Serembala

Sheet No. : 201/2

Co-ordinates : 7°13'S 37°59'E

Population (1978) : 829

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,39	0,49	0,60	0,80
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River Ruvu	
Low flow (5% /10% year)	>2000/>2200 l/s	
Distance from village	< 1 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Shallow wells with handpumps: 4 Nos

**MEDIUM AND LONG TERM :**  
 Shallow wells with handpumps: +2 Nos



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIGUGU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Sungaji

Sheet No. : 166/1

Co-ordinates : 6° 13' S 37° 34' E

Population (1978) : 1530

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.73	0.91	1.10	1.47
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Chazi
Low flow (5% /10% year)	2/3 l/s	
Distance from village	2 km	
Elevation with regard to village	50 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All.	All.
Aquifer type		15-40 *VLC
Aquifer depth (m-GL)		< 5
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)	200-600	150-250
Location		south of village

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
River Chazi								6,5	< 0,1		0	3.781113

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Mhindu gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	: KIRONDA
Names of Subvillages	:
District/Division/Subdivision	: MOR/NGE/Kingolwira
Sheet No.	: 183/3
Co-ordinates	: 6° 46' S 37° 40' E
Population (1978)	: 1707
Livestock-Units (1978)	:
Settlement Pattern	: x <input checked="" type="checkbox"/> y <input type="checkbox"/> z <input type="checkbox"/>
Village facilities	: PS <input checked="" type="checkbox"/> DP <input type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																	
<b>WATER DEMAND</b>																	
	<table border="1"> <thead> <tr> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>0.81</td> <td>1.02</td> <td>1.23</td> <td>1.64</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	1978	1983	1988	1998	0.81	1.02	1.23	1.64								
1978	1983	1988	1998														
0.81	1.02	1.23	1.64														
Population demand (l/s)																	
Livestock demand (l/s)																	
Total demand (l/s)																	
<b>WATER POTENTIAL</b>																	
Prospects for																	
Suitable ground water sources	: G <input type="checkbox"/> F <input type="checkbox"/> P <input checked="" type="checkbox"/>																
Suitable surface water sources	: G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
<b>HYDROLOGICAL DATA</b>		Potential surface water sources
Name of water source	River Ngerengere	
Low flow (5% /10% year)	flow depends on reservoir regime	
Distance from village	< 1 km	
Elevation with regard to village	-10 m	
Water quality		
<b>HYDROGEOLOGICAL DATA</b>		Shallow ground water
Aquifer type	All. sand	Medium-depth and deep-ground water
Aquifer depth (m-GL)	5-15	Gneiss
Aquifer thickness (m)	2.0	
Median waterlevel (m-GL)	1.5	
Permeability (m/day)		100
EC (mS/m)	200-2500	700-3800
Location	Ngerengere valley	Ngerengere valley
*) VLC: vertical lithological composition		

4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	Ø Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Sw	1			3,5	1,5-3,5	2,0	not used	225	0,5	27	0	F.790418

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	: Pumped <input type="checkbox"/> Gravity <input type="checkbox"/>
Intake structure	:
Water lifting equipment	: pump : _____ engine : _____
Transmission main	:
Storage tank	:
Distribution lines	:
Domestic water points	:
Additional facilities	: CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	:

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)		x	
Village population dependent on facility		x	
Village total score	: 13		
Classification in VILLAGE PRIORITY GROUP No.	: 1		

7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES	
SHORT TERM :	Pumped supply from River Ngerengere: RP + 1 km + SRD
MEDIUM AND LONG TERM :	Extension of distribution facilities

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIKEO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MGE/RBkeo

Sheet No. : 201/1

Co-ordinates : 7°12'S 37°33'E

Population (1978) : 1435

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,76	0,97	1,19	1,57
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

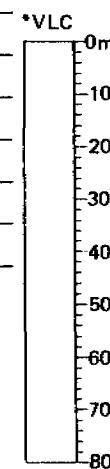
Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	N.I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		



\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Village water supply conditions with the 1981 targets

**MEDIUM AND LONG TERM :**  
 Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	: KIKUNDI
Names of Subvillages	: Mgowe, Luhangazi, Mzowero
District/Division/Subdivision	: MOR/MAT/Krioka
Sheet No.	: 183/4
Co-ordinates	: 6°52'S 37°53'E
Population (1978)	: 1489
Livestock-Units (1978)	: 2
Settlement Pattern	: X <input checked="" type="checkbox"/> Y <input type="checkbox"/> Z <input type="checkbox"/>
Village facilities	: PS <input checked="" type="checkbox"/> DP <input checked="" type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																					
<b>WATER DEMAND</b>																					
	<table border="1"> <thead> <tr> <th></th> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>Population demand (l/s)</td> <td>0,78</td> <td>1,00</td> <td>1,23</td> <td>1,62</td> </tr> <tr> <td>Livestock demand (l/s)</td> <td>0,01</td> <td>0,01</td> <td>0,01</td> <td>0,01</td> </tr> <tr> <td>Total demand (l/s)</td> <td>0,78</td> <td>1,00</td> <td>1,23</td> <td>1,62</td> </tr> </tbody> </table>		1978	1983	1988	1998	Population demand (l/s)	0,78	1,00	1,23	1,62	Livestock demand (l/s)	0,01	0,01	0,01	0,01	Total demand (l/s)	0,78	1,00	1,23	1,62
	1978	1983	1988	1998																	
Population demand (l/s)	0,78	1,00	1,23	1,62																	
Livestock demand (l/s)	0,01	0,01	0,01	0,01																	
Total demand (l/s)	0,78	1,00	1,23	1,62																	
<b>WATER POTENTIAL</b>																					
Prospects for																					
Suitable ground water sources	: G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																				
Suitable surface water sources	: G <input type="checkbox"/> F <input checked="" type="checkbox"/> P <input type="checkbox"/>																				

4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply from riverside well		1972						30	0,2		10	F. 781124

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
<b>HYDROLOGICAL DATA</b>		Potential surface water sources
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
<b>HYDROGEOLOGICAL DATA</b>		Shallow ground water / Medium-depth and deep-ground water
Aquifer type	ALL.	
Aquifer depth (m-G.L)	2-5	
Aquifer thickness (m)	3,0	
Median waterlevel (m-G.L)	0,3	
Permeability (m/day)		
EC (mS/m)	123	
Location	Kiroka valley	
*) VLC: vertical lithological composition		

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	: Pumped <input checked="" type="checkbox"/> Gravity <input type="checkbox"/> 1-38 l/s
Intake structure	: riverside well
Water lifting equipment	: pump: grundfos engine: Bukh
Transmission main	: 2,1 km )
Storage tank	: 22,5 m <sup>3</sup> L ) drw.no.17138
Distribution lines	: 1,6 km )
Domestic water points	: 6
Additional facilities	: CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	: + 30 m

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No.	: 3		

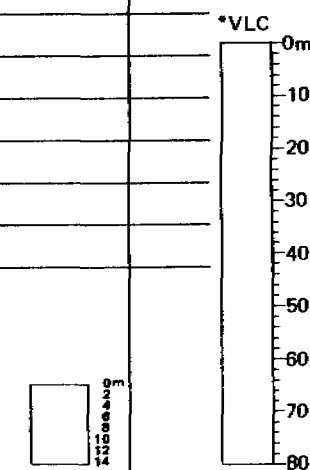
7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES	
<b>SHORT TERM :</b>	Shallow wells with handpumps: 4 Nos
<b>MEDIUM AND LONG TERM :</b>	Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	: KIKUNGA
Names of Subvillages	:
District/Division/Subdivision	: KIL/ULA/Zombo
Sheet No.	: 181/4
Co-ordinates	: 6°59'S 36°55'E
Population (1978)	: 771
Livestock-Units (1978)	: 12
Settlement Pattern	: <input checked="" type="checkbox"/> x <input type="checkbox"/> y <input type="checkbox"/> z
Village facilities	: PS <input type="checkbox"/> DP <input type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																					
<b>WATER DEMAND</b>																					
	<table border="1"> <thead> <tr> <th></th> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>Population demand (l/s)</td> <td>0,37</td> <td>0,46</td> <td>0,56</td> <td>0,74</td> </tr> <tr> <td>Livestock demand (l/s)</td> <td>0,01</td> <td>0,01</td> <td>0,01</td> <td>0,01</td> </tr> <tr> <td>Total demand (l/s)</td> <td>0,37</td> <td>0,46</td> <td>0,56</td> <td>0,75</td> </tr> </tbody> </table>		1978	1983	1988	1998	Population demand (l/s)	0,37	0,46	0,56	0,74	Livestock demand (l/s)	0,01	0,01	0,01	0,01	Total demand (l/s)	0,37	0,46	0,56	0,75
	1978	1983	1988	1998																	
Population demand (l/s)	0,37	0,46	0,56	0,74																	
Livestock demand (l/s)	0,01	0,01	0,01	0,01																	
Total demand (l/s)	0,37	0,46	0,56	0,75																	
<b>WATER POTENTIAL</b>																					
Prospects for																					
Suitable ground water sources	: G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																				
Suitable surface water sources	: G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																				

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
<b>HYDROLOGICAL DATA</b>		Potential surface water sources
Name of water source	River Miyombo	
Low flow (5% /10% year)	>600/> 650 l/s	
Distance from village	1 km	
Elevation with regard to village	-10 m	
Water quality		
<b>HYDROGEOLOGICAL DATA</b>		Shallow ground water / Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		
*VLC: vertical lithological composition		



4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	: Pumped <input type="checkbox"/> Gravity <input type="checkbox"/>
Intake structure	:
Water lifting equipment	: pump : _____ engine : _____
Transmission main	:
Storage tank	:
Distribution lines	:
Domestic water points	:
Additional facilities	: CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	:

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No.	: 3		

7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES	
SHORT TERM :	Shallow wells with handpumps: 4 Nos
MEDIUM AND LONG TERM :	Shallow wells with handpumps: +1 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KILAMA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GAI/Iyogwe

Sheet No. : 165/1

Co-ordinates : 6°03' S 37°14' E

Population (1978) : 800

Livestock-Units (1978) : 2684

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,38	0,48	0,58	0,77
Livestock demand (l/s)	0,93	1,05	1,16	1,40
Total demand (l/s)	1,31	1,53	1,74	2,17

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*| VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)			x
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 13		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Supply from riverside well:  
RSWP + 5 km + SRD

**MEDIUM AND LONG TERM :**  
Extension of distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KILANGALI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAS/Masanze

Sheet No. : 182/3

Co-ordinates : 6°57'S 37°05'E

Population (1978) : 2357

Livestock-Units (1978) : 5094

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,19	1,52	1,85	2,46
Livestock demand (l/s)	1,77	1,99	2,21	2,65
Total demand (l/s)	2,96	3,51	4,06	5,11

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Miyombo
Low flow (5% /10% year)	> 500/>600 l/s	
Distance from village	2 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		25-100 *VLC
Aquifer thickness (m)		5-15
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		<200
Location	village	village

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply from river Miyombo		1970						11,5	0,1		18	G.781115

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
2,05 l/s  
riverside well along river

Intake structure : Miyombo

Water lifting equipment : pump : Mother platt  
engine : Kiloskar

Transmission main : 0,3 km )

Storage tank : 22,5 m<sup>3</sup> B ) drw.no.17129

Distribution lines : 2,4 km

Domestic water points : 7

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Rehabilitation of intake works and pumping equipment

**MEDIUM AND LONG TERM :**  
Extension: storage tank and extensive distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KILIMANJARO

Names of Subvillages :

District/Division/Subdivision : MOR/TUR/Sungazi

Sheet No. : 166/1

Co-ordinates : 6°08'S 37°36'E

Population (1978) : 2235

Livestock Units (1978) : 7

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,06	1,33	1,61	2,15
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	1,06	1,34	1,61	2,15

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River Diwale	
Low flow (5% /10% year)	270/340 l/s	
Distance from village	<1 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply from river Diwale								5,5	< 0,1		50	G.781113

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
see Kichangani

Intake structure : see Kichangani

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : 0,5 km )

Storage tank : 22,3 m<sup>3</sup> B ) drw.no.17092

Distribution lines : 0,2 km )

Domestic water points : 3

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No.	: 3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Rehabilitation intake works and pumping equipment

**MEDIUM AND LONG TERM :**  
Extension works: storage tank and extensive distribution system



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : Kilosa

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : \_\_\_\_\_

Sheet No. : \_\_\_\_\_

Co-ordinates : \_\_\_\_\_

Population (1978) : \_\_\_\_\_

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : N  D  S

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)				
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			
Quality of the water source			
Water accessibility (walking distance to facility)			
Reliability of facility			
Water Quality (EC)			
Village population dependent on facility			

Village total score : \_\_\_\_\_

Classification in VILLAGE PRIORITY GROUP No. : \_\_\_\_\_

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

SHORT TERM :

MEDIUM AND LONG TERM :

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : Kimamba

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : \_\_\_\_\_

Sheet No. : \_\_\_\_\_

Co-ordinates : \_\_\_\_\_

Population (1978) : \_\_\_\_\_

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : N  D  S

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)				
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			
Quality of the water source			
Water accessibility (walking distance to facility)			
Reliability of facility			
Water Quality (EC)			
Village population dependent on facility			

Village total score : \_\_\_\_\_

Classification in VILLAGE PRIORITY GROUP No. : \_\_\_\_\_

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

SHORT TERM :

MEDIUM AND LONG TERM :

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KINDA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Maskati

Sheet No. : 165/2

Co-ordinates : 6°10'S 37°26'E

Population (1978) : 1397

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,66	0,83	1,91	1,34
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N. I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KINONKO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MGE/Mikese

Sheet No. : 184/1

Co-ordinates : 6°44'S 38°01'E

Population (1978) : 651

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.31	0.39	0.47	0.63
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All. sand	
Aquifer depth (m-GL)	5-7	*VLC
Aquifer thickness (m)	1.6	
Median waterlevel (m-GL)	1.7	
Permeability (m/day)	10-50	
EC (mS/m)	150-250	
Location	Matule valley	

\*1 VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDB	5			1.5				120				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility			x
Water Quality (EC)		x	
Village population dependent on facility	x		
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 3 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KINYOLISI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GAU/IYOGWE

Sheet No. : 165/1

Co-ordinates : 6°05'S 37°10'E

Population (1978) : 800

Livestock-Units (1978) : 875

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,38	0,48	0,58	0,77
Livestock demand (l/s)	0,30	0,34	0,38	0,46
Total demand (l/s)	0,68	0,82	0,96	1,22

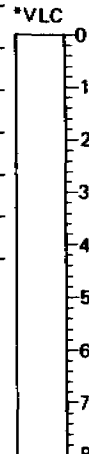
**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	0-7	*VLC 
Aquifer thickness (m)	7.0	
Median waterlevel (m-GL)	2.2	
Permeability (m/day)	700	
EC (mS/m)	74	
Location	Kinyolisi valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
BDH	M			0,2-0,6				65	0,5	2,0		G. 781025

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 11

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 4 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIPERA

Names of Subvillages : Kinyenzem Mwanga

District/Division/Subdivision : MOR/MLA/Mlali

Sheet No. : 183/3

Co-ordinates : 6°56' S 37°22' E

Population (1978) : 2289

Livestock-Units (1978) : 163

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,09	1,37	1,65	2,20
Livestock demand (l/s)	0,06	0,06	0,07	0,06
Total demand (l/s)	1,14	1,43	1,72	2,26

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Mlali
Low flow (5% /10% year)	perennial	
Distance from village	< 1 km	
Elevation with regard to village	-5 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Ngerengere valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply from river Mlali	1	1969										

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
see Mlali

Intake structure : "

Water lifting equipment : pump : see Mlali  
engine : "

Transmission main : 3,0 km )

Storage tank : 22,5 m<sup>3</sup> L ) drw.no.17095A

Distribution lines : 1,2 km )

Domestic water points : 3

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Rehabilitation intake works and pumping equipment

**MEDIUM AND LONG TERM :**

Extension works: storage tank and extensive distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIROKA

Names of Subvillages : Madabala, "Kiroka"

District/Division/Subdivision : MOR/MAT/Kiroka

Sheet No. : 183/4

Co-ordinates : 6°51'S 37°49'E

Population (1978) : 3327

Livestock-Units (1978) :

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	166	210	251	339
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River Kiroka	
Low flow (5% /10% year)	4/6 l/s	
Distance from village	5 km	
Elevation with regard to village	45 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All. sand/loam	dolomite
Aquifer depth (m-GL)	2-4	
Aquifer thickness (m)	1.6	
Median waterlevel (m-GL)	0.7	
Permeability (m/day)		
EC (mS/m)		50
Location	69	
	Tiroka valley	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDR	M											
River Kiroka								20	0,4		0	3,781103
River Mahembe								20	0,3		5	3,781103

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 13

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 7 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +6 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIRUNGA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Kibogwa

Sheet No. : 183/3

Co-ordinates : 6°58'S 37°42'E

Population (1978) : 1215

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,58	0,73	0,88	1,17
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\* ) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area, having possibilities for pumped supply or gravity supply from small perennial rivers



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KISAKI KITUONI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Kisaki

Sheet No. : 201/3

Co-ordinates : 7°29'S 37°36'E

Population (1978) : 2015

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,03	1,32	1,60	2,13
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River Mgeta	
Low flow (5% /10% year)	530/580 l/s	
Distance from village	7 km	
Elevation with regard to village	-20 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All. sand	
Aquifer depth (m-GL)		*VLC
Aquifer thickness (m)		0m
Median waterlevel (m-GL)		10
Permeability (m/day)		20
EC (mS/m)		30
Location	Mgeta valley	40
		50
		60
		70
		80

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance
pumped supply from s.w. *	1											

\* owned by Tanzania Railways Corporation

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)		x	
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 10

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditons comply with 1981 targets

**MEDIUM AND LONG TERM :**

Borehole, 2 km transmission main, storage tank and rudimentary distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KISALA

Names of Subvillages :

District/Division/Subdivision : MOR/TUR/Sungaji

Sheet No. : 166/1

Co-ordinates : 6°10'S 37°36'E

Population (1978) : 1340

Livestock-Units (1978) :

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,64	0,80	0,97	1,29
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	River Divue	river Diviale
Name of water source	25/30 l/s	270/340 l/s
Low flow (5% /10% year)	4 km	< 1 km
Distance from village	30 m	-10 m
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All. sand	
Aquifer type	2-12	*VLC
Aquifer depth (m-GL)		0m
Aquifer thickness (m)		10
Median waterlevel (m-GL)	2.1	20
Permeability (m/day)		30
EC (mS/m)	22	40
Location	village	50
		60
		70
		80

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDB	10			2,2				22				
								17	< 0,1		0	P.781113
								17,5	< 0,1		6	P.781113
								13	0,2		4	P.781113

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main :

Storage tank :

Distribution lines :

Domestic water points :

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 7 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KISANGA

Names of Subvillages : Kilonga

District/Division/Subdivision : KIL/MIK/Kisanga

Sheet No. : 199/3

Co-ordinates : 7°20' S 36°44' E

Population (1978) : 2464

Livestock-Units (1978) : 550

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,25	1,59	1,93	2,56
Livestock demand (l/s)	0,19	0,21	0,24	0,29
Total demand (l/s)	1,44	1,80	2,17	2,84

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N. I.
Low flow (5% /10% year)	perennial	
Distance from village	3 km	
Elevation with regard to village	40 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Shallow wells with handpumps: 12 Nos

**MEDIUM AND LONG TERM :**  
 Shallow wells with handpumps: +5 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	: KISANGA STAND
Names of Subvillages	:
District/Division/Subdivision	: MOR/NGE/Tumunguo
Sheet No.	: 201/2
Co-ordinates	: 7°03'S 37°57'E
Population (1978)	: 1099
Livestock-Units (1978)	:
Settlement Pattern	: X <input type="checkbox"/> Y <input checked="" type="checkbox"/> Z <input type="checkbox"/>
Village facilities	: PS <input checked="" type="checkbox"/> DP <input type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																					
<b>WATER DEMAND</b>																					
	<table border="1"> <thead> <tr> <th></th> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>Population demand (l/s)</td> <td>0,52</td> <td>0,66</td> <td>0,79</td> <td>1,06</td> </tr> <tr> <td>Livestock demand (l/s)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Total demand (l/s)</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		1978	1983	1988	1998	Population demand (l/s)	0,52	0,66	0,79	1,06	Livestock demand (l/s)					Total demand (l/s)				
	1978	1983	1988	1998																	
Population demand (l/s)	0,52	0,66	0,79	1,06																	
Livestock demand (l/s)																					
Total demand (l/s)																					
<b>WATER POTENTIAL</b>																					
Prospects for																					
Suitable ground water sources : G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																					
Suitable surface water sources : G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																					

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
<b>HYDROLOGICAL DATA</b>		Potential surface water sources
Name of water source	River Ruvu	
Low flow (5% /10% year)	> 2100/>2300 l/s	
Distance from village	1 km	
Elevation with regard to village	-10 m	
Water quality		
<b>HYDROGEOLOGICAL DATA</b>		Shallow ground water / Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		
*) VLC: vertical lithological composition		

4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	: Pumped <input type="checkbox"/> Gravity <input type="checkbox"/>
Intake structure	:
Water lifting equipment	: pump : _____ engine : _____
Transmission main	:
Storage tank	:
Distribution lines	:
Domestic water points	:
Additional facilities	: CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	:

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No.	: 3		

7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES	
<b>SHORT TERM :</b>	Shallow wells with handpumps: 5 Nos
<b>MEDIUM AND LONG TERM :</b>	Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KISEMU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGB/Kidugallo

Sheet No. : 184/1

Co-ordinates : 6°44'S 38°13'E

Population (1978) : 966

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,46	0,58	0,70	0,93
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		limestone
Aquifer depth (m-GL)		30-100 *VLC
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		120-190
Location		village

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)			x
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility	x		

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 5 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KISIMAGULU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Hembeti

Sheet No. : 165/2

Co-ordinates : 6° 12' S 37° 28' E

Population (1978) : 1180

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,56	0,70	0,85	1,13
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	N.I.	
Name of water source		
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Gravity scheme, 2 km transmission main, storage tank and rudimentary distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KISINGA

Names of Subvillages :

District/Division/Subdivision : MOR/NGE/Kingolwira

Sheet No. : 183/4

Co-ordinates : 6°48'S 37°51'E

Population (1978) : 938

Livestock-Units (1978) :

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,45	0,56	0,68	0,90
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Rehabilitation of storage tank and rudimentary distribution system

**MEDIUM AND LONG TERM :**  
Extension works: extensive distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KISITWI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GAI/Rubeho

Sheet No. : 164/4

Co-ordinates : 6°18'S 36°53'E

Population (1978) : 2130

Livestock-Units (1978) : 2290

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,01	1,27	1,53	2,05
Livestock demand (l/s)	0,80	0,89	0,99	1,19
Total demand (l/s)	1,81	2,17	2,53	3,24

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Makero
Low flow (5% /10% year)	1/2 l/s	
Distance from village	7 km	
Elevation with regard to village	950 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Gravity water supply		1961						7	0,1	2,2	20	G.790223

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity  see drawings existing Gairo scheme

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : 5,7 km )

Storage tank : 45 m<sup>3</sup> L ) drw.no.17085

Distribution lines : 2 km )

Domestic water points : 3

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Gairo gravity scheme

**MEDIUM AND LONG TERM :**  
Gairo gravity scheme



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KISONGWE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAS/Rudewa

Sheet No. : 182/1

Co-ordinates : 6°39'S 37°01'E

Population (1978) : 1508

Livestock-Units (1978) : 149

Settlement Pattern : Y  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,72	0,90	1,09	1,45
Livestock demand (l/s)	0,05	0,05	0,05	0,08
Total demand (l/s)	0,77	0,96	1,15	1,53

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N. I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No.	: 3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area, having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KISWIRA

Names of Subvillages :

District/Division/Subdivision : MOR/MAT/Kisumu

Sheet No. : 201/2

Co-ordinates : 7°03'S 37°46'E

Population (1978) : 1230

Livestock-Units (1978) :

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,58	0,73	0,89	1,18
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River Mvango	
Low flow (5% /10% year)	>500/>550 l/s	
Distance from village	<10 m	
Elevation with regard to village	-15 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply from river Mviziyo		1972										

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
3,8 l/s  
Riverside well along river

Intake structure : Mviziyo

Water lifting equipment : pump : Grundfos  
engine : Bukh

Transmission main : 2,1 km )  
Storage tank : 22,5 m<sup>3</sup> L ) drw.no.17138  
Distribution lines : 1,6 km )

Domestic water points : 6

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Rehabilitation intake works and pumping equipment

**MEDIUM AND LONG TERM :**  
Village water supply conditions comply with 1991 targets

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KITAITA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GAI/Chockwale

Sheet No. : 145/4

Co-ordinates : 5°58'S 36°58'E

Population (1978) : 624

Livestock-Units (1978) : 931

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,30	0,37	0,45	0,60
Livestock demand (l/s)	0,32	0,36	0,40	0,48
Total demand (l/s)	0,62	0,74	0,85	1,08

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
BDR	20			3,7			dry in dry season	9				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)			x
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 13		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 3 Nos  
or resettlement, or incorporation  
in Gairo gravity plan

**MEDIUM AND LONG TERM :**  
Depending on solution selected for  
short term programme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KITANGE I

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Mamboya

Sheet No. : 164/4

Co-ordinates : 6°16'S 36°57'E

Population (1978) : 1151

Livestock-Units (1978) : 1146

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,55	0,69	0,83	1,11
Livestock demand (l/s)	0,40	0,45	0,50	0,60
Total demand (l/s)	0,94	1,13	1,33	1,70

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Kitange
Low flow (5% /10% year)	7/10 l/s	
Distance from village	9 km	
Elevation with regard to village	40 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Kitange valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference Intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Gairo gravity scheme

**MEDIUM AND LONG TERM :**

Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KITANGE II

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Mamboya

Sheet No. : 164/2

Co-ordinates : 6°12'S 36°58'E

Population (1978) : 2113

Livestock-Units (1978) : 2253

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,08	1,38	1,68	2,22
Livestock demand (l/s)	0,78	0,88	0,98	1,17
Total demand (l/s)	1,86	2,26	2,65	3,39

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Kitange valley	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Gairo gravity scheme

**MEDIUM AND LONG TERM :**  
Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KITETE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Magole

Sheet No. : 165/4

Co-ordinates : 6°25'S 37°16'E

Population (1978) : 1171

Livestock-Units (1978) : 48

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,56	0,70	0,84	1,12
Livestock demand (l/s)	0,02	0,02	0,02	0,03
Total demand (l/s)	0,57	0,72	0,86	1,15

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All. sand	sand
Aquifer depth (m-GL)		15-80 *VLC
Aquifer thickness (m)		5-15
Median waterlevel (m-GL)		12
Permeability (m/day)		
EC (mS/m)		110
Location	village Kitete valley	village

\* ) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance
Sw	2							19				
HDB	M											

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Borehole, 2 km transmission main, storage tank and rudimentary distribution system

**MEDIUM AND LONG TERM :**

Extension works: extensive distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KITETE MSINDAZI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MIK/Kidodi

Sheet No. : 218/1

Co-ordinates : 7°42'S 37°03'E

Population (1978) : 1542

Livestock-Units (1978) : 11

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,73	0,92	1,11	1,48
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	0,74	0,92	1,12	1,49

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	River Great Ruaka	River Ruembe
Name of water source	>100/>1000 l/s	>800/>400 l/s
Low flow (5% /10% year)	<1 km	<1 km
Distance from village	-20 m	-15 m
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All. sand	sand, gravel
Aquifer type	2-6	10-50
Aquifer depth (m-GL)		10-20
Aquifer thickness (m)	3,3	
Median waterlevel (m-GL)		100-300
Permeability (m/day)	18	<100
EC (mS/m)	village	village
Location		

\*1) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 8 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KITONGA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Kasanga

Sheet No. : 201/2

Co-ordinates : 7°12'S 37°46'E

Population (1978) : 1011

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,48	0,60	0,73	0,97
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N. I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area, having possibilities for pumped supply or gravity supply from small perennial streams



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KITUNGWA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MGE/Kingolwira

Sheet No. : 183/3-4

Co-ordinates : 6° 46' S 37° 45' E

Population (1978) : 2211

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,05	1,32	1,59	2,12
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River <u>Mgoiole</u>
Low flow (5% /10% year)	<u>14/17 l/s</u>	
Distance from village	<u>5 km</u>	
Elevation with regard to village	<u>50 m</u>	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 10

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Rehabilitation storage tank and rudimentary distribution system

**MEDIUM AND LONG TERM :**  
 Extension works: extensive distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KITUNGWA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Tawa

Sheet No. : 201/1

Co-ordinates : 7°02'S 37°44'E

Population (1978) : 1192

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,57	0,71	0,86	1,15
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No.	: 3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditons comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIVUNGU

Names of Subvillages : Kivungu "A"

District/Division/Subdivision : KIL/MAS/Masanze

Sheet No. : 182/3

Co-ordinates : 6°56'S 37°02'E

Population (1978) : 2265

Livestock-Units (1978) : 19

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,15	1,47	1,78	2,37
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	1,16	1,47	1,79	2,38

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA		Potential surface water sources	
Name of water source	River Miyombo		
Low flow (5% /10% year)	>500/>600 l/s		
Distance from village	2 km		
Elevation with regard to village	-10 m		
Water quality			
HYDROGEOLOGICAL DATA		Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All.	All.	
Aquifer depth (m-GL)		15-100	*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		5-15	
Median waterlevel (m-GL)			
Permeability (m/day)			
EC (mS/m)		< 200	
Location	village	village	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply from river Miyombo		1972										

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
1,44 l/s

Intake structure :

Water lifting equipment : pump : mother platt  
engine : Kiloskar

Transmission main : 1,6 km )

Storage tank : 22,5 m<sup>3</sup> H ) drw.no. 17123

Distribution lines : 2,6 km )

Domestic water points : 7

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) :

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No.	: 3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Rehabilitation of intake works and pumping equipment

**MEDIUM AND LONG TERM :**  
Extension works:  
transmission main, storage tank and extensive distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIWEGE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Mgerengere

Sheet No. : 184/3

Co-ordinates : 6°49'S 38°04'E

Population (1978) : 937

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,44	0,56	0,68	0,90
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	weathered gneiss	
Aquifer type		*VLC
Aquifer depth (m-GL)		0m
Aquifer thickness (m)		10
Median waterlevel (m-GL)	2,0	20
Permeability (m/day)	low	30
EC (mS/m)	< 75	40
Location	small valley	50
		60
		70
		80

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDE	6			2,0			very small yields	9				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)			x
Reliability of facility			x
Water Quality (EC)		x	
Village population dependent on facility	x		
Village total score	: 14		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 5 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIZAGIRA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Kasanga

Sheet No. : 201/1-2

Co-ordinates : 7°13'S 37°45'E

Population (1978) : 628

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,30	0,37	0,45	0,60
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 7

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Gravity scheme, 2 km transmission main, storage tank and rudimentary distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KIZINA

Names of Subvillages : Milengolenge

District/Division/Subdivision : MOR/MAT/Kiroka

Sheet No. : 183/4

Co-ordinates : 6°51'S 37°50'E

Population (1978) : 2210

Livestock-Units (1978) : 60

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1.05	1.32	1.59	2.12
Livestock demand (l/s)	0.02	0.02	0.03	0.03
Total demand (l/s)	1.07	1.34	1.62	2.15

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Kiroka
Low flow (5% /10% year)	4/6 l/s	
Distance from village	7 km	
Elevation with regard to village	70 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All. sand/loam	dolomite
Aquifer type	2-4	*VLC
Aquifer depth (m-GL)	2	
Aquifer thickness (m)	1.2	
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)	73	50
Location	Kiroka village	village

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 13		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 11 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +4 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KODODO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MGE/KIkeo

Sheet No. : 201/1

Co-ordinates : 7°09'S 37°31'E

Population (1978) : 2134

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,01	1,27	1,54	2,05
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

village water supply conditions with 1981 targets

**MEDIUM AND LONG TERM :**

The sufficient data available

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KOLERO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Kolero

Sheet No. : 201/2

Co-ordinates : 7°14'S 37°47'E

Population (1978) : 1540

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1.81	1.93	1.26	1.48
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Not sufficient data available



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KOLONI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA' Kasanga

Sheet No. : 201/2

Co-ordinates : 7°10'S 37°46'E

Population (1978) : 1485

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,70	0,89	1,07	1,43
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	N.I.	
Name of water source	perennial	
Low flow (5% /10% year)	1-3 km	
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	*VLC	
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Gravity scheme, 2 km transmission main, storage tank and rudimentary distribution main

# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	: KONDE
Names of Subvillages	:
District/Division/Subdivision	: MOR/MAT/Kisumu
Sheet No.	: 201/1-2
Co-ordinates	: 7°04'S 37°45'E
Population (1978)	: 1231
Livestock-Units (1978)	: 78
Settlement Pattern	: x <input type="checkbox"/> y <input type="checkbox"/> z <input type="checkbox"/>
Village facilities	: PS <input checked="" type="checkbox"/> DP <input type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																					
<b>WATER DEMAND</b>																					
	<table border="1"> <thead> <tr> <th></th> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>Population demand (l/s)</td> <td>0,58</td> <td>0,73</td> <td>0,89</td> <td>1,16</td> </tr> <tr> <td>Livestock demand (l/s)</td> <td>0,03</td> <td>0,03</td> <td>0,03</td> <td>0,04</td> </tr> <tr> <td>Total demand (l/s)</td> <td>0,61</td> <td>0,77</td> <td>0,92</td> <td>1,22</td> </tr> </tbody> </table>		1978	1983	1988	1998	Population demand (l/s)	0,58	0,73	0,89	1,16	Livestock demand (l/s)	0,03	0,03	0,03	0,04	Total demand (l/s)	0,61	0,77	0,92	1,22
	1978	1983	1988	1998																	
Population demand (l/s)	0,58	0,73	0,89	1,16																	
Livestock demand (l/s)	0,03	0,03	0,03	0,04																	
Total demand (l/s)	0,61	0,77	0,92	1,22																	
<b>WATER POTENTIAL</b>																					
Prospects for																					
Suitable ground water sources	: G <input type="checkbox"/> F <input type="checkbox"/> P <input checked="" type="checkbox"/>																				
Suitable surface water sources	: G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																				

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
<b>HYDROLOGICAL DATA</b>		Potential surface water sources
Name of water source		N. I.
Low flow (5% /10% year)		perennial
Distance from village		1-3 km
Elevation with regard to village		
Water quality		
<b>HYDROGEOLOGICAL DATA</b>		Shallow ground water
		Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		
		*VLC: vertical lithological composition

4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	: Pumped <input type="checkbox"/> Gravity <input type="checkbox"/>
Intake structure	:
Water lifting equipment	: pump : _____ engine : _____
Transmission main	:
Storage tank	:
Distribution lines	:
Domestic water points	:
Additional facilities	: CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	:

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No.	: 3		

7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES	
<b>SHORT TERM :</b>	
Village water supply conditions comply with 1981 targets	
<b>MEDIUM AND LONG TERM :</b>	
Gravity scheme, 2 km transmission main, storage tank and rudimentary distribution	

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KONDOA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : XIL/MAS/Makwerebwere

Sheet No. : 182/3

Co-ordinates : 6°49'S 37°03'E

Population (1978) : 1021

Livestock-Units (1978) : 227

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.48	0.61	0.74	0.78
Livestock demand (l/s)	0.08	0.09	0.10	0.12
Total demand (l/s)	0.56	0.70	0.83	1.10

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Mleondoa
Low flow (5% /10% year)	570/ 600 l/s	
Distance from village	3 km	
Elevation with regard to village	- 5 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All. sand	All. sand
Aquifer type	2-9	18-60 *VLC
Aquifer depth (m-GL)	5,4	25
Aquifer thickness (m)	1,7	1,5
Median waterlevel (m-GL)	10-100	125
Permeability (m/day)	56	55
EC (mS/m)	village	village
Location		

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDB	10				2,5			52	0,8	4,9	2	P.781025
Sw	5							37	0,4	1.2	0	F.781025
								42	0,8		70	G.781025
BH *	1	1979						45	0,5	3	0	G.790329

\* not in operation yet

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Pumped supply from borehole:  
BH + 2km + SRD,  
or shallow wells with handpumps: 5 Nos

**MEDIUM AND LONG TERM :**  
Extension works: extensive distribution system, or shallow wells with handpumps

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KONGA/VIKENGE

Names of Subvillages :

District/Division/Subdivision : MOR/MLA/Mla1i

Sheet No. : 183/3

Co-ordinates : 6°55'S 37°36'E

Population (1978) : 1449

Livestock-Units (1978) :

Settlement Pattern :  Y  Y  Z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,76	0,98	1,20	1,58
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	River Ngerengere	
Name of water source	391/49 l/s	
Low flow (5% /10% year)	4 km	
Distance from village	50 m	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

**\*VLC**

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coll MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Gravity water supply from river Ngerengere (Maji Project)

**MEDIUM AND LONG TERM :**

Village water supply conditions will comply with 1991 targets after completion of Maji project

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KONGWA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Mvuha

Sheet No. : 201/2

Co-ordinates : 7° 14' S 37° 54' E

Population (1978) : 1157

Livestock Units (1978) : 1857

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,55	0,69	0,83	1,11
Livestock demand (l/s)	0,64	0,73	0,81	0,97
Total demand (l/s)	1,19	1,42	1,64	2,08

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	RIVER Mvuha
Low flow (5% /10% year)	600/730 l/s	
Distance from village	< 1 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All sand
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Mvuha valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Shallow wells with handpumps: 6 Nos

**MEDIUM AND LONG TERM :**  
 Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KUMBA (KILEME)

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Bwakiira Jyy

Sheet No. : 201/1

Co-ordinates : 7°13'S 37°43'E

Population (1978) : 961

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,46	0,57	0,69	0,92
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

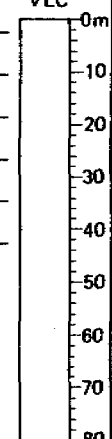
Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	N.I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		



\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area, having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KUMBULU

Names of Subvillages :

District/Division/Subdivision : KIL/MON/ChanjaLe

Sheet No. : 164/3-4

Co-ordinates : 6°27'S 36°45'E

Population (1978) : 1255

Livestock-Units (1978) :

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,60	0,75	0,90	1,21
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Kumbulu
Low flow (5% /10% year)	perennial	
Distance from village	2 km	
Elevation with regard to village	40 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main :

Storage tank :

Distribution lines :

Domestic water points :

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Gravity scheme, 2,5 km transmission main, storage tank and rudimentary distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	: KUNKE
Names of Subvillages	:
District/Division/Subdivision	: MOR/TUR/Dlongoya
Sheet No.	: 166/1
Co-ordinates	: 6°08'S 37°40'E
Population (1978)	: 1326
Livestock Units (1978)	: 20
Settlement Pattern	: X <input type="checkbox"/> Y <input checked="" type="checkbox"/> Z <input type="checkbox"/>
Village facilities	: PS <input checked="" type="checkbox"/> DP <input type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																					
<b>WATER DEMAND</b>																					
	<table border="1"> <thead> <tr> <th></th> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>Population demand (l/s)</td> <td>0.63</td> <td>0.77</td> <td>0.96</td> <td>1.27</td> </tr> <tr> <td>Livestock demand (l/s)</td> <td>0.01</td> <td>0.01</td> <td>0.01</td> <td>0.01</td> </tr> <tr> <td>Total demand (l/s)</td> <td>0.64</td> <td>0.80</td> <td>0.97</td> <td>1.28</td> </tr> </tbody> </table>		1978	1983	1988	1998	Population demand (l/s)	0.63	0.77	0.96	1.27	Livestock demand (l/s)	0.01	0.01	0.01	0.01	Total demand (l/s)	0.64	0.80	0.97	1.28
	1978	1983	1988	1998																	
Population demand (l/s)	0.63	0.77	0.96	1.27																	
Livestock demand (l/s)	0.01	0.01	0.01	0.01																	
Total demand (l/s)	0.64	0.80	0.97	1.28																	
<b>WATER POTENTIAL</b>																					
Prospects for																					
Suitable ground water sources	: G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																				
Suitable surface water sources	: G <input type="checkbox"/> F <input type="checkbox"/> P <input checked="" type="checkbox"/>																				

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
<b>HYDROLOGICAL DATA</b>		Potential surface water sources
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
<b>HYDROGEOLOGICAL DATA</b>		Shallow ground water / Medium-depth and deep-ground water
Aquifer type	All. sand	*VLC 
Aquifer depth (m-GL)	6-10	
Aquifer thickness (m)		
Median waterlevel (m-GL)	6,5	
Permeability (m/day)		
EC (mS/m)	110	
Location	village	
*) VLC: vertical lithological composition		

4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDH	4			6,6				110				
SW	2							250	0,4	10	0	P. 781027
								130	0,6	3.1	6	G. 781027

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	: Pumped <input type="checkbox"/> Gravity <input type="checkbox"/>
Intake structure	:
Water lifting equipment	: pump : _____ engine : _____
Transmission main	:
Storage tank	:
Distribution lines	:
Domestic water points	:
Additional facilities	: CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	:

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)		x	
Village population dependent on facility		x	
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No.	: 1		

7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES	
<b>SHORT TERM :</b>	Shallow wells with handpumps: 7 Nos
<b>MEDIUM AND LONG TERM :</b>	Shallow wells with handpumps: +2 Nos



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KWABA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Ngerengere

Sheet No. : 184/4

Co-ordinates : 6°59'S 38°16'E

Population (1978) : 718

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,34	0,43	0,52	0,69
Livestock demand (l/s)				
Total demand (l/s)				

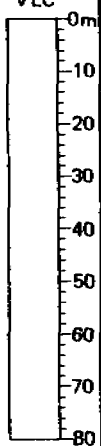
**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	2-12	*VLC 
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)	125	
Location	Ngerengere valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDB	1			0,4				125				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 4 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +1 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KWAMBE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Magole

Sheet No. : 165/4

Co-ordinates : 6°21'S 37°17'E

Population (1978) : see Makwambe

Livestock-Units (1978) : 16898

Settlement Pattern :  $\chi$    $y$    $z$

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)				
Livestock demand (l/s)	5.87	6.60	7.33	8.80
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	$\phi$ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
No permanent settlement, supply from existing cattle watering facilities

**MEDIUM AND LONG TERM :**  
see above

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KWAMTONGA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Sungaji

Sheet No. : 166/1

Co-ordinates : 6°09'S 37°35'E

Population (1978) : 1109

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,53	0,66	0,80	1,07
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	River Divue	
Name of water source		
Low flow (5% /10% year)	25/31 l/s	
Distance from village	2 km	
Elevation with regard to village	30 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	*VLC	
Aquifer type	all. sand	
Aquifer depth (m-GL)	3-6	
Aquifer thickness (m)	1,0	
Median waterlevel (m-GL)	1,3	
Permeability (m/day)		
EC (mS/m)	24	
Location	village	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. : 3			

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 6 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KWELIKWIJI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Mhonda

Sheet No. : 166/1

Co-ordinates : 6°06'S 37°34'E

Population (1978) : 1464

Livestock-Units (1978) : 18

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,69	0,87	1,05	1,41
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	0,70	0,88	1,06	1,42

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Chazi
Low flow (5% /10% year)	50/ 75 l/s	
Distance from village	1 km	
Elevation with regard to village	40 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 7

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Gravity scheme, 2 km transmission main, storage tank and rudimentary distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : KWIPIPA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GAI/Rubeko

Sheet No. : 164/2

Co-ordinates : 6°12'S 36°52'E

Population (1978) : 1273

Livestock-Units (1978) : 1569

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,60	0,76	0,92	1,22
Livestock demand (l/s)	0,54	0,61	0,68	0,82
Total demand (l/s)	1,15	1,37	1,60	2,04

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Gravity water supply		1972										

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
 : see drawings existing Gairo scheme

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : 45 m<sup>3</sup> L )  
 ) see drw.no.17085

Distribution lines : 3 km )

Domestic water points : 1

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No.	: 2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Gairo gravity scheme

**MEDIUM AND LONG TERM :**

Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LANGALI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MGE/Langali

Sheet No. : 201/1

Co-ordinates : 7°03'S 37°34'E

Population (1978) : 2201

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,13	1,44	1,76	2,33
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Mgeta
Low flow (5% /10% year)	533 l/s, 575 l/s	perennial
Distance from village	1 km	1-3 km
Elevation with regard to village	-20 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance
Gravity water supply from river Mgeta		1974										

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : Weir(+ sandtrap) in river Mgeta

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : 4,1 km

Storage tank : \_\_\_\_\_

Distribution lines : 1,9 km

Domestic water points : 5

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
 Village located in mountainous area, having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LANZI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Kibungo

Sheet No. : 201/1

Co-ordinates : 7°04'S 37°40'E

Population (1978) : 1010

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,48	0,60	0,73	0,97
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No.	: 3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LEGEZAMWENDO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Kingolwira

Sheet No. : 183/4

Co-ordinates : 6°47'S 37°46'E

Population (1978) : 1373

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,65	0,82	0,99	1,32
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River Mgojole	
Low flow (5% /10% year)	14/17 l/s	
Distance from village	4 km	
Elevation with regard to village	40 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Gravity water supply * from river Mgojole		1960										

\* Run-of-the-river system

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
1,75 l/s

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_ )

Storage tank : \_\_\_\_\_ ) drw.no. 7545

Distribution lines : 1,6 km )

Domestic water points : 1

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Rehabilitation programme :  
storage tank and rudimentary distribution system

**MEDIUM AND LONG TERM :**  
Extension works: extensive distribution system



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LESHATA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GAI/Chakwale

Sheet No. : 146/3

Co-ordinates : 5°58'S 37°04'E

Population (1978) : 2285

Livestock-Units (1978) : 6143

Settlement Pattern : I  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,08	1,36	1,65	2,20
Livestock demand (l/s)	2,13	2,40	2,67	3,20
Total demand (l/s)	3,22	3,76	4,31	5,39

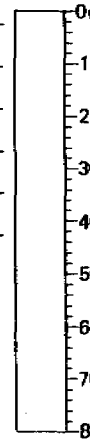
**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	ALL. sand
Aquifer depth (m-GL)	0-7	*VLC 
Aquifer thickness (m)	7	
Median waterlevel (m-GL)	1,5	
Permeability (m/day)		
EC (mS/m)	40	
Location	Magera valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDH	M			0,4				40				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 13

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 11 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +5 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LOGO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/TAWA

Sheet No. : 183/4

Co-ordinates : 6°59'S 37°47'E

Population (1978) : 871

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,41	0,52	0,63	0,84
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	River Ruvu	
Name of water source	River Ruvu	
Low flow (5% /10% year)	> 500/>550 l/s	
Distance from village	< 1 km	
Elevation with regard to village	-20 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
 Pumped water supply (river Ruvu)

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LONGWE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Kasanga

Sheet No. : 201/1

Co-ordinates : 7°12'S 37°43'E

Population (1978) : 635

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,30	0,38	0,46	0,61
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N. I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC
Aquifer thickness (m)		0m
Median waterlevel (m-GL)		10
Permeability (m/day)		20
EC (mS/m)		30
Location		40
		50
		60
		70
		80

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No.	: 3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUALE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MGE/Kikeo

Sheet No. : 201/1

Co-ordinates : 7°07'S 37°33'E

Population (1978) : 2303

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,17	1,49	1,81	2,40
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	N. I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
 Village located in mountainous area having possibilities for pumped supply of gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUBASAZI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Kolero

Sheet No. : 201/2-4

Co-ordinates : 7°15'S 37°47'E

Population (1978) : 861

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,41	0,51	0,62	0,83
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	Ø Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Not sufficient data available

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUBUMU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Kidungalle

Sheet No. : 184/3

Co-ordinates : 6°54'S 38°13'E

Population (1978) : 372

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,18	0,22	0,27	0,36
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA		Potential surface water sources	
Name of water source			
Low flow (5% /10% year)			
Distance from village			
Elevation with regard to village			
Water quality			
HYDROGEOLOGICAL DATA		Shallow ground water	Medium-depth and deep-ground water
Aquifer type		All sand	
Aquifer depth (m-GL)			
Aquifer thickness (m)			
Median waterlevel (m-GL)			
Permeability (m/day)			
EC (mS/m)		< 200	
Location		Ngerengere valley	

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 2 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +1 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUBUNGU

Names of Subvillages :

District/Division/Subdivision : MOR/MLA/MLa11

Sheet No. : 182/4 - 183/3

Co-ordinates : 6°50'S 37°30'E

Population (1978) : 1095

Livestock-Units (1978) :

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,52	0,65	0,79	1,05
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	ALL. sandy/loam	
Aquifer type		*VLC
Aquifer depth (m-GL)	3,5-5,0	
Aquifer thickness (m)	1,5	
Median waterlevel (m-GL)	3,5	
Permeability (m/day)	100	
EC (mS/m)	70	
Location	village	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDR	2											
Sw	2			4,0				70				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main :

Storage tank :

Distribution lines :

Domestic water points :

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 5 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUBUNGO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/M1kese

Sheet No. : 183/2

Co-ordinates : 6°44'S 37°55'E

Population (1978) : 967

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  1  2  3

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.46	0.58	0.70	0.93
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA		Potential surface water sources	
Name of water source			
Low flow (5% /10% year)			
Distance from village			
Elevation with regard to village			
Water quality			
HYDROGEOLOGICAL DATA		Shallow ground water	Medium-depth and deep-ground water
Aquifer type		All /gneiss	*VLC
Aquifer depth (m-GL)			
Aquifer thickness (m)			
Median waterlevel (m-GL)			
Permeability (m/day)			
EC (mS/m)		35-600	
Location		small valley	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
BDR	2			3,5			very low	35				
Sw	1		1,35	5,3			"	53				
Sw	1		1,35	4,8			dry in dry-season	300	0,3	7,5	20	P.781122

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility			x
Water Quality (EC)			x
Village population dependent on facility	x		

Village total score : 14

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 5 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +2 Nos



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUFUKIRI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/NON/Chagongwe

Sheet No. : 164/4

Co-ordinates : 6°23'S 36°52'E

Population (1978) : 1004

Livestock-Units (1978) : 1619

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,48	0,60	0,72	0,96
Livestock demand (l/s)	0,56	0,62	0,70	0,84
Total demand (l/s)	1,04	1,23	1,43	1,81

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No.	: 3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUGENI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Mtombozl

Sheet No. : 201/1

Co-ordinates : 7°06'S 37°44'E

Population (1978) : 707

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,34	0,42	0,51	0,68
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	N. I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 7

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUHEMBE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MIK/

Sheet No. : 199/4

Co-ordinates : \_\_\_\_\_

Population (1978) : 303

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :   $\alpha$    $\gamma$    $\beta$    $\delta$

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,14	0,18	0,32	0,29
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All.	sandstone
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		15
Permeability (m/day)		
EC (mS/m)		150
Location	Ruhembe valley	village

\* ) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	$\phi$ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Not sufficient data available

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : TUHINDO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Mvomero

Sheet No. : 166/3

Co-ordinates : 6°28'S 37°33'E

Population (1978) : 812

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,34	0,48	0,59	0,78
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Wami
Low flow (5% /10% year)	1550/1930 l/s	
Distance from village	3 km	
Elevation with regard to village	-5 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All. sand	decomposal basement
Aquifer type	5-10	33-35
Aquifer depth (m-GL)		
Aquifer thickness (m)		2
Median waterlevel (m-GL)		very low
Permeability (m/day)		
EC (mS/m)	200-2800	800
Location	village	

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)			x
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 10

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Pumped supply from borehole in Dohawa village:  
BH + 3 km + SRD

**MEDIUM AND LONG TERM :**  
Extension of distribution facilities

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUHOLELE

Names of Subvillages : MADAM

District/Division/Subdivision : 183/4

Sheet No. : 6°56'S 37°50'E

Co-ordinates : 1645

Population (1978) :

Livestock-Units (1978) :

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,78	0,98	1,19	1,58
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	small valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 3 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +4 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LURWAJI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GAU/Gairo

Sheet No. : 164/2

Co-ordinates : 6° 11' S 36° 50' E

Population (1978) : 879

Livestock-Units (1978) : 774

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,42	0,52	0,63	0,84
Livestock demand (l/s)	0,27	0,30	0,34	0,40
Total demand (l/s)	0,69	0,83	0,97	1,25

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

0m  
10  
20  
30  
40  
50  
60  
70  
80

1  
14  
14300000

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Gravity water supply		1972										

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
see drawing existing Gairo scheme

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_ )  
drw.no. 17085

Storage tank : \_\_\_\_\_ )

Distribution lines : 3,2 km )

Domestic water points : 1

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source	x		
Water accessibility (walking distance to facility)		x	
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Gairo gravity scheme

**MEDIUM AND LONG TERM :**  
Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUKANGE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Kolero

Sheet No. : 201/4

Co-ordinates : 7°16'S 37°46' E

Population (1978) : 1841

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,87	1,19	1,33	1,77
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		
*) VLC: vertical lithological composition		

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Not sufficient data available.  
Possibly shallow wells with handpumps.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUKENGU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Kibungo

Sheet No. : 201/1

Co-ordinates : 7°03'S 37°43'E

Population (1978) : 1103

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,52	0,66	0,79	1,06
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/t)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditons comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having facilities for pumped supply or gravity supply from small perennial streams



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUKENGE

Names of Subvillages :

District/Division/Subdivision : MOR/TUR/Sungaji

Sheet No. : 166/1

Co-ordinates : 6°14'S 37° 38'E

Population (1978) : 864

Livestock-Units (1978) : 13

Settlement Pattern :  $\alpha$    $\beta$    $\gamma$

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,41	0,52	0,62	0,83
Livestock demand (l/s)	0,81	0,01	0,01	0,01
Total demand (l/s)	0,41	0,52	0,63	0,84

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Diwale
Low flow (5% /10% year)	>250/>320 l/s	
Distance from village	< 1 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	0-6	
Aquifer thickness (m)	6	
Median waterlevel (m-GL)	0,0	
Permeability (m/day)	50-100	
EC (mS/m)	20	
Location	Diwale riverbed	
*) VLC: vertical lithological composition		

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply from Sw in riverbed	1	1973		1,5				5	0,1	2,7	0	P.781027
HDH				2,0				8				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  1,03 l/s Gravity

Intake structure :

Water lifting equipment : pump : mother platt  
engine : Kiloskar

Transmission main : 1,4 km )

Storage tank : 22,5 m<sup>3</sup> H ) drw.no. 17139

Distribution lines : 0,5 km )

Domestic water points : 3

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : + 20 m

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Rehabilitation works:  
intake works and pumping equipment

**MEDIUM AND LONG TERM :**  
Extension of distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUKOBE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Mzinga

Sheet No. : 183/1-3

Co-ordinates : 6°45'S 37°37'E

Population (1978) : 1380

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,65	0,82	0,99	1,33
Livestock demand (l/s)				
Total demand (l/s)				

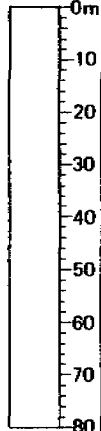
**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River Ngerengere	
Low flow (5% /10% year)	Low disposal on reservoir regime	
Distance from village	4 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All. sand	
Aquifer depth (m-GL)	2,5-5-0	*VLC 
Aquifer thickness (m)	2,5	
Median waterlevel (m-GL)	3,5	
Permeability (m/day)		
EC (mS/m)	142	
Location	small valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDB	3			2,5				12				
Sw	1			3,5	2,5-5,0	2,5		142				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)			x
Village population dependent on facility		x	
Village total score	: 13		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 7 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUKULUNGE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Mvuha

Sheet No. : 201/2

Co-ordinates : 7°13'S 37°53'E

Population (1978) : 636

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,30	0,38	0,46	0,61
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	River Mvuha	
Name of water source	601/730 l/s	
Low flow (5% /10% year)	1 km	
Distance from village	-10 m	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	ALL.	
Aquifer type		*VLC
Aquifer depth (m-GL)		0m
Aquifer thickness (m)		10
Median waterlevel (m-GL)		20
Permeability (m/day)		30
EC (mS/m)		40
Location	Mvuha valley	50
		60
		70
		80

\* ) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No.	: 3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 3 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps or pumped water supply river Mvuha as part of a scheme for 3 villages. see table EA 2-1.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUKUGUNI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MGE/Kikeo

Sheet No. : 201/1

Co-ordinates : 7°10'S 37°32'E

Population (1978) : 1694

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,80	1,01	1,22	1,63
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N. I.
Low flow (5% /10% year)	Perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUKUYU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MGE/Langali

Sheet No. : 201/1

Co-ordinates : 7°02'S 37°32'E

Population (1978) : 791

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,38	0,47	0,57	0,76
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 6		
Classification in VILLAGE PRIORITY GROUP No. :	: 3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditons comply with 1981 targets

**MEDIUM AND LONG TERM :**

Not sufficient data available

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LULONGWE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Ngerengere

Sheet No. : 184/3

Co-ordinates : 6°58'S 38°12'E

Population (1978) : 883

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,42	0,53	0,64	0,85
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All. sand	
Aquifer depth (m-GL)	1,5-5	*VLC
Aquifer thickness (m)		
Median waterlevel (m-GL)	2,5	
Permeability (m/day)		
EC (mS/m)	125	
Location	Lulongwe valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDB	M			2,5				125				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 4 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUMANGO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MIK/Kidodi

Sheet No. : 218/1

Co-ordinates : 7°31'S 37°02'E

Population (1978) : 835

Livestock-Units (1978) : 13

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,40	0,50	0,60	0,80
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	0,40	0,50	0,61	0,81

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	River Ruhembe	
Name of water source	River Ruhembe	
Low flow (5% /10% year)	> 50 / > 75 l/s	
Distance from village	< 1 km	
Elevation with regard to village	-30 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	*VLC	
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	Ø Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
River Lumango								12,5	0,2	1,8	20	F.790228

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 4 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUMBA CHINI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Singisa

Sheet No. : 201/2

Co-ordinates : 7°16'S 37°37'E

Population (1978) : 2154

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,02	1,29	1,55	2,07
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from vilage	1-3 km	
Elevation with regard to vilage		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	small valley	
*) VLC: vertical lithological composition		

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditons comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having possibilities for pumped supply of gravity supply from small perennial streams



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUMBA JUU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Singisa

Sheet No. : 201/1

Co-ordinates : 7° 12' S 37° 38' E

Population (1978) : 860

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,41	0,51	0,62	0,83
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N. I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	LUMBIJI
Names of Subvillages	
District/Division/Subdivision	KIL/NON/Chanjale
Sheet No.	181/2
Co-ordinates	6°37'S 36°59'E
Population (1978)	1661
Livestock-Units (1978)	
Settlement Pattern	x <input checked="" type="checkbox"/> y <input type="checkbox"/> z <input type="checkbox"/>
Village facilities	PS <input checked="" type="checkbox"/> DP <input type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																	
<b>WATER DEMAND</b>																	
	<table border="1"> <thead> <tr> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>0,88</td> <td>1,11</td> <td>1,34</td> <td>1,79</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	1978	1983	1988	1998	0,88	1,11	1,34	1,79								
1978	1983	1988	1998														
0,88	1,11	1,34	1,79														
Population demand (l/s)																	
Livestock demand (l/s)																	
Total demand (l/s)																	
<b>WATER POTENTIAL</b>																	
Prospects for																	
Suitable ground water sources	G <input type="checkbox"/> F <input type="checkbox"/> P <input checked="" type="checkbox"/>																
Suitable surface water sources	G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
<b>HYDROLOGICAL DATA</b>	Potential surface water sources	
Name of water source	River Lumbiji	
Low flow (5% /10% year)	perennial	
Distance from village	4 km	
Elevation with regard to village	30 m	
Water quality		
<b>HYDROGEOLOGICAL DATA</b>	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		
*) VLC: vertical lithological composition		

4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	Pumped <input type="checkbox"/> Gravity <input type="checkbox"/>
Intake structure	
Water lifting equipment	pump : _____ engine : _____
Transmission main	
Storage tank	
Distribution lines	
Domestic water points	
Additional facilities	CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No.	: 3		

7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES
<b>SHORT TERM :</b> village water supply conditions comply with 1981 targets
<b>MEDIUM AND LONG TERM :</b> Gravity water supply from river Lumbiji: G + 4 km + SRD/ED

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUMUMA IDOLE

Names of Subvillages :

District/Division/Subdivision : KIL/ULA/Lumuma

Sheet No. : 181/3

Co-ordinates : 6°49'S 36°39'E

Population (1978) : 1729

Livestock-Units (1978) :

Settlement Pattern : I  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,90	1,15	1,40	1,85
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River Lumuma	
Low flow (5% /10% year)	perennial	
Distance from village	1 km	
Elevation with regard to village	-45 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main :

Storage tank :

Distribution lines :

Domestic water points :

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. : 3			

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 9 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	: LUNDI
Names of Subvillages	:
District/Division/Subdivision	: MOR/MAT/Lundi
Sheet No.	: 201/2
Co-ordinates	: 7°04'S 37°49'E
Population (1978)	: 2006
Livestock-Units (1978)	:
Settlement Pattern	: <input checked="" type="checkbox"/> x <input type="checkbox"/> y <input type="checkbox"/> z
Village facilities	: PS <input checked="" type="checkbox"/> DP <input checked="" type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																					
<b>WATER DEMAND</b>																					
	<table border="1"> <thead> <tr> <th></th> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>Population demand (l/s)</td> <td>1,03</td> <td>1,31</td> <td>1,60</td> <td>2,12</td> </tr> <tr> <td>Livestock demand (l/s)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Total demand (l/s)</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		1978	1983	1988	1998	Population demand (l/s)	1,03	1,31	1,60	2,12	Livestock demand (l/s)					Total demand (l/s)				
	1978	1983	1988	1998																	
Population demand (l/s)	1,03	1,31	1,60	2,12																	
Livestock demand (l/s)																					
Total demand (l/s)																					
<b>WATER POTENTIAL</b>																					
Prospects for																					
Suitable ground water sources	: G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																				
Suitable surface water sources	: G <input type="checkbox"/> F <input type="checkbox"/> P <input checked="" type="checkbox"/>																				

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
<b>HYDROLOGICAL DATA</b>		Potential surface water sources
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
<b>HYDROGEOLOGICAL DATA</b>		Shallow ground water
Aquifer type		All.
Aquifer depth (m-GL)		Medium-depth and deep-ground water
Aquifer thickness (m)		dolomite
Median waterlevel (m-GL)		*VLC
Permeability (m/day)		
EC (mS/m)		50
Location		small valley village
*) VLC: vertical lithological composition		

4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	: Pumped <input type="checkbox"/> Gravity <input type="checkbox"/>
Intake structure	:
Water lifting equipment	: pump : _____ engine : _____
Transmission main	:
Storage tank	:
Distribution lines	:
Domestic water points	:
Additional facilities	: CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	: _____

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No.	: 2		

7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES	
<b>SHORT TERM :</b>	Shallow wells with handpumps: 10 Nos
<b>MEDIUM AND LONG TERM :</b>	Shallow wells with handpumps: +4 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUSANGE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Mtomboz1

Sheet No. : 201/1

Co-ordinates : 7°08'S 37°43'E

Population (1978) : 1237

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,59	0,74	0,89	1,19
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No.	: 3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUSUNGI

Names of Subvillages :

District/Division/Subdivision : MOR/MGE/Langali

Sheet No. : 201/1

Co-ordinates : 7°05'S 37°33'E

Population (1978) : 1214

Livestock-Units (1978) :

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,58	0,72	0,87	1,17
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	N. I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

0m  
10  
20  
30  
40  
50  
60  
70  
80

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUTINDI TWATWATWA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAS/Rudewa

Sheet No. : 182/2

Co-ordinates : 6°37'S 37°16'E

Population (1978) : 1032

Livestock-Units (1978) : 24584

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,49	0,62	0,74	0,99
Livestock demand (l/s)	3,54	9,60	10,67	12,80
Total demand (l/s)	9,03	10,22	11,41	13,80

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Wami
Low flow (5% /10% year)	1275/1480 l/s	
Distance from village	1 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type All. sand Aquifer depth (m-GL) Aquifer thickness (m) Median waterlevel (m-GL) Permeability (m/day) EC (mS/m) Location Wami valley	All. sand 15-100 *VLC > 5 < 200 village

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 5 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : LUWEMBA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/ULA/Midete

Sheet No. : 181/2

Co-ordinates : 6°35' S 36°50' E

Population (1978) : 1181

Livestock-Units (1978) : 777

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,56	0,70	0,85	1,13
Livestock demand (l/s)	0,27	0,30	0,34	0,40
Total demand (l/s)	0,83	1,01	1,19	1,54

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Shallow ground water	Medium-depth and deep-ground water
Name of water source	River Mologosi	
Low flow (5% /10% year)	perennial	
Distance from village	3 km	
Elevation with regard to village	30 m	
Water quality		
<b>HYDROGEOLOGICAL DATA</b>	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Gravity water supply transmission main, storage tank and rudimentary distribution system



# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	: MABANA
Names of Subvillages	:
District/Division/Subdivision	: KIL/MAM/Magole
Sheet No.	: 165/4
Co-ordinates	: 6°27'S 37°25'E
Population (1978)	: 1050
Livestock-Units (1978)	: 11
Settlement Pattern	: $\chi$ <input type="checkbox"/> $\gamma$ <input checked="" type="checkbox"/> $\zeta$ <input type="checkbox"/>
Village facilities	: PS <input type="checkbox"/> DP <input type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																					
WATER DEMAND																					
	<table border="1"> <thead> <tr> <th></th> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>Population demand (l/s)</td> <td>0,50</td> <td>0,63</td> <td>0,76</td> <td>1,01</td> </tr> <tr> <td>Livestock demand (l/s)</td> <td>0,01</td> <td>0,01</td> <td>0,01</td> <td>0,01</td> </tr> <tr> <td>Total demand (l/s)</td> <td>0,50</td> <td>0,63</td> <td>0,76</td> <td>1,01</td> </tr> </tbody> </table>		1978	1983	1988	1998	Population demand (l/s)	0,50	0,63	0,76	1,01	Livestock demand (l/s)	0,01	0,01	0,01	0,01	Total demand (l/s)	0,50	0,63	0,76	1,01
	1978	1983	1988	1998																	
Population demand (l/s)	0,50	0,63	0,76	1,01																	
Livestock demand (l/s)	0,01	0,01	0,01	0,01																	
Total demand (l/s)	0,50	0,63	0,76	1,01																	
WATER POTENTIAL																					
Prospects for																					
Suitable ground water sources	: G <input type="checkbox"/> F <input type="checkbox"/> P <input checked="" type="checkbox"/>																				
Suitable surface water sources	: G <input type="checkbox"/> F <input type="checkbox"/> P <input checked="" type="checkbox"/>																				

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
HYDROLOGICAL DATA		Potential surface water sources
Name of water source	River Mhandi	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA		Shallow ground water / Medium-depth and deep-ground water
Aquifer type	All.	
Aquifer depth (m-GL)	15-35 *VLC	
Aquifer thickness (m)	< 5	
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)	>150	
Location	village	
*) VLC: vertical lithological composition		

4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	$\phi$ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
BDH							very low yields					

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	: Pumped <input type="checkbox"/> Gravity <input type="checkbox"/>
Intake structure	:
Water lifting equipment	: pump : _____ engine : _____
Transmission main	:
Storage tank	:
Distribution lines	:
Domestic water points	:
Additional facilities	: CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	:

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No.	: 2		

7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES	
SHORT TERM :	Pumped water supply from Mhundi river
MEDIUM AND LONG TERM :	Extension works: extensive distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MABULA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Magubike

Sheet No. : 165/1

Co-ordinates : 6°09'S 37°08'E

Population (1978) : 1069

Livestock-Units (1978) : 834

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,51	0,64	0,77	1,03
Livestock demand (l/s)	0,29	0,33	0,36	0,43
Total demand (l/s)	0,80	0,96	1,13	1,46

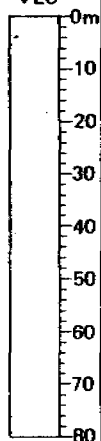
**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	0-7	*VLC 
Aquifer thickness (m)	3,5	
Median waterlevel (m-GL)	1,2	
Permeability (m/day)	500	
EC (mS/m)	Magera valley	
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
BDH	8			0,3				120				
								160	0,6	3,0		P. 781023
								140	0,3	3,1		G. 781023

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility		x	

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 5 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	: MACHATU
Names of Subvillages	:
District/Division/Subdivision	: KIL/MAM/Mamboya
Sheet No.	: 164/2 - 165/1
Co-ordinates	: 6°06'S 37°00'E
Population (1978)	: 829
Livestock-Units (1978)	:
Settlement Pattern	: x <input type="checkbox"/> y <input checked="" type="checkbox"/> z <input type="checkbox"/>
Village facilities	: PS <input type="checkbox"/> DP <input type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																					
<b>WATER DEMAND</b>																					
	<table border="1"> <thead> <tr> <th></th> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>Population demand (l/s)</td> <td>0,39</td> <td>0,49</td> <td>0,60</td> <td>0,80</td> </tr> <tr> <td>Livestock demand (l/s)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Total demand (l/s)</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		1978	1983	1988	1998	Population demand (l/s)	0,39	0,49	0,60	0,80	Livestock demand (l/s)					Total demand (l/s)				
	1978	1983	1988	1998																	
Population demand (l/s)	0,39	0,49	0,60	0,80																	
Livestock demand (l/s)																					
Total demand (l/s)																					
<b>WATER POTENTIAL</b>																					
Prospects for																					
Suitable ground water sources	: G <input type="checkbox"/> F <input type="checkbox"/> P <input checked="" type="checkbox"/>																				
Suitable surface water sources	: G <input type="checkbox"/> F <input type="checkbox"/> P <input checked="" type="checkbox"/>																				

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
<b>HYDROLOGICAL DATA</b>		Potential surface water sources
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
<b>HYDROGEOLOGICAL DATA</b>		Shallow ground water / Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		
*) VLC: vertical lithological composition		

4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	: Pumped <input type="checkbox"/> Gravity <input type="checkbox"/>
Intake structure	:
Water lifting equipment	: pump : _____ engine : _____
Transmission main	:
Storage tank	:
Distribution lines	:
Domestic water points	:
Additional facilities	: CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	:

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)			x
Reliability of facility		x	
Water Quality (EC)			x
Village population dependent on facility	x		
Village total score	: 14		
Classification in VILLAGE PRIORITY GROUP No.	: 1		

7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES	
SHORT TERM :	Gairo gravity scheme
MEDIUM AND LONG TERM :	Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MADEGE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GAI/Chakwale

Sheet No. : 165/1

Co-ordinates : 6°02'S 37°01'E

Population (1978) : 2050

Livestock-Units (1978) : 2648

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,05	1,34	1,63	2,16
Livestock demand (l/s)	0,92	1,03	1,15	1,38
Total demand (l/s)	1,97	2,37	2,78	3,54

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	3-6	*VLC 
Aquifer thickness (m)	3,0	
Median waterlevel (m-GL)	1,8	
Permeability (m/day)	600	
EC (mS/m)	170	
Location	Ndogoni valley	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
BDR	5			0,9				200				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)		x	
Reliability of facility			x
Water Quality (EC)			x
Village population dependent on facility			x
Village total score	: 16		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 10 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +4 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MADIZINI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Dlongoya

Sheet No. : 166/1

Co-ordinates : 6°08'S 37°38'E

Population (1978) : 2443

Livestock-Units (1978) : 33

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	116	146	176	235
Livestock demand (l/s)	0.01	0.01	0.01	0.02
Total demand (l/s)	117	147	177	236

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	4-6	*VLC
Aquifer thickness (m)		
Median waterlevel (m-GL)	3,0	
Permeability (m/day)		
EC (mS/m)	30	
Location	village	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
BDR	M			4,1				30				
								140	0,2	310	0	P.781027
								30	0,2	9	0	P.781027

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)		x	
Village population dependent on facility			x

Village total score : 13

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Shallow wells with handpumps: 12 Nos

**MEDIUM AND LONG TERM :**  
 Shallow wells with handpumps: +5 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MADIZINI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MIK/Kasanga

Sheet No. : 199/2

Co-ordinates : 7°12'S 36°48'E

Population (1978) : 862

Livestock-Units (1978) : 300

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,41	0,51	0,62	0,83
Livestock demand (l/s)	0,10	0,12	0,13	0,16
Total demand (l/s)	0,51	0,63	0,75	0,98

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	N.I.	
Low flow (5% /10% year)	perennial	
Distance from village	2 km	
Elevation with regard to village	50 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All.	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Myomba valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 7

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 4 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MADOTO

Names of Subvillages : Magumeni

District/Division/Subdivision : KIL/MAS/Chanzuru

Sheet No. : 182/1-3

Co-ordinates : 6°45'S 37°08'E

Population (1978) : 1731

Livestock-Units (1978) : 51

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,82	1,03	1,25	1,66
Livestock demand (l/s)	0,02	0,02	0,02	0,03
Total demand (l/s)	0,84	1,05	1,27	1,69

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All. loam	sand
Aquifer type		
Aquifer depth (m-GL)	5-10	23-27
Aquifer thickness (m)	0,5	4
Median waterlevel (m-GL)	2,5	5,8
Permeability (m/day)		5
EC (mS/m)	100-300	135
Location	village	village

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply from BH on sisal estate *								133	0,5	2,7		G. 790216
Sw	2			6				170-250				
SWHP	2							325	0,2	58		G. 780223

\* Estate has provided one tap for village

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility		x	
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 7 Nos  
 (2 Magi SWHP are available)

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MADUDU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/MagoLe

Sheet No. : 165/4

Co-ordinates : 6°24'S 37°18'E

Population (1978) : 1296

Livestock-Units (1978) : 818

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,62	0,77	0,93	1,25
Livestock demand (l/s)	0,28	0,32	0,36	0,43
Total demand (l/s)	0,90	1,09	1,29	1,67

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All. sand	sand
Aquifer type	3-8	15-100
Aquifer depth (m-GL)		5
Aquifer thickness (m)		
Median waterlevel (m-GL)	3,9	
Permeability (m/day)		
EC (mS/m)	60	<200
Location	village	village

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDH	5			3,0				49				
Sw	3			3,2				70	0,6	1,8	20	S.781019
				7,2				65	0,4	58	4	S.781019
								40	0,4	3,5	700	P.781019

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 6 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +3 Nos



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MADUDUMIZI

Names of Subvillages : \*

District/Division/Subdivision : KIL/ULA/Zombo

Sheet No. : 181/4

Co-ordinates : 6°58'S 36°54'E

Population (1978) : 1414

Livestock-Units (1978) : 11

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,67	0,84	1,02	1,36
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	0,67	0,85	1,02	1,36

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River Miyombo	
Low flow (5% /10% year)	600/>650 l/s	
Distance from village	3 km	
Elevation with regard to village	-20 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 18		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 7 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MAFUTA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Mbomda

Sheet No. : 166/1

Co-ordinates : 6°05'S 37°34'E

Population (1978) : 809

Livestock-Units (1978) : 5

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,28	0,48	0,58	0,78
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	0,39	0,48	0,59	0,78

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Diwale
Low flow (5% /10% year)	>75/>150 l/s	
Distance from village	1 km	
Elevation with regard to village	30 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 6		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditons comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Gravity scheme, 2 km transmission main, storage tank and rudimentary distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MAGALI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MGA/Malela

Sheet No. : 200/2

Co-ordinates : 7°02'S 37°26'E

Population (1978) : 647

Livestock-Units (1978) : 89

Settlement Pattern :  $x$    $y$    $z$

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,31	0,39	0,47	0,62
Livestock demand (l/s)	0,03	0,03	0,04	0,05
Total demand (l/s)	0,34	0,42	0,50	0,67

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	ALL.
Aquifer depth (m-GL)		*VLC
Aquifer thickness (m)		0m
Median waterlevel (m-GL)		10
Permeability (m/day)		20
EC (mS/m)		30
Location	Small valley	40
		50
		60
		70
		80

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility	x		
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Shallow wells with handpumps: 3 Nos

**MEDIUM AND LONG TERM :**  
 Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MAGELA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MGE/Kidugallo

Sheet No. : 184/3

Co-ordinates : 6°53'S 38°12'E

Population (1978) : 460

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern KA : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,22	0,27	0,33	0,44
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)		*VLC 
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Ngerengere valley	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 2 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +1 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : **MAGERA**

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : **KIL/MAM/Magubike**

Sheet No. : **165/1**

Co-ordinates : **6°06'S 37°08'E**

Population (1978) : **1567**

Livestock-Units (1978) : **581**

Settlement Pattern :  $\alpha$    $\gamma$    $\geq$

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.74	0.94	1.13	1.51
Livestock demand (l/s)	0.20	0.23	0.25	0.30
Total demand (l/s)	0.94	1.16	1.38	1.81

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	4-7	
Aquifer thickness (m)	2,5	
Median waterlevel (m-GL)	4,0	
Permeability (m/day)		
EC (mS/m)	85	
Location	Magera valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDR	5			0,3				75	0,3	2,7		F. 781023
								110	0,7	2,9		P. 781023

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 11

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 8 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MROGONI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Seremba1a

Sheet No. : 201/2

Co-ordinates : 7°13'S 37°59'E

Population (1978) : 786

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,45	0,58	0,72	0,95
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Ruvu
Low flow (5% /10% year)	>2000 / >2200 l/s	
Distance from village	< 1 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No	: 3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 4 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MAGOLE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Magole

Sheet No. : 165/4

Co-ordinates : 6°23'S 37°22'E

Population (1978) : 3752

Livestock-Units (1978) : 24

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,86	2,35	2,86	3,80
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	1,86	2,36	2,87	3,81

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	sand
Aquifer depth (m-GL)		35-50 *VLC
Aquifer thickness (m)		3-70
Median waterlevel (m-GL)		13
Permeability (m/day)		
EC (mS/m)		72
Location		village

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply from borehole				49	35-49	7	2,1	72				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)		x	
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 10

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Pumped supply from borehole (Muji Project)

**MEDIUM AND LONG TERM :**

Village water supply conditions comply with 1991 targets

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : **MAGOMENI**  
 Names of Subvillages : **Molikiwi, Mhadagi, Mhuyami**  
 District/Division/Subdivision : **KIL/MAS/Masanze**  
 Sheet No. : **181/4**  
 Co-ordinates : **6°50'S 36°59'E**  
 Population (1978) : **5400**  
 Livestock-Units (1978) : \_\_\_\_\_  
 Settlement Pattern :  x  y  z   
 Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	2,56	3,22	3,89	5,19
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P   
 Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River Mkondoa	
Low flow (5% /10% year)	570/>600 l/s	
Distance from village	3 km	
Elevation with regard to village	10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All. sand	gravel sand
Aquifer depth (m-GL)		15-100
Aquifer thickness (m)		15
Median waterlevel (m-GL)		
Permeability (m/day)		50-100
EC (mS/m)		100
Location	village	village

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDH	4											
Sw	3											
River Mkondoa								20	0,2		280	F.781115

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
 Intake structure : \_\_\_\_\_  
 Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_  
 Transmission main : \_\_\_\_\_  
 Storage tank : \_\_\_\_\_  
 Distribution lines : \_\_\_\_\_  
 Domestic water points : \_\_\_\_\_  
 Additional facilities : CT  CD  HC   
 Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 10  
 Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Shallow wells with handpumps: 27 Nos

**MEDIUM AND LONG TERM :**  
 Shallow wells with handpumps: +9 Nos



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MAGUBIKE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Magubike

Sheet No. : 165/1-3

Co-ordinates : 6° 15' S 37° 10' E

Population (1978) : 2919

Livestock-Units (1978) : 4323

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,47	1,87	2,27	3,02
Livestock demand (l/s)	1,50	1,69	1,88	2,25
Total demand (l/s)	2,97	3,56	4,15	5,17

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All.	gneiss
Aquifer depth (m-GL)	5-7	
Aquifer thickness (m)	1,1	
Median waterlevel (m-GL)	1,3	
Permeability (m/day)		
EC (mS/m)	100-1000	490
Location	small village	village

\*VLC

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDR	M			2,0				84				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)			x
Village population dependent on facility			x

Village total score : 14

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Shallow wells with handpumps: 15 Nos

**MEDIUM AND LONG TERM :**  
 Shallow wells with handpumps: +5 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MAGUHA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Magubike

Sheet No. : 165/3

Co-ordinates : 6°17'S 37°12'E

Population (1978) : 1827

Livestock-Units (1978) : 1417

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,87	1,09	1,32	1,76
Livestock demand (l/s)	0,49	0,55	0,62	0,74
Total demand (l/s)	1,36	1,64	1,93	2,49

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply from spring		1975						49				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
3,64 l/s

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : KSB (1x)  
engine : Lister (2x)

Transmission main : 0,6 km )

Storage tank : 45 m<sup>3</sup> B ) drw.no.17218  
4,2 km )

Distribution lines : \_\_\_\_\_

Domestic water points : 7

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	: 3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Extension of distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MAGUNGA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Maskati

Sheet No. : 165/2

Co-ordinates : 6°05'S 37°25'E

Population (1978) : 546

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,36	0,33	0,39	0,52
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	N.I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 6

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravitu supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MAGURUWE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MGE/Langali

Sheet No. : 201/1

Co-ordinates : 7°01'S 37°37'E

Population (1978) : 1541

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,73	0,92	1,11	1,48
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 7

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MAHARAKA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MLA/Msongozl

Sheet No. : 200/2

Co-ordinates : 7° 11' S 37° 19' E

Population (1978) : 1840

Livestock-Units (1978) : 33

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,95	1,21	1,48	1,96
Livestock demand (l/s)	0,01	0,01	0,01	0,02
Total demand (l/s)	0,96	1,23	1,49	1,98

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All sand/loam	
Aquifer depth (m-GL)	3-7	*VLC
Aquifer thickness (m)	2,7	
Median waterlevel (m-GL)	1,6	
Permeability (m/day)		
EC (mS/m)	135	
Location	Maharaka valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDR				1,0				135				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)		x	
Village population dependent on facility		x	

Village total score : 13

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 9 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +4 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MAJAWANGA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GAI/Gairo

Sheet No. : 164/2

Co-ordinates : 6°05'S 36°50'E

Population (1978) : 955  
155

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,45	0,57	0,69	0,92
Livestock demand (l/s)	0,05	0,06	0,07	0,08
Total demand (l/s)	0,51	0,63	0,76	1,00

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Shallow ground water	Medium-depth and deep-ground water
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Gravity water supply		1873						7	0,1	2,0	12	G.790222

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
1,03 l/s

Intake structure : Weir (+ sandtrap) in Tributaries of river Kitange

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : 10,5 km )

Storage tank : 45 m<sup>3</sup> L ) dzw.no.17166

Distribution lines : 3 km )

Domestic water points : 3

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 10

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Gairo gravity scheme

**MEDIUM AND LONG TERM :**

Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MAKUYU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Rembeti

Sheet No. : 165/4

Co-ordinates : 6°19'S 37°23'E

Population (1978) : 2342

Livestock-Units (1978) : 6177

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,11	1,40	1,69	2,29
Livestock demand (l/s)	2,14	2,41	2,68	3,22
Total demand (l/s)	3,26	3,81	4,37	5,47

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All. loam, sand	All. sand
Aquifer type		*VLC
Aquifer depth (m-GL)		35-80
Aquifer thickness (m)		20
Median waterlevel (m-GL)		10
Permeability (m/day)		30
EC (mS/m)	26-350	28
Location	south side of village	village

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDE	3			12				80				
Sw	4			10				26				
				4,5				68	0,3	9	15	F. 781019
								130	0,9	11	12	F. 781019

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 11

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Pumped supply from borehole  
 BH + 2 km + SRD

**MEDIUM AND LONG TERM :**  
 Extension of distribution facilities

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MAKUYU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GAI/Iyogwe

Sheet No. : 165/1

Co-ordinates : 6°02'S 37°11'E

Population (1978) : 2089

Livestock-Units (1978) : 2453

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,99	1,25	1,51	2,00
Livestock demand (l/s)	0,85	0,96	1,06	1,28
Total demand (l/s)	1,84	2,20	2,57	3,28

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Shallow ground water	Medium-depth and deep-ground water
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All. sand	
Aquifer depth (m-GL)	3-6	
Aquifer thickness (m)	2,4	
Median waterlevel (m-GL)	1,6	
Permeability (m/day)		
EC (mS/m)	79	
Location	Kingolisi valley	

\*VLC

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDR				2,2				28				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 10 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +5 Nos



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MAKWAMBE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Msowero

Sheet No. : 165/3

Co-ordinates : 6°28'S 37°07'E

Population (1978) : 1153

Livestock-Units (1978) : 600

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,55	0,69	0,83	1,11
Livestock demand (l/s)	0,21	0,23	0,26	0,31
Total demand (l/s)	0,76	0,92	1,09	1,42

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Shallow ground water	Medium-depth and deep-ground water
Name of water source	River Milindo	
Low flow (5% /10% year)	>100/>150 l/s	
Distance from village	<1 km	
Elevation with regard to village	-10 m	
Water quality		
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
River Milindo												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Pumped supply from riverside well, 2 km transmission main, storage tank and rudimentary distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MALANGALI

Names of Subvillages : Mkoloni, Mauzi

District/Division/Subdivision : KIL/MAS/Makwerekwere

Sheet No. : 182/3

Co-ordinates : 6°50'S 37°06'E

Population (1978) : 3126

Livestock-Units (1978) : 192

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1.56	1.98	2.41	3.19
Livestock demand (l/s)	0.07	0.08	0.08	0.10
Total demand (l/s)	1.63	2.06	2.49	3.29

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River Mkolondoa	
Low flow (5% /10% year)	570 / > 600 l's	
Distance from village	2 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All. sand	All. sand/gravel
Aquifer depth (m-GL)		15-100
Aquifer thickness (m)		> 15
Median waterlevel (m-GL)	4.0	10
Permeability (m/day)		10-100
EC (mS/m)	85	<100
Location	village	village

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Hdh	10			3,0				70	0,3		10	P. 781025
								122	0,5	16,4	8	G. 781025
								230	0,5	2,7	0	G. 781025
								197	0,5	1,2	5	G. 781025

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 11

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 16 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +6 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	: MALANI
Names of Subvillages	:
District/Division/Subdivision	: MOR/BWA/Kolero
Sheet No.	: 201/2
Co-ordinates	: 7°14'S 37°45'E
Population (1978)	: 815
Livestock-Units (1978)	:
Settlement Pattern	: I <input checked="" type="checkbox"/> y <input type="checkbox"/> z <input type="checkbox"/>
Village facilities	: PS <input type="checkbox"/> DP <input type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																					
<b>WATER DEMAND</b>																					
	<table border="1"> <thead> <tr> <th></th> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>Population demand (l/s)</td> <td>0,39</td> <td>0,49</td> <td>0,59</td> <td>0,78</td> </tr> <tr> <td>Livestock demand (l/s)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Total demand (l/s)</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		1978	1983	1988	1998	Population demand (l/s)	0,39	0,49	0,59	0,78	Livestock demand (l/s)					Total demand (l/s)				
	1978	1983	1988	1998																	
Population demand (l/s)	0,39	0,49	0,59	0,78																	
Livestock demand (l/s)																					
Total demand (l/s)																					
<b>WATER POTENTIAL</b>																					
Prospects for																					
Suitable ground water sources : G <input type="checkbox"/> F <input type="checkbox"/> P <input checked="" type="checkbox"/>																					
Suitable surface water sources : G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																					

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
<b>HYDROLOGICAL DATA</b>	<b>Potential surface water sources</b>	
Name of water source	N.I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
<b>HYDROGEOLOGICAL DATA</b>	<b>Shallow ground water</b>	<b>Medium-depth and deep-ground water</b>
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		
*) VLC: vertical lithological composition		

4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	: Pumped <input type="checkbox"/> Gravity <input type="checkbox"/>
Intake structure	:
Water lifting equipment	: pump : _____ engine : _____
Transmission main	:
Storage tank	:
Distribution lines	:
Domestic water points	:
Additional facilities	: CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	:

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No.	: 3		

7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES	
<b>SHORT TERM :</b>	Village water supply conditions comply with 1981 targets
<b>MEDIUM AND LONG TERM :</b>	Village located in mountainous area, having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MALOLO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MIK/Malolo

Sheet No. : 199/3

Co-ordinates : 7° 19'S 36° 33'E

Population (1978) : 2612

Livestock-Units (1978) : 813

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1.32	1.67	2.03	2.70
Livestock demand (l/s)	0.28	0.32	0.35	0.42
Total demand (l/s)	1.60	1.99	2.39	3.12

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	N.I.	
Low flow (5% /10% year)	perennial	
Distance from village	2 km	
Elevation with regard to village	40 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance
Perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 13 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +5 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MALUI

Names of Subvillages : Malui II, Makuluwili

District/Division/Subdivision : KIL/MAS/Makwerebwere

Sheet No. : 182/3

Co-ordinates : 6°51'S 37°03'E

Population (1978) : 2977

Livestock-Units (1978) : 2468

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	141	178	214	286
Livestock demand (l/s)	0.86	0.96	1.07	1.29
Total demand (l/s)	2.27	2.74	3.22	4.15

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Mkondoa
Low flow (5% /10% year)	570 /> 600 l/s	
Distance from village	1 km	
Elevation with regard to village	-5 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)		18-60 *VLC
Aquifer thickness (m)		25
Median waterlevel (m-GL)	3,2	1,5
Permeability (m/day)		125
EC (mS/m)	46	55
Location	village	village

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
RDH	M			3,0				42				
Sw	1			4,8				99	0,5	2,7	8	G.781026
								65	0,6		160	G.781026
								81	0,5	2,9	0	G.781026

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 11

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 15 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +6 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MAMBANI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Kibogwa

Sheet No. : 183/3

Co-ordinates : 6°58'S 37°40'E

Population (1978) : 1512

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,72	0,90	1,09	1,45
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to vilage		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial stream												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditons comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MAMBOYA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Mamboya

Sheet No. : 165/3

Co-ordinates : 6° 16' S 37° 05' E

Population (1978) : 956

Livestock-Units (1978) : 21512

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,53	0,69	0,84	1,11
Livestock demand (l/s)	1,57	1,76	1,96	2,35
Total demand (l/s)	2,10	2,45	2,80	3,46

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)	5-6	*VLC
Aquifer thickness (m)	1	
Median waterlevel (m-GL)	1.3	
Permeability (m/day)	low	
EC (mS/m)	29	
Location	village	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
BDE	4											
Sw	1			5,4				29				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Pumped supply from shallow well, 5 km transmission main, storage tank and rudimentary distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	: MAMOYO
Names of Subvillages	: Kibasni, Manyema, Mabwere, bwere, Mamoyo II
District/Division/Subdivision	: KIL/MAS/Makwerekwere
Sheet No.	: 182/3
Co-ordinates	: 6°50'S 37°03'E
Population (1978)	: 4509
Livestock-Units (1978)	: 20
Settlement Pattern	: <input checked="" type="checkbox"/> x <input type="checkbox"/> y <input type="checkbox"/> z
Village facilities	: PS <input checked="" type="checkbox"/> DP <input type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																					
<b>WATER DEMAND</b>																					
	<table border="1"> <thead> <tr> <th></th> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>Population demand (l/s)</td> <td>214</td> <td>269</td> <td>325</td> <td>435</td> </tr> <tr> <td>Livestock demand (l/s)</td> <td>0.01</td> <td>0.01</td> <td>0.01</td> <td>0.01</td> </tr> <tr> <td>Total demand (l/s)</td> <td>2.15</td> <td>2.70</td> <td>3.26</td> <td>4.34</td> </tr> </tbody> </table>		1978	1983	1988	1998	Population demand (l/s)	214	269	325	435	Livestock demand (l/s)	0.01	0.01	0.01	0.01	Total demand (l/s)	2.15	2.70	3.26	4.34
	1978	1983	1988	1998																	
Population demand (l/s)	214	269	325	435																	
Livestock demand (l/s)	0.01	0.01	0.01	0.01																	
Total demand (l/s)	2.15	2.70	3.26	4.34																	
<b>WATER POTENTIAL</b>																					
Prospects for																					
Suitable ground water sources	: G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																				
Suitable surface water sources	: G <input type="checkbox"/> F <input checked="" type="checkbox"/> P <input type="checkbox"/>																				

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
<b>HYDROLOGICAL DATA</b>		Potential surface water sources
Name of water source	River Mkondoa	
Low flow (5% /10% year)	570/ 600 l/s	
Distance from village	2 km	
Elevation with regard to village	-5 m	
Water quality		
<b>HYDROGEOLOGICAL DATA</b>		Shallow ground water
Aquifer type	All. sand	Medium-depth and deep-ground water
Aquifer depth (m-GL)	2-10	All. sand
Aquifer thickness (m)	5.4	*VLC
Median waterlevel (m-GL)	3.7	18-60
Permeability (m/day)		125
EC (mS/m)	50	55
Location	village	village

\*) VLC: vertical lithological composition

4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>++</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Sw	6			4.0				81	0.7	2.2	4	G.781025
								70	0.6		0	G.781025
								60	0.6		0	G.781025
								63	0.5		0	G.781025

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	: Pumped <input type="checkbox"/> Gravity <input type="checkbox"/>
Intake structure	: _____
Water lifting equipment	: pump : _____ engine : _____
Transmission main	: _____
Storage tank	: _____
Distribution lines	: _____
Domestic water points	: _____
Additional facilities	: CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	: _____

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No. :	: 2		

7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES	
<b>SHORT TERM :</b>	Shallow wells with handpumps: 23 Nos
<b>MEDIUM AND LONG TERM :</b>	Shallow wells with handpumps: +9 Nos



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MANDELA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Magole

Sheet No. : 165/4

Co-ordinates : 6°20'S 37°24'E

Population (1978) : 1643

Livestock-Units (1978) : 115

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,78	0,98	1,18	1,58
Livestock demand (l/s)	0,04	0,04	0,05	0,06
Total demand (l/s)	0,82	1,03	1,23	1,64

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

<b>HYDROLOGICAL DATA</b>	Potential surface water sources	
	Name of water source	
	Low flow (5% /10% year)	
	Distance from village	
Elevation with regard to village		
Water quality		
<b>HYDROGEOLOGICAL DATA</b>	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
	Aquifer depth (m-GL)	6,5-9,0
	Aquifer thickness (m)	1,3
	Median waterlevel (m-GL)	6,0
	Permeability (m/day)	low
	EC (mS/m)	55-130
Location	village	

\* ) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E. Coli MPN/100 ml	General Appearance
Sw	1			9,2				190	1,0	16	200	P. 781019
Sw	1			18,5				45	0,3	3,5		G. 781114
Sw	1			19,5				115				
BH *	1	1978						50	0,3	3,5		G. 781110

\* Not in operation yet

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Borehole, 2 km transmission main, storage tank and rudimentary distribution system

**MEDIUM AND LONG TERM :**

Extension of distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MANGAE

Names of Subvillages : Makan'wa

District/Division/Subdivision : MOE/MLA/Melelela

Sheet No. : 182/4

Co-ordinates : 6°57'S 37°20'E

Population (1978) : 952

Livestock-Units (1978) : 54

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,45	0,57	0,69	0,91
Livestock demand (l/s)	0,02	0,02	0,02	0,03
Total demand (l/s)	0,47	0,59	0,71	0,94

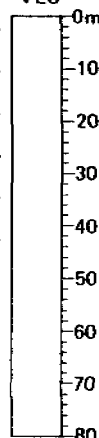
**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	6-8	*VLC 
Aquifer thickness (m)	2	
Median waterlevel (m-GL)	6,2	
Permeability (m/day)		
EC (mS/m)	195	
Location	Mangai valley	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDH	6			1,0				160	3,1	40	30	G.790306
Sw	1			7,8				180				
River Mangae								140	0,7	10	2	G.790306

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility	x		

Village total score : 11

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 5 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MANYINGA

Names of Subvillages :

District/Division/Subdivision : MOR/TUR/Diongoya

Sheet No. : 166/1

Co-ordinates : 6°08'S 37°27'E

Population (1978) : 2156

Livestock-Units (1978) : 53

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1.02	1.29	1.55	2.07
Livestock demand (l/s)	0.02	0.02	0.02	0.03
Total demand (l/s)	1.04	1.31	1.58	2.10

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Diwale
Low flow (5% /10% year)	270/340 l/s	
Distance from village	3 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	0,8-	
Aquifer thickness (m)		
Median waterlevel (m-GL)	1,3	
Permeability (m/day)		
EC (mS/m)	34	
Location	village	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDR	15			1,7	0,8- ?			34				
Sw	3							20	0,2	5,6	0	G.781027
								80	0,2		0	F.781027

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main :

Storage tank :

Distribution lines :

Domestic water points :

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 10

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 11 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +4 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MANZA

Names of Subvillages : Kinga

District/Division/Subdivision : MOR/MLA/Mlali

Sheet No. : 200/2 - 201/1

Co-ordinates : 7°01'S 37°30'E

Population (1978) : 580

Livestock-Units (1978) : 40

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,28	0,35	0,42	0,56
Livestock demand (l/s)	0,01	0,02	0,02	0,02
Total demand (l/s)	0,29	0,36	0,44	0,58

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. loam/sand
Aquifer depth (m-GL)	2-6	
Aquifer thickness (m)	2,3	
Median waterlevel (m-GL)	1,3	
Permeability (m/day)		
EC (mS/m)	110	
Location	Ngerengere valley	
*1 VLC: vertical lithological composition		

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance
streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)		x	
Village population dependent on facility	x		
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 3 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +1 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MASALawe

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MGE/KIkeo

Sheet No. : 201/1

Co-ordinates : 7°07'S 37°31'E

Population (1978) : 989

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,47	0,59	0,71	0,95
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 6		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Not sufficient data available

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MASENGE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GAI/Rubeko

Sheet No. : 164/A

Co-ordinates : 6°20'S 36°55'E

Population (1978) : 1592

Livestock-Units (1978) : 687

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,76	0,95	1,15	1,53
Livestock demand (l/s)	0,24	0,27	0,30	0,36
Total demand (l/s)	0,99	1,22	1,45	1,89

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Mahero
Low flow (5% /10% year)	1/2 l/s	
Distance from village	3 km	
Elevation with regard to village	40 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area, having possibilities for pumped supply or gravity supply from small perennial stream

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MASEYU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Mikese

Sheet No. : 183/2

Co-ordinates : 6°41'S 37°59'E

Population (1978) : 1216

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.87	0.73	0.88	1.17
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

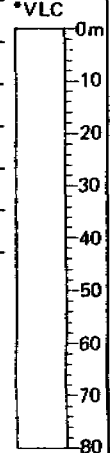
Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		



\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
BDH	4			1,0				9	0,2		400	P. 781124
Sw	1			3,0				400	0,2	2	6	P. 781124

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)			x
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility		x	
Village total score	: 13		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 6 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MASKATI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Maskati

Sheet No. : 165/2

Co-ordinates : 6°03'S 37°28'E

Population (1978) : 2631

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,72	1,68	2,05	2,72
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	N.I.	
Name of water source		
Low flow (5% /10% year)	Perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	*VLC	
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*] VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MATALE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Hembeti

Sheet No. : 165/2

Co-ordinates : 6°12'S 37°20'E

Population (1978) : 1185

Livestock-Units (1978) : 1658

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,56	0,71	0,85	1,14
Livestock demand (l/s)	0,58	0,65	0,72	0,86
Total demand (l/s)	1,14	1,35	1,57	2,00

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Chogowale
Low flow (5% /10% year)	perennial	
Distance from village	< 1 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)	0,5	
Permeability (m/day)	high	
EC (mS/m)	< 75	
Location	Chogowale riverbed	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 6 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MATULI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Ngerengere

Sheet No. : 184/3

Co-ordinates : 6°55'S 38°13'E

Population (1978) : 2061

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1.05	1.34	1.64	2.17
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)	< 100	
Location	Matuli valley Ngerengere valley	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDH				0,4				35	0,1			P.781124
Sw								25	0,2		20	P.781124

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 10 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +4 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MAZIMBA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Kibati

Sheet No. : 147/2

Co-ordinates : 5°55'S 37°32'E

Population (1978) : 908

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,41	0,54	0,65	0,87
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*1) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility	x		
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Pumped supply from riverside well, 2 km transmission main, storage tank and rudimentary distribution system.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MBAMBA

Names of Subvillages :

District/Division/Subdivision : KIL/ULA/ULaya

Sheet No. : 200/1

Co-ordinates : 7°04'S 37°02'E

Population (1978) : 1505

Livestock-Units (1978) : 25

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,79	1,01	1,24	1,64
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	0,80	1,02	1,25	1,65

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All.	All.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Kitere Valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Streams/riverbeds												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main :

Storage tank :

Distribution lines :

Domestic water points :

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 8 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MBIGILI

Names of Subvillages :

District/Division/Subdivision : KIL/MAM/Magole

Sheet No. : 165/4

Co-ordinates : 6°27' S 37°23' E

Population (1978) : 2555

Livestock-Units (1978) : 10

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,21	1,52	1,84	2,45
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	1,22	1,53	1,85	2,46

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)		15-35 *VLC
Aquifer thickness (m)		5
Median waterlevel (m-GL)		low
Permeability (m/day)		150
EC (mS/m)		
Location	Mkundi riverbed	village

\*1 VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	Fe (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDB												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main :

Storage tank :

Distribution lines :

Domestic water points :

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells (if possible) or pumped water supply from Mkundi river:  
RSWP + 2 km + SRD

**MEDIUM AND LONG TERM :**

Shallow wells or extension of distribution facilities of pumped supply

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MBILI

Names of Subvillages : Njwego

District/Division/Subdivision : KIL/MAM/Mamboya

Sheet No. : 165/1

Co-ordinates : 6°08' S 37°04' E

Population (1978) : 821

Livestock-Units (1978) : 394

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,39	0,49	0,59	0,79
Livestock demand (l/s)	0,12	0,13	0,15	0,18
Total demand (l/s)	0,51	0,62	0,74	0,97

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)	> 200	
Location	Mbili riverbed	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	N(5)(mg/l)	E.Coli MPN/100 ml	General Appearance
HDB	6			0,4-1,6			dry in dry-season	150-300				
								325	0,7	12,4		F.781117

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)		x	
Village population dependent on facility	x		
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Gairo gravity scheme

**MEDIUM AND LONG TERM :**  
Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MBOGO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Sungaji

Sheet No. : 166/1

Co-ordinates : 6°12'S 37°35'E

Population (1978) : 2423

Livestock Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,15	1,45	1,75	2,33
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Drive
Low flow (5% /10% year)	25/31 l/s	
Distance from village	4 km	
Elevation with regard to village	40 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All sand
Aquifer depth (m-GL)	3-8	
Aquifer thickness (m)	1,5	
Median waterlevel (m-GL)	1,8	
Permeability (m/day)		
EC (mS/m)	15	
Location	village	
*) VLC: vertical lithological composition		

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>++</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 2 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +5 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MBWADE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Bwakirachini

Sheet No. : 201/4

Co-ordinates : 7°23'S 37°48'E

Population (1978) : 2289

Livestock-Units (1978) : 1640

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,17	1,49	1,82	2,43
Livestock demand (l/s)	0,57	0,64	0,71	0,85
Total demand (l/s)	1,74	2,13	2,53	3,27

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	riverbed	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
River Dutum								14,5	0,3	3,1	∞	F. 781103

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 11 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +5 Nos



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MBWADE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAS/Chanzuru

Sheet No. : 182/13

Co-ordinates : 6°45'S 37°11'E

Population (1978) : 1004

Livestock Units (1978) : 11

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,48	0,60	0,72	0,96
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	0,49	0,60	0,73	0,97

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All. sand	sand/gravel
Aquifer depth (m-GL)	7,5-13	15-80
Aquifer thickness (m)	2-5	25
Median waterlevel (m-GL)	7,0	14
Permeability (m/day)		60-100
EC (mS/m)	65-150	72
Location	village	village

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance
Sw	1			12,2				166	0,6	3,1	10	F. 781025
BH *	1	1979						65	0,4	13		G. 790130

\* not yet in operation

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility		x	
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Shallow wells with handpumps: 5 Nos

**MEDIUM AND LONG TERM :**  
 Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MELELA  
 Names of Subvillages : Kibaoni, Vianza, Mlandizi  
 District/Division/Subdivision : MOR/MLA/Melela  
 Sheet No. : 182/4  
 Co-ordinates : 6°55'S 37°25'E  
 Population (1978) : 3489  
 Livestock Units (1978) : 97

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,73	2,29	2,67	3,54
Livestock demand (l/s)	0,03	0,04	0,04	0,05
Total demand (l/s)	1,77	2,24	2,71	3,59

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Shallow ground water	Medium-depth and deep-ground water
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
<b>HYDROGEOLOGICAL DATA</b>	All. gneiss	
Aquifer type		
Aquifer depth (m-GL)	6	*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)	4-6	
Median waterlevel (m-GL)	3,5	
Permeability (m/day)	low	
EC (mS/m)	83	
Location	small valleys	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply from shallow well	1	1977		3,0			low	90	0,4	31	0	G.790306

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
 1381 l/s

Intake structure : shallow well

Water lifting equipment : pump : mother platt (2x)  
 engine : Kiloskar (2x)

Transmission main : 5,3 km )

Storage tank : 225 m<sup>3</sup> L ) drw.no.17231

Distribution lines : 10,6 km )

Domestic water points : 17

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Rehabilitation of intake works is underway (Maji Project)

**MEDIUM AND LONG TERM :**

Village water supply conditions will comply with 1991 targets after rehabilitation of intake works

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MESHUGI

Names of Subvillages :

District/Division/Subdivision : KIL/GAI/Gairo

Sheet No. : 164/2

Co-ordinates : 6°03'S 36°50'E

Population (1978) : 1240

Livestock-Units (1978) : 1000

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,59	0,74	0,89	1,19
Livestock demand (l/s)	0,35	0,39	0,43	0,52
Total demand (l/s)	0,94	1,13	1,33	1,71

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply from borehole	*	1961										

\* Permanently out of order

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : borehole

Water lifting equipment : pump : climax  
engine : Peter

Transmission main : 0,05 km )

Storage tank : 22,5 m<sup>3</sup> L ) dzw.no. 7045

Distribution lines : 0,2 km

Domestic water points : 1

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) :

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source	x		
Water accessibility (walking distance to facility)			x
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 13		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Gairo gravity scheme

**MEDIUM AND LONG TERM :**

Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MFULU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Magole

Sheet No. : 165/4

Co-ordinates : 6°25'S 37°18'E

Population (1978) : 1016

Livestock-Units (1978) : 29

Settlement Pattern :

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,48	0,61	0,73	0,98
Livestock demand (l/s)	0,01	0,01	0,01	0,02
Total demand (l/s)	0,49	0,62	0,74	0,99

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand All. <span style="float:right">*VLC</span>
Aquifer depth (m-GL)	10-15	25-75
Aquifer thickness (m)	5	<5
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)	<150	>150
Location	village	village

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Sw	5			3,0	2, 1-2, 3	0,2		20-90				
								110	0,6	84	200	P.781019

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)		x	
Village population dependent on facility		x	

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 5 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MFULUNI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAS/Chanzuru

Sheet No. : 182/1

Co-ordinates : 6°42' S 37°01' E

Population (1978) : 1093

Livestock Units (1978) : 6

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,52	0,65	0,79	1,05
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	0,52	0,65	0,79	1,05

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River
Low flow (5% /10% year)	Kisunqusi	
Distance from village	perennial	
Elevation with regard to village	3km	
Water quality	40 m	
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Gravity water supply 3 km transmission main, storage tank and rudimentary distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MFUMBWE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Mkuyuni

Sheet No. : 183/4

Co-ordinates : 6°54'S 37°49'E

Population (1978) : 1661

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,79	0,99	1,20	1,60
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA		Potential surface water sources	
Name of water source			
Low flow (5% /10% year)			
Distance from village			
Elevation with regard to village			
Water quality			
HYDROGEOLOGICAL DATA		Shallow ground water	Medium-depth and deep-ground water
Aquifer type			
Aquifer depth (m-GL)			
Aquifer thickness (m)			
Median waterlevel (m-GL)			
Permeability (m/day)			
EC (mS/m)			
Location			

\*VLC

0m  
10  
20  
30  
40  
50  
60  
70  
80

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E. Coli MPN/100 ml	General Appearance
streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Not sufficient data available

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MGATA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Bwakira Juu

Sheet No. : 201/1

Co-ordinates : 7° 14' S 37° 43' E

Population (1978) : 1580

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,75	0,94	1,14	1,52
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N. I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*1 VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area, having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MHALE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MGE/Kikeo

Sheet No. : 201/1

Co-ordinates : 7°08'S 37°34'E

Population (1978) : 1207

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,57	0,72	0,87	1,16
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	N. I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*1) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MHONDA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Mhonda

Sheet No. : 166/1

Co-ordinates : 6°08'S 37°35'E

Population (1978) : 2011

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,95	1,20	1,45	1,93
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Diwale
Low flow (5% /10% year)	150/ 200 l/s	
Distance from village	3 km	
Elevation with regard to village	30 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Gravity scheme: 3 km transmission main, storage tank and rudimentary distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MIFULU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Tegetera

Sheet No. : 183/3-4

Co-ordinates : 6° 58' S 37° 45' E

Population (1978) : 1924

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,91	1,15	1,39	1,85
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	N.I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*] VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance
Perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	: 3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MIKESE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Mikese

Sheet No. : 183/4

Co-ordinates : 6°46'S 37°54'E

Population (1978) : 2081

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1.06	1.36	1.65	2.19
Livestock demand (l/s)				
Total demand (l/s)				

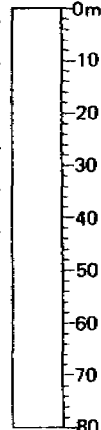
**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	2-6	*VLC 
Aquifer thickness (m)	2,3	
Median waterlevel (m-GL)	0,7	
Permeability (m/day)		
EC (mS/m)	103	
Location	Mikese valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>++</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
SW	4			6,8				115	0,4	6,7	300	F.781122
Pumped supply from borehole		1968		60				820				
SWBP		1978						120	0,2	2	0	F.781124

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
3,76 l/s

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : Mono  
engine : Lister

Transmission main : 1,1 km )

Storage tank : 22,5 m<sup>3</sup> H ) drw.no. 17300

Distribution lines : 2,2 km )

Domestic water points : 9

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility		x	

Village total score : 10

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Rehabilitation pumping equipment  
storage tank and extension of distribution system

**MEDIUM AND LONG TERM :**

Village water supply conditions comply with 1991 targets after rehabilitation programme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : Mikumi

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : \_\_\_\_\_

Sheet No. : \_\_\_\_\_

Co-ordinates : \_\_\_\_\_

Population (1978) : \_\_\_\_\_

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : N  D  S

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)				
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			
Quality of the water source			
Water accessibility (walking distance to facility)			
Reliability of facility			
Water Quality (EC)			
Village population dependent on facility			
Village total score			
Classification in VILLAGE PRIORITY GROUP No. :			

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

SHORT TERM :

MEDIUM AND LONG TERM :

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MILAWILILA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Tawa

Sheet No. : 183/3-4

Co-ordinates : 6°59'S 37°45'E

Population (1978) : 809

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,18	0,48	0,58	0,78
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
EC		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>++</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 7

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MILENGWE LENGWE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Mungazi

Sheet No. : 201/3

Co-ordinates : 7°26'S 37°39'E

Population (1978) : 889

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,12	0,53	0,64	0,85
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Mungazi
Low flow (5% /10% year)	22/37 l/s	
Distance from village	1 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	village	village

\*1) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDB	3			2,7			dry in dry season	140				
Sw	1			4,0				60	0,9	6,7	0	G.781103

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Medium depth wells with handpumps: 4 Nos

**MEDIUM AND LONG TERM :**  
Medium depth wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MINDU

Names of Subvillages : Kasanga, LUGALA

District/Division/Subdivision : MOR/NGE/MzingA

Sheet No. : 183/3

Co-ordinates : 6°52' S 37°36' E

Population (1978) : 2162

Livestock Units (1978) :

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1.03	1.29	1.56	2.08
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	Mindu research	
Low flow (5% /10% year)	-	
Distance from village	<1 km	
Elevation with regard to village	- 20 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
River Ngerengere												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main :

Storage tank :

Distribution lines :

Domestic water points :

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Mindu dam, village to be replaced

**MEDIUM AND LONG TERM :**

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MIRAMA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Mvomero

Sheet No. : 165/4

Co-ordinates : 6°22'S 37°27'E

Population (1978) : 1248

Livestock-Units (1978) : 109

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.57	0.74	0.70	1.20
Livestock demand (l/s)	0.04	0.04	0.05	0.06
Total demand (l/s)	0.63	0.79	0.75	1.26

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA		Potential surface water sources	
Name of water source			
Low flow (5% /10% year)			
Distance from village			
Elevation with regard to village			
Water quality			
HYDROGEOLOGICAL DATA		Shallow ground water	Medium-depth and deep-ground water
Aquifer type		All. sand	Loam/sand
Aquifer depth (m-GL)	3-8		14-20
Aquifer thickness (m)	3-7		6
Median waterlevel (m-GL)	1,3		
Permeability (m/day)			low
EC (mS/m)	66		
Location	village		village

**\*) VLC: vertical lithological composition**

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance
Sw	3			14,3				95	0,5	17	2	G.781019
								98	0,7	11,5	150	G.781019
								25	0,5	7	9	P.781019

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility		x	

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 6 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +3 Nos



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NISONGENI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Kingolwire

Sheet No. : 183/3-4

Co-ordinates : 6°48'S 37°45'E

Population (1978) : 1428

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,68	0,85	1,03	1,37
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	River Mgolole	
Name of water source	14/17 l/s	
Low flow (5% /10% year)	1 km	
Distance from village	30 m	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	Ø Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Gravity water supply from river Myolole *		1960										

\* Run-of-the-river system, together with the villages Kitungwa and Lageramwendo

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity  1,75 l/s

Intake structure : Weir (+ sandtrap) in river Myolole

Water lifting equipment : pump : \_\_\_\_\_ engine : \_\_\_\_\_

Transmission main : - )

Storage tank : - ) drw.no. 7545

Distribution lines : 0,43 km )

Domestic water points : 2

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source	x		
Water accessibility (walking distance to facility)		x	
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score			10
Classification in VILLAGE PRIORITY GROUP No. :			2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Rehabilitation of existing gravity supply (Maji project)

**MEDIUM AND LONG TERM :**

Village water supply conditions comply with 1991 targets after completion of the rehabilitation programme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MKALAMA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GA /Gairo

Sheet No. : 164/2

Co-ordinates : 6°05'S 36°51'E

Population (1978) : 1436

Livestock Units (1978) : 1510

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,68	0,86	1,03	1,38
Livestock demand (l/s)	0,52	0,59	0,66	0,79
Total demand (l/s)	1,21	1,45	1,69	2,17

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance
Water supply Maja Wanga												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source	x		
Water accessibility (walking distance to facility)			x
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	13		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

SHORT TERM :  
 Gairo gravity scheme

MEDIUM AND LONG TERM :  
 Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MKAMBARANI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Kingolwira

Sheet No. : 183/4

Co-ordinates : 6°46'S 37°48'E

Population (1978) : 564

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.27	0.31	0.41	0.54
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	4-7	
Aquifer thickness (m)	2,1	
Median waterlevel (m-GL)	0,7	
Permeability (m/day)		
EC (mS/m)	70-700	
Location	small valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
RDH	8			1,5				80-180				
								14,5	0,2		400	P.781122
								60	0,4		50	P.781122

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)			x
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility	x		
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 3 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +1 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MKATA RANCH

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MLA/Melela

Sheet No. : 182/2-4

Co-ordinates : 6°45'S 37°21'E

Population (1978) : 400

Livestock Units (1978) : \_\_\_\_\_

Settlement Pattern :

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,19	0,24	0,29	0,38
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	River Mkata	
Name of water source	>500/>600 l/s	
Low flow (5% /10% year)	1 km	
Distance from village	-5 m	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All sand	sand
Aquifer type		15-50 *VLC
Aquifer depth (m-GL)		> 5
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)	< 100	< 200
Location	village	village

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nox.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Sw	1			12				80				
Pumped supply from river Mkata *												

\* operated by Mkata Ranch

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. : 3			

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village water supply conditions comply with 1991 targets

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MKATA UJAMAA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MLA/Msongozi

Sheet No. : 182/3

Co-ordinates : 6°57'S 37°13'E

Population (1978) : 388

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,26	0,35	0,43	0,56
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	river Mkata	
Low flow (5% /10% year)	>300/>400 l/s	
Distance from village	1 km	
Elevation with regard to village	- 5 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All sand	sand/gravel
Aquifer depth (m-GL)		15-50
Aquifer thickness (m)		> 5
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		< 200
Location	Mkata valley	Mkata valley

**\*VLC**

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E. Coli MPN/100 ml	General Appearance
Pumped supply from river-side well	1	1969										

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : riverside well

Water lifting equipment : pump : KSB  
 engine : Lister

Transmission main : 2,1 km

Storage tank : 22,5 m<sup>3</sup> H

Distribution lines : 5,0 km

Domestic water points : 4

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 7

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
 Village water supply conditions comply with 1991 targets

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MKINDO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Hembeti

Sheet No. : 166/1

Co-ordinates : 6° 14' S 37° 33' E

Population (1978) : 2336

Livestock Units (1978) : \_\_\_\_\_

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,11	1,39	1,68	2,24
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River	Mkindu
Low flow (5% /10% year)	320/360 l/s	
Distance from village	3 km	
Elevation with regard to village	40 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All. sand	
Aquifer depth (m-GL)	3-8	*VLC
Aquifer thickness (m)	3,0	
Median waterlevel (m-GL)	2,9	
Permeability (m/day)		
EC (mS/m)	53	
Location	village	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
river Mkindo								4,5	< 0,1		100	G.781113

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Shallow wells with handpumps: 12 Nos

**MEDIUM AND LONG TERM :**  
 Shallow wells with handpumps: +4 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : HKOBWE

Names of Subvillages : Kidette

District/Division/Subdivision : KIL/NON/Chagongwe

Sheet No. : 164/4

Co-ordinates : 6°23'S 36°55'E

Population (1978) : 1183

Livestock-Units (1978) : 979

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,56	0,71	0,85	1,14
Livestock demand (l/s)	0,34	0,38	0,42	0,51
Total demand (l/s)	0,90	1,09	1,28	1,65

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	N. I.	
Name of water source	perennial	
Low flow (5% /10% year)	1-3 km	
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	# Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from a small perennial stream

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MKOLOLO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Singisa

Sheet No. : 201/3

Co-ordinates : 7°17'S 37°23'E

Population (1978) : 438

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,21	0,38	0,47	0,61
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Shallow ground water	Medium-depth and deep-ground water
Name of water source	River Mgeta	
Low flow (5% /10% year)	>100/>150 l/s	
Distance from village	<1 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
River Mgeta												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Gravity scheme, 2 km transmission main, storage tank and rudimentary distribution system



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MKONOWAMARA

Names of Subvillages :

District/Division/Subdivision : MOR/NGE/KingoIwine

Sheet No. : 183/2

Co-ordinates : 6°43'S 37°48'E

Population (1978) : 623

Livestock-Units (1978) :

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,30	0,37	0,45	0,60
Livestock demand (l/s)				
Total demand (l/s)				

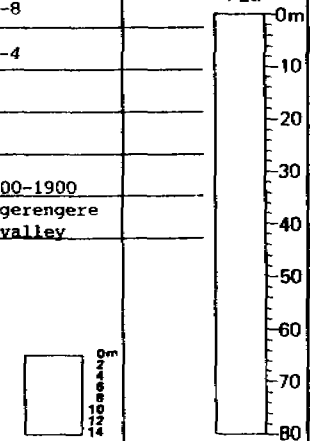
**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Ngerengere
Low flow (5% /10% year)	flow depends on reservoir regime	
Distance from village	< 1 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	4-8	*VLC 
Aquifer thickness (m)	1-4	
Median waterlevel (m-GL)	4	
Permeability (m/day)		
EC (mS/m)	800-1900	
Location	Ngerengere valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
River Ngerengere												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main :

Storage tank :

Distribution lines :

Domestic water points :

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)			x
Village population dependent on facility	x		
Village total score	: 13		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Pumped supply from river, 1 km transmission main, storage tank and rudimentary distribution system

**MEDIUM AND LONG TERM :**

Extension distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : Mkulazi

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGB/Mkulazi

Sheet No. : 202/1

Co-ordinates : 7°10'S 38°12'E

Population (1978) : 602

Livestock Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	027	036	043	058
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Sandy soil	
Aquifer type		
Aquifer depth (m-GL)	1-15	*VLC
Aquifer thickness (m)		
Median waterlevel (m-GL)	1-3	
Permeability (m/day)		
EC (mS/m)	<100	
Location	village	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
RDH	4			1,0				5				
Sw	3			3,9								

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)			x
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 10

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 3 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +1 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : Mkundi

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Magole

Sheet No. : 165/4

Co-ordinates : 6°20'S 37°20'E

Population (1978) : 814

Livestock-Units (1978) : 189

Settlement Pattern :   $\lambda$    $\gamma$    $z$

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,39	0,49	0,59	0,78
Livestock demand (l/s)	0,07	0,07	0,08	0,10
Total demand (l/s)	0,45	0,56	0,67	0,88

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	0-8	
Aquifer thickness (m)	8	
Median waterlevel (m-GL)	0,5	
Permeability (m/day)	100-500	
EC (mS/m)	< 100	
Location	Mkundi riverbed	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	$\phi$ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
River Mkundi								14	0,2	1,3	> 1000	P.781019

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)		x	
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 4 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : Mkundi

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Mzinda

Sheet No. : 183/1

Co-ordinates : 6°42'S 37°38'E

Population (1978) : 685

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,33	0,41	0,49	0,66
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	2-6	
Aquifer thickness (m)	2,0	
Median waterlevel (m-GL)	3,5	
Permeability (m/day)		
EC (mS/m)	30	
Location	village	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDH	3				3,5			22				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)			x
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility	x		
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 3 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MKUNGHUJU

Names of Subvillages : Kitati

District/Division/Subdivision : KIL/ULA/Lumuma

Sheet No. : 181/3

Co-ordinates : 6°47'S 36°39'E

Population (1978) : 1155

Livestock-Units (1978) : 1254

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,55	0,69	0,83	1,11
Livestock demand (l/s)	0,44	0,49	0,55	0,66
Total demand (l/s)	1,99	1,18	1,38	1,77

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Ilongo
Low flow (5% /10% year)	perennial	
Distance from village	3 km	
Elevation with regard to village	50 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*1 VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 6 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MKUNYUNI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Mkuyuni

Sheet No. : 183/4

Co-ordinates : 6°57'S 37°49'E

Population (1978) : 1983

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,02	1,30	1,58	2,10
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	Mkuyuni springs	
Low flow (5% /10% year)	0,75/1.00 l/s	
Distance from village	1 km	
Elevation with regard to village	40 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All.	dolomite
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)	< 100	500
Location	small village	village

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Unprotected spring								70	0,5	2,7	20	G,781103

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 10 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +4 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MLAGUZI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Sungaji

Sheet No. : 166/1

Co-ordinates : 6°10'S 37°33'E

Population (1978) : 667

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,32	0,40	0,48	0,64
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Divue
Low flow (5% /10% year)	25/31 l/s	
Distance from village	1 km	
Elevation with regard to village	30 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 6		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Gravity scheme, 2,5 km transmission main, storage tank and extensive distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MLALI

Names of Subvillages : Kinyori

District/Division/Subdivision : MOR/MLA/MLaoli

Sheet No. : 183/3

Co-ordinates : 6° 57' S 37° 32' E

Population (1978) : 2196

Livestock-Units (1978) : 226

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,12	1,43	1,74	2,30
Livestock demand (l/s)	1,08	0,09	0,10	0,12
Total demand (l/s)	2,20	1,51	1,83	2,42

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Mladi
Low flow (5% /10% year)	perennial	
Distance from village	1 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Ngerengere valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply from river Mlali *		1969						20	0,4	1,3	200	G.790306

\* common system with Kipera

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
2,6 l/s

Intake structure : riverside well

Water lifting equipment : pump : Godwin (2x)  
engine : Lister (2x)

Transmission main : 1,2 km )

Storage tank : 45 m<sup>3</sup>/L ) drw.no. 17095A

Distribution lines : 3,4 km )

Domestic water points : 7

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Rehabilitation intake structure and pumping equipment

**MEDIUM AND LONG TERM :**

Extension of storage capacity and distribution facilities



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MLILINGWA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Ngerengere

Sheet No. : 184/3

Co-ordinates : 6°54'S 38°02'E

Population (1978) : 474

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,22	0,28	0,34	0,46
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

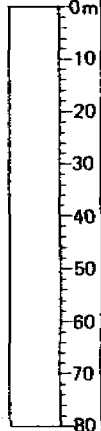
Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	Laterite
Aquifer depth (m-GL)		*VLC
Aquifer thickness (m)		
Median waterlevel (m-GL)	0,5	
Permeability (m/day)		
EC (mS/m)	5-10	
Location		



\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDH	10			0,7			very low	5-8				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)			x
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 2 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +1 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MIONO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAI/KI semu

Sheet No. : 201/1

Co-ordinates : 7°05'S 37°43'E

Population (1978) : 1505

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,71	0,90	1,08	1,45
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	N.I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

0m  
10  
20  
30  
40  
50  
60  
70  
80

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
 Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MNGAZI

Names of Subvillages :

District/Division/Subdivision : MOR/BWA/Mngazi

Sheet No. : 201/3

Co-ordinates : 7°25'S 37°41'E

Population (1978) : 1344

Livestock-Units (1978) : 21

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,71	0,92	1,12	1,48
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	0,72	0,93	1,13	1,49

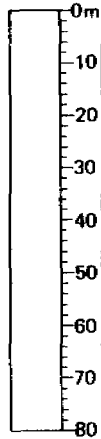
**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Mngazi
Low flow (5% /10% year)	22/37 l/s	
Distance from village	1 km	
Elevation with regard to village	- 10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)		*VLC 
Aquifer thickness (m)		
Median waterlevel (m-GL)	0,5	
Permeability (m/day)		
EC (mS/m)	100	
Location	Mngazi river bed	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
River Mngazi								8	0,2	3,1	300	F. 781103

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main :

Storage tank :

Distribution lines :

Domestic water points :

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	: 3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 7 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : Mnyanza

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MLA/MLa11

Sheet No. : 183/3

Co-ordinates : 6°58'S 37°36'E

Population (1978) : 1931

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  $\alpha$    $\gamma$    $\zeta$

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,92	1,15	1,39	1,86
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	N.I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-G/L)		
Aquifer thickness (m)		
Median waterlevel (m-G/L)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

0m  
10  
20  
30  
40  
50  
60  
70  
80

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	$\phi$ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 81 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : Morogoro

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : \_\_\_\_\_

Sheet No. : \_\_\_\_\_

Co-ordinates : \_\_\_\_\_

Population (1978) : \_\_\_\_\_

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : N  D  S

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)				
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			
Quality of the water source			
Water accessibility (walking distance to facility)			
Reliability of facility			
Water Quality (EC)			
Village population dependent on facility			

Village total score : \_\_\_\_\_

Classification in VILLAGE PRIORITY GROUP No. : \_\_\_\_\_

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

SHORT TERM : \_\_\_\_\_

MEDIUM AND LONG TERM : \_\_\_\_\_

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MSINBA

Names of Subvillages : Miyomboni

District/Division/Subdivision : KIL/MIK/MIK (km)

Sheet No. : 199/4

Co-ordinates : 7°26'S 36°35'E

Population (1978) : 1301

Livestock-Units (1978) : 77

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,69	0,89	1,09	1,44
Livestock demand (l/s)	0,02	0,03	0,03	0,04
Total demand (l/s)	0,72	0,92	1,12	1,48

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Not sufficient data available

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MSINGISE

Names of Subvillages :

District/Division/Subdivision : KIL'GAI/Gairo

Sheet No. : 164/2

Co-ordinates : 6° 12'S 36° 52'E

Population (1978) : 1582

Livestock-Units (1978) : 2893

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,75	0,94	1,14	1,52
Livestock demand (l/s)	1,00	1,13	1,26	1,51
Total demand (l/s)	1,76	2,07	2,40	3,03

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Gravity supply from tributaries river Kitange *		1972										

\* Incorporated in existing Gairo scheme

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
: 11,5 l/s  
Wei(+ sandtrap) in tributaries

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : 4,3 km )

Storage tank : 45 m<sup>3</sup> L ) drw.no. 17085

Distribution lines : 3,7 km )

Domestic water points : 1

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 10

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Gairo gravity scheme

**MEDIUM AND LONG TERM :**

Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MSOLOKELO

Names of Subvillages : Kombola, Mnesa

District/Division/Subdivision : MOR/TUR/Kibati

Sheet No. : 147/2

Co-ordinates : 5°57'S 37°37'E

Population (1978) : 513

Livestock-Units (1978) :

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,24	0,31	0,37	0,49
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 6		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village Water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Not sufficient data available most likely pumped water supply from a riverside well:  
RSWP + 2km + SRD



# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	: MSOLWA
Names of Subvillages	: -
District/Division/Subdivision	: KILIMIK/KISANJA
Sheet No.	: 199/3-4
Co-ordinates	: 7°17' S 36°45' E
Population (1978)	: 1204
Livestock-Units (1978)	: 360
Settlement Pattern	: x <input type="checkbox"/> y <input type="checkbox"/> z <input type="checkbox"/>
Village facilities	: PS <input checked="" type="checkbox"/> DP <input type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																					
<b>WATER DEMAND</b>																					
	<table border="1"> <thead> <tr> <th></th> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>Population demand (l/s)</td> <td>0,57</td> <td>0,72</td> <td>0,87</td> <td>1,16</td> </tr> <tr> <td>Livestock demand (l/s)</td> <td>0,13</td> <td>0,14</td> <td>0,16</td> <td>0,19</td> </tr> <tr> <td>Total demand (l/s)</td> <td>0,70</td> <td>0,86</td> <td>1,02</td> <td>1,34</td> </tr> </tbody> </table>		1978	1983	1988	1998	Population demand (l/s)	0,57	0,72	0,87	1,16	Livestock demand (l/s)	0,13	0,14	0,16	0,19	Total demand (l/s)	0,70	0,86	1,02	1,34
	1978	1983	1988	1998																	
Population demand (l/s)	0,57	0,72	0,87	1,16																	
Livestock demand (l/s)	0,13	0,14	0,16	0,19																	
Total demand (l/s)	0,70	0,86	1,02	1,34																	
<b>WATER POTENTIAL</b>																					
Prospects for																					
Suitable ground water sources	: G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																				
Suitable surface water sources	: G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																				

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
<b>HYDROLOGICAL DATA</b>		Potential surface water sources
Name of water source	N.I.	
Low flow (5% /10% year)	perennial	
Distance from village	4 km	
Elevation with regard to village	30 m	
Water quality		
<b>HYDROGEOLOGICAL DATA</b>		Shallow ground water / Medium-depth and deep-ground water
Aquifer type	All.	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		
*) VLC: vertical lithological composition		

4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	: Pumped <input type="checkbox"/> Gravity <input type="checkbox"/>
Intake structure	: _____
Water lifting equipment	: pump : _____ engine : _____
Transmission main	: _____
Storage tank	: _____
Distribution lines	: _____
Domestic water points	: _____
Additional facilities	: CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	: _____

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No.	: 3		

7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES	
SHORT TERM :	Shallow wells with handpumps: 6 Nos
MEDIUM AND LONG TERM :	Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MSONGE

Names of Subvillages :

District/Division/Subdivision : MOR/BWA/Mvuha

Sheet No. : 201/2

Co-ordinates : 7°07'S 37°51'E

Population (1978) : 1085

Livestock-Units (1978) : 47

Settlement Pattern :

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,51	0,65	0,78	1,04
Livestock demand (l/s)	1,02	0,02	0,02	0,02
Total demand (l/s)	0,53	0,67	0,80	1,07

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Msonge
Low flow (5% /10% year)	10/14 l/s	
Distance from village	1 km	
Elevation with regard to village	10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All. sand	sandstone
Aquifer type		*VLC
Aquifer depth (m-GL)		0m
Aquifer thickness (m)		10
Median waterlevel (m-GL)		20
Permeability (m/day)		30
EC (mS/m)		40
Location	Msonge riverbed	east of village
		50
		60
		70
		80

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E. Coli MPN/100 ml	General Appearance
Springs								86	0,6		0	G.781103
								90	0,6		>1000	G.781103
River Msonge								60	0,5		15	G.781103

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main :

Storage tank :

Distribution lines :

Domestic water points :

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)			x
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Gravity scheme, 4 km transmission main, storage tank and rudimentary distribution system

**MEDIUM AND LONG TERM :**

Extension of distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : **MSONGOZI**  
 Msongozi Mission  
 Names of Subvillages : (=Kaichale) Pasua  
 District/Division/Subdivision : **NOR/MLA/Msongozi**  
 Sheet No. : **200/2**  
 Co-ordinates : **7°04'S 37°20'E**  
 Population (1978) : **1423**  
 Livestock-Units (1978) : **49**

Settlement Pattern :     
 Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.68	0.85	1.03	1.37
Livestock demand (l/s)	0.02	0.02	0.02	0.02
Total demand (l/s)	0.69	0.87	1.05	1.39

**WATER POTENTIAL**

Prospects for  
 Suitable ground water sources : G  F  P   
 Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	3-8	
Aquifer thickness (m)	3.3	
Median waterlevel (m-GL)	3.3	
Permeability (m/day)		
EC (mS/m)	150-200	
Location	Msongozi valley	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDB	8			2-4				6-180				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
 Intake structure : \_\_\_\_\_  
 Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_  
 Transmission main : \_\_\_\_\_  
 Storage tank : \_\_\_\_\_  
 Distribution lines : \_\_\_\_\_  
 Domestic water points : \_\_\_\_\_  
 Additional facilities : CT  CD  HC   
 Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility		x	
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No.	: 2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Shallow wells with handpumps: 7 Nos

**MEDIUM AND LONG TERM :**  
 Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MSOWERO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MIK/Kidodi

Sheet No. : 217/2 218/1

Co-ordinates : 7°34'S 37°00'E

Population (1978) : 1220

Livestock Units (1978) : 10

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.58	0.73	0.88	1.17
Livestock demand (l/s)	0.01	0.01	0.01	0.01
Total demand (l/s)	0.59	0.74	0.89	1.18

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Msowero
Low flow (5% /10% year)	75/120 l/s	
Distance from village	<1 km	
Elevation with regard to village	- 5 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC
Aquifer thickness (m)		0m
Median waterlevel (m-GL)		10
Permeability (m/day)		20
EC (mS/m)		30
Location		40
		50
		60
		70
		80

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
River Msowero								6	0.1	1.3	3	P. 790228

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

SHORT TERM :

Tundu gravity scheme

MEDIUM AND LONG TERM :

Tundu gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MSOWERO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/ULA/Lumuma

Sheet No. : 183/3

Co-ordinates : 6°50'S 36°38'E

Population (1978) : 1450

Livestock-Units (1978) : 877

Settlement Pattern :

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.69	0.87	1.04	1.39
Livestock demand (l/s)	0.30	0.34	0.38	0.46
Total demand (l/s)	0.99	1.21	1.43	1.85

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Lumuma T.
Low flow (5% /10% year)	perennial	perennial
Distance from village	< 1 km	2 km
Elevation with regard to village	-5 m	50 m
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Lumuma valley	

\*1 VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												
river Lumuma												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Shallow wells with handpumps: 7 Nos

**MEDIUM AND LONG TERM :**  
 Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MSOWERO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Maowero

Sheet No. : 1B2/1

Co-ordinates : 6°32'S 37°13'E

Population (1978) : 4845

Livestock-Units (1978) : 2399

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	2.38	3.01	3.64	4.85
Livestock demand (l/s)	0.83	0.94	1.04	1.25
Total demand (l/s)	3.21	3.94	4.68	6.09

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river Tami
Low flow (5% /10% year)	75/120 l/s	
Distance from village	< 1 km	
Elevation with regard to village	-5 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	all. sand
Aquifer depth (m-GL)	20-100	*VLC
Aquifer thickness (m)	5-15	
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)	<200	
Location	east of village	

\*1) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply from river Msowero	1	1972						10	0.2	2.7	0	G. 781026

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
: 2.2 l/s

Intake structure : riverside well (direct inflow)

Water lifting equipment : pump : mother platt  
engine : Kiloskar

Transmission main : 1.5 km )

Storage tank : 22.5 m<sup>3</sup> H ) drw.no. 17142

Distribution lines : 2.9 km )

Domestic water points : 3

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : + 15 m

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	10		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Rehabilitation of intake works and pumping equipment

**MEDIUM AND LONG TERM :**

Extension works: storage tank and extensive distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MSUFINI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Hembeti

Sheet No. : 165/4

Co-ordinates : 6°17'S 37°29'E

Population (1978) : 733

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,35	0,44	0,53	0,70
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All. sand	sand
Aquifer depth (m-GL)	2-5	40-100
Aquifer thickness (m)	1,5	> 15
Median waterlevel (m-GL)	1,5	8
Permeability (m/day)		
EC (mS/m)	15	< 100
Location	village	village

\* ) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Sw								110	0,8	2,2	1000	F.781027

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)		x	
Village population dependent on facility	x		

Village total score : 11

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 4 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +1 No.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MTAMBA

Names of Subvillages : Kangazi

District/Division/Subdivision : MOR/NAT/Kisumu

Sheet No. : 201/2

Co-ordinates : 7°05'S 37°47'E

Population (1978) : 3160

Livestock-Units (1978) : 61

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,50	1,89	2,28	3,04
Livestock demand (l/s)	0,02	0,02	0,03	0,03
Total demand (l/s)	1,52	1,91	2,30	3,07

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	Mtamba springs	
Low flow (5% /10% year)	3/5 l/s	
Distance from village	< 1 km	
Elevation with regard to village	15 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All.	dolomite
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)	0,5	
Permeability (m/day)		
EC (mS/m)	16	40
Location	small village	village

\*1) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDH	3							16				
gravity supply from protected spring *	3	1967						55	0,7	3,5	0	G.781103

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
+ 4 l/s (for three small systems)

Intake structure : protected spring

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : 3x 1 m<sup>3</sup> L )

Storage tank : 3x 1 m<sup>3</sup> ) drw.no.17103A

Distribution lines : 4,1 km

Domestic water points : 3

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : + 10 m

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 10 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +4 Nos



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MTEGA

Names of Subvillages :

District/Division/Subdivision : KIL/NON/Changole

Sheet No. : 164/4

Co-ordinates : 6°29'S 36°59'E

Population (1978) : 1688

Livestock-Units (1978) : 2199

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,80	1,01	1,22	1,62
Livestock demand (l/s)	0,76	0,86	0,95	1,15
Total demand (l/s)	1,56	1,87	2,17	2,77

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main :

Storage tank :

Distribution lines :

Domestic water points :

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MTOMBOZI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Mtombozi

Sheet No. : 201/2

Co-ordinates : 7°07'S 37°47'E

Population (1978) : 1007

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,55	0,72	0,88	1,16
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river Mvuha
Low flow (5% /10% year)	>150/>200 l/s	
Distance from village	5 km	
Elevation with regard to village	200 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	ALL.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Mvuha valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance
streams												
HDR	S											

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 5 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MTUMBATU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Haboya

Sheet No. : 164/2

Co-ordinates : 6°08'S 36°59'E

Population (1978) : 1588

Livestock-Units (1978) : 1673

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,75	0,95	1,14	1,53
Livestock demand (l/s)	0,58	0,65	0,73	0,87
Total demand (l/s)	1,33	1,60	1,87	2,40

**WATER POTENTIAL**

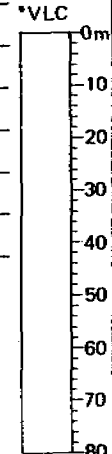
Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		



\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDR	6			1,0	24-56		dry in dry season	9				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)			x
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 13		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Gairo gravity scheme

**MEDIUM AND LONG TERM :**

Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MUGUDENI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Mvomero

Sheet No. : 165/4

Co-ordinates : 6°20'S 37°25'E

Population (1978) : 1187

Livestock-Units (1978) : 176

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,56	0,71	0,86	1,14
Livestock demand (l/s)	0,06	0,07	0,08	0,09
Total demand (l/s)	0,62	0,78	0,93	1,23

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand/Loam
Aquifer depth (m-GL)	3-7	
Aquifer thickness (m)	2,4	
Median waterlevel (m-GL)	2,5	
Permeability (m/day)		
EC (mS/m)	120-820	
Location	village	

\*1) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
BDH	4			3,9				195	1,3	2,2	800	P.781019
								530	0,8	2,2	35	P.781019
								130	0,8	2,2	> 1000	P.781019
Sw	1							175	1,1	6,2	4	P.781019

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)			x
Village population dependent on facility		x	

Village total score : 13

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 6 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MURENDA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/ULA/Ulaya

Sheet No. : 199/2

Co-ordinates : 7°10'S 36°55'E

Population (1978) : 1978

Livestock-Units (1978) : 35

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,01	1,30	1,58	2,09
Livestock demand (l/s)	0,01	0,01	0,02	0,02
Total demand (l/s)	1,03	1,31	1,59	2,11

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Kitete valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E. Coli MFN/100 ml	General Appearance
HDR								73				
river Muhenda								25	0,3	3,1	100	F.781115
Unprotected spring								14,5	0,2	2,7	0	G.781115

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source			x
Water accessibility (walking distance to facility)			x
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	15		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 10 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +4 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MUHUNGAMKOLA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Mikese

Sheet No. : 183/4

Co-ordinates : 6°47'S 37°58'E

Population (1978) : 474

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,22	0,28	0,34	0,46
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All . sand	
Aquifer type	*VLC	
Aquifer depth (m-GL)	3-6	0m
Aquifer thickness (m)	3,4	10
Median waterlevel (m-GL)	1,0	20
Permeability (m/day)		30
EC (mS/m)	130-400	40
Location	small valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>++</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDR	1			0,9				80	0,2	2,2	200	P.781124
	2			2,6				17			60	P.781124
	3			1,2				125				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 11

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 2 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +1 No.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MULUNGA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MIK/MaLoLo

Sheet No. : 199/1

Co-ordinates : 7°07'S 36°33'E

Population (1978) : 755

Livestock-Units (1978) : 444

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,36	0,45	0,54	0,73
Livestock demand (l/s)	0,15	0,17	0,19	0,23
<b>Total demand (l/s)</b>	<b>0,51</b>	<b>0,62</b>	<b>0,74</b>	<b>0,96</b>

**WATER POTENTIAL**

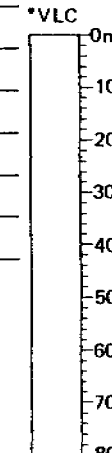
Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	3 km	
Elevation with regard to village	50 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		



\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Gravity scheme, 2 km transmission main, storage tank and extensive distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MUNISAGARA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAS/Masanze

Sheet No. : 181/2-4

Co-ordinates : 6°45'S 36°53'E

Population (1978) : 1042

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.43	0.62	0.75	1.00
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river Mkondoa
Low flow (5% /10% year)	> 450/>500 l/s	
Distance from village	1 km	
Elevation with regard to village	-5 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	ALL.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Mkondoa river	

\* ) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
river Mkondoa												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 5 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +2 Nos

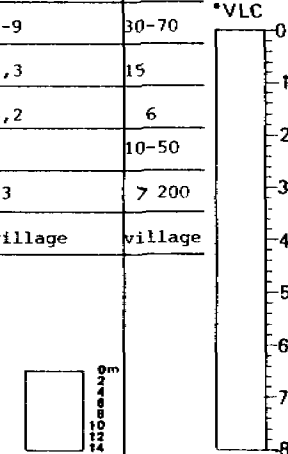


# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	: MVOMERO
Names of Subvillages	: Chamkole
District/Division/Subdivision	: MOR/TUR/Mvomero
Sheet No.	: 165/4
Co-ordinates	: 6° 18' S 37° 27' E
Population (1978)	: 3458
Livestock-Units (1978)	: 138
Settlement Pattern	: x <input type="checkbox"/> y <input type="checkbox"/> z <input checked="" type="checkbox"/>
Village facilities	: PS <input checked="" type="checkbox"/> DP <input checked="" type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																					
<b>WATER DEMAND</b>																					
	<table border="1"> <thead> <tr> <th></th> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>Population demand (l/s)</td> <td>1,72</td> <td>2,18</td> <td>2,64</td> <td>3,51</td> </tr> <tr> <td>Livestock demand (l/s)</td> <td>0,05</td> <td>0,05</td> <td>0,06</td> <td>0,07</td> </tr> <tr> <td>Total demand (l/s)</td> <td>1,76</td> <td>2,23</td> <td>2,70</td> <td>3,58</td> </tr> </tbody> </table>		1978	1983	1988	1998	Population demand (l/s)	1,72	2,18	2,64	3,51	Livestock demand (l/s)	0,05	0,05	0,06	0,07	Total demand (l/s)	1,76	2,23	2,70	3,58
	1978	1983	1988	1998																	
Population demand (l/s)	1,72	2,18	2,64	3,51																	
Livestock demand (l/s)	0,05	0,05	0,06	0,07																	
Total demand (l/s)	1,76	2,23	2,70	3,58																	
<b>WATER POTENTIAL</b>																					
Prospects for																					
Suitable ground water sources	: G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																				
Suitable surface water sources	: G <input type="checkbox"/> F <input type="checkbox"/> P <input checked="" type="checkbox"/>																				

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
<b>HYDROLOGICAL DATA</b>		Potential surface water sources
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
<b>HYDROGEOLOGICAL DATA</b>		Shallow ground water / Medium-depth and deep-ground water
Aquifer type		All. sand/loam / sand
Aquifer depth (m-GL)	5-9	30-70
Aquifer thickness (m)	2,3	15
Median waterlevel (m-GL)	5,2	6
Permeability (m/day)		10-50
EC (mS/m)	83	> 200
Location	village	village



\*VLC

0m

10

20

30

40

50

60

70

80

\*) VLC: vertical lithological composition

4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Sw	3			7,0				175	0,2	90	70	G.781113
gravity supply from river Mvomero *												

\* river runs dry during dry-season; common system with Dibemba

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	: Pumped <input type="checkbox"/> Gravity <input checked="" type="checkbox"/> 4,03 l/s *
Intake structure	:
Water lifting equipment	: pump : _____ engine : _____
Transmission main	: 4,37 km )
Storage tank	: 135 m <sup>3</sup> L )drw.no.17153
Distribution lines	: 5,1 km )
Domestic water points	: 17
Additional facilities	: CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	:

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand		x	
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No.	: 2		

7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES	
SHORT TERM :	Shallow wells with handpumps: 5 Nos
MEDIUM AND LONG TERM :	Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MVUHA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Mvuha

Sheet No. : 201/2

Co-ordinates : 7°12'S 37°51'E

Population (1978) : 2539

Livestock-Units (1978) : 53

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,28	1,63	1,98	2,63
Livestock demand (l/s)	2,02	0,02	0,02	0,03
Total demand (l/s)	1,30	1,65	2,00	2,66

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Shallow ground water	Medium-depth and deep ground water
Name of water source	river Mvuha	
Low flow (5% /10% year)	610/730 l/s	
Distance from village	< 1 km	
Elevation with regard to village	- 10 m	
Water quality		
<b>HYDROGEOLOGICAL DATA</b>		
Aquifer type	All.	*VLC
Aquifer depth (m-GL)		0m
Aquifer thickness (m)		10
Median waterlevel (m-GL)		20
Permeability (m/day)		30
EC (mS/m)		40
Location	Mvuha valley	50
		60
		70
		80

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
river Mvuha								9	0,1		50	F.781103

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 13 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +5 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MVUMI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Msowero

Sheet No. : 182/1

Co-ordinates : 6°35'S 37°10'E

Population (1978) : 3406

Livestock-Units (1978) : 2281

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,69	2,15	2,61	3,46
Livestock demand (l/s)	3,79	0,89	0,99	1,19
Total demand (l/s)	2,48	3,04	3,60	4,65

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river
Low flow (5% /10% year)	Losangate	
Distance from village	200/240 l/s	
Elevation with regard to village	< 1 km	
Water quality	-5 m	
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	Γ (mo/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply from river Kisangate		1972						8	0,1		140	G.781114

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
: 2,81 l/s

Intake structure : riverside well (direct inflow)

Water lifting equipment : pump : mother platt  
engine : Kiloskar

Transmission main : 0,35 km )

Storage tank : 22,5 m<sup>3</sup> II ) drw.no.17143

Distribution lines : 2,1 km )

Domestic water points : 6

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Rehabilitation of intake works and pumping equipment

**MEDIUM AND LONG TERM :**

Extension of storage capacity and distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	: MWALAZI
Names of Subvillages	:
District/Division/Subdivision	: MOR/MGE/Tchenzema
Sheet No.	: 201/1
Co-ordinates	: 7°05'S 37°33'E
Population (1978)	: 1420
Livestock-Units (1978)	:
Settlement Pattern	: X <input checked="" type="checkbox"/> Y <input type="checkbox"/> Z <input type="checkbox"/>
Village facilities	: PS <input checked="" type="checkbox"/> DP <input type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																					
<b>WATER DEMAND</b>																					
	<table border="1"> <thead> <tr> <th></th> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>Population demand (l/s)</td> <td>0,67</td> <td>0,85</td> <td>1,02</td> <td>1,36</td> </tr> <tr> <td>Livestock demand (l/s)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Total demand (l/s)</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		1978	1983	1988	1998	Population demand (l/s)	0,67	0,85	1,02	1,36	Livestock demand (l/s)					Total demand (l/s)				
	1978	1983	1988	1998																	
Population demand (l/s)	0,67	0,85	1,02	1,36																	
Livestock demand (l/s)																					
Total demand (l/s)																					
<b>WATER POTENTIAL</b>																					
Prospects for																					
Suitable ground water sources	: G <input type="checkbox"/> F <input type="checkbox"/> P <input checked="" type="checkbox"/>																				
Suitable surface water sources	: G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																				

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
<b>HYDROLOGICAL DATA</b>		Potential surface water sources
Name of water source	N.I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
<b>HYDROGEOLOGICAL DATA</b>		Shallow ground water / Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		
*) VLC: vertical lithological composition		

4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	: Pumped <input type="checkbox"/> Gravity <input type="checkbox"/>
Intake structure	:
Water lifting equipment	: pump : _____ engine : _____
Transmission main	:
Storage tank	:
Distribution lines	:
Domestic water points	:
Additional facilities	: CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	:

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES	
<b>SHORT TERM :</b>	Village water supply conditions comply with 1981 targets
<b>MEDIUM AND LONG TERM :</b>	Village located in mountainous area, having possibilities for pumped supply or gravity supply from small perennial streams.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MWANDI

Names of Subvillages : Ifunde

District/Division/Subdivision : KIL/HAM/Magubike

Sheet No. : 165/1

Co-ordinates : 6°12'S 37°12'E

Population (1978) : 2558

Livestock-Units (1978) :

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,21	1,53	1,84	2,46
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	4-10	*VLC 
Aquifer thickness (m)	6	
Median waterlevel (m-GL)	4	
Permeability (m/day)	800	
EC (mS/m)	80	
Location	Berega valley	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
HPH	6							110	0.8	31		P, yellow

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 13 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +5 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MWARAZI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Mkuyuni

Sheet No. : 183/4

Co-ordinates : 6°59'S 37°50'E

Population (1978) : 1016

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,48	0,61	0,73	0,98
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river Ruvu
Low flow (5% /10% year)	> 2100/>2300 l/s	
Distance from village	2 km	
Elevation with regard to village	-30 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. dolomite *VLC
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	small valleys	village

\* ) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E. Coll MPN/100 ml	General Appearance
streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 11

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 5 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MWASA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/ULA/Kiolete

Sheet No. : 181/1-2

Co-ordinates : 6°40'S 36°45'E

Population (1978) : 1117

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,61	0,78	0,96	1,26
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	river Mkondoa	
Name of water source	>400/>500 l/s	
Low flow (5% /10% year)	<1 km	
Distance from village	-10 m	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
river Mkondoa												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Pumped supply from riverside well, 2 km transmission main, storage tank and rudimentary distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MZAGANZA STATION

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/ULA/Kidete

Sheet No. : 181/2

Co-ordinates : 6°42'S 36°49'E

Population (1978) : 835

Livestock-Units (1978) : 150

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,40	0,50	0,60	0,80
Livestock demand (l/s)	0,05	0,06	0,07	0,08
Total demand (l/s)	0,45	0,56	0,67	0,88

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river Mkondoa
Low flow (5% /10% year)	>450/>500 l/s	
Distance from village	1 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	ALL.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Mkondoa valley	
*) VLC: vertical lithological composition		

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 4 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : MZIHA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Ranga

Sheet No. : 147/4

Co-ordinates : 5°54'S 37°47'E

Population (1978) : 1916

Livestock Units (1978) : 23

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,99	1,26	1,53	2,03
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	0,99	1,27	1,54	2,04

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	ALL _____ *VLC
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Lukigura valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	Ø Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
RIVER Lukigura												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 10 nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NDOGOMI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GAI/Chakwale

Sheet No. : 164/2 - 165/1

Co-ordinates : 6°01'S 37°00'E

Population (1978) : 1434

Livestock Units (1978) : 2161

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,68	0,86	1,03	1,38
Livestock demand (l/s)	0,75	0,84	0,94	1,13
Total demand (l/s)	1,43	1,70	1,97	2,50

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	3-6	
Aquifer thickness (m)	3	
Median waterlevel (m-GL)	1,8	
Permeability (m/day)		
EC (mS/m)	170	
Location	Ndogomi valley	
*VLC: vertical lithological composition		

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sub>1</sub> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDB	6			1,4				175	0,3	6,2		F. 781024

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		X	
Quality of the water source			X
Water accessibility (walking distance to facility)	X		
Reliability of facility		X	
Water Quality (EC)	X		
Village population dependent on facility		X	
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 7 nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NDOLE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Maskati

Sheet No. : 165/2

Co-ordinates : 6°09'S 37°23'E

Population (1978) : 726

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,42	0,55	0,68	0,89
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river
Low flow (5% /10% year)	Ndole	
Distance from village	perennial	
Elevation with regard to village	2 km	
Water quality	40 m	
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 6		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Gravity scheme, 3 km transmission main, storage tank and rudimentary distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NGERENGERE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Ngerengere

Sheet No. : 184/3

Co-ordinates : 6°46'S 38°07'E

Population (1978) : 3753

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : z  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,87	2,37	2,86	3,82
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All - sand
Aquifer depth (m-GL)	2-5	
Aquifer thickness (m)	3	
Median waterlevel (m-GL)	2	
Permeability (m/day)		
EC (mS/m)	58	
Location	Ngerengere valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply from shallow well	1							90	0,3	16	0	F.781124

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility			x
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 8 Nos

**MEDIUM AND LONG TERM :**

Extension of storage capacity and distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NGERENGERE DARAJANI

Names of Subvillages : Ukwambi

District/Division/Subdivision : MOR/NGE/Mikese

Sheet No. : 184/1

Co-ordinates : 6°39'S 38°02'E

Population (1978) : 1384

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,66	0,83	1,00	1,33
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	5-7	*VLC 
Aquifer thickness (m)	2.1	
Median waterlevel (m-GL)	3.1	
Permeability (m/day)		
EC (mS/m)	170-240	
Location	Ngerengere valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance
river Ngerengere								20	0,7		500	P.781124

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility		x	
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 7 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NGILOLI

Names of Subvillages : —

District/Division/Subdivision : KIL/GAI/Gairo

Sheet No. : 164/2

Co-ordinates : 6°08'S 36°55'E

Population (1978) : 1000

Livestock-Units (1978) : —

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.47	0.60	0.72	0.96
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	∅ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDB	F											

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : —

Water lifting equipment : pump : —  
engine : —

Transmission main : —

Storage tank : —

Distribution lines : —

Domestic water points : —

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : —

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source	x		
Water accessibility (walking distance to facility)			x
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 11

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Gairo gravity scheme

**MEDIUM AND LONG TERM :**  
Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NGONG'ORO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Lundi

Sheet No. : 201/2

Co-ordinates : 7°04'S 37°51'E

Population (1978) : 1605

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,76	0,96	1,16	1,54
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All. loam	dolomite
Aquifer type		*VLC
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)	50	
Location	small valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDB	4			2,1				48				
Sw	1			1,0				16				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 11

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 8 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +3 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NGUNGULU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MGE/Tchenzema

Sheet No. : 201/1

Co-ordinates : 7°08'S 37°35'E

Population (1978) : 1028

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,49	0,61	0,74	0,99
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N. I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area, having possibility for pumped supply or gravity supply from small perennial streams



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NGUYAMI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GAI/Chakwale

Sheet No. : 165/1

Co-ordinates : 6°04'S 37°02'E

Population (1978) : 1792

Livestock-Units (1978) : 1503

Settlement Pattern :  $\alpha$    $\gamma$    $\beta$

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,85	1,07	1,29	1,72
Livestock demand (l/s)	0,52	0,59	0,65	0,78
Total demand (l/s)	1,37	1,66	1,94	2,50

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)	200-400	
Location	Hibedja valley Ndogomi valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	$\phi$ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
BDH	6							90-180				
								225	0,7	5,3		P.781024

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)			x
Village population dependent on facility			x
Village total score	: 14		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Gairo gravity scheme

**MEDIUM AND LONG TERM :**  
Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NG'WEME

Names of Subvillages :

District/Division/Subdivision : MOR/MAT/Mtombozi

Sheet No. : 201/1

Co-ordinates : 7°06'S 37°43'E

Population (1978) : 624

Livestock-Units (1978) :

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,30	0,37	0,45	0,60
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N. I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main :

Storage tank :

Distribution lines :

Domestic water points :

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NJUNGWA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Mamboya

Sheet No. : 164/4 - 165/3

Co-ordinates : 6°21'S 37°00'E

Population (1978) : 1628

Livestock-Units (1978) : 306

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,77	0,97	1,17	1,56
Livestock demand (l/s)	0,11	0,12	0,13	0,16
Total demand (l/s)	0,88	1,09	1,31	1,72

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*1) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

**1. GENERAL VILLAGE DATA**

Name of the village : NONCWE

Names of Subvillages : LukInqa

District/Division/Subdivision : KIL/NON/Chanjale

Sheet No. : 164/4

Co-ordinates : 6°27'S 36°56'E

Population (1978) : 1338

Livestock-Units (1978) : 538

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,71	0,91	1,12	1,48
Livestock demand (l/s)	0,19	0,21	0,23	0,28
Total demand (l/s)	0,90	1,12	1,35	1,76

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

0m  
2  
4  
6  
8  
10  
12  
14

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having facilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NTALA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Singisa

Sheet No. : 201/2

Co-ordinates : 7°16'S 37°39'E

Population (1978) : 1066

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,51	0,64	0,77	1,02
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Pumped supply from riverside well, 2 km transmission main, storage tank and rudimentary distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NYACHIRO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Kiboa

Sheet No. : 183/3

Co-ordinates : 6° 59' S 37° 41' E

Population (1978) : 2363

Livestock Units (1978) : \_\_\_\_\_

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,12	1,41	1,70	2,27
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	N.I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area, having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NYALI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/ULA/Zombo

Sheet No. : 181/4

Co-ordinates : 6°57'S 36°54'E

Population (1978) : 1142

Livestock-Units (1978) : 41

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,54	0,68	0,82	1,10
Livestock demand (l/s)	0,01	0,02	0,02	0,02
Total demand (l/s)	0,56	0,70	0,84	1,12

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river
Low flow (5% /10% year)	Moyombo	
Distance from village	600 / > 650 l/s	
Elevation with regard to village	2 km	
Water quality	-5 m	
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Sonnil valley Miyombo valley	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nox	Year	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	Ca <sup>++</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
River Miyombo							11,5	0,1		18	G. 781115

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 6 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 Nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NYAMENI

Names of Subvillages : Nyameni "A"

District/Division/Subdivision : KIL/ULA/YIaya

Sheet No. : 199/2

Co-ordinates : 7°04'S 36°53'E

Population (1978) : 1490

Livestock Units (1978) : 25

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,71	0,89	1,07	1,43
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	0,72	0,90	1,08	1,44

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Miyombo
Low flow (5% /10% year)	620/690 l/s	
Distance from village	< 1 km	
Elevation with regard to village	-5 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Miyombo valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
River Miyombo												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 7 Nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +3 Nos



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NYAMIGADU-A

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Singisa

Sheet No. : 201/1

Co-ordinates : 7°12'S 37°41'E

Population (1978) : 942

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,45	0,56	0,68	0,90
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		
* ) VLC: vertical lithological composition		

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area, having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NYAMIGADU-B

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Singisa

Sheet No. : 201/1-3

Co-ordinates : 7°15'S 37°40'S

Population (1978) : 823

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,39	0,59	0,59	0,79
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N. I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NYANDIRA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/HGE/Tchenzema

Sheet No. : 201/1

Co-ordinates : 7°05'S 37°35'E

Population (1978) : 2065

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,98	1,23	1,49	1.98
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N. I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having facilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NYANGALA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Mamboya

Sheet No. : 165/3

Co-ordinates : 6°20'S 37°08'E

Population (1978) : 558

Livestock-Units (1978) : 127

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,26	0,33	0,40	0,54
Livestock demand (l/s)	0,04	0,05	0,06	0,07
Total demand (l/s)	0,31	0,38	0,46	0,60

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)	1,5	
Permeability (m/day)		
EC (mS/m)	40 small valley	
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDII	2							40				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 3 Nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: + 1 no.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NYARUTANGA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Kisaki

Sheet No. : 201/3

Co-ordinates : 7°27'S 37°34'E

Population (1978) : 1685

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,80	1,01	1,21	1,62
Livestock demand (l/s)				
Total demand (l/s)				

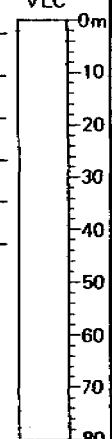
**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river Mgeta
Low flow (5% /10% year)	535/575 l/s	
Distance from village	2 km	
Elevation with regard to village	-20 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	0-5	*VLC 
Aquifer thickness (m)	5	
Median waterlevel (m-GL)	1,5	
Permeability (m/day)		
EC (mS/m)	70	
Location	Mgeta valley	
*) VLC: vertical lithological composition		

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDF	5							70				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)		x	
Village population dependent on facility		x	
Village total score	: 13		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 8 nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +4 nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : NYINGWA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Kibungo

Sheet No. : 201/1

Co-ordinates : 7°06'S 37°40'E

Population (1978) : 1696

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,80	1,01	1,22	1,63
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N. I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area, having facilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : PANDAMBILI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Kibati

Sheet No. : 146/4 - 147/3

Co-ordinates : 5°50'S 37°30'E

Population (1978) : 925

Livestock-Units (1978) : 330

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,44	0,55	0,67	0,89
Livestock demand (l/s)	0,11	0,13	0,14	0,17
Total demand (l/s)	0,55	0,68	0,81	1,06

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	river Msonge	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All.	
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	river valley	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
BDR	S											

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 6		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 5 nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +2 nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : PANGAWA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Kingolwira

Sheet No. : 183/4

Co-ordinates : 6°48'S 37°47'E

Population (1978) : 886

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,42	0,53	0,64	0,85
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river
Low flow (5% /10% year)	Mgolole	
Distance from village	14/17 l/s	
Elevation with regard to village	5 km	
Water quality	40 m	
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coll MPN/100 ml	General Appearance
gravity supply from river												
Mgolole *	1975											

\* this system also provides water to Kisinga village, from the storage tank in Pangawe

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : weir(+ sandtrap) in river

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : 5,1 km )

Storage tank : 45 m<sup>3</sup> L ) drw.no. 17202

Distribution lines : 1,6 km )

Domestic water points : 8

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Extension distribution system



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : PEAPEA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAS/Rudewa

Sheet No. : 182/1

Co-ordinates : 6°43'S 37°08'E

Population (1978) : 842

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,40	0,50	0,61	0,81
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All. sand	sand/gravel
Aquifer type		
Aquifer depth (m-GL)		20-100
Aquifer thickness (m)		> 15
Median waterlevel (m-GL)	2,1	5-10
Permeability (m/day)		50-250
EC (mS/m)	< 100	< 100
Location	village	village

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Sw	4							80	0,2		20	G.781012
								85	0,2		10	G.781012
pumped supply from shallow well *								83	0,3		0	G.781012

\* operated by sisal estate; Peapea village is provided with one communal water point.

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
village wells with handpumps: 4 nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : PEKO-MISEGESE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MLA/MLa1i

Sheet No. : 183/2

Co-ordinates : 6°59'S 37°34'E

Population (1978) : 2667

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,27	1,59	1,92	2,56
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC
Aquifer thickness (m)		0m
Median waterlevel (m-GL)		10
Permeability (m/day)		20
EC (mS/m)		30
Location		40
		50
		60
		70
		80

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Pumped supply from riverside well, 2 km transmission main, storage tank and rudimentary distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : PEMBA

Names of Subvillages : SAGASA

District/Division/Subdivision : MOR/TUR/Kibati

Sheet No. : 147/3 -166/1

Co-ordinates : 6°00'S 37°31'E

Population (1978) : 2275

Livestock-Units (1978) : 227

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,16	1,47	1,79	2,38
Livestock demand (l/s)	0,08	0,09	0,10	0,12
Total demand (l/s)	1,23	1,56	1,89	2,49

**WATER POTENTIAL**

Prospects for

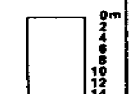
Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition



**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 10		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Pumped supply from riverside well, 2 km transmission main, storage tank and rudimentary distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : PINDE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MGE/Langali

Sheet No. : 201/1

Co-ordinates : 7°03'S 37°35'E

Population (1978) : 897

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,43	0,54	0,65	0,86
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 6

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : RUAHA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MIX/Kidodi

Sheet No. : 217/2

Co-ordinates : 7°40'S 36°59'E

Population (1978) : 7369

Livestock-Units (1978) : 14

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	3,50	4,40	5,31	7,08
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	3,50	4,40	5,32	7,09

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	river Great Ruaha	river Tundu
Name of water source	>1000/1000l/s	90/95 l/s
Low flow (5% /10% year)	< 1 km	10 km
Distance from village	-10 m	50 m
Elevation with regard to village		
Water quality		

HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>+</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
river Great Ruaha												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 10

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Tundu gravity scheme

**MEDIUM AND LONG TERM :**  
Tundu gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : RUBEHO

Names of Subvillages :

District/Division/Subdivision : KIL/GAI/Rubeho

Sheet No. : 164/2-4

Co-ordinates : 6°15'S 36°52'E

Population (1978) : 2872

Livestock-Units (1978) : 3377

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,36	1,71	2,07	2,76
Livestock demand (l/s)	1,17	1,32	1,47	1,76
Total demand (l/s)	2,54	3,03	3,53	4,52

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
gravity supply from tributaries												
river Kitanga *		1965						7	0,1	2,2	1	G.790222
		1965										

\* part of existing Gairo scheme

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity   
11,5 l/s

Intake structure : weir (+ sandtrap) in tributaries  
river Kitanga

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : 6,2 km )

Storage tank : 90 m3 L ) drw.no.17085

Distribution lines : 3,0 km )

Domestic water points : 2

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Rehabilitation programme as part of Gairo gravity scheme (i.e. utilization of sources of existing scheme for Kisitoe and Rubeho only)

**MEDIUM AND LONG TERM :**

Extension of distribution facilities

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : RUDEWA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Kinoie

Sheet No. : 183/4

Co-ordinates : 6°57'S 37°46'E

Population (1978) : 2576

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,22	1,54	1,86	2,47
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

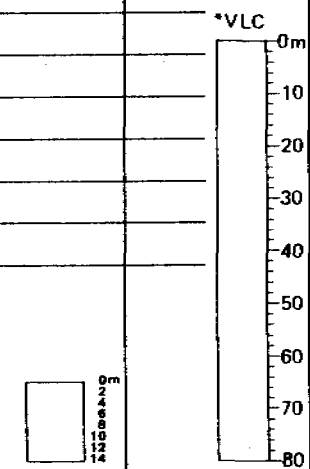
Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	N.I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition



**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>+</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : RUDEWA BATINI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAS/Rudewa

Sheet No. : 182/1

Co-ordinates : 6°42'S 37°08'E

Population (1978) : 2693

Livestock-Units (1978) : 46

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,25	1,72	2,09	2,78
Livestock demand (l/s)	0,02	0,02	0,02	0,02
Total demand (l/s)	1,37	1,74	2,11	2,80

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	river Wami	river Klungusi
Name of water source		
Low flow (5% /10% year)	1075/1240 l/s	170/190 l/s
Distance from village	2 km	7 km
Elevation with regard to village	-5 m	70 m
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All. sand	sand/gravel
Aquifer type		
Aquifer depth (m-GL)	6-9	15-25
Aquifer thickness (m)	1,6	10
Median waterlevel (m-GL)	5,5	5,6
Permeability (m/day)		30
EC (mS/m)	37	23
Location	village	village

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
Sw	20			9,5				35	0,3	8,9	0	G.781012
								105	0,5		20	F.781012
								42	0,4		200	F.781012
BH *								22,5	0,3	2,2		G.790227

\* not in operation yet

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Pumped supply from a borehole:  
BH + 2 km + SRD

**MEDIUM AND LONG TERM :**  
Extension of distribution system



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : RUDEWA GONGONI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAS/Rudewa

Sheet No. : 182/1

Co-ordinates : 6°40'S 37°08'E

Population (1978) : 1764

Livestock-Units (1978) : 69

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,84	1,05	1,27	1,69
Livestock demand (l/s)	0,02	0,03	0,03	0,04
Total demand (l/s)	0,86	1,08	1,30	1,73

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river Wami
Low flow (5% /10% year)	1075/1240 l/s	
Distance from village	1 km	
Elevation with regard to village	-5 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	2-4,2	
Aquifer thickness (m)	2,2	
Median waterlevel (m-GL)	1,0	
Permeability (m/day)		
EC (mS/m)	53	
Location	Wami valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Pumped supply from river Wani *								7	0,1		400	F.781012
River Wami								7,5	0,1		420	F.781114

\* operated by sisal estate; village is provided with one top and one private connection

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source			x
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 10

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 9 nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +3 nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : RUDEWA MBUYUNI

Names of Subvillages : Mhunguni

District/Division/Subdivision : KIL/MAS/RUDEWA

Sheet No. : 182/1

Co-ordinates : 6°41'S 37°09'E

Population (1978) : 1682

Livestock-Units (1978) : 64

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,80	1,00	1,21	1,62
Livestock demand (l/s)	0,02	0,03	0,03	0,03
Total demand (l/s)	0,82	1,03	1,24	1,65

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river Wami
Low flow (5% /10% year)	1075/1240 l/s	
Distance from village	2 km	
Elevation with regard to village	-5 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	5-10	
Aquifer thickness (m)	1,6	
Median waterlevel (m-GL)	4,1	
Permeability (m/day)		
EC (mS/m)	54	
Location	village	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDB	8			5,0				35	0,5	3	120	P. 781026
Sw								40	0,5	1,4	0	P. 781026

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 6 nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +4 nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : RUHEMBE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MIK/Kidodi

Sheet No. : 281/1

Co-ordinates : 7°34'S 37°03'E

Population (1978) : 2399

Livestock-Units (1978) : 3

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,14	1,43	1,73	2,30
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	1,14	1,43	1,73	2,31

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river
Low flow (5% /10% year)	Ruhembe	
Distance from village	>50/>75 l/s	
Elevation with regard to village	<1 km	
Water quality	30 m	
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sandstone
Aquifer depth (m-GL)		*VLC
Aquifer thickness (m)		0m
Median waterlevel (m-GL)		10
Permeability (m/day)		20
EC (mS/m)		150
Location	Ruhembe valley	village

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> <sup>-</sup> (mg/l)	E.Coli MPN/100 ml	General Appearance
river Ruhembe								22,5	0,3	1,3	20	P. 790228

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 10

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 12 nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +5 nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : RUSANGA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/D/longoya

Sheet No. : 166/1

Co-ordinates : 6°07'S 37°38'E

Population (1978) : 2897

Livestock-Units (1978) : 5

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,37	1,73	2,09	2,78
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	1,38	1,73	2,09	2,79

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river Mjonga
Low flow (5% /10% year)	>50/>75 l/s	
Distance from village	4 km	
Elevation with regard to village	30 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Mjonga valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
gravity supply from river Mjonga *								5,5	< 0,1		0	G. 781113

\* operated by Mtibwa estate; village provided with one top

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 14 nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +6 nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : SAGASAGA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Kidugallo

Sheet No. : 184/4

Co-ordinates : 6°48'S 38°18'E

Population (1978) : 887

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,42	0,53	0,64	0,85
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources		
Name of water source			
Low flow (5% /10% year)			
Distance from village			
Elevation with regard to village			
Water quality			
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water	
Aquifer type		sandstone	
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80	
Aquifer thickness (m)			
Median waterlevel (m-GL)			
Permeability (m/day)			
EC (mS/m)			200-400
Location			village

\*] VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
Borehole Kidugallo												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)			x
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility	x		

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 4 nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: 2 nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : SANGASANGA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MLA/M1011

Sheet No. : 183/3

Co-ordinates : 6°53'S 37°34'E

Population (1978) : 766

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,36	0,46	0,55	0,74
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	River	Mindu
Name of water source	Ngerengere	reservoir
Low flow (5% /10% year)	39/49 l/s	
Distance from village	7 km	
Elevation with regard to village	40 m	-10 m
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	*VLC	
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
HDH	2			2,5			very low yield	40				

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 12		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Shallow wells with handpumps: 2 nos  
 Moreover, the Maji Department intends to construct a gravity water supply to this village together with Kong /Vikenge)

**MEDIUM AND LONG TERM :**  
 Village water supply conditions will comply with 1991 targets after implementation of the Maji project

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : SEMWALI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Maskati

Sheet No. : 165/2

Co-ordinates : 6°08'S 37°26'E

Population (1978) : 858

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,41	0,51	0,62	0,82
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 6

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : SEREGETE - A

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Kudugallo

Sheet No. : 184/4

Co-ordinates : 6°56'S 38°18'E

Population (1978) : 380

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,18	0,23	0,27	0,37
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	T (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
River Ruvu												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)			x
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 13		
Classification in VILLAGE PRIORITY GROUP No. :	1		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Resettlement, due to very unfavourable water resources conditions or pumped supply from river Ruvu

**MEDIUM AND LONG TERM :**

Extensions to distribution system of pumped supply if this alternative was selected as short term solution



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : SEREGETE-B

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Kidugallo

Sheet No. : 184/4

Co-ordinates : 6°59'S 38°20'E

Population (1978) : 683

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,32	0,41	0,49	0,66
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for:

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
RIVER Ruvu												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)		x	
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Resettlement, due to very unfavourable water resources conditions or pumped supply from river Ruvu

**MEDIUM AND LONG TERM :**  
Extensions to distribution system of pumped supply, if this alternative selected as shortterm solution

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : SESENGA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Mngazi

Sheet No. : 201/3

Co-ordinates : 7°26'S 37°36'E

Population (1978) : 1046

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,50	0,62	0,75	1,00
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	river Mgeta	
Low flow (5% /10% year)	530/575 l/s	
Distance from village	1 km	
Elevation with regard to village	-20 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All.	
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Mgeta valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
RIVER Mgeta												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 5 nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +2 nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : SINGISA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Singisa

Sheet No. : 201/2

Co-ordinates : 7°16'S 37°40'E

Population (1978) : 1410

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,67	0,84	1,02	1,35
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

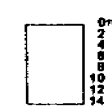
Suitable ground water sources : G  F  P

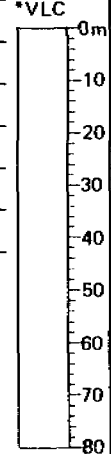
Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river Mngazi
Low flow (5% /10% year)	12/19 l/s	
Distance from village	<1 km	
Elevation with regard to village	- 30 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition





**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>+</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
river Mngazi												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibility for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : SENYAULIME

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Ngerengere

Sheet No. : 184/3

Co-ordinates : 6°46'S 38°06'E

Population (1978) : 832

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,39	0,50	0,60	0,80
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source		
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All. sand	
Aquifer type		
Aquifer depth (m-GL)	2-5	
Aquifer thickness (m)	3	
Median waterlevel (m-GL)	2	
Permeability (m/day)		
EC (mS/m)	58	
Location	Ngerengere valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
river Ngerengere												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility		x	
Water Quality (EC)		x	
Village population dependent on facility	x		

Village total score : 11

Classification in VILLAGE PRIORITY GROUP No. : 2

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 4 nos (if possible technically)

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +2 nos (see above)

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : TABU HOTEL

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/GAI/Gairo

Sheet No. : 164/2

Co-ordinates : 6°08'S 36°56'E

Population (1978) : 1200

Livestock-Units (1978) : 354

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,57	0,72	0,86	1,15
Livestock demand (l/s)	0,12	0,14	0,15	0,18
Total demand (l/s)	0,69	0,85	1,02	1,34

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*J VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
BDH	I											

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)			x
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 13

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Gairo gravity scheme

**MEDIUM AND LONG TERM :**  
Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : TAMBUU

Names of Subvillages : Tambuu-Chini

District/Division/Subdivision : MOR/MAT/Lundi

Sheet No. : 201/2

Co-ordinates : 7°07'S 37°48'E

Population (1978) : 3335

Livestock-Units (1978) :

Settlement Pattern :

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,58	1,99	2,40	3,20
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	Tambuu springs
Low flow (5% /10% year)	1/2 l/s	
Distance from village	<1 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

**\*) VLC: vertical lithological composition**

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>+</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
Springs	P											

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Mvuha gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : TANDAI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Kinole

Sheet No. : 183/4

Co-ordinates : 6°55'S 37°46'E

Population (1978) : 2827

Livestock-Units (1978) : 93

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,42	1,80	2,19	2,91
Livestock demand (l/s)	0,03	0,04	0,04	0,05
Total demand (l/s)	1,45	1,84	2,23	2,96

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N. I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E. Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous are having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : TANDARI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MGE/LangaLi

Sheet No. : 201/1

Co-ordinates : 7° 01'05" S 37° 36' E

Population (1978) : 1097

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,52	0,65	0,79	1,05
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	N.I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

0m  
10  
20  
30  
40  
50  
60  
70  
80

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : TANDARI

Names of Subvillages :

District/Division/Subdivision : MOR/MAT/Mtombozl

Sheet No. : 201/1-2

Co-ordinates : 7°08'S 37°45'E

Population (1978) : 1626

Livestock-Units (1978) :

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.77	0.97	1.17	1.56
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river Mvuha
Low flow (5% /10% year)	>150 /> 200 l/s	
Distance from village	2 km	
Elevation with regard to village	100 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

0m  
10  
20  
30  
40  
50  
60  
70  
80

0m  
2  
4  
6  
8  
10  
12  
14

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>2+</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Mvuha gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : TANGENI

Names of Subvillages :

District/Division/Subdivision : MOR/MLA/Mla11

Sheet No. : 183/3

Co-ordinates : 6°56'S 37°36'E

Population (1978) : 1776

Livestock-Units (1978) :

Settlement Pattern : Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,84	1,06	1,28	1,71
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	River Ngerengere
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	Ø Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
River Ngerengere								6	0,1	2,7	> 1000	G.790306

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main :

Storage tank :

Distribution lines :

Domestic water points :

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : TAWA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT

Sheet No. : 201/1

Co-ordinates : 7°01'S 37°44'E

Population (1978) : 3036

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,53	1,94	2,36	3,13
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	N. I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : TCHENZEMA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/ GE/Tchenzema

Sheet No. : 201/1

Co-ordinates : 7°07'S 37°35'E

Population (1978) : 1645

Livestock Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.78	0.98	1.19	1.56
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No.	: 3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : TEGETERO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Tegetero

Sheet No. : 183/3

Co-ordinates : 6°56'S 37°43'E

Population (1978) : 1250

Livestock Units (1978) : \_\_\_\_\_

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,59	0,75	0,90	1,20
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : TEMEKERO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Kolero

Sheet No. : 201/1

Co-ordinates : 7°14'S 37°44'E

Population (1978) : 728

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,35	0,43	0,52	0,70
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 7

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area, having possibility for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : TINDIGA

Names of Subvillages : Ngelula, Mbwende

District/Division/Subdivision : KIL/MAS/Makwerebwere

Sheet No. : 182/3

Co-ordinates : 6°52'S 37°04'E

Population (1978) : 3941

Livestock-Units (1978) : 39394

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,87	2,35	2,84	3,79
Livestock demand (l/s)	13,68	15,39	17,10	20,52
Total demand (l/s)	15,55	17,74	19,94	24,30

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river Mkondoa
Low flow (5% /10% year)	570/>600 l/s	
Distance from village	3 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All. sand	gravel/sand
Aquifer type		
Aquifer depth (m-GL)	4-10	20-100
Aquifer thickness (m)	3-6	>15
Median waterlevel (m-GL)	3,0	5-10
Permeability (m/day)		50-100
EC (mS/m)	40-60	<100
Location	village	village

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
HDR	S			4,5				40				
Sw	S							62	0,5		50	G.781026
								70	0,4		24	G.781026
Swpp	1							89	0,5		0	G.781026

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 13

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 20 nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +8 nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : TULO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Mvuha

Sheet No. : 201/2

Co-ordinates : 7°14'S 37°55'E

Population (1978) : 825

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,39	0,49	0,59	0,79
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	river Mvuha	
Low flow (5% /10% year)	610/730 l/s	
Distance from village	< 1 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All.	sandstone
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		< 200
EC (mS/m)	Mvuha valley	village
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
river Mvuha												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 4 nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 nos



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : TUNDU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MIK/Kidodi

Sheet No. : 217/2

Co-ordinates : 7°36'S 36°59'E

Population (1978) : 2112

Livestock-Units (1978) : 12

Settlement Pattern : x  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,00	1,26	1,52	2,03
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	1,01	1,27	1,53	2,04

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	river Tundu	
Name of water source	90/96 l/s	
Low flow (5% /10% year)	1 km	
Distance from village	50 m	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
river Tundu								9,5	0,2	2,7	60	F. 790228

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x

Village total score : 9

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Tundu gravity scheme

**MEDIUM AND LONG TERM :**  
Tundu gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : TUNGI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Kingolwira

Sheet No. : 183/3

Co-ordinates : 6°46'S 37°42'E

Population (1978) : 2318

Livestock Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,10	1,38	1,67	2,23
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
Name of water source	River Ngerengere	
Low flow (5% /10% year)	Flow depends on reservoir regime	
Distance from village	< 1 km	
Elevation with regard to village	-5 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All. sand	
Aquifer depth (m-GL)	2-10	*VLC
Aquifer thickness (m)	2	
Median waterlevel (m-GL)	1,5	
Permeability (m/day)		
EC (mS/m)	200-3000	
Location	Ngerengere valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
river Ngerengere												
Pumped supply from river Ngerengere *												

\* operated by Tungi sisal estate

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility			x
Water Quality (EC)		x	
Village population dependent on facility			x

Village total score : 14

Classification in VII LAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Pumped supply from river, 1 km transmission main, storage tank and rudimentary distribution

**MEDIUM AND LONG TERM :**

Extension of distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : TUNUNGUO

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Tununguo

Sheet No. : 201/2

Co-ordinates : 7°02'S 37°56'E

Population (1978) : 1510

Livestock-Units (1978) : 4973

Settlement Pattern :  x  y  z

Village facilities : PS  DP  RHC   
 GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,72	0,90	1,09	1,45
Livestock demand (l/s)	1,73	1,94	2,16	2,59
Total demand (l/s)	2,44	2,84	3,25	4,04

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	river Ruvu	
Name of water source		
Low flow (5% /10% year)	>2100/>2300 l/s	
Distance from village	<1 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	All sand	sandstone
Aquifer type	*VLC	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)	< 200	
Location	Ruvu valley	village

\* VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
river Ruvu												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
 engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	X		
Quality of the water source			X
Water accessibility (walking distance to facility)	X		
Reliability of facility	X		
Water Quality (EC)	X		
Village population dependent on facility		X	

Village total score : 7

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
 Shallow wells with handpumps: 8 nos

**MEDIUM AND LONG TERM :**  
 Shallow wells with handpumps: +3 nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : UBILI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/TUR/Mhonda

Sheet No. : 166/1

Co-ordinates : 6°03'S 37°32'E

Population (1978) : 725

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,34	0,43	0,52	0,70
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
River Diwale												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 6		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Pumped supply riverside well, 2 km transmission main, storage tank and rudimentary distribution system.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

1. GENERAL VILLAGE DATA	
Name of the village	: UDUNG' HU
Names of Subvillages	:
District/Division/Subdivision	: KIL/MIK/Kidodi
Sheet No.	: 217/2
Co-ordinates	: 7°33'S 36°56'E
Population (1978)	: 2456
Livestock-Units (1978)	:
Settlement Pattern	: X <input checked="" type="checkbox"/> Y <input type="checkbox"/> Z <input type="checkbox"/>
Village facilities	: PS <input checked="" type="checkbox"/> DP <input type="checkbox"/> RHC <input type="checkbox"/> GH <input type="checkbox"/> RE <input type="checkbox"/> AWR <input type="checkbox"/>

2. WATER DEMAND AND WATER POTENTIAL																					
<b>WATER DEMAND</b>																					
	<table border="1"> <thead> <tr> <th></th> <th>1978</th> <th>1983</th> <th>1988</th> <th>1998</th> </tr> </thead> <tbody> <tr> <td>Population demand (l/s)</td> <td>1,47</td> <td>1,47</td> <td>1,77</td> <td>2,36</td> </tr> <tr> <td>Livestock demand (l/s)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Total demand (l/s)</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		1978	1983	1988	1998	Population demand (l/s)	1,47	1,47	1,77	2,36	Livestock demand (l/s)					Total demand (l/s)				
	1978	1983	1988	1998																	
Population demand (l/s)	1,47	1,47	1,77	2,36																	
Livestock demand (l/s)																					
Total demand (l/s)																					
<b>WATER POTENTIAL</b>																					
Prospects for																					
Suitable ground water sources	: G <input type="checkbox"/> F <input type="checkbox"/> P <input checked="" type="checkbox"/>																				
Suitable surface water sources	: G <input checked="" type="checkbox"/> F <input type="checkbox"/> P <input type="checkbox"/>																				

3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA		
<b>HYDROLOGICAL DATA</b>		Potential surface water sources
Name of water source	N.I.	
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
<b>HYDROGEOLOGICAL DATA</b>		Shallow ground water / Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		
*) VLC: vertical lithological composition		

4. PRESENT WATER SUPPLY FACILITIES												
Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	Γ (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

5. SPECIFICATIONS OF PIPED WATER SUPPLY	
Design capacity	: Pumped <input type="checkbox"/> Gravity <input type="checkbox"/>
Intake structure	:
Water lifting equipment	: pump : _____ engine : _____
Transmission main	:
Storage tank	:
Distribution lines	:
Domestic water points	:
Additional facilities	: CT <input type="checkbox"/> CD <input type="checkbox"/> HC <input type="checkbox"/>
Level difference intake/storage tank (m)	:

6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES			
	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No.	: 3		

7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES	
<b>SHORT TERM :</b>	Village water supply conditions comply with 1981 targets
<b>MEDIUM AND LONG TERM :</b>	Village located in mountainous area, having possibilities for pumped supply, or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : UKWAMA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Kosanga

Sheet No. : 201/1

Co-ordinates : 7°11'S 37°43'E

Population (1978) : 1265

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,60	0,75	0,91	1,22
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	T (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
Perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 0		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area, having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : UKWAMANI

Names of Subvillages :

District/Division/Subdivision : KIL/GAI/Gairo

Sheet No. : 164/2

Co-ordinates : 6°07' S 36°51' E

Population (1978) : 1609

Livestock-Units (1978) : 2274

Settlement Pattern :  1  2  3

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,76	0,96	1,16	1,55
Livestock demand (l/s)	0,79	0,89	0,99	1,18
Total demand (l/s)	1,55	1,85	2,15	2,73

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	T (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
gravity supply from tributaries river Kitange *	1	1973						7	0,1		2	G. 790222

\* common supply with village Majawanga

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity :  Pumped  Gravity   
1,03 l/s \*  
weir (+ sandtrap) in tributaries

Intake structure : river Kitange

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : 5,5 km )

Storage tank : - ) see drw. 17166

Distribution lines : 0,1 km )

Domestic water points : 1

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand			x
Quality of the water source	x		
Water accessibility (walking distance to facility)		x	
Reliability of facility			x
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 12

Classification in VILLAGE PRIORITY GROUP No. : 1

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Gairo gravity scheme

**MEDIUM AND LONG TERM :**  
Gairo gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : ULAYA KIBAONI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/ULA/Ulaya

Sheet No. : 199/2

Co-ordinates : 7°04'S 36°54'E

Population (1978) : 2010

Livestock-Units (1978) : 35

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1.03	1.31	1.60	2.12
Livestock demand (l/s)	0.01	0.01	0.02	0.02
Total demand (l/s)	1.04	1.32	1.62	2.14

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river
Low flow (5% /10% year)	Miyombo	
Distance from village	620/690 l/s	
Elevation with regard to village	1 km	
Water quality	-5 m	

HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Miyombo valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
river Miyombo								11,5	0,1		18	G.781115

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	X		
Quality of the water source		X	
Water accessibility (walking distance to facility)	X		
Reliability of facility	X		
Water Quality (EC)	X		
Village population dependent on facility			X

Village total score : 7

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 10 nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +4 nos



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : ULAYA MBUYUNI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/ULA/Ulaya

Sheet No. : 199/2

Co-ordinates : 7°02'S 36°55'E

Population (1978) : 659

Livestock-Units (1978) : 20

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,31	0,39	0,47	0,63
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	0,32	0,40	0,48	0,64

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river
Low flow (5% /10% year)	Miyombo	
Distance from village	620/690 l/s	
Elevation with regard to village	< 1 km	
Water quality	-10 m	
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type	All.	
Aquifer depth (m-GL)		*VLC
Aquifer thickness (m)		0m
Median waterlevel (m-GL)		10
Permeability (m/day)		20
EC (mS/m)	Miyombo valley	30
Location		40
		50
		60
		70
		80

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
River Miyombo								11,5	0,1		18	3.781115

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 3 nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +2 nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : UELING'OMBE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MIK/Malolo

Sheet No. : 199/1

Co-ordinates : 7°04'S 36°35'E

Population (1978) : 1281

Livestock Units (1978) : 852

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,68	0,88	1,08	1,42
Livestock demand (l/s)	0,30	0,33	0,37	0,44
Total demand (l/s)	0,98	1,21	1,45	1,87

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N. I.
Low flow (5% /10% year)	perennial	
Distance from village	1 km	
Elevation with regard to village	50 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 7

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Gravity scheme, 2 km transmission main, storage tank and rudimentary distribution system

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : UNONE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAS/Rudewa

Sheet No. : 182/1

Co-ordinates : 6°35'S 37°04'E

Population (1978) : 999

Livestock Units (1978) : 84

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,55	0,71	0,87	1,15
Livestock demand (l/s)	0,03	0,03	0,04	0,04
Total demand (l/s)	0,58	0,74	0,91	1,19

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river Wami
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. _____
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	small valley	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
River Wami												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (FC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 5 nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +2 nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : UPONDA CHINI

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/MAT/Tawa

Sheet No. : 183/4 - 201/2

Co-ordinates : 7°00'S 37°46'E

Population (1978) : 1547

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,73	0,92	1,11	1,49
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	river Ruvu	
Name of water source	>500/7550 l/s	
Low flow (5% /10% year)	< 1 km	
Distance from village	-20 m	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
Aquifer type		
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coff MPN/100 ml	General Appearance
river Ruvu												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 8		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Pumped water supply (river Ruvu)

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : UPONELA

Names of Subvillages : -

District/Division/Subdivision : KIL/MAM/MAMBOYA

Sheet No. : 165/3

Co-ordinates : 6°19'53"E

Population (1978) : 1526

Livestock-Units (1978) : 874

Settlement Pattern :  1  2  3

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.72	0.91	1.10	1.47
Livestock demand (l/s)	0.30	0.34	0.38	0.46
Total demand (l/s)	1.03	1.25	1.48	1.92

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA		Potential surface water sources	
Name of water source		<u>N.I</u>	
Low flow (5% /10% year)		<u>perennial</u>	
Distance from village		<u>1-3 km</u>	
Elevation with regard to village			
Water quality			
HYDROGEOLOGICAL DATA		Shallow ground water	Medium-depth and deep-ground water
Aquifer type			
Aquifer depth (m-GL)			
Aquifer thickness (m)			
Median waterlevel (m-GL)			
Permeability (m/day)			
EC (mS/m)			
Location			

\*VLC

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F <sup>-</sup> (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
<u>Streams</u>												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	X		
Quality of the water source		X	
Water accessibility (walking distance to facility)	X		
Reliability of facility	X		
Water Quality (EC)	X		
Village population dependent on facility		X	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

SHORT TERM : Village water supply conditions comply with 1981 targets

MEDIUM AND LONG TERM : NOE sufficient data available, possibly gravity water supply from perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : UPONEJA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MAM/Mamboya

Sheet No. : 165/3

Co-ordinates : 6°19'S 37°01'E

Population (1978) : 1526

Livestock-Units (1978) : 874

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,72	0,91	1,10	1,42
Livestock demand (l/s)	0,30	0,34	0,38	0,46
Total demand (l/s)	1,03	1,25	1,48	1,92

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N. I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Not sufficient data available, possibly gravity water supply from perennial stream

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : USUNGURU

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Kidugallo

Sheet No. : 202/2

Co-ordinates : 7°04'S 38°28'E

Population (1978) : 538

Livestock Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,26	0,32	0,39	0,52
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river Ruvu
Low flow (5% /10% year)	>2000/>2200 l/s	
Distance from village	3 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Ruvu valley	

\*VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	Ø Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	Ca <sup>++</sup> (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
river Ruvu												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)		x	
Reliability of facility	x		
Water Quality (FC)	x		
Village population dependent on facility	x		

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 3 nos

**MEDIUM AND LONG TERM :**  
shallow wells with handpumps: +1 no.

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : VIDUNDA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : KIL/MIK/Kidodi

Sheet No. : 217/2

Co-ordinates : 7°36'S 36°57'E

Population (1978) : 1595

Livestock-Units (1978) : 37

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,76	0,95	1,15	1,53
Livestock demand (l/s)	0,01	0,01	0,02	0,02
Total demand (l/s)	0,77	0,97	1,17	1,55

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	N(l)(mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**  
Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams



# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : VIGOLEGOLE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/BWA/Mngazi

Sheet No. : 201/3

Co-ordinates : 7°25'S 37°40'E

Population (1978) : 2181

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	1,03	1,30	1,57	2,10
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river Mngazi
Low flow (5% /10% year)	22/37 l/s	
Distance from village	< 1 km	
Elevation with regard to village	-10 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Mngazi valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
RIVER Mngazi								8	0,2		300	F.781102

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility			x
Village total score	: 9		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 11 nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +4 nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : VIHENGELÉ

Names of Subvillages :

District/Division/Subdivision : MOR/MAT/Lundi

Sheet No. : 201/2

Co-ordinates : 7°08'S 37°47'E

Population (1978) : 943

Livestock Units (1978) :

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,45	0,56	0,68	0,91
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river Mvuha
Low flow (5% /10% year)	> 150 / > 200 l/s	
Distance from village	5 km	
Elevation with regard to village	250 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	T (mm/l)	TD (log/l)	E.Coli MPN/100 ml	General Appearance
river Mvuha												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main :

Storage tank :

Distribution lines :

Domestic water points :

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		
Village total score	: 7		
Classification in VILLAGE PRIORITY GROUP No. :	3		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Mvuha gravity scheme

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : VINILE

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/LangaLi

Sheet No. : 201/1

Co-ordinates : 7°02'S 37°38'E

Population (1978) : 795

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  y  z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,38	0,47	0,57	0,76
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	N.I.
Low flow (5% /10% year)	perennial	
Distance from village	1-3 km	
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	
Aquifer depth (m-GL)		
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location		

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (mg/l)	NO3(mg/l)	E.Coli MPN/100 ml	General Appearance
perennial streams												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source	x		
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility	x		

Village total score : 6

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Village water supply conditions comply with 1981 targets

**MEDIUM AND LONG TERM :**

Village located in mountainous area having possibilities for pumped supply or gravity supply from small perennial streams

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : VISARAKA

Names of Subvillages : \_\_\_\_\_

District/Division/Subdivision : MOR/NGE/Kidugallo

Sheet No. : 184/2

Co-ordinates : 6°50'S 38°11'E

Population (1978) : 1112

Livestock-Units (1978) : \_\_\_\_\_

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0.60	0.78	0.95	1.26
Livestock demand (l/s)				
Total demand (l/s)				

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	
Low flow (5% /10% year)		
Distance from village		
Elevation with regard to village		
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All. sand
Aquifer depth (m-GL)	2-10	*VLC 0m 10 20 30 40 50 60 70 80
Aquifer thickness (m)	8	
Median waterlevel (m-GL)	2.0	
Permeability (m/day)		
EC (mS/m)	75	
Location	Ngerengere valley	
*) VLC: vertical lithological composition		

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	T (log/l)	TDS(log/l)	E.Coli MPN/100 ml	General Appearance
HDB	5											
river												
Ngerengere												

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure : \_\_\_\_\_

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main : \_\_\_\_\_

Storage tank : \_\_\_\_\_

Distribution lines : \_\_\_\_\_

Domestic water points : \_\_\_\_\_

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) : \_\_\_\_\_

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand		x	
Quality of the water source			x
Water accessibility (walking distance to facility)	x		
Reliability of facility		x	
Water Quality (EC)	x		
Village population dependent on facility		x	
Village total score	: 11		
Classification in VILLAGE PRIORITY GROUP No. :	2		

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**  
Shallow wells with handpumps: 6 nos

**MEDIUM AND LONG TERM :**  
Shallow wells with handpumps: +2 nos

# MOROGORO DOMESTIC WATER SUPPLY PLAN

**1. GENERAL VILLAGE DATA**

Name of the village : ZOMBO-LUMBO

Names of Subvillages :

District/Division/Subdivision : KIL/ULA/Zombo

Sheet No. : 181/4

Co-ordinates : 6°58'S 36°55'E

Population (1978) : 1683

Livestock-Units (1978) : 28

Settlement Pattern : X  Y  Z

Village facilities : PS  DP  RHC   
GH  RE  AWR

**2. WATER DEMAND AND WATER POTENTIAL**

**WATER DEMAND**

	1978	1983	1988	1998
Population demand (l/s)	0,87	1,12	1,37	1,81
Livestock demand (l/s)	0,01	0,01	0,01	0,01
Total demand (l/s)	0,88	1,13	1,38	1,82

**WATER POTENTIAL**

Prospects for

Suitable ground water sources : G  F  P

Suitable surface water sources : G  F  P

**3. HYDROLOGICAL AND HYDROGEOLOGICAL DATA**

HYDROLOGICAL DATA	Potential surface water sources	
	Name of water source	river Miyombo
Low flow (5% /10% year)	600/>650 l/s	
Distance from village	<1 km	
Elevation with regard to village	-5 m	
Water quality		
HYDROGEOLOGICAL DATA	Shallow ground water	Medium-depth and deep-ground water
	Aquifer type	All.
Aquifer depth (m-GL)		*VLC
Aquifer thickness (m)		
Median waterlevel (m-GL)		
Permeability (m/day)		
EC (mS/m)		
Location	Miyombo valley	

\*) VLC: vertical lithological composition

**4. PRESENT WATER SUPPLY FACILITIES**

Type of facility	Nos.	Year	φ Well	Depth of well (m)	Depth of Aquifer (m)	Thickness Aquifer (m)	Yield (l/s)	EC(mS/m)	F (µm/l)	NO <sub>3</sub> (mg/l)	E.Coli MPN/100 ml	General Appearance
river Miyombo								115	0,1			G. 781115

**5. SPECIFICATIONS OF PIPED WATER SUPPLY**

Design capacity : Pumped  Gravity

Intake structure :

Water lifting equipment : pump : \_\_\_\_\_  
engine : \_\_\_\_\_

Transmission main :

Storage tank :

Distribution lines :

Domestic water points :

Additional facilities : CT  CD  HC

Level difference intake/storage tank (m) :

**6. APPRAISAL OF PRESENT WATER SUPPLY FACILITIES**

	1	2	3
Water availability versus demand	x		
Quality of the water source		x	
Water accessibility (walking distance to facility)	x		
Reliability of facility	x		
Water Quality (EC)	x		
Village population dependent on facility		x	

Village total score : 8

Classification in VILLAGE PRIORITY GROUP No. : 3

**7. RECOMMENDATIONS FOR IMPROVEMENT OF WATER SUPPLY FACILITIES**

**SHORT TERM :**

Shallow wells with handpumps: 8 nos

**MEDIUM AND LONG TERM :**

Shallow wells with handpumps: +4 nos