No. 4

THE STUDY ON REHABILITATION OF DAR ES SALAAM WATER SUPPLY IN THE UNITED REPUBLIC OF TANZANIA

FINAL REPORT
VOLUME 4 : DATA I

JULY 1991

JAPAN INTERNATIONAL COOPERATION AGENCY

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ON
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TABLE OF CONTENTS

C. DATA TO CHAPTER 5

D. DATA TO CHAPTER 6

A.
DATA TO CHAPTER 2

1. WATER DEMAND

1.1 Industrial Consumption

TABLE A.1.1 INDUSTRIAL CONSUMPTION BY CONSUMERS

Sub-branch Name	Ward No.	Ward Name	Sr. No.	Account Number	Consumption (m3/day)
ILALA	106	Ilala	6	112012	213.0
ILALA	106	Ilala	8	112675	410.3
ILALA	109	Kipawa	71	54256	8.6
ILALA	109	Kipawa	72	54263	3.5
ILALA	109	Kipawa	73	54267	2.1
ILALA	109	Kipawa	74	54488	0.0
ILALA	109	Kipawa	75	554420	2.8
ILALA	114	Kisutu	107	149002	1.1
TEMEKE	201	Kigamboni	88	257002	140.2
TEMEKE	213	Temeke 14	10	59031	2.7
TEMEKE	213	Temeke 14	11	59073	5.5
TEMEKE	213	Temeke 14	12	59063	0.8
TEMEKE	213	Temeke 14	13	59062	26.0
TEMEKE	213	Temeke 14	15	59055	0.0
TEMEKE	213	Temeke 14	16	59037	6.5
TEMEKE	213	Temeke 14	19	62020	2.7
TEMEKE	213	Temeke 14	20	62021	0.4
TEMEKE	213	Temeke 14	21	62043	17.2
TEMEKE	213	Temeke 14	22	62052	1.6
TEMEKE	213	Temeke 14	24	63003	0.1
TEMEKE	213	Temeke 14	26	63014	3.8
TEMEKE	213	Temeke 14	42	67056	0.4
TEMEKE	213	Temeke 14	43	67155	0.3
TEMEKE	213	Temeke 14	47	67140	30.2
TEMEKE	213	Temeke 14	49	68031	1.8
TEMEKE	213	Temeke 14	51	68058	0.3
TEMEKE	213	Temeke 14	52	68061	1.7
TEMEKE	213	Temeke 14	53	68085	6.6
TEMEKE	213	Temeke 14	54	68112	6.3
TEMEKE	213	Temeke 14	57	92478	5.7
TEMEKE	213	Temeke 14	58	93391	0.1
TEMEKE	213	Temeke 14	59	93393	1.1
TEMEKE	213	Temeke 14	86	255052	79.9
TEMEKE	213	Temeke 14	87	255157	0.1
TEMEKE	213	Temeke 14	93	62035	13.9
TEMEKE	213	Temeke 14	94	67135	1.6
TEMEKE	213	Temeke 14	122	63052	2.3
TEMEKE	213	Temeke 14	132	63050	2.2
TEMEKE	215	Keko	102	51102	1.4
KINONDONI	301	Msasani	3	197475	2.0
KINONDONI	303	Mwananyamala	15	252110	0.2
KINONDONI	303	Mwananyamala	125	200064	0.1
KAWE	402	Kawe	22	501376	2.4
KAWE	402	Kawe	33	186444	7.1
KAWE	402	Kawe	37	1755	3.9
KAWE	402	Kawe	74	701055	30.9
MAGOMENI	509	Ubungo	2	90908	5.1
MAGOMENI	509	Ubungo	5	90184	12.1
MAGOMENI	509	Ubungo	13	90116	15.4
MAGOMENI	509	Ubungo	21	890235	14.3
MAGOMENI	509	Ubungo	24	90105	783.3
MAGOMENI	509	Ubungo	27	90171	39.5
MAGOMENI	509	Ubungo	36	590794	78.8
MAGOMENI	509	Ubungo	39	690705	4.3

description	Number	Consumption (m3/day)
Total(Big Consumers)‥‥①	6	1705
Total(Small Consumers)‥②	48	298
Total(①+②)	54	2003

1.2 Commercial Consumption

TABLE A.1.2 (1) COMMERCIAL CONSUMPTION BY CONSUMERS

Sub-branch Name	Ward No.	Ward Name	Sr. No.	Account Number	Consumption (m3/day)
ILALA	105	Kinyerezi	106	277077	11.7
ILALA	106	Ilala	4	110127	1.8
ILALA	106	Ilala	133	109037	0.4
ILALA	106	Ilala	134	108071	0.3
ILALA	106	Ilala	135	109330	0.5
ILALA	106	Ilala	136	106033	0.4
ILALA	106	Ilala	137	108270	0.2
ILALA	106	Ilala	138	105002	2.2
ILALA	106	Ilala	143	108077	0.6
ILALA	106	Ilala	148	110043	0.4
ILALA	106	Ilala	149	110087	3.6
ILALA	106	Ilala	150	108232	0.4
ILALA	106	Ilala	168	108086	0.1
ILALA	106	Ilala	173	109202	0.6
ILALA	106	Ilala	175	109204	0.6
ILALA	106	Ilala	176	106020	0.7
ILALA	106	Ilala	191	108036	0.3
ILALA	106	Ilala	193	113004	0.7
ILALA	106	Ilala	197	108420	0.3
ILALA	106	Ilala	199	108413	0.5
ILALA	106	Ilala	200	107181	0.3
ILALA	106	Ilala	201	107056	0.4
ILALA	106	Ilala	224	112154	0.1
ILALA	106	Ilala	229	107110	0.3
ILALA	106	Ilala	245	108420	1.4
ILALA	110	Buguruni	119	560129	1.5
ILALA	110	Buguruni	155	60553	1.2
ILALA	110	Buguruni	156	60291	1.1
ILALA	110	Buguruni	157	60324	0.4
ILALA	110	Buguruni	158	60767	1.8
ILALA	110	Buguruni	159	60760	1.3
ILALA	110	Buguruni	160	60341	1.2
ILALA	110	Buguruni	161	60445	2.2
ILALA	110	Buguruni	162	60199	0.7
ILALA	110	Buguruni	163	60398	1.0
ILALA	110	Buguruni	164	60546	0.4
ILALA	110	Buguruni	194	60887	0.0
ILALA	111	Kariakoo	80	136160	0.7
ILALA	111	Kariakoo	81	117137	0.8
ILALA	111	Kariakoo	88	128021	0.0
ILALA	111	Kariakoo	90	129039	1.2
ILALA	111	Kariakoo	91	133004	1.4
ILALA	111	Kariakoo	92	134019	0.7
ILALA	111	Kariakoo	93	134031	0.4
ILALA	111	Kariakoo	94	135027	0.9
ILALA	111	Kariakoo	95	136033	0.4
ILALA	111	Kariakoo	96	136147	1.5
ILALA	111	Kariakoo	97	136167	2.1
ILALA	111	Kariakoo	98	138166	3.2
ILALA	111	Kariakoo	99	141135	1.9
ILALA	111	Kariakoo	102	142007	0.3
ILALA	111	Kariakoo	115	131075	0.4
ILALA	111	Kariakoo	116	142101	0.7
ILALA	111	Kariakoo	117	135001	0.5
ILALA	111	Kariakoo	125	137207	2.2
ILALA	111	Kariakoo	126	131075	0.4
ILALA	111	Kariakoo	128	131069	2.1
ILALA	111	Kariakoo	129	135085	2.3
ILALA	111	Kariakoo	144	130033	2.2

TABLE A.1.2 (2) COMMERCIAL CONSUMPTION BY CONSUMERS

Sub-branch Name	Ward No.	Ward Name	Sr. No.	Account Number	Consumption (m3/day)
ILALA	111	Kariakoo	165	140090	3.6
ILALA	111	Kariakoo	181	140022	2.4
ILALA	111	Kariakoo	183	140035	4.7
ILALA	111	Kariakoo	198	117154	0.1
ILALA	111	Kariakoo	207	129038	0.1
ILALA	111	Kariakoo	209	141191	1.6
ILALA	111	Kariakoo	211	141110	0.2
ILALA	111	Kariakoo	212	141175	0.6
ILALA	111	Kariakoo	225	140066	1.0
ILALA	111	Kariakoo	226	141192	0.6
ILALA	111	Kariakoo	242	128021	0.1
ILALA	112	Jangwani	82	118079	0.9
ILALA	112	Jangwani	83	118086	0.8
ILALA	112	Jangwani	84	120003	0.1
ILALA	112	Jangwani	86	122017	0.7
ILALA	112	Jangwani	87	124098	1.4
ILALA	112	Jangwani	131	118109	4.5
ILALA	112	Jangwani	142	124002	0.9
ILALA	112	Jangwani	146	121026	0.9
ILALA	112	Jangwani	147	124100	2.7
ILALA	112	Jangwani	152	118079	0.9
ILALA	112	Jangwani	153	120088	1.4
ILALA	112	Jangwani	192	119082	0.1
ILALA	112	Jangwani	195	120080	0.7
ILALA	112	Jangwani	202	118043	0.6
ILALA	112	Jangwani	240	120088	72.2
ILALA	112	Jangwani	241	120080	2.6
ILALA	113	Gerezani	1	42001	3.3
ILALA	113	Gerezani	100	144163	0.6
ILALA	113	Gerezani	101	144206	0.8
ILALA	113	Gerezani	108	44026	3.7
ILALA	113	Gerezani	196	42130	0.2
ILALA	113	Gerezani	222	144200	0.1
ILALA	113	Gerezani	223	143161	0.1
ILALA	113	Gerezani	227	144159	1.7
ILALA	113	Gerezani	251	145056	0.1
ILALA	113	Gerezani	258	145055	1.7
ILALA	113	Gerezani	259	145056	0.1
ILALA	113	Gerezani	261	145054	0.6
ILALA	114	Kisutu	5	159075	0.1
ILALA	114	Kisutu	10	170341	0.2
ILALA	114	Kisutu	62	172081	0.1
ILALA	114	Kisutu	63	172145	1.0
ILALA	114	Kisutu	111	157097	1.0
ILALA	114	Kisutu	114	154042	0.8
ILALA	114	Kisutu	120	155054	2.6
ILALA	114	Kisutu	124	159072	0.3
ILALA	114	Kisutu	167	170342	2.4
ILALA	114	Kisutu	169	148042	2.2
ILALA	114	Kisutu	170	146112	0.6
ILALA	114	Kisutu	171	166023	0.0
ILALA	114	Kisutu	172	177095	1.5
ILALA	114	Kisutu	174	153058	3.5
ILALA	114	Kisutu	177	156092	0.1
ILALA	114	Kisutu	178	147013	1.5
ILALA	114	Kisutu	180	168063	0.1
ILALA	114	Kisutu	182	177039	2.2
ILALA	114	Kisutu	188	161097	0.5
ILALA	114	Kisutu	189	161103	1.0

TABLE A.1.2 (3) COMMERCIAL CONSUMPTION BY CONSUMERS

Sub-branch Name	Ward No.	Ward Name	Sr. No.	Account Number	Consumption (m3/day)
ILALA	114	Kisutu	190	162003	0.9
ILALA	114	Kisutu	204	158877	0.2
ILALA	114	Kisutu	228	171344	0.1
ILALA	114	Kisutu	230	158032	0.1
ILALA	114	Kisutu	231	158030	0.1
ILALA	114	Kisutu	232	158029	0.1
ILALA	114	Kisutu	233	158028	0.3
ILALA	114	Kisutu	234	168106	0.0
ILALA	114	Kisutu	246	166023	0.0
ILALA	114	Kisutu	247	159011	0.4
ILALA	114	Kisutu	248	157050	0.6
ILALA	114	Kisutu	249	168062	1.4
ILALA	114	Kisutu	250	158026	0.1
ILALA	114	Kisutu	253	157059	0.1
ILALA	114	Kisutu	254	157061	0.0
ILALA	114	Kisutu	255	157049	0.1
ILALA	114	Kisutu	256	157057	0.0
ILALA	114	Kisutu	257	168044	0.9
ILALA	114	Kisutu	260	148105	0.6
ILALA	114	Kisutu	262	146089	3.3
ILALA	114	Kisutu	264	153058	3.5
ILALA	117	Upanga West	239	88009	3.4
ILALA	118	Kivukoni	89	35022	1.4
ILALA	118	Kivukoni	105	37025	94.1
ILALA	118	Kivukoni	179	180002	1.9
ILALA	118	Kivukoni	184	182079	0.3
ILALA	118	Kivukoni	217	35110	25.4
ILALA	118	Kivukoni	218	37022	2.0
ILALA	118	Kivukoni	244	37022	2.0
ILALA	118	Kivukoni	252	182119	1.3
TEMEKE	207	Mbagala	101	191814	3.0
TEMEKE	213	Temeke 14	18	62013	3.4
TEMEKE	213	Temeke 14	25	63046	0.1
TEMEKE	213	Temeke 14	27	63057	0.2
TEMEKE	213	Temeke 14	28	63059	0.5
TEMEKE	213	Temeke 14	29	63064	0.5
TEMEKE	213	Temeke 14	30	63066	0.1
TEMEKE	213	Temeke 14	31	63067	0.9
TEMEKE	213	Temeke 14	32	64017	0.6
TEMEKE	213	Temeke 14	44	67077	3.7
TEMEKE	213	Temeke 14	48	68003	1.6
TEMEKE	213	Temeke 14	60	93403	70.7
TEMEKE	213	Temeke 14	61	94015	0.0
TEMEKE	213	Temeke 14	64	94059	0.1
TEMEKE	213	Temeke 14	65	94074	0.2
TEMEKE	213	Temeke 14	68	96006	0.4
TEMEKE	213	Temeke 14	69	96013	1.5
TEMEKE	213	Temeke 14	71	96097	0.3
TEMEKE	213	Temeke 14	75	202144	3.7
TEMEKE	213	Temeke 14	80	218108	0.2
TEMEKE	213	Temeke 14	81	219118	0.4
TEMEKE	213	Temeke 14	82	221095	0.6
TEMEKE	213	Temeke 14	83	225003	0.3
TEMEKE	213	Temeke 14	84	225122	1.3
TEMEKE	213	Temeke 14	85	255049	2.3
TEMEKE	213	Temeke 14	91	255141	0.2
TEMEKE	213	Temeke 14	96	64021	2.2
TEMEKE	213	Temeke 14	97	67008	2.5
TEMEKE	213	Temeke 14	100	68149	0.0

TABLE A.1.2 (4) COMMERCIAL CONSUMPTION BY CONSUMERS

Sub-branch Name	Ward No.	Ward Name	Sr. No.	Account Number	Consumption (m3/day)
TEMEKE	213	Temeke 14	107	67046	2.1
TEMEKE	213	Temeke 14	108	68179	0.6
TEMEKE	213	Temeke 14	109	98034	0.0
TEMEKE	213	Temeke 14	110	68170	0.2
TEMEKE	213	Temeke 14	112	68155	0.0
TEMEKE	213	Temeke 14	114	94044	0.3
TEMEKE	213	Temeke 14	117	62017	0.1
TEMEKE	213	Temeke 14	118	62018	0.2
TEMEKE	213	Temeke 14	119	62014	0.3
TEMEKE	213	Temeke 14	120	59044	1.8
TEMEKE	213	Temeke 14	121	63068	0.3
TEMEKE	213	Temeke 14	123	67055	0.0
TEMEKE	213	Temeke 14	124	67068	0.1
TEMEKE	213	Temeke 14	127	68008	0.2
TEMEKE	213	Temeke 14	128	68051	0.4
TEMEKE	213	Temeke 14	129	68073	0.2
TEMEKE	213	Temeke 14	130	68192	0.3
TEMEKE	213	Temeke 14	134	63068	0.7
TEMEKE	213	Temeke 14	136	63036	0.7
TEMEKE	213	Temeke 14	137	64025	0.9
TEMEKE	213	Temeke 14	138	62045	0.6
TEMEKE	213	Temeke 14	140	68117	0.0
TEMEKE	213	Temeke 14	141	63008	1.0
TEMEKE	214	Mtoni	72	99006	0.1
TEMEKE	214	Mtoni	76	203013	0.2
TEMEKE	214	Mtoni	77	203029	0.2
TEMEKE	214	Mtoni	78	203096	0.2
TEMEKE	214	Mtoni	79	203230	0.2
TEMEKE	214	Mtoni	98	48277	0.2
TEMEKE	215	Keko	5	51133	5.7
TEMEKE	215	Keko	7	52202	0.4
TEMEKE	215	Keko	33	65005	5.7
TEMEKE	215	Keko	35	65015	47.0
TEMEKE	215	Keko	39	65131	0.2
TEMEKE	215	Keko	40	66002	12.3
TEMEKE	215	Keko	90	265189	0.7
TEMEKE	215	Keko	113	65155	0.3
TEMEKE	215	Keko	115	51008	9.2
TEMEKE	215	Keko	131	243211	0.2
TEMEKE	216	Kurasini	1	46001	103.8
TEMEKE	216	Kurasini	2	46077	69.9
TEMEKE	216	Kurasini	111	46082	0.2
TEMEKE	216	Kurasini	143	46082	0.7
KINONDONI	301	Msasani	1	8297	0.6
KINONDONI	301	Msasani	2	197476	0.7
KINONDONI	301	Msasani	5	9011	7.2
KINONDONI	301	Msasani	40	11008	7.6
KINONDONI	301	Msasani	93	8003	0.9
KINONDONI	301	Msasani	94	8414	2.9
KINONDONI	301	Msasani	95	8120	0.0
KINONDONI	301	Msasani	96	8411	0.8
KINONDONI	301	Msasani	97	8447	0.4
KINONDONI	301	Msasani	103	11062	3.1
KINONDONI	302	Kinondoni	24	30122	0.1
KINONDONI	302	Kinondoni	28	187006	0.1
KINONDONI	302	Kinondoni	29	239125	0.5
KINONDONI	302	Kinondoni	31	31306	0.2
KINONDONI	302	Kinondoni	32	240042	0.5
KINONDONI	302	Kinondoni	33	31221	0.1

TABLE A.1.2 (5) COMMERCIAL CONSUMPTION BY CONSUMERS

Sub-branch Name	Ward No.	Ward Name	Sr. No.	Account Number	Consumption (m3/day)
KINONDONI	302	Kinondoni	38	187163	0.3
KINONDONI	302	Kinondoni	39	30154	0.2
KINONDONI	302	Kinondoni	47	3037	0.7
KINONDONI	302	Kinondoni	48	239250	0.5
KINONDONI	302	Kinondoni	50	31018	0.8
KINONDONI	302	Kinondoni	51	187035	0.1
KINONDONI	302	Kinondoni	54	187158	1.6
KINONDONI	302	Kinondoni	56	246115	0.5
KINONDONI	302	Kinondoni	57	246009	1.1
KINONDONI	302	Kinondoni	61	239153	0.3
KINONDONI	302	Kinondoni	62	239005	0.3
KINONDONI	302	Kinondoni	63	30435	0.2
KINONDONI	302	Kinondoni	68	30065	0.4
KINONDONI	302	Kinondoni	69	198064	0.7
KINONDONI	302	Kinondoni	71	199024	0.6
KINONDONI	302	Kinondoni	73	28266	0.9
KINONDONI	302	Kinondoni	74	241019	0.2
KINONDONI	302	Kinondoni	75	239049	0.1
KINONDONI	302	Kinondoni	81	31194	0.3
KINONDONI	302	Kinondoni	82	31221	0.2
KINONDONI	302	Kinondoni	83	31206	0.3
KINONDONI	302	Kinondoni	84	31282	0.6
KINONDONI	302	Kinondoni	89	239231	0.1
KINONDONI	302	Kinondoni	90	31429	0.9
KINONDONI	302	Kinondoni	91	31227	1.0
KINONDONI	302	Kinondoni	92	198050	0.2
KINONDONI	302	Kinondoni	98	239176	0.5
KINONDONI	302	Kinondoni	99	198048	0.3
KINONDONI	302	Kinondoni	101	241159	0.3
KINONDONI	302	Kinondoni	102	241112	0.7
KINONDONI	302	Kinondoni	105	31085	0.4
KINONDONI	302	Kinondoni	106	31163	0.4
KINONDONI	302	Kinondoni	107	31054	0.3
KINONDONI	302	Kinondoni	108	31173	0.2
KINONDONI	302	Kinondoni	109	31175	0.3
KINONDONI	302	Kinondoni	110	31204	0.2
KINONDONI	302	Kinondoni	112	31256	0.2
KINONDONI	302	Kinondoni	113	31353	0.2
KINONDONI	302	Kinondoni	114	31331	0.5
KINONDONI	302	Kinondoni	117	31157	0.3
KINONDONI	302	Kinondoni	121	31237	0.3
KINONDONI	302	Kinondoni	122	31277	0.3
KINONDONI	302	Kinondoni	123	26017	0.5
KINONDONI	302	Kinondoni	126	247005	0.2
KINONDONI	303	Mwananyamala	14	204294	1.2
KINONDONI	303	Mwananyamala	18	531287	0.7
KINONDONI	303	Mwananyamala	22	254061	4.0
KINONDONI	303	Mwananyamala	25	254114	1.8
KINONDONI	303	Mwananyamala	30	254112	0.7
KINONDONI	303	Mwananyamala	36	531202	0.2
KINONDONI	303	Mwananyamala	37	831236	1.3
KINONDONI	303	Mwananyamala	53	254166	0.6
KINONDONI	303	Mwananyamala	55	207077	0.5
KINONDONI	303	Mwananyamala	58	207054	1.0
KINONDONI	303	Mwananyamala	59	731096	0.6
KINONDONI	303	Mwananyamala	60	731227	1.1
KINONDONI	303	Mwananyamala	64	631176	0.1
KINONDONI	303	Mwananyamala	67	631008	0.0
KINONDONI	303	Mwananyamala	70	204182	0.9

TABLE A.1.2 (6) COMMERCIAL CONSUMPTION BY CONSUMERS

Sub-branch Name	Ward No.	Ward Name	Sr. No.	Account Number	Consumption (m3/day)
KINONDONI	303	Mwananyamala	72	531364	0.1
KINONDONI	303	Mwananyamala	76	200008	0.3
KINONDONI	303	Mwananyamala	79	531550	0.2
KINONDONI	303	Mwananyamala	80	631248	0.7
KINONDONI	303	Mwananyamala	86	200122	0.3
KINONDONI	303	Mwananyamala	100	831176	0.2
KINONDONI	303	Mwananyamala	119	731037	0.7
KINONDONI	303	Mwananyamala	124	251004	2.7
KAWE	402	Kawe	24	501124	0.4
KAWE	402	Kawe	26	501386	0.4
KAWE	402	Kawe	28	266579	0.5
KAWE	402	Kawe	40	266584	1.7
KAWE	402	Kawe	42	501857	2.0
KAWE	402	Kawe	43	501054	0.3
KAWE	402	Kawe	51	501111	1.4
KAWE	402	Kawe	52	501272	1.6
KAWE	402	Kawe	64	501871	1.2
KAWE	402	Kawe	65	501714	0.4
KAWE	402	Kawe	69	501729	1.6
MAGOMENI	501	Magomeni	7	102063	6.3
MAGOMENI	501	Magomeni	15	101109	1.9
MAGOMENI	501	Magomeni	20	101001	13.0
MAGOMENI	501	Magomeni	28	102003	0.3
MAGOMENI	501	Magomeni	29	102215	0.4
MAGOMENI	501	Magomeni	31	102279	1.1
MAGOMENI	501	Magomeni	40	100910	0.4
MAGOMENI	501	Magomeni	46	101275	0.4
MAGOMENI	501	Magomeni	51	102002	0.4
MAGOMENI	501	Magomeni	52	100654	1.3
MAGOMENI	501	Magomeni	58	101576	0.3
MAGOMENI	501	Magomeni	60	208012	0.3
MAGOMENI	501	Magomeni	107	101231	0.3
MAGOMENI	501	Magomeni	109	102056	0.4
MAGOMENI	501	Magomeni	111	100715	1.3
MAGOMENI	501	Magomeni	112	104089	0.2
MAGOMENI	501	Magomeni	113	104086	0.2
MAGOMENI	501	Magomeni	114	101104	0.2
MAGOMENI	501	Magomeni	116	101182	2.4
MAGOMENI	501	Magomeni	118	208117	0.3
MAGOMENI	501	Magomeni	121	103006	0.4
MAGOMENI	501	Magomeni	122	103085	0.5
MAGOMENI	501	Magomeni	124	100417	0.1
MAGOMENI	501	Magomeni	125	100364	1.9
MAGOMENI	501	Magomeni	126	102098	0.4
MAGOMENI	501	Magomeni	127	102014	0.2
MAGOMENI	501	Magomeni	128	208136	0.9
MAGOMENI	501	Magomeni	129	100424	1.0
MAGOMENI	501	Magomeni	130	101644	0.6
MAGOMENI	501	Magomeni	131	101539	0.4
MAGOMENI	501	Magomeni	136	104011	0.3
MAGOMENI	501	Magomeni	137	101562	1.4
MAGOMENI	501	Magomeni	138	100288	0.3
MAGOMENI	501	Magomeni	139	100001	1.0
MAGOMENI	501	Magomeni	140	101096	0.3
MAGOMENI	502	Makurumla	108	205129	0.1
MAGOMENI	502	Makurumla	119	205126	0.1
MAGOMENI	502	Makurumla	123	216136	0.3
MAGOMENI	503	Ndugumbi	3	215009	1.8
MAGOMENI	503	Ndugumbi	47	209095	0.2

TABLE A.1.2 (7) COMMERCIAL CONSUMPTION BY CONSUMERS

Sub-branch Name	Ward No.	Ward Name	Sr. No.	Account Number	Consumption (m3/day)
MAGOMENI	503	Ndugumbi	62	212124	0.3
MAGOMENI	503	Ndugumbi	110	209067	0.2
MAGOMENI	503	Ndugumbi	115	214005	0.7
MAGOMENI	503	Ndugumbi	117	214023	0.7
MAGOMENI	503	Ndugumbi	120	215089	0.5
MAGOMENI	503	Ndugumbi	132	213100	0.3
MAGOMENI	503	Ndugumbi	133	213013	0.3
MAGOMENI	503	Ndugumbi	134	238004	0.1
MAGOMENI	503	Ndugumbi	135	212004	0.4
MAGOMENI	506	Kigogo	32	261018	1.0
MAGOMENI	507	Mabibo	42	258712	1.3
MAGOMENI	507	Mabibo	54	258363	2.2
MAGOMENI	507	Mabibo	57	258064	0.1
MAGOMENI	509	Ubungo	6	270854	2.2
MAGOMENI	509	Ubungo	11	90671	4.2
MAGOMENI	509	Ubungo	14	890446	1.2
MAGOMENI	509	Ubungo	22	590881	2.4
MAGOMENI	509	Ubungo	25	590583	2.7
MAGOMENI	509	Ubungo	35	90064	5.9
MAGOMENI	509	Ubungo	38	590305	0.1
MAGOMENI	509	Ubungo	41	90145	0.2
MAGOMENI	509	Ubungo	45	527694	0.2
MAGOMENI	509	Ubungo	48	790845	0.3
MAGOMENI	509	Ubungo	49	790028	0.9
MAGOMENI	509	Ubungo	50	690339	0.5
MAGOMENI	509	Ubungo	53	90736	0.7
MAGOMENI	509	Ubungo	55	270904	0.3
MAGOMENI	509	Ubungo	56	270417	1.7
MAGOMENI	509	Ubungo	59	690965	0.6
MAGOMENI	509	Ubungo	63	90086	0.5
MAGOMENI	509	Ubungo	64	890823	0.8
MAGOMENI	509	Ubungo	65	890345	0.9
MAGOMENI	509	Ubungo	66	270212	1.5
MAGOMENI	509	Ubungo	69	790306	1.0
MAGOMENI	509	Ubungo	70	990027	0.7
MAGOMENI	509	Ubungo	72	527902	0.4
MAGOMENI	509	Ubungo	73	270082	0.3
MAGOMENI	509	Ubungo	74	270306	0.5
MAGOMENI	509	Ubungo	75	270204	0.4
MAGOMENI	509	Ubungo	76	270407	0.6
MAGOMENI	509	Ubungo	77	270385	0.5
MAGOMENI	509	Ubungo	78	270802	0.4
MAGOMENI	509	Ubungo	81	590020	0.6
MAGOMENI	509	Ubungo	82	90683	0.7
MAGOMENI	509	Ubungo	83	790547	0.5
MAGOMENI	509	Ubungo	85	90678	0.3
MAGOMENI	509	Ubungo	87	690088	0.6
MAGOMENI	509	Ubungo	88	890111	0.2
MAGOMENI	509	Ubungo	89	90142	0.5
MAGOMENI	509	Ubungo	90	590874	0.6
MAGOMENI	509	Ubungo	91	790792	2.0
MAGOMENI	509	Ubungo	92	90096	0.4
MAGOMENI	509	Ubungo	93	790364	1.0
MAGOMENI	509	Ubungo	94	90177	0.1
MAGOMENI	509	Ubungo	95	590039	0.3
MAGOMENI	509	Ubungo	96	590529	1.4
MAGOMENI	509	Ubungo	97	790688	0.3
MAGOMENI	509	Ubungo	98	790601	0.1
MAGOMENI	509	Ubungo	99	90074	0.6

TABLE A.1.2 (8) COMMERCIAL CONSUMPTION BY CONSUMERS

Sub-branch Name	Ward No.	Ward Name	Sr. No.	Account Number	Consumption (m3/day)
MAGOMENI	509	Ubungo	100	590215	1.4
MAGOMENI	509	Ubungo	101	790594	1.7
MAGOMENI	509	Ubungo	102	790062	0.6
MAGOMENI	509	Ubungo	103	890358	0.2
MAGOMENI	509	Ubungo	104	690358	0.8
MAGOMENI	509	Ubungo	105	690854	1.2
MAGOMENI	509	Ubungo	106	270825	0.5

Description	Number	Consumption (m3/day)
Total(Big Consumers)····①	5	411
Total(Small Consumers)··②	415	490
Total(①+②)	420	901

1.3 Institutional Consumption

TABLE A.1.3 (1) INSTITUTIONAL CONSUMPTION BY CONSUMERS

Sub-branch Name	Ward No.	Ward Name	Sr. No.	Account Number	Consumption (m3/day)
ILALA	106	Ilala	7	112409	3.9
ILALA	106	Ilala	121	112040	2.2
ILALA	106	Ilala	123	111004	29.6
ILALA	109	Kipawa	132	54265	0.3
ILALA	110	Buguruni	2	60055	0.4
ILALA	110	Buguruni	213	60178	4.8
ILALA	113	Gerezani	203	45023	0.7
ILALA	114	Kisutu	9	171021	1.4
ILALA	114	Kisutu	210	162074	0.1
ILALA	114	Kisutu	263	168091	0.0
ILALA	116	Upanga East	76	76087	1.9
ILALA	116	Upanga East	145	75015	5.3
ILALA	116	Upanga East	221	75035	7.6
ILALA	117	Upanga West	3	88095	2.2
ILALA	117	Upanga West	78	78001	12.9
ILALA	118	Kivukoni	66	182059	0.9
ILALA	118	Kivukoni	68	37028	3.5
ILALA	118	Kivukoni	69	38111	7.4
ILALA	118	Kivukoni	70	38113	0.0
ILALA	118	Kivukoni	122	40011	0.2
ILALA	118	Kivukoni	216	38119	11.7
TEMEKE	213	Temeke 14	9	59009	0.3
TEMEKE	213	Temeke 14	23	62055	0.1
TEMEKE	213	Temeke 14	45	67081	0.0
TEMEKE	213	Temeke 14	55	68132	3.6
TEMEKE	213	Temeke 14	70	96068	2.8
TEMEKE	213	Temeke 14	125	67095	0.0
TEMEKE	213	Temeke 14	126	67108	1.7
TEMEKE	215	Keko	6	52086	3.8
TEMEKE	215	Keko	34	65014	2.5
TEMEKE	215	Keko	38	65055	6.7
TEMEKE	215	Keko	92	52323	1.0
TEMEKE	215	Keko	142	52323	0.7
TEMEKE	216	Kurasini	8	57015	125.9
KINONDONI	301	Msasani	16	8258	4.2
KINONDONI	301	Msasani	46	189138	1.0
KINONDONI	302	Kinondoni	21	198098	1.1
KINONDONI	302	Kinondoni	44	2071	0.7
KINONDONI	302	Kinondoni	104	5156	4.4
KINONDONI	302	Kinondoni	115	28076	0.2
KINONDONI	302	Kinondoni	116	198123	0.2
KAWE	402	Kawe	5	601252	24.1
KAWE	402	Kawe	7	1123	15.7
KAWE	402	Kawe	8	1306	3.6
KAWE	402	Kawe	18	186312	0.7
KAWE	402	Kawe	23	1270	1.6
KAWE	402	Kawe	34	1490	0.3
KAWE	402	Kawe	36	601601	559.3
KAWE	402	Kawe	67	601225	0.7
KAWE	402	Kawe	72	266327	3.9
MAGOMENI	501	Magomeni	19	101068	6.2
MAGOMENI	501	Magomeni	68	510001	29.1
MAGOMENI	507	Mabibo	43	258713	1.1
MAGOMENI	509	Ubungo	1	90952	0.1
MAGOMENI	509	Ubungo	9	590544	1.2
MAGOMENI	509	Ubungo	12	590158	15.8
MAGOMENI	509	Ubungo	16	590394	1.1
MAGOMENI	509	Ubungo	26	90061	0.4
MAGOMENI	509	Ubungo	33	690545	0.4

TABLE A.1.3 (2) INSTITUTIONAL CONSUMPTION BY CONSUMERS

Sub-branch Name	Ward No.	Ward Name	Sr. No.	Account Number	Consumption (m3/day)
MAGOMENI	509	Ubungo	34	90095	0.0
MAGOMENI	509	Ubungo	80	90115	5.1

	No.	Consumption (m3/day)
Total(Big Consumers)‥‥①	2	685
Total(Small Consumers)‥②	59	243
Total(①+②)	61	928

2. PER CAPITA CONSUMPTION - NO CONNECTION

2.1 Magomeni Model Area

TABLE A.2.1 VISUAL WATER CONSUMPTION MEASUAREMENT

MAGOMENI

Number	House Number or Family Name	Volume (litres/day) Date 07-03-90 (1)	Date 08-03-90 (2)	Date 09-03-90 (3)	Total (litres)	Remarks
1	MR. MAJID	182.8	126.9	170.1	479.8	
2	153	172.8	152.2	135.0	460.0	
3	156	0.0	16.2	0.0	16.2	
4	212	261.1	257.3	271.0	789.4	
5	213	16.2	0.0	0.0	16.2	
6	214	118.0	71.4	48.2	237.6	
7	215	126.2	86.0	27.0	239.2	
Total		877.1	710.0	651.3	2,238.4	

TABLE A.2.2 VISUAL WATER CONSUMPTION MESUAREMENT (1)

Date :7-3-90 Area :MAGOMENI

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
6:28	MR. MAJID	Steel Bucket	16.2	1	
6:57	MR. MAJID	Small Plastic	5.4	1	
7:35	213	Steel Bucket	16.2	1	
7:35	MR. MAJID	Steel Bucket	16.2	1	
7:45	MR. MAJID	Steel Bucket	16.2	1	
7:45	212	Small Plastic	6	1	
7:50	MR. MAJID	Steel Bucket	16.2	1	
8:15	153	Steel Bucket	16.2	1	
8:30	153	Steel Bucket	16.2	1	
8:33	212	Steel Bucket	10	1	
8:55	212	Steel Bucket	16.2	1	
9:55	212	Steel Bucket	16.2	1	
10:15	212	Plastic Bucket	16.2	1	
10:25	MR. MAJID	Steel Bucket	16.2	1	
10:30	153	Small Sourcepan	5.4	1	
10:31	MR. MAJID	Small Drum	18.9	1	
10:35	MR. MAJID	Small Drum	18.9	1	
10:50	212	Small Plastic	6	1	
11:10	212	Steel Bucket	16.2	1	
11:25	214	Steel Bucket	16.2	1	
11:25	214	Small Plastic	5	1	
11:40	214	Plastic Bucket	21.6	1	
12:10	215	Steel Bucket	16.2	1	
12:15	212	Steel Bucket	16.2	1	
12:15	215	Small Bucket	5.4	1	
12:20	153	Steel Bucket	16.2	1	
12:45	153	Steel Bucket	16.2	1	
13:25	153	Steel Bucket	16.2	1	
13:31	212	Plastic Bucket	16.2	1	
13:45	MR. MAJID	Steel Bucket	16.2	1	
14:05	214	Steel Bucket	16.2	1	
14:30	212	Steel Bucket	16.2	1	
14:40	215	Plastic Bucket	21.6	1	
14:45	215	Small Bucket	5.4	1	
14:46	215	Plastic Bucket	21.6	1	
14:55	212	Steel Bucket	16.2	1	
15:00	215	Small Bucket	5.4	1	
15:00	215	Small Kettle	1.4	1	
15:05	215	Small Sourcepan	5.4	1	
15:07	215	Small Bucket	5.4	1	
15:08	215	Small Kettle	1.4	1	
15:09	212	Steel Bucket	18.6	1	+Small Plastic
15:10	153	Plastic Bucket	21.6	1	
15:14	215	Small Plastic	5	1	
15:14	215	Small Bucket	5.4	1	
15:25	215	Small Bucket	5.4	1	
15:34	215	Small Plastic	5	1	
16:10	153	Steel Bucket	16.2	1	
16:26	212	Steel Bucket	16.2	1	
16:36	153	Steel Bucket	16.2	1	
16:40	215	Steel Bucket	16.2	1	
16:41	MR. MAJID	Small Plastic	5.4	1	
17:05	153	Steel Bucket	16.2	1	
17:50	212	Steel Bucket	16.2	1	
18:25	214	Small Plastic	5	1	
19:11	MR. MAJID	Small Plastic	5.4	1	
19:17	MR. MAJID	Small Plastic	5.4	1	

TABLE A.2.2 VISUAL WATER CONSUMPTION MESUAREMENT (2)

Date :7-3-90 Area :MAGOMENI

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
19:20	212	Small Sourcepan	8.1	1	
19:24	MR. MAJID	Small Plastic	5	1	
19:28	MR. MAJID	Small Plastic	5	1	
19:31	212	Small Bucket	6	1	
19:32	153	Steel Bucket	16.2	1	
19:32	MR. MAJID	Small Plastic	5.4	1	
19:35	212	Small Plastic	6	1	
19:37	MR. MAJID	Small Plastic	5.4	1	
19:40	214	Steel Bucket	16.2	1	
19:45	212	Plastic Bucket	16.2	1	
19:45	214	Plastic Bucket	21.6	1	
19:54	214	Steel Bucket	16.2	1	
19:55	212	Steel Bucket	16.2	1	
20:00	212	Small Plastic	6	1	
20:05	MR. MAJID	Small Plastic	5.4	1	
Total			877.1	72.0	

TABLE A.2.3 VISUAL WATER CONSUMPTION MESUAREMENT (1)

Date :8-3-90 Area :MAGOMENI

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
6:12	MR. MAJID	Small Plastic	5.4	1	
6:16	MR. MAJID	Steel Bucket	16.2	1	
6:21	MR. MAJID	Steel Bucket	16.2	1	
6:22	MR. MAJID	Small Plastic	5.4	1	
6:31	156	Steel Bucket	16.2	1	
6:37	153	Steel Bucket	16.2	1	
6:46	153	Steel Bucket	16.2	1	
6:58	212	Steel Bucket	16.2	1	
7:43	153	Steel Bucket	16.2	1	
7:44	MR. MAJID	Steel Bucket	18.9	1	
7:44	214	Small Plastic	5	1	
7:47	153	Steel Bucket	16.2	1	
7:55	MR. MAJID	Steel Bucket	16.2	1	
8:06	MR. MAJID	Steel Bucket	16.2	1	
8:09	212	Plastic Bucket	16.2	1	
8:16	212	Steel Bucket	16.2	1	
8:25	212	Steel Bucket	16.2	1	
8:34	214	Plastic Bucket	21.6	1	
8:50	212	Steel Bucket	16.2	1	
8:55	153	Small Sourcepan	6.4	1	
8:58	214	Small Bucket	6.4	1	
9:01	214	Small Bucket	6.4	1	
9:05	214	Small Bucket	5.4	1	
9:10	212	Small Plastic	6.4	1	
9:14	214	Small Bucket	5.4	1	
9:18	214	Small Bucket	5.4	1	
9:22	212	Steel Bucket	16.2	1	
9:25	214	Small Bucket	5.4	1	
9:28	214	Small Bucket	5.4	1	
9:40	212	Small Plastic	6	1	
9:45	212	Small Plastic	6.4	1	
9:56	MR. MAJID	Steel Bucket	16.2	1	
10:28	212	Small Plastic	6	1	
10:32	212	Small Sourcepan	1.5	1	
10:45	212	Steel Bucket	16.2	1	
10:55	215	Small Plastic	5	1	
10:56	MR. MAJID	Small Plastic	5.4	1	
11:50	215	Small Bucket	5.4	1	
12:00	215	Small Bucket	5.4	1	
12:05	215	Small Bucket	5.4	1	
12:97	215	Small Bucket	5.4	1	
12:10	215	Small Bucket	5.4	1	
12:30	212	Steel Bucket	16.2	1	
12:32	153	Steel Bucket	16.2	1	
12:38	212	Steel Bucket	16.2	1	
12:40	212	Small Plastic	5	1	
13:14	214	Small Plastic	5	1	
14:45	212	Small Plastic	5	1	
15:15	215	Plastic Bucket	21.6	1	
15:20	215	Steel Bucket	16.2	1	
15:21	215	Small Bucket	5.4	1	
15:24	212	Steel Bucket	16.2	1	
15:25	212	Small Plastic	5	1	
15:25	215	Small Bucket	5.4	1	
15:26	212	Steel Bucket	16.2	1	
15:28	215	Small Bucket	5.4	1	
15:35	212	Small Jarg	2.7	1	

TABLE A.2.3 VISUAL WATER CONSUMPTION MESUAREMENT (2)

Date :8-3-90 Area :MAGOMENI

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
15:36	153	Steel Bucket	16.2	1	
15:40	153	Steel Bucket	16.2	1	
15:44	153	Steel Bucket	16.2	1	
16:29	212	Plastic Bucket	16.2	1	
16:55	MR. MAJID	Small Plastic	5.4	1	
17:00	153	Steel Bucket	16.2	1	
17:05	MR. MAJID	Small Plastic	5.4	1	
17:47	212	Small Jarg	2.7	1	
20.12	212	Steel Bucket	16.2	1	
Total			710.0	66.0	

TABLE A.2.4 VISUAL WATER CONSUMPTION MESUAREMENT

Date :9-3-90 Area :MAGOMENI

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
6:14	MR. MAJID	Small Plastic	5.4	1	
6:35	153	Steel Bucket	16.2	1	
6:37	MR. MAJID	Small Drum	18.9	1	
6:40	MR. MAJID	Sourcepan	8.1	1	
6:45	MR. MAJID	Small Drum	18.9	1	
6:52	MR. MAJID	Small Drum	18.9	1	
6:58	MR. MAJID	Small Drum	18.9	1	
7:20	212	Plastic Bucket	16.2	1	
7:25	212	Steel Bucket	16.2	1	
7:32	214	Steel Bucket	16.2	1	
7:40	212	Steel Bucket	16.2	1	
8:05	214	Small Plastic	5.4	1	
8:19	212	Steel Bucket	16.2	1	
8:25	MR. MAJID	Small Drum	18.9	1	
8:29	153	Steel Bucket	16.2	1	
8:38	212	Steel Bucket	16.2	1	
9:14	214	Small Bucket	5.4	1	
9:20	212	Steel Bucket	16.2	1	
9:41	212	Small Plastic	5.4	1	
9:44	153	Steel Bucket	16.2	1	
10:05	MR. MAJID	Small Drum	18.9	1	
10:10	212	Steel Bucket	16.2	1	
10:15	212	Small Sourcepan	1	1	
11:15	MR. MAJID	Small Drum	16.2	1	
12:00	215	Small Bucket	5.4	1	
12:05	153	Plastic Bucket	21.6	1	
12:07	215	Small Bucket	5.4	1	
12:10	215	Small Bucket	5.4	1	
12:15	215	Small Bucket	5.4	1	
12:20	215	Small Bucket	5.4	1	
12:25	212	Plastic Bucket	16.2	1	
12:35	212	Steel Bucket	16.2	1	
12:40	153	Steel Bucket	16.2	1	
14:40	212	Small Plastic	5.4	1	
14:41	MR. MAJID	Small Plastic	5.4	1	
14:44	212	Small Plastic	5.4	1	
15:25	212	Steel Bucket	16.2	1	
15:30	212	Small Plastic	5.4	1	
15:40	MR. MAJID	Small Drum	16.2	1	
16:05	212	Steel Bucket	16.2	1	
16:45	153	Steel Bucket	16.2	1	
16:59	212	Plastic Bucket	16.2	1	
17:40	153	Steel Bucket	16.2	1	
17:41	153	Steel Bucket	16.2	1	
17:43	212	Steel Bucket	16.2	1	
17:44	212	Small Plastic	5.4	1	
19:10	MR. MAJID	Small Plastic	5.4	1	
20:10	212	Steel Bucket	16.2	1	
20:10	214	Steel Bucket	16.2	1	
20:10	214	Small Plastic	5	1	
20:18	212	Steel Bucket	16.2	1	
Total			651.3	51.0	

2.2 Kinondoni Model Area (Kiosk)

TABLE A.2.5 VISUAL WATER CONSUMPTION MEASUAREMENT
KINONDONI(KIOSK)

Number	House Number or Family Name	Volume (litres/day) Date 12-03-90 (1)	Date 13-03-90 (2)	Date 14-03-90 (3)	Total (litres)	Remarks
1	MR. POLLY'	5.4	0.0	0.0	5.4	
2	MR. BUI	5.4	5.4	0.0	10.8	
3	12	16.2	0.0	0.0	16.2	
4	24	13.5	29.7	0.0	43.2	
5	37	19.2	9.0	0.0	28.2	
6	42	0.0	0.0	3.0	3.0	
7	43	51.4	0.0	32.4	83.8	
8	47	145.8	162.9	156.6	465.3	
9	49	241.5	143.6	237.9	623.0	
10	50	298.8	272.0	351.9	922.7	
11	51	216.2	288.3	382.5	887.0	
12	52	69.6	155.1	103.2	327.9	
13	67	0.0	16.2	0.0	16.2	
14	79	3.0	0.0	0.0	3.0	
15	195	0.0	16.2	0.0	16.2	
Total		1,086.0	1,098.4	1,267.5	3,451.9	

TABLE A.2.6 VISUAL WATER CONSUMPTION MESUAREMENT (1)

Date : 12-3-90 Area : KINONDONI(KIOSK)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
6:56	50	Plastic Bucket	21.6	1	
7:02	51	Small Sourcepan	2.0	1	
7:30	51	Steel Bucket	16.2	1	
7:35	50	Plastic Bucket	21.6	1	
7:45	47	Steel Bucket	16.2	1	
7:50	49	Steel Bucket	16.2	1	
8:05	50	Plastic Bucket	21.6	1	
8:16	50	Steel Bucket	16.2	1	
8:30	50	Plastic Bucket	21.6	1	
8:45	49	Steel Bucket	16.2	1	
9:04	51	Steel Bucket	16.2	1	
9:15	50	Plastic Bucket	21.6	1	
9:37	47	Plastic Bucket	13.5	1	
9:37	47	Steel Bucket	13.5	1	
10:05	49	Plastic Bucket	24.6	1	
10:12	50	Plastic Bucket	24.6	1	
10:15	50	Steel Bucket	13.5	1	
10:37	49	Plastic Bucket	13.5	1	
10:40	51	Small Sourcepan	4.5	1	
10:57	50	Steel Bucket	13.5	1	
10:58	51	Steel Bucket	13.5	1	
11:00	52	Plastic Bucket	19.2	1	
11:00	50	Steel Bucket	13.5	1	
11:05	52	Steel Bucket	15.0	1	
11:15	50	Steel Bucket	16.2	1	
11:26	51	Steel Bucket	16.2	1	
11:35	50	Plastic Bucket	19.2	1	
11:46	50	Plastic Bucket	19.2	1	
11:52	47	Steel Bucket	13.5	1	
12:03	52	Plastic Bucket	19.2	1	
12:09	52	Steel Bucket	16.2	1	
12:19	50	Steel Bucket	16.2	1	
12:22	51	Small Plastic	6.0	1	
12:31	47	Steel Bucket	16.2	1	
12:39	49	Steel Bucket	16.2	1	
12:48	49	Steel Bucket	16.2	1	
12.57	49	Steel Bucket	16.2	1	
13:04	47	Steel Bucket	16.2	1	
13:12	51	Steel Bucket	16.2	1	
13:20	47	Steel Bucket	13.5	1	
13:28	47	Steel Bucket	13.5	1	
13:33	49	Steel Bucket	16.2	1	
13:43	49	Plastic Bucket	16.2	1	
13:47	24	Steel Bucket	13.5	1	
14:15	79	Small	3.0	1	
14:16	49	Steel Bucket	16.2	1	
14:32	51	Steel Bucket	13.5	1	
14:45	51	Steel Bucket	16.2	1	
16:04	51	Steel Bucket	16.2	1	
16:21	50	Plastic Bucket	16.2	1	
16:31	49	Plastic Bucket	16.2	1	
16:35	49	Plastic Bucket	16.2	1	
16:46	MR. POLLY	Small Plastic	5.4	1	
16:50	51	Small Plastic	5.4	1	
16:50	MR. BUI	Small Plastic	5.4	1	
16:56	43	Small Plastic	5.0	1	
16:56	43	Small Plastic	5.0	1	

TABLE A.2.6 VISUAL WATER CONSUMPTION MESUAREMENT (2)

Date : 12-3-90 Area : KINONDONI(KIOSK)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
16:56	43	Plastic Bucket	19.2	1	
16:59	37	Plastic Bucket	19.2	1	
17:00	12	Steel Bucket	16.2	1	
17:23	51	Steel Bucket	16.2	1	
18:04	49	Steel Bucket	16.2	1	
18:23	51	Sourcepan	13.5	1	
18:32	50	Small Sourcepan	4.5	1	
18:33	50	Small Sourcepan	4.5	1	
18:41	47	Steel Bucket	13.5	1	
18:50	43	Steel Bucket	16.2	1	
18:59	49	Small Sourcepan	3.0	1	
19:06	51	Steel Bucket	16.2	1	
19:19	49	Steel Bucket	16.2	1	
19:31	51	Small Plastic	6.0	1	
19:35	51	Steel Bucket	16.2	1	
19:45	47	Steel Bucket	16.2	1	
19:50	49	Small Bucket	6.0	1	
19:58	50	Steel Bucket	13.5	1	
20:03	43	Small Plastic	6.0	1	
20:06	51	Small Plastic	6.0	1	
Total			1,086.0	77.0	

TABLE A.2.7 VISUAL WATER CONSUMPTION MESUAREMENT (1)

Date : 13-3-90 Area : KINONDONI(KIOSK)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
6:29	49	Plastic Bucket	16.2	1	
6:45	51	Steel Bucket	13.5	1	
6:49	50	Steel Bucket	13.5	1	
7:18	51	Small Sourcepan	1.5	1	
7:20	51	Steel Bucket	16.2	1	
7:37	50	Plastic Bucket	19.2	1	
7:54	49	Plastic Bucket	19.2	1	
8:20	51	Steel Bucket	16.2	1	
8:30	51	Steel Bucket	13.5	1	
8:45	51	Plastic Bucket	19.2	1	
9:02	51	Small Sourcepan	3.0	1	
9:20	47	Plastic Bucket	19.2	1	
9:32	47	Plastic Bucket	19.2	1	
9:37	50	Plastic Bucket	19.2	1	
9:48	47	Steel Bucket	13.5	1	
9:57	47	Steel Bucket	13.5	1	
10:12	50	Small Sourcepan	6.5	1	
10:13	52	Steel Bucket	16.2	1	
10:23	52	Steel Bucket	16.2	1	
10:31	49	Steel Bucket	16.2	1	
10:35	51	Steel Bucket	16.2	1	
10:54	52	Plastic Bucket	19.2	1	
11:00	50	Plastic Bucket	19.2	1	
11:10	49	Plastic Bucket	19.2	1	
11:22	52	Plastic Bucket	19.2	1	
11:32	52	Steel Bucket	16.2	1	
11:41	51	Steel Bucket	16.2	1	
11:52	49	Plastic Bucket	19.2	1	
12:01	49	Steel Bucket	16.2	1	
12:11	51	Steel Bucket	16.2	1	
12:19	50	Steel Bucket	13.2	1	
12:28	49	Steel Bucket	16.2	1	
12:39	52	Plastic Bucket	19.2	1	
12:48	52	Steel Bucket	16.2	1	
13:00	52	Plastic Bucket	19.2	1	
13:04	52	Steel Bucket	13.5	1	Small Plastic
13:12	MR. BUI	Small Plastic	5.4	1	
13:14	51	Small Plastic	5.4	1	
13:18	50	Steel Bucket	16.2	1	
13:20	49	Steel Bucket	16.2	1	
14:06	51	Steel Bucket	16.2	1	
14:10	47	Steel Bucket	16.2	1	
15:33	51	Steel Bucket	16.2	1	
15:41	51	Steel Bucket	16.2	1	
15:48	50	Steel Bucket	16.2	1	
15:57	51	Steel Bucket	16.2	1	
16:02	51	Steel Bucket	13.5	1	Small Plastic
16:05	51	Steel Bucket	13.5	1	Small Plastic
16:20	37	Small Plastic	5.0	1	
16:20	37	Small Bucket	4.0	1	
16:30	50	Steel Bucket	16.2	1	
16:46	50	Steel Bucket	16.2	1	
17:12	24	Steel Bucket	16.2	1	
17:24	47	Steel Bucket	16.2	1	
17:33	50	Plastic Bucket	19.2	1	
17:40	50	Steel Bucket	16.2	1	
17:49	50	Steel Bucket	16.2	1	

TABLE A.2.7 VISUAL WATER CONSUMPTION MESUAREMENT (2)

Date : 13-3-90 Area : KINONDONI(KIOSK)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
17:58	47	Plastic Bucket	19.2	1	
18:05	47	Plastic Bucket	16.2	1	
18:11	51	Steel Bucket	16.2	1	
18:11	51	Steel Bucket	16.2	1	
18:21	50	Steel Bucket	16.2	1	
18:23	47	Steel Bucket	13.5	1	
18:45	47	Steel Bucket	16.2	1	
18:49	50	Steel Bucket	16.2	1	
18:57	50	Steel Bucket	16.2	1	
19:07	49	Small Sourcepan	5.0	1	
19:24	51	Small Plastic	5.4	1	
19:28	24	Steel Bucket	13.5	1	
19:30	51	Small Plastic	5.4	1	
19:35	67	Steel Bucket	16.2	1	
19:56	51	Steel Bucket	16.2	1	
19:57	195	Steel Bucket	16.2	1	
19:58	50	Steel Bucket	16.2	1	
Total			1,098.4	74.0	

TABLE A.2.8 VISUAL WATER CONSUMPTION MESUAREMENT (1)

Date : 14-3-90 Area : KINONDONI(KIOSK)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
6:37	51	Steel Bucket	16.2	1	
6:37	50	Steel Bucket	13.5	1	
7:00	50	Steel Bucket	16.2	1	
7:13	49	Steel Bucket	16.2	1	
7:22	51	Steel Bucket	16.2	1	
7:29	51	Small Sourcepan	4.0	1	
7:34	50	Steel Bucket	16.2	1	
7:45	47	Steel Bucket	16.2	1	
7:58	47	Steel Bucket	16.2	1	
8:06	51	Steel Bucket	16.2	1	
8:11	50	Plastic Bucket	19.2	1	
8:32	51	Plastic Bucket	19.2	1	
8:43	51	Steel Bucket	16.2	1	
8:51	51	Steel Bucket	16.2	1	
9:00	51	Steel Bucket	16.2	1	
9:11	51	Steel Bucket	16.2	1	
9:22	50	Small Bucket	16.2	1	
9:33	52	Plastic Bucket	16.2	1	
9:41	52	Steel Bucket	16.2	1	
9:50	52	Steel Bucket	16.2	1	
9:59	50	Steel Bucket	16.2	1	
10:08	51	Steel Bucket	16.2	1	
10:17	50	Steel Bucket	16.2	1	
10:26	49	Plastic Bucket	19.2	1	
10:36	49	Steel Bucket	16.2	1	
10:44	51	Steel Bucket	16.2	1	
10:55	52	Plastic Bucket	19.2	1	
11:11	52	Steel Bucket	16.2	1	
11:18	50	Plastic Bucket	19.2	1	
11:29	51	Steel Bucket	13.5	1	
11:38	50	Steel Bucket	16.2	1	
11:44	49	Steel Bucket	16.2	1	
11:53	51	Steel Bucket	16.2	1	
12:00	51	Steel Bucket	16.2	1	
12:08	49	Plastic Bucket	16.2	1	
12:16	50	Small Plastic	16.2	1	
12:25	49	Steel Bucket	16.2	1	
12:35	52	Plastic Bucket	19.2	1	
12:45	50	Steel Bucket	13.5	1	
12:48	51	Steel Bucket	16.2	1	
12.54	51	Steel Bucket	16.2	1	
13:04	49	Steel Bucket	16.2	1	
13:13	49	Steel Bucket	16.2	1	
13:38	49	Steel Bucket	16.2	1	
13:39	47	Steel Bucket	16.2	1	
14:55	49	Steel Bucket	16.2	1	
15:11	51	Steel Bucket	16.2	1	
15:26	51	Steel Bucket	16.2	1	
15:41	51	Steel Bucket	16.2	1	
16:25	50	Steel Bucket	16.2	1	
16:32	47	Steel Bucket	16.2	1	
16:40	47	Steel Bucket	16.2	1	
16:47	50	Plastic Bucket	19.2	1	
16:59	50	Plastic Bucket	16.2	1	
17:08	50	Plastic Bucket	19.2	1	
17:14	47	Steel Bucket	16.2	1	
17:21	51	Steel Bucket	16.2	1	

TABLE A.2.9 VISUAL WATER CONSUMPTION MESUAREMENT (2)

Date : 14-3-90 Area : KINONDONI(KIOSK)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
17:28	50	Plastic Bucket	16.2	1	
17:37	43	Plastic Bucket	16.2	1	
17:43	47	Steel Bucket	13.5	1	
17:51	50	Plastic Bucket	19.2	1	
17:58	50	Plastic Bucket	16.2	1	
18:04	50	Plastic Bucket	16.2	1	
18:10	51	Steel Bucket	16.2	1	
18:18	51	Steel Bucket	16.2	1	
18:26	49	Steel Bucket	16.2	1	
18:40	49	Steel Bucket	16.2	1	
18:41	50	Small Sourcepan	3.0	1	
18:42	50	Small Sourcepan	3.0	1	
18:47	50	Small Sourcepan	1.5	1	
18:55	43	Steel Bucket	16.2	1	
19:04	42	Small Plastic	3.0	1	
19:06	47	Steel Bucket	16.2	1	
19:13	47	Plastic Bucket	16.2	1	
19:23	51	Sourcepan	13.5	1	
19:29	50	Steel Bucket	13.5	1	
19:35	49	Steel Bucket	13.5	1	
19:42	47	Steel Bucket	13.5	1	
19:48	49	Steel Bucket	13.5	1	
19:50	51	Small Plastic	5.5	1	
19:57	50	Steel Bucket	13.5	1	
20:01	49	Steel Bucket	13.5	1	
20:02	51	Small Plastic	5.5	1	
20:09	51	Steel Bucket	13.5	1	
Total			1,267.5	84.0	

2.3 Kinondoni Model Area (Stand Pipe)

TABLE A.2.10 VISUAL WATER CONSUMPTION MEASUAREMENT (1)
KINONDONI(STAND PIPE)

Number	House Number or Family Name	Volume (litres/day) Date 12-03-90 (1)	Date 13-03-90 (2)	Date 14-03-90 (3)	Total (litres)	Remarks
1	ALLY YUSUFU	75.9	86.4	59.4	221.7	
2	ELIZILE	10.0			10.0	
3	HADIJA OMARI	21.6		43.2	64.8	
4	IDDI	16.2			16.2	
5	JONAS	43.2	86.4	59.4	189.0	
6	MARI MAKEJA		17.2		17.2	
7	MARIAM ABDU	16.2			16.2	
8	NGOMBE PASCAL	164.7	282.3	156.6	603.6	
9	37			15.8	15.8	
10	38			20.0	20.0	
11	41	35.1	16.2	48.6	99.9	
12	42	32.4		32.4	64.8	
13	43	129.3	141.4	205.0	475.7	
14	44	21.6			21.6	
15	66	16.2			16.2	
16	72			18.9	18.9	
17	74	16.2			16.2	
18	75	49.6	48.6	16.2	114.4	
19	76	43.2	126.9	86.4	256.5	
20	77	65.8	64.8	36.1	166.7	
21	79	54.0	56.7	89.1	199.8	
22	80			116.1	116.1	
23	82		94.5	186.3	280.8	
24	84	360.3	307.8	391.8	1,059.9	
25	85	399.2	35.1	37.8	472.1	
26	86	16.2	97.2	32.4	145.8	
27	87	399.6	278.1	367.2	1,044.9	
28	88	306.1	158.4	172.8	637.3	
29	89	137.0	267.3	267.3	671.6	
30	90	261.2		232.2	493.4	
31	91	237.6	245.7	291.6	774.9	
32	97	18.9			18.9	
33	98		72.5		72.5	
34	150		16.2		16.2	
35	154	16.2		16.2	32.4	
36	180	36.1	57.0		93.1	
37	190	18.9			18.9	
38	197	16.2			16.2	
39	208	21.6			21.6	
40	209		81.0	38.8	119.8	
41	210		64.8		64.8	
42	211		51.3	18.9	70.2	
43	212	247.7	320.6	334.8	903.1	
44	213	542.5	297.0	361.8	1,201.3	
45	214	44.2	54.0		98.2	
46	216	18.9			18.9	
47	218	43.2			43.2	
48	222	119.4	217.9	167.4	504.7	
49	223	199.4	141.4	116.1	456.9	
50	225	43.2	16.2	16.2	75.6	
51	226	16.2			16.2	
52	229			18.9	18.9	
53	237	5.0			5.0	
54	248	58.7			58.7	
55	280		54.0		54.0	
56	284	17.9			17.9	
57	286			18.9	18.9	

TABLE A.2.10 VISUAL WATER CONSUMPTION MEASUAREMENT (2)
KINONDONI(STAND PIPE)

Number	House Number or Family Name	Volume (litres/day) Date 12-03-90 (1)	Date 13-03-90 (2)	Date 14-03-90 (3)	Total (litres)	Remarks
58	287	232.2	293.6	316.9	842.7	
59	288	68.9	110.7	102.6	282.2	
60	289	278.1	224.1	241.3	743.5	
61	471	21.2	37.8		59.0	
62	701	113.4	48.6	67.5	229.5	
63	707	213.3	208.9	219.7	641.9	
Total		5,339.7	4,778.6	5,038.6	15,156.9	

TABLE A.2.11 VISUAL WATER CONSUMPTION MESUAREMENT (1)

Date : 12-3-90 Area : KINONDONI(SP)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
6:45	90	Steel Bucket	16.2	1	
6:46	84	Steel Bucket	16.2	1	
6:47	223	Steel Bucket	16.2	1	
6:50	IDDI .	Steel Bucket	16.2	1	
6:50	85	Plastic Bucket	21.6	1	
6:51	85	Steel Bucket	16.2	1	
6:53	85	Plastic Bucket	21.6	1	
6:53	223	Steel Bucket	16.2	1	
6:55	216	Plastic Bucket	18.9	1	
7:00	97	Steel Bucket	18.9	1	
7:01	223	Steel Bucket	18.9	1	
7:05	218	Plastic Bucket	21.6	1	
7:05	213	Plastic Bucket	21.6	1	
7:06	44	Plastic Bucket	21.6	1	
7:08	JONAS	Plastic Bucket	21.6	1	
7:12	214	Plastic Bucket	22.6	1	
7:20	43	Steel Bucket	18.9	1	
7:20	43	Steel Bucket	16.2	1	
7:21	85	Plastic Bucket	22.6	1	
7:25	85	Steel Bucket	16.2	1	
7:26	85	Steel Bucket	16.2	1	
7:26	85	Small Plastic	11.8	1	
7:30	212	Plastic Bucket	16.2	1	
7:30	212	Plastic Bucket	16.2	1	
7:35	84	Steel Bucket	18.9	1	
7:37	84	Steel Bucket	18.9	1	
7:39	208	Plastic Bucket	21.6	1	
7:41	87	Steel Bucket	18.9	1	
7:41	87	Plastic Bucket	21.6	1	
7:43	85	Steel Bucket	18.9	1	
7:45	84	Steel Bucket	18.9	1	
7:46	84	Steel Bucket	18.9	1	
7:48	87	Steel Bucket	18.9	1	
7:50	88	Steel Bucket	16.2	1	
7:52	154	Steel Bucket	16.2	1	
7:55	88	Plastic Bucket	18.9	1	
7:55	88	Plastic Bucket	18.9	1	
8:10	NGOMBE PASCAL	Steel Bucket	16.2	1	
8:15	86	Steel Bucket	16.2	1	
8:20	287	Plastic Bucket	18.9	1	
8:20	287	Plastic Bucket	18.9	1	
8:21	287	Plastic Bucket	21.6	1	
8:24	76	Steel Bucket	21.6	1	
8:30	213	Plastic Bucket	21.6	1	
8:30	213	Plastic Bucket	18.9	1	
8:30	213	Plastic Bucket	21.6	1	
8:30	287	Plastic Bucket	21.6	1	
8:31	214	Steel Bucket	21.6	1	
8:35	287	Steel Bucket	18.9	1	
8:35	287	Plastic Bucket	21.6	1	
8:37	471	Steel Bucket	16.2	1	
8:37	471	Small Plastic	5.0	1	
8:45	289	Plastic Bucket	16.2	1	
8:45	289	Plastic Bucket	18.9	1	
8:46	248	Plastic Bucket	21.6	1	
8:46	289	Plastic Bucket	18.9	1	
8:48	289	Plastic Bucket	18.9	1	

TABLE A.2.11 VISUAL WATER CONSUMPTION MESUAREMENT (2)

Date : 12-3-90 Area : KINONDONI(SP)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
8:50	87	Steel Bucket	16.2	1	
8:50	85	Steel Bucket	17.7	1	
8:55	248	Steel Bucket	18.2	1	
8:57	223	Steel Bucket	16.2	1	
8:59	89	Steel Bucket	11.8	1	
9:00	248	Steel Bucket	18.9	1	
9:05	84	Steel Bucket	16.2	1	
9:06	84	Plastic Bucket	21.6	1	
9:10	84	Small Plastic	5.4	1	
9:11	89	Steel Bucket	11.8	1	
9:12	84	Plastic Bucket	21.6	1	
9:13	84	Plastic Bucket	21.6	1	
9:15	287	Steel Bucket	18.9	1	
9:20	286	Steel Bucket	16.2	1	
9:20	75	Steel Bucket	16.2	1	
9:21	90	Small Sourcepan	6.4	1	
9:22	84	Plastic Bucket	21.6	1	
9:25	91	Steel Bucket	16.2	1	
9:26	75	Steel Bucket	17.2	1	
9:26	84	Steel Bucket	17.2	1	
9:28	91	Steel Bucket	18.9	1	
9:30	84	Small Plastic	5.0	1	
9:31	90	Small Sourcepan	6.4	1	
9:32	87	Twin	18.9	1	
9:36	84	Plastic Bucket	21.6	1	
9:37	84	Small Plastic	5.0	1	
9:38	91	Steel Bucket	18.9	1	
9:39	287	Small Sourcepan	5.4	1	
9:39	89	Sourcepan	13.5	1	
9:41	ALLY YUSUFU	Steel Bucket	19.9	1	
9:43	91	Steel Bucket	18.9	1	
9:45	90	Steel Bucket	16.2	1	
9:47	ALLY YUSUFU	Steel Bucket	19.9	1	
9:50	287	Plastic Bucket	10.8	1	
9:51	ALLY YUSUFU	Steel Bucket	19.9	1	
9:52	91	Steel Bucket	18.9	1	
9:53	85	Steel Bucket	18.2	1	
9:54	85	Steel Bucket	18.2	1	
9:56	212	Steel Bucket	16.2	1	
9:57	212	Steel Bucket	17.2	1	
9:58	213	Plastic Bucket	21.6	1	
9:59	213	Plastic Bucket	21.6	1	
10:01	212	Steel Bucket	17.2	1	
10:03	85	Steel Bucket	18.2	1	
10:04	212	Plastic Bucket	18.9	1	
10:07	218	Plastic Bucket	21.6	1	
10:10	ELIZLE	Small Plastic	5.0	1	
10:12	213	Plastic Bucket	21.6	1	
10:13	213	Plastic Bucket	21.6	1	
10:14	213	Plastic Bucket	21.6	1	
10:15	213	Plastic Bucket	21.6	1	
10:15	ELIZLE	Small Plastic	5.0	1	
10:16	85	Small Bucket	10.8	1	
10:18	213	Plastic Bucket	20.4	1	
10:20	85	Steel Bucket	16.2	1	
10:20	85	Steel Bucket	16.2	1	
10:23	222	Plastic Bucket	19.9	1	

TABLE A.2.11 VISUAL WATER CONSUMPTION MESUAREMENT (3)

Date : 12-3-90 Area : KINONDONI(SP)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
10:26	226	Steel Bucket	16.2	1	
10:27	707	Plastic Bucket	21.6	1	
10:30	222	Plastic Bucket	20.4	1	
10:32	222	Plastic Bucket	20.4	1	
10:35	223	Small Bottle	1.0	1	
10:46	88	Steel Bucket	10.8	1	
10:47	43	Plastic Bucket	21.6	1	
10:47	43	Steel Bucket	18.6	1	
10:48	212	Steel Bucket	16.2	1	
10:50	88	Steel Bucket	10.8	1	
10:55	284	Steel Bucket	17.9	1	
11:00	237	Small Plastic	5.0	1	
11:14	85	Steel Bucket	16.2	1	
11:27	213	Small Drum	18.9	1	
11:27	289	Plastic Bucket	18.9	1	
11:30	NGOMBE PASCAL	Steel Bucket	18.9	1	
11:31	213	Steel Bucket	18.9	1	
11:38	213	Small Drum	18.9	1	
11:45	87	Tin	18.9	1	
11:55	287	Steel Bucket	18.9	1	
12:05	213	Jwtz Drum	21.6	1	
12:10	223	Small Sourcepan	6.4	1	
12:15	87	Big Bottle	10.8	1	
12:15	87	Tin	18.9	1	
12:16	707	Sourcepan	16.2	1	
12:18	707	Steel Bucket	16.2	1	
12:20	707	Steel Bucket	16.2	1	
12:25	707	Steel Bucket	16.2	1	
12:29	87	Steel Bucket	18.9	1	
12:30	701	Steel Bucket	16.2	1	
12:30	701	Steel Bucket	16.2	1	
12:40	79	Steel Bucket	18.9	1	
12:45	79	Steel Bucket	18.9	1	
12:45	213	Small Sourcepan	3.7	1	
12:45	289	Steel Bucket	18.9	1	
12:50	43	Steel Bucket	18.9	1	
12:55	222	Steel Bucket	16.2	1	
13:05	212	Steel Bucket	18.9	1	
13:15	77	Steel Bucket	16.2	1	
3:16	701	Steel Bucket	16.2	1	
13:25	91	Steel Bucket	16.2	1	
13:30	91	Steel Bucket	16.2	1	
13:32	213	Steel Bucket	18.9	1	
13:35	213	Steel Bucket	16.2	1	
13:35	213	Steel Bucket	16.2	1	
13:44	90	Plastic Bucket	21.6	1	
13:56	707	Sourcepan	16.2	1	
13:58	707	Steel Bucket	16.2	1	
14:14	212	Steel Bucket	16.2	1	
14:23	87	Big Bottle	10.8	1	
14:24	88	Steel Bucket	10.8	1	
14:30	707	Steel Bucket	16.2	1	
14:31	NGOMBE PASCAL	Steel Bucket	16.2	1	
14:43	289	Steel Bucket	18.9	1	
14:47	88	Steel Bucket	17.2	1	
14.49	89	Steel Bucket	16.2	1	
14:51	NGOMBE PASCAL	Steel Bucket	16.2	1	

TABLE A.2.11 VISUAL WATER CONSUMPTION MESUAREMENT (4)

Date : 12-3-90 Area : KINONDONI(SP)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
14:53	ALLY YUSUFU	Steel Bucket	16.2	1	
14:54	88	Steel Bucket	10.8	1	
14:58	91	Steel Bucket	16.2	1	
15:00	213	Plastic Bucket	18.9	1	
15:04	89	Sourcepan	13.5	1	
15:06	213	Plastic Bucket	18.9	1	
15:08	89	Sourcepan	13.5	1	
15:10	289	Plastic Bucket	18.9	1	
15:13	288	Steel Bucket	16.2	1	
15:14	289	Plastic Bucket	18.9	1	
15:14	225	Plastic Bucket	21.6	1	
15:15	288	Plastic Bucket	21.6	1	
15:15	89	Sourcepan	13.5	1	
15:16	225	Plastic Bucket	21.6	1	
15:18	90	Steel Bucket	16.2	1	
15:19	288	Sourcepan	8.1	1	
15:20	288	Plastic Bucket	3.4	1	
15:21	90	Steel Bucket	16.2	1	
15:24	288	Sourcepan	8.1	1	
15:24	41	Sourcepan	16.2	1	
15:25	289	Steel Bucket	16.2	1	
15:26	89	Sourcepan	13.5	1	
15:28	90	Steel Bucket	16.2	1	
15:29	288	Sourcepan	8.1	1	
15:29	288	Small Plastic	3.4	1	
15:31	90	Steel Bucket	16.2	1	
15:31	87	Plastic Bucket	18.9	1	
15:34	84	Steel Bucket	16.2	1	
15:35	79	Steel Bucket	16.2	1	
15:35	90	Steel Bucket	16.2	1	
15:40	90	Steel Bucket	16.2	1	
15:44	77	Steel Bucket	16.2	1	
15:45	87	Steel Bucket	16.2	1	
15:45	87	Steel Bucket	21.6	1	
15:45	87	Steel Bucket	16.2	1	
15:47	287	Steel Bucket	18.9	1	
15:50	87	Plastic Bucket	21.6	1	
15:50	90	Steel Bucket	16.2	1	
15:50	87	Plastic Bucket	21.6	1	
15:55	43	Plastic Bucket	18.9	1	
15:55	90	Steel Bucket	16.2	1	
15:57	701	Steel Bucket	16.2	1	
15:57	91	Steel Bucket	16.2	1	
16:00	90	Steel Bucket	16.2	1	
16:00	223	Steel Bucket	16.2	1	
16:04	90	Steel Bucket	16.2	1	
16:05	85	Small Bucket	8.0	1	
16:08	701	Steel Bucket	16.2	1	
16:08	91	Steel Bucket	16.2	1	
16:08	90	Steel Bucket	16.2	1	
16:10	87	Plastic Bucket	21.6	1	
16.12	213	Plastic Bucket	21.6	1	
16.12	213	Plastic Bucket	21.6	1	
16.12	90	Steel Bucket	16.2	1	
16:14	212	Steel Bucket	18.9	1	
16:15	87	Plastic Bucket	21.6	1	
16:18	88	Steel Bucket	10.8	1	

TABLE A.2.11 VISUAL WATER CONSUMPTION MESUAREMENT (5)

Date : 12-3-90 Area : KINONDONI(SP)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
16:20	707	Steel Bucket	18.9	1	
16:25	88	Steel Bucket	10.8	1	
16:28	212	Plastic Bucket	18.9	1	
16:33	88	Sourcepan	8.1	1	
16:35	213	Steel Bucket	16.2	1	
16:37	75	Steel Bucket	16.2	1	
16:37	85	Steel Bucket	16.2	1	
16:50	NGOMBE PASCAL	Steel Bucket	16.2	1	
16:50	42	Steel Bucket	16.2	1	
16:50	42	Steel Bucket	16.2	1	
16:52	707	Sourcepan	16.2	1	
16:53	212	Plastic Bucket	18.9	1	
16:55	212	Steel Bucket	18.9	1	
17:03	88	Plastic Bucket	21.6	1	
17:05	88	Plastic Bucket	21.6	1	
17:08	77	Steel Bucket	16.2	1	
17:10	43	Steel Bucket	16.2	1	
17:15	223	Small Plastic	2.7	1	
17:15	88	Plastic Bucket	21.6	1	
17:15	88	Plastic Bucket	21.6	1	
17:15	707	Plastic Bucket	21.6	1	
17:20	289	Plastic Bucket	18.9	1	
17:21	289	Plastic Bucket	18.9	1	
17:23	289	Plastic Bucket	18.9	1	
17:24	88	Plastic Bucket	21.6	1	
17:28	88	Plastic Bucket	21.6	1	
17:31	88	Steel Bucket	10.8	1	
17:34	84	Steel Bucket	18.9	1	
17:40	77	Steel Bucket	17.2	1	
17:45	85	Plastic Bucket	21.6	1	
17:45	85	Steel Bucket	17.2	1	
17:47	JONAS	Plastic Bucket	21.6	1	
17:50	88	Steel Bucket	10.8	1	
17:50	212	Plastic Bucket	18.9	1	
17:50	222	Plastic Bucket	20.9	1	
17:55	287	Steel Bucket	18.9	1	
17:56	88	Steel Bucket	10.8	1	
18:10	41	Steel Bucket	18.9	1	
18:14	HADIJA OMARI	Plastic Bucket	21.6	1	
18:17	74	Steel Bucket	16.2	1	
18:20	84	Steel Bucket	16.2	1	
18:24	85	Plastic Bucket	21.6	1	
18:25	NGOMBE PASCAL	Steel Bucket	16.2	1	
18:28	85	Plastic Bucket	21.6	1	
18:30	222	Plastic Bucket	21.6	1	
18:33	91	Steel Bucket	16.2	1	
18:35	707	Plastic Bucket	21.6	1	
18:38	91	Steel Bucket	16.2	1	
18:38	213	Small Drum	18.9	1	
18:40	87	Steel Bucket	18.9	1	
18:40	701	Steel Bucket	16.2	1	
18:40	91	Steel Bucket	16.2	1	
18:44	213	Plastic Bucket	21.6	1	
18:45	87	Tin	18.9	1	
18:45	89	Steel Bucket	18.9	1	
18:47	87	Tin	18.9	1	
18:50	87	Big Bottle	10.8	1	

TABLE A.2.11 VISUAL WATER CONSUMPTION MESUAREMENT (6)

Date : 12-3-90 Area : KINONDONI(SP)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
18:52	223	Sourcepan	8.1	1	
18:53	213	Plastic Bucket	21.6	1	
18:55	NGOMBE PASCAL	Steel Bucket	16.2	1	
18:55	89	Steel Bucket	10.8	1	
18:56	91	Steel Bucket	16.2	1	
18:56	85	Steel Bucket	16.2	1	
18:58	NGOMBE PASCAL	Steel Bucket	16.2	1	
18:59	84	Plastic Bucket	21.6	1	
19:00	84	Plastic Bucket	21.6	1	
19:00	84	Steel Bucket	17.2	1	
19:01	197	Steel Bucket	16.2	1	
19:04	180	Sourcepan	16.2	1	
19.05	180	Steel Bucket	16.2	1	
19:06	180	Small Bucket	3.7	1	
19:07	190	Steel Bucket	18.9	1	
19:07	NGOMBE PASCAL	Steel Bucket	16.2	1	
19:10	287	Steel Bucket	18.9	1	
19:10	NGOMBE PASCAL	Steel Bucket	16.2	1	
19:11	76	Plastic Bucket	21.6	1	
19:13	66	Steel Bucket	16.2	1	
19:16	213	Steel Bucket	16.2	1	
19:40	701	Steel Bucket	16.2	1	
19:43	289	Steel Bucket	18.9	1	
19:46	289	Steel Bucket	18.9	1	
19:50	223	Steel Bucket	16.2	1	
19:51	223	Small Bucket	3.7	1	
19:52	223	Small Bucket	3.7	1	
19:55	223	Steel Bucket	16.2	1	
19:56	223	Steel Bucket	16.2	1	
19:56	223	Small Bucket	3.7	1	
19:58	223	Steel Bucket	16.2	1	
20:00	223	Steel Bucket	16.2	1	
20:00	223	Small Sourcepan	5.4	1	
Total			5,339.7	318.0	

TABLE A.2.12 VISUAL WATER CONSUMPTION MESUAREMENT (1)

Date : 13-3-90 Area : KINONDONI(SP)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
6:20	214	Plastic Bucket	16.2	1	
6:22	91	Steel Bucket	16.2	1	
6:23	223	Steel Bucket	16.2	1	
6:24	287	Steel Bucket	16.2	1	
6:25	212	Plastic Bucket	21.6	1	
6:26	212	Plastic Bucket	18.9	1	
6:30	91	Steel Bucket	16.2	1	
6:31	225	Plastic Bucket	16.2	1	
6:45	223	Steel Bucket	16.2	1	
6:47	NGOMBE PASCAL	Steel Bucket	16.2	1	
6:50	88	Steel Bucket	16.2	1	
6:58	88	Steel Bucket	1.8	1	
7:00	213	Steel Bucket	16.2	1	
7:08	NGOMBE PASCAL	Steel Bucket	16.2	1	
7:10	287	Plastic Bucket	21.6	1	
7:10	287	Small Bucket	2.7	1	
7:14	43	Plastic Bucket	21.6	1	
7:14	223	Steel Bucket	16.2	1	
7:15	43	Small Plastic	5.4	1	
7:16	287	Plastic Bucket	21.6	1	
7:18	707	Steel Bucket	16.2	1	
7:20	707	Plastic Bucket	21.6	1	
7:20	707	Steel Bucket	17.2	1	
7:25	JONAS	Plastic Bucket	21.6	1	
7:28	287	Steel Bucket	17.2	1	
7:28	287	Plastic Bucket	18.9	1	
7:29	707	Steel Bucket	10.8	1	
7:30	JONAS	Plastic Bucket	21.6	1	
7:31	89	Sourcepan	13.5	1	
7:31	222	Plastic Bucket	21.6	1	
7:33	222	Small Plastic	5.0	1	
7:35	75	Steel Bucket	16.2	1	
7:36	289	Plastic Bucket	18.9	1	
7:37	289	Plastic Bucket	18.9	1	
7:40	98	Steel Bucket	16.2	1	
7:42	289	Plastic Bucket	18.9	1	
7:43	89	Sourcepan	13.5	1	
7:45	289	Plastic Bucket	18.9	1	
7:45	289	Plastic Bucket	18.9	1	
7:45	222	Plastic Bucket	21.6	1	
7:50	82	Plastic Bucket	21.6	1	
7:50	82	Plastic Bucket	18.9	1	
7:53	222	Small Plastic	5.0	1	
7:56	212	Plastic Bucket	18.9	1	
7:56	222	Plastic Bucket	13.5	1	
7:58	212	Steel Bucket	16.2	1	
7:58	212	Plastic Bucket	18.9	1	
8:00	287	Plastic Bucket	18.9	1	
8:01	89	Sourcepan	13.5	1	
8:01	76	Plastic Bucket	21.6	1	
8:02	89	Steel Bucket	16.2	1	
8:03	707	Steel Bucket	18.9	1	
8:03	707	Steel Bucket	18.9	1	
8:05	43	Steel Bucket	16.2	1	
8:05	89	Sourcepan	13.5	1	
8:07	76	Plastic Bucket	21.6	1	
8:09	209	Plastic Bucket	21.6	1	

TABLE A.2.12 VISUAL WATER CONSUMPTION MESUAREMENT (2)

Date : 13-3-90 Area : KINONDONI(SP)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
8:09	209	Plastic Bucket	21.6	1	
8:10	212	Steel Bucket	18.9	1	
8:12	76	Plastic Bucket	21.6	1	
8:13	223	Steel Bucket	8.1	1	
8:28	89	Sourcepan	13.5	1	
8:30	84	Steel Bucket	16.2	1	
8:30	84	Steel Bucket	16.2	1	
8:31	471	Plastic Bucket	21.6	1	
8:32	471	Plastic Bucket	16.2	1	
8:33	NGOMBE PASCAL	Plastic Bucket	18.9	1	
8:35	98	Small Plastic	5.0	1	
8:38	NGOMBE PASCAL	Steel Bucket	16.2	1	
8:42	223	Steel Bucket	16.2	1	
8:44	NGOMBE PASCAL	Steel Bucket	16.2	1	
8:50	89	Steel Bucket	10.8	1	
8:52	89	Steel Bucket	16.2	1	
8:53	89	Steel Bucket	18.9	1	
8:53	89	Steel Bucket	16.2	1	
8:54	85	Steel Bucket	16.2	1	
8:56	77	Steel Bucket	16.2	1	
8:57	89	Steel Bucket	16.2	1	
9:00	150	Steel Bucket	16.2	1	
9:02	91	Steel Bucket	16.2	1	
9:02	43	Steel Bucket	16.2	1	
9:06	77	Steel Bucket	16.2	1	
9:07	91	Steel Bucket	16.2	1	
9:09	77	Steel Bucket	16.2	1	
9:20	91	Steel Bucket	16.2	1	
9:20	180	Steel Bucket	16.2	1	
9:22	180	Steel Bucket	16.2	1	
9:25	180	Steel Bucket	16.2	1	
9:28	84	Plastic Bucket	21.6	1	
9:30	84	Plastic Bucket	21.6	1	
9:35	84	Steel Bucket	16.2	1	
9:40	84	Steel Bucket	16.2	1	
9:55	89	Steel Bucket	16.2	1	
9:59	223	Steel Bucket	16.2	1	
10:00	88	Steel Bucket	10.8	1	
10:03	209	Plastic Bucket	21.6	1	
10:04	209	Steel Bucket	16.2	1	
10:06	86	Steel Bucket	18.9	1	
10:07	86	Plastic Bucket	21.6	1	
10:10	75	Steel Bucket	16.2	1	
10:13	211	Steel Bucket	16.2	1	
10:14	75	Plastic Bucket	16.2	1	
10:15	91	Steel Bucket	16.2	1	
10:18	180	Small Plastic	4.2	1	
10:20	223	Small Sourcepan	1.0	1	
10:21	211	Steel Bucket	16.2	1	
10:23	77	Steel Bucket	16.2	1	
10:25	223	Sourcepan	8.1	1	
10:27	211	Steel Bucket	18.9	1	
10:28	223	Sourcepan	8.1	1	
10:30	88	Steel Bucket	16.2	1	
10:30	89	Steel Bucket	16.2	1	
10:31	89	Steel Bucket	10.8	1	
10:32	88	Steel Bucket	16.2	1	

TABLE A.2.12 VISUAL WATER CONSUMPTION MESUAREMENT (3)

Date : 13-3-90 Area : KINONDONI(SP)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
10:34	223	Steel Bucket	10.8	1	
10:34	89	Steel Bucket	18.9	1	
10:37	88	Steel Bucket	16.2	1	
10:42	287	Steel Bucket	18.9	1	
10:52	87	Tin	18.9	1	
10:53	87	Tin	18.9	1	
10:53	87	Big Bottle	10.8	1	
11:01	85	Steel Bucket	17.2	1	
11:03	223	Steel Bucket	8.1	1	
11:05	289	Plastic Bucket	16.2	1	
11:07	222	Plastic Bucket	21.6	1	
11:08	87	Steel Bucket	16.2	1	
11:10	87	Steel Bucket	18.9	1	
11:10	701	Steel Bucket	16.2	1	
11:13	87	Steel Bucket	18.9	1	
11:14	NGOMBE PASCAL	Steel Bucket	16.2	1	
11:15	91	Steel Bucket	16.2	1	
11:17	43	Plastic Bucket	18.9	1	
11:17	43	Steel Bucket	16.2	1	
11:18	43	Steel Bucket	18.9	1	
11:18	287	Steel Bucket	17.2	1	
11:19	87	Steel Bucket	18.9	1	
11:19	213	Steel Bucket	16.2	1	
11:20	91	Steel Bucket	16.2	1	
11:30	213	Plastic Bucket	21.6	1	
11:30	213	Plastic Bucket	21.6	1	
11:31	213	Plastic Bucket	21.6	1	
11:32	707	Steel Bucket	16.2	1	
11:34	87	Steel Bucket	16.2	1	
11:35	87	Steel Bucket	16.2	1	
11:36	222	Plastic Bucket	21.6	1	
11:36	86	Plastic Bucket	21.6	1	
11:38	213	Plastic Bucket	21.6	1	
11:38	87	Steel Bucket	16.2	1	
11:39	87	Plastic Bucket	21.6	1	
11:40	213	Sourcepan	16.2	1	
11:41	NGOMBE PASCAL	Sourcepan	16.2	1	
11:43	213	Plastic Bucket	16.2	1	
11:44	210	Steel Bucket	16.2	1	
11:46	210	Steel Bucket	16.2	1	
11:50	213	Plastic Bucket	21.6	1	
11:51	213	Plastic Bucket	21.6	1	
12:05	210	Steel Bucket	16.2	1	
12:05	210	Steel Bucket	16.2	1	
12:06	NGOMBE PASCAL	Plastic Bucket	18.9	1	
12:08	79	Steel Bucket	18.9	1	
12:08	84	Plastic Bucket	21.6	1	
12:10	84	Steel Bucket	16.2	1	
12:11	NGOMBE PASCAL	Steel Bucket	16.2	1	
12:12	79	Steel Bucket	16.2	1	
12:15	180	Small Plastic	4.2	1	
12:17	280	Plastic Bucket	21.6	1	
12:17	213	Plastic Bucket	21.6	1	
12:18	NGOMBE PASCAL	Small Plastic	4.2	1	
12:19	212	Plastic Bucket	18.9	1	
12:20	701	Plastic Bucket	16.2	1	
12:26	222	Steel Bucket	16.2	1	

TABLE A.2.12 VISUAL WATER CONSUMPTION MESUAREMENT (4)

Date : 13-3-90 Area : KINONDONI(SP)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
12:26	222	Steel Bucket	16.2	1	
12:28	212	Steel Bucket	17.2	1	
12:29	212	Steel Bucket	17.2	1	
12:30	89	Steel Bucket	10.8	1	
12:31	213	Small Drum	18.9	1	
12:32	212	Steel Bucket	18.9	1	
12:35	212	Steel Bucket	18.9	1	
12:44	212	Plastic Bucket	21.6	1	
12:45	280	Steel Bucket	16.2	1	
12:45	98	Steel Bucket	18.9	1	
12:46	212	Plastic Bucket	21.6	1	
12:55	84	Steel Bucket	16.2	1	
13:00	84	Steel Bucket	16.2	1	
13:02	NGOMBE PASCAL	Steel Bucket	16.2	1	
13:08	84	Steel Bucket	16.2	1	
13:08	84	Steel Bucket	16.2	1	
15:15	84	Steel Bucket	16.2	1	
15:20	223	Steel Bucket	16.2	1	
15:20	NGOMBE PASCAL	Steel Bucket	16.2	1	
15:25	NGOMBE PASCAL	Steel Bucket	16.2	1	
15:30	41	Steel Bucket	16.2	1	
15:35	280	Steel Bucket	16.2	1	
15:40	ALLY YUSUFU	Steel Bucket	21.6	1	
15:45	ALLY YUSUFU	Steel Bucket	21.6	1	
15:47	87	Big Bottle	10.8	1	
15:50	ALLY YUSUFU	Steel Bucket	21.6	1	
15:55	91	Steel Bucket	21.6	1	
15:55	NGOMBE PASCAL	Sourcepan	10.8	1	
15:58	ALLY YUSUFU	Steel Bucket	21.6	1	
15:59	79	Steel Bucket	21.6	1	
16:00	91	Steel Bucket	21.6	1	
16:10	86	Steel Bucket	16.2	1	
16:14	87	Steel Bucket	18.9	1	
16:15	NGOMBE PASCAL	Steel Bucket	16.2	1	
16:16	287	Plastic Bucket	21.6	1	
16:17	222	Steel Bucket	18.9	1	
16:18	222	Plastic Bucket	18.9	1	
16:19	87	Steel Bucket	18.9	1	
16:20	91	Steel Bucket	18.9	1	
16:20	287	Plastic Bucket	21.6	1	
16:20	88	Steel Bucket	16.2	1	
16:21	287	Plastic Bucket	21.6	1	
16:22	87	Tin	18.9	1	
16:30	87	Tin	18.9	1	
16:34	707	Steel Bucket	16.2	1	
16:35	707	Steel Bucket	16.2	1	
16:40	JONAS	Plastic Bucket	21.6	1	
16:45	88	Steel Bucket	10.8	1	
16:55	86	Steel Bucket	18.9	1	
17:00	76	Plastic Bucket	21.6	1	
17:05	88	Steel Bucket	10.8	1	
17:05	76	Plastic Bucket	21.6	1	
17:10	76	Plastic Bucket	18.9	1	
17:20	701	Steel Bucket	16.2	1	
17:25	222	Steel Bucket	16.2	1	
17:34	213	Steel Bucket	18.9	1	
17:35	289	Plastic Bucket	18.9	1	

TABLE A.2.12 VISUAL WATER CONSUMPTION MESUAREMENT (5)

Date : 13-3-90 Area : KINONDONI(SP)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
17:36	43	Plastic Bucket	21.6	1	
17:37	43	Small Plastic	6.4	1	
17:44	91	Steel Bucket	16.2	1	
17:44	213	Steel Drum	21.6	1	
17:46	84	Plastic Bucket	21.6	1	
17:52	91	Steel Bucket	18.9	1	
17:54	84	Plastic Bucket	21.6	1	
17:55	707	Steel Bucket	18.9	1	
17:59	84	Plastic Bucket	21.6	1	
18:00	212	Steel Bucket	18.9	1	
18:01	707	Steel Bucket	18.9	1	
18:05	289	Plastic Bucket	18.9	1	
18:07	289	Plastic Bucket	18.9	1	
18:08	212	Steel Bucket	18.9	1	
18:10	JONAS	Plastic Bucket	21.6	1	
18:11	288	Steel Bucket	18.9	1	
18:12	707	Steel Bucket	18.9	1	
18:14	289	Plastic Bucket	18.9	1	
18:15	289	Plastic Bucket	18.9	1	
18:16	91	Steel Bucket	18.9	1	
18:17	288	Plastic Bucket	21.6	1	
18:18	288	Plastic Bucket	18.9	1	
18:19	289	Plastic Bucket	18.9	1	
18:19	85	Steel Bucket	18.9	1	
18:20	NGOMBE PASCAL	Steel Bucket	18.9	1	
18:20	288	Plastic Bucket	21.6	1	
18:21	84	Steel Bucket	16.2	1	
81:21	82	Plastic Bucket	21.6	1	
18:24	288	Plastic Bucket	21.6	1	
18:25	288	Small Plastic	2.7	1	
18:25	288	Small Plastic	2.7	1	
18:25	288	Small Plastic	2.7	1	
18:26	82	Steel Bucket	16.2	1	
18:28	98	Steel Bucket	16.2	1	
18:29	82	Steel Bucket	16.2	1	
18:30	NGOMBE PASCAL	Steel Bucket	16.2	1	
18:30	98	Steel Bucket	16.2	1	
18:35	88	Steel Bucket	10.8	1	
18:36	89	Steel Bucket	10.8	1	
18:40	88	Steel Bucket	10.8	1	
18:40	89	Steel Bucket	10.8	1	
18:45	212	Steel Bucket	16.2	1	
18:50	222	Plastic Bucket	21.6	1	
18:50	89	Steel Bucket	10.8	1	
18:55	212	Steel Bucket	18.9	1	
18:58	287	Plastic Bucket	21.6	1	
19:00	NGOMBE PASCAL	Steel Bucket	16.2	1	
19:00	287	Steel Bucket	16.2	1	
19:05	287	Steel Bucket	21.6	1	
19:05	214	Plastic Bucket	21.6	1	
19:07	214	Steel Bucket	16.2	1	
19:08	213	Steel Bucket	21.6	1	
19:10	88	Steel Bucket	10.8	1	
19:10	88	Steel Bucket	10.8	1	
19:15	287	Steel Bucket	16.2	1	
Total			4,778.6	283.0	

TABLE A.2.13 VISUAL WATER CONSUMPTION MESUAREMENT (1)

Date : 14-3-90 Area : KINONDONI(SP)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
6:30	287	Steel Bucket	16.2	1	
6:32	225	Steel Bucket	16.2	1	
6:33	91	Steel Bucket	16.2	1	
6:34	91	Steel Bucket	16.2	1	
6:35	223	Steel Bucket	16.2	1	
6:36	75	Steel Bucket	16.2	1	
6:38	91	Steel Bucket	16.2	1	
6:40	80	Steel Bucket	18.9	1	
6:42	80	Small Plastic	5.4	1	
6:44	JONAS	Steel Bucket	18.9	1	
6:45	223	Steel Bucket	16.2	1	
6:45	80	Steel Bucket	18.9	1	
6:46	80	Small Plastic	5.4	1	
6:48	80	Steel Bucket	18.9	1	
6:49	80	Small Plastic	5.4	1	
6:50	223	Steel Bucket	16.2	1	
6:51	707	Steel Bucket	16.2	1	
6:52	707	Steel Bucket	16.2	1	
6:54	287	Plastic Bucket	21.6	1	
6:58	80	Steel Bucket	18.9	1	
7:00	80	Small Plastic	5.4	1	
7:02	213	Steel Bucket	16.2	1	
7:03	43	Plastic Bucket	21.6	1	
7:10	154	Steel Bucket	16.2	1	
7:12	80	Plastic Bucket	18.9	1	
7:15	287	Plastic Bucket	21.6	1	
7:16	212	Plastic Bucket	18.9	1	
7:18	88	Steel Bucket	16.2	1	
7:20	212	Steel Bucket	18.9	1	
7:25	212	Steel Bucket	18.9	1	
7:26	212	Plastic Bucket	21.6	1	
7:30	84	Steel Bucket	16.2	1	
7:35	223	Steel Bucket	16.2	1	
7:36	43	Plastic Bucket	21.6	1	
7:40	43	Steel Bucket	16.2	1	
7:47	43	Steel Bucket	18.9	1	
7:48	82	Steel Bucket	18.9	1	
7:50	89	Steel Bucket	18.9	1	
7:53	89	Steel Bucket	16.2	1	
7:54	89	Steel Bucket	10.8	1	
7:55	89	Steel Bucket	16.2	1	
8:00	222	Plastic Bucket	21.6	1	
8:10	213	Steel Bucket	18.9	1	
8:15	JONAS	Steel Bucket	18.9	1	
8:18	84	Plastic Bucket	21.6	1	
8:20	84	Plastic Bucket	21.6	1	
8:25	NGOMBE PASCAL	Steel Bucket	16.2	1	
8:26	213	Plastic Bucket	21.6	1	
8:30	213	Plastic Bucket	21.6	1	
8:37	213	Plastic Bucket	21.6	1	
8:45	212	Plastic Bucket	21.6	1	
8:50	223	Steel Bucket	16.2	1	
8:50	82	Plastic Bucket	21.6	1	
8:55	91	Steel Bucket	16.2	1	
8:55	213	Plastic Bucket	21.6	1	
8:56	212	Steel Bucket	16.2	1	
8:57	213	Sourcepan	16.2	1	

TABLE A.2.13 VISUAL WATER CONSUMPTION MESUAREMENT (2)

Date : 14-3-90 Area : KINONDONI(SP)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
8:59	89	Sourcepan	13.5	1	
9:30	91	Steel Bucket	16.2	1	
9:32	212	Plastic Bucket	18.9	1	
9:34	76	Plastic Bucket	21.6	1	
9:35	82	Plastic Bucket	21.6	1	
9:35	91	Steel Bucket	16.2	1	
9:36	88	Steel Bucket	10.8	1	
9:38	89	Sourcepan	13.5	1	
9:40	76	Plastic Bucket	21.6	1	
9:42	287	Plastic Bucket	21.6	1	
9:43	287	Plastic Bucket	21.6	1	
9:45	91	Steel Bucket	16.2	1	
9:45	89	Sourcepan	13.5	1	
9:46	ALLY YUSUFU	Steel Bucket	18.9	1	
9:54	289	Plastic Bucket	18.9	1	
9:55	289	Plastic Bucket	18.9	1	
10:00	212	Steel Bucket	18.9	1	
10:02	212	Steel Bucket	16.2	1	
10:02	289	Plastic Bucket	18.9	1	
10:03	37	Steel Bucket	10.8	1	
10:03	37	Small Bucket	5.0	1	
10:04	289	Plastic Bucket	18.9	1	
10:04	89	Steel Bucket	16.2	1	
10:06	84	Plastic Bucket	18.9	1	
10:06	84	Plastic Bucket	21.6	1	
10:07	87	Steel Bucket	16.2	1	
10:07	84	Plastic Bucket	21.6	1	
10:13	84	Plastic Bucket	18.9	1	
10:14	707	Small Plastic	10.8	1	
10:15	87	Tin	18.9	1	
10:15	87	Tin	18.9	1	
10:16	707	Plastic Bucket	21.6	1	
10:20	87	Steel Bucket	18.9	1	
10:20	289	Plastic Bucket	18.9	1	
10:21	87	Plastic Bucket	21.6	1	
10:23	289	Plastic Bucket	18.9	1	
10:25	87	Steel Bucket	18.9	1	
10:27	82	Steel Bucket	18.9	1	
10:28	82	Steel Bucket	18.9	1	
10:29	289	Plastic Bucket	18.9	1	
10:29	79	Sourcepan	16.2	1	
10:30	707	Small Plastic	11.8	1	
10:32	82	Steel Bucket	18.9	1	
10:35	NGOMBE PASCAL	Steel Bucket	16.2	1	
10:39	82	Steel Bucket	18.9	1	
10:44	287	Steel Bucket	17.2	1	
10:44	88	Steel Bucket	10.8	1	
10:46	287	Steel Bucket	18.9	1	
10:46	287	Steel Bucket	18.9	1	
10:53	89	Steel Bucket	18.9	1	
11:13	89	Steel Bucket	10.8	1	
11:15	212	Steel Bucket	18.9	1	
11:17	223	Steel Bucket	16.2	1	
11:30	43	Steel Bucket	17.2	1	
11:30	43	Steel Bucket	17.7	1	
11:46	79	Steel Bucket	16.2	1	
11:50	NGOMBE PASCAL	Steel Bucket	16.2	1	

TABLE A.2.13 VISUAL WATER CONSUMPTION MESUAREMENT (3)

Date : 14-3-90 Area : KINONDONI(SP)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
11:55	79	Steel Bucket	18.9	1	
11:57	NGOMBE PASCAL	Small Plastic	5.4	1	
12:00	86	Steel Bucket	16.2	1	
12:10	701	Steel Bucket	16.2	1	
12:12	223	Small Plastic	5.4	1	
12:15	87	Plastic Bucket	21.6	1	
12:16	ALLY YUSUFU	Plastic Bucket	18.9	1	
12:16	42	Steel Bucket	16.2	1	
12:21	42	Steel Bucket	16.2	1	
12:24	87	Tin	18.9	1	
12:25	707	Steel Bucket	16.2	1	
12:25	707	Steel Bucket	18.9	1	
12:32	NGOMBE PASCAL	Steel Bucket	16.2	1	
12:39	213	Plastic Bucket	21.6	1	
12:53	209	Plastic Bucket	21.6	1	
12:53	209	Steel Bucket	17.2	1	
12:54	84	Steel Bucket	17.2	1	
12:54	84	Steel Bucket	17.2	1	
12:55	84	Plastic Bucket	21.6	1	
12:56	84	Plastic Bucket	21.6	1	
13:00	89	Steel Bucket	18.9	1	
13:01	84	Small Bucket	5.4	1	
13:02	84	Steel Bucket	17.2	1	
13:04	JONAS	Plastic Bucket	21.6	1	
13:05	87	Tin	18.9	1	
13:30	87	Plastic Bucket	21.6	1	
13:33	286	Steel Bucket	18.9	1	
13:44	76	Plastic Bucket	21.6	1	
13:45	212	Steel Bucket	16.2	1	
13:56	76	Plastic Bucket	21.6	1	
13:56	213	Plastic Bucket	21.6	1	
13:57	213	Plastic Bucket	21.6	1	
14:00	NGOMBE PASCAL	Steel Bucket	18.9	1	
14:00	90	Steel Bucket	18.9	1	
14:01	289	Plastic Bucket	18.9	1	
14:01	289	Plastic Bucket	18.9	1	
14:02	289	Plastic Bucket	18.9	1	
14:03	287	Steel Bucket	18.9	1	
14:10	87	Tin	18.9	1	
14:10	87	Big Bottle	10.8	1	
14:11	289	Steel Bucket	16.2	1	
14:14	90	Steel Bucket	18.9	1	
14:15	222	Plastic Bucket	18.9	1	
14:16	222	Plastic Bucket	21.6	1	
14:20	90	Steel Bucket	16.2	1	
14:20	41	Steel Bucket	16.2	1	
14:25	90	Steel Bucket	16.2	1	
14:30	38	Drum	20.0	1	
14:30	90	Steel Bucket	16.2	1	
14:31	41	Sourcepan	13.5	1	
14:35	222	Plastic Bucket	21.6	1	
14:35	90	Steel Bucket	16.2	1	
14:38	212	Plastic Bucket	18.9	1	
14:38	212	Plastic Bucket	21.6	1	
14:39	90	Steel Bucket	16.2	1	
14:40	222	Plastic Bucket	21.6	1	
14:45	213	Steel Bucket	18.9	1	

TABLE A.2.13 VISUAL WATER CONSUMPTION MESUAREMENT (4)

Date : 14-3-90 Area : KINONDONI(SP)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
14:46	213	Plastic Bucket	21.6	1	
14:47	213	Plastic Bucket	21.6	1	
14:48	213	Small Drum	16.2	1	
14:50	287	Steel Bucket	16.2	1	
14:51	89	Steel Bucket	16.2	1	
14:53	212	Steel Bucket	16.2	1	
14:55	222	Plastic Bucket	21.6	1	
15:05	79	Steel Bucket	18.9	1	
15:05	43	Steel Bucket	16.2	1	
15:06	89	Steel Bucket	18.9	1	
15:07	89	Steel Bucket	10.8	1	
15:07	90	Steel Bucket	16.2	1	
15:08	90	Steel Bucket	16.2	1	
15:10	91	Steel Bucket	16.2	1	
15:10	223	Steel Bucket	8.1	1	
15:13	91	Steel Bucket	18.9	1	
15:13	212	Plastic Bucket	18.9	1	
15:15	90	Steel Bucket	16.2	1	
15:16	ALLY YUSUFU	Steel Bucket	10.8	1	
15:20	90	Steel Bucket	16.2	1	
15:23	ALLY YUSUFU	Small Plastic	10.8	1	
15:24	90	Steel Bucket	16.2	1	
15:27	90	Steel Bucket	16.2	1	
15:31	90	Steel Bucket	16.2	1	
15:33	79	Steel Bucket	18.9	1	
15:34	211	Steel Bucket	18.9	1	
15:35	85	Steel Bucket	18.9	1	
15:36	212	Steel Bucket	16.2	1	
15:36	84	Steel Bucket	18.9	1	
15:37	84	Steel Bucket	18.9	1	
15:39	213	Plastic Bucket	21.6	1	
15:45	88	Steel Bucket	10.8	1	
15:45	84	Steel Bucket	18.9	1	
15:48	84	Steel Bucket	18.9	1	
15:49	91	Steel Bucket	10.8	1	
15:53	88	Steel Bucket	10.8	1	
16:05	84	Steel Bucket	18.9	1	
16:05	72	Steel Bucket	18.9	1	
16:06	41	Steel Bucket	18.9	1	
16:20	7	Steel Bucket	18.9	1	
16:22	88	Steel Bucket	16.2	1	
16:30	287	Steel Bucket	16.2	1	
16:30	88	Steel Bucket	16.2	1	
16:34	86	Steel Bucket	16.2	1	
16:34	88	Steel Bucket	16.2	1	
16:39	43	Plastic Bucket	16.2	1	
16:39	43	Steel Bucket	16.2	1	
16:40	43	Steel Bucket	16.2	1	
16:45	88	Steel Bucket	16.2	1	
16:55	91	Steel Bucket	16.2	1	
17:00	91	Steel Bucket	16.2	1	
17:01	91	Steel Bucket	16.2	1	
17:02	91	Steel Bucket	16.2	1	
17:04	91	Steel Bucket	16.2	1	
17:15	91	Steel Bucket	16.2	1	
17:35	707	Steel Bucket	16.2	1	
17:40	707	Steel Bucket	16.2	1	

TABLE A.2.13 VISUAL WATER CONSUMPTION MESUAREMENT (5)

Date : 14-3-90 Area : KINONDONI(SP)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
17:45	707	Plastic Bucket	21.6	1	
17:46	287	Steel Bucket	16.2	1	
17:48	89	Steel Bucket	10.8	1	
17:50	77	Steel Bucket	17.2	1	
17:50	287	Plastic Bucket	21.6	1	
17:59	89	Small Plastic	10.8	1	
18:10	NGOMBE PASCAL	Steel Bucket	16.2	1	
18:11	84	Steel Bucket	16.2	1	
18:14	84	Steel Bucket	18.9	1	
18:15	85	Steel Bucket	18.9	1	
18:16	NGOMBE PASCAL	Steel Bucket	16.2	1	
18:18	222	Steel Bucket	18.9	1	
18:19	89	Steel Bucket	16.2	1	
18:19	NGOMBE PASCAL	Steel Bucket	16.2	1	
18:20	87	Plastic Bucket	21.6	1	
18:21	222	Plastic Bucket	21.6	1	
18:21	213	Plastic Bucket	21.6	1	
18:25	HADIJA OMARI	Plastic Bucket	21.6	1	
18:26	91	Steel Bucket	16.2	1	
18:33	HADIJA OMARI	Plastic Bucket	21.6	1	
18:33	NGOMBE PASCAL	Plastic Bucket	18.9	1	
18:34	288	Plastic Bucket	21.6	1	
18:35	287	Steel Bucket	18.9	1	
18:35	212	Steel Bucket	18.9	1	
18:36	213	Steel Bucket	16.2	1	
18:38	43	Plastic Bucket	21.6	1	
18:38	43	Small Plastic	5.4	1	
18:40	288	Plastic Bucket	21.6	1	
18:40	212	Steel Bucket	18.9	1	
18:44	213	Plastic Bucket	21.6	1	
18:44	288	Plastic Bucket	21.6	1	
18:47	288	Plastic Bucket	21.6	1	
18:47	288	Steel Bucket	16.2	1	
18:49	707	Plastic Bucket	21.6	1	
18:50	87	Plastic Bucket	21.6	1	
18:55	88	Steel Bucket	16.2	1	
18:56	82	Plastic Bucket	16.2	1	
18:58	82	Plastic Bucket	16.2	1	
18:59	87	Plastic Bucket	21.6	1	
19:00	287	Steel Bucket	16.2	1	
19:01	82	Plastic Bucket	16.2	1	
19:03	701	Plastic Bucket	16.2	1	
19:05	91	Steel Bucket	18.9	1	
19:07	84	Plastic Bucket	21.6	1	
19:08	87	Plastic Bucket	21.6	1	
19:09	707	Steel Bucket	16.2	1	
19:09	707	Steel Bucket	16.2	1	
19:10	287	Steel Bucket	18.9	1	
19:11	287	Steel Bucket	16.2	1	
19:14	289	Steel Bucket	16.2	1	
19:15	89	Steel Bucket	16.2	1	
19:18	223	Small Plastic	5.4	1	
19:20	87	Steel Bucket	16.2	1	
19:20	87	Tin	18.9	1	
19:22	701	Steel Bucket	16.2	1	
19:30	88	Steel Bucket	16.2	1	
19:32	88	Steel Bucket	16.2	1	

TABLE A.2.13 VISUAL WATER CONSUMPTION MESUAREMENT (6)

Date : 14-3-90 Area : KINONDONI(SP)

Time	House Number or Family Name	Kind of Bucket and etc.	Volume (litre)	Quantity	Remarks
19:45	229	Plastic Bucket	18.9	1	
19:45	701	Sourcepan	18.9	1	
19:48	87	Plastic Bucket	21.6	1	
20:01	289	Plastic Bucket	19.9	1	
Total			5,038.6	289.0	

3. PEAK FACTOR

3.1 Present Peak Factor

TABLE A.3.1 DISTRIBUTION FLOW FROM RESERVOIR ON 3RD. AUGUST, 1990 (1)

TIME (hour)	TIME (Minutes)	Measuring Flow(m3/hr) University	Mtoni	Kimara	Total	1 Hour Flow(m3/day) University	Mtoni	Kimara	Total	Hourly Factor
0	0									
0	10	6,573	190	0	6,763					
0	20	6,638	190	0	6,828					
0	30	6,597	190	0	6,787					
0	40	6,549	190	0	6,739					
0	50	6,589	190	0	6,779					
1	0	6,605	190	0	6,795	158,200	4,600	0	162,800	0.89
1	10	6,597	190	0	6,787					
1	20	6,670	190	0	6,860					
1	30	6,686	190	0	6,876					
1	40	6,654	190	0	6,844					
1	50	6,662	190	0	6,852					
2	0	6,726	190	0	6,916	160,000	4,600	0	164,600	0.90
2	10	6,678	190	0	6,868					
2	20	6,654	190	0	6,844					
2	30	6,678	190	0	6,868					
2	40	6,694	190	0	6,884					
2	50	6,678	190	0	6,868					
3	0	6,718	190	0	6,908	160,400	4,600	0	165,000	0.91
3	10	6,654	190	0	6,844					
3	20	6,766	190	0	6,956					
3	30	6,670	190	0	6,860					
3	40	6,605	190	0	6,795					
3	50	6,622	190	0	6,812					
4	0	6,614	190	0	6,804	159,700	4,600	0	164,300	0.90
4	10	6,589	190	0	6,779					
4	20	6,654	190	0	6,844					
4	30	6,638	190	0	6,828					
4	40	6,565	190	0	6,755					
4	50	6,670	190	0	6,860					
5	0	6,734	190	0	6,924	159,400	4,600	0	164,000	0.90
5	10	6,670	495	890	8,055					
5	20	6,654	495	890	8,039					
5	30	6,646	495	890	8,031					
5	40	6,646	495	890	8,031					
5	50	6,718	495	890	8,103					
6	0	7,008	495	890	8,393	161,400	11,900	21,400	194,700	1.07

TABLE A.3.1 DISTRIBUTION FLOW FROM RESERVOIR ON 3RD, AUGUST, 1990 (2)

TIME (hour)	TIME (Minutes)	Measuring Flow(m3/hr) University	Mtoni	Kimara	Total	1 Hour Flow(m3/day) University	Mtoni	Kimara	Total	Hourly Factor
6	10	7,201	394	1,919	9,514					
6	20	7,394	394	1,919	9,707					
6	30	7,547	394	1,919	9,860					
6	40	7,724	394	1,919	10,037					
6	50	7,748	394	1,919	10,061					
7	0	7,780	394	1,919	10,093	181,600	9,500	46,100	237,200	1.30
7	10	7,933	455	2,654	11,042					
7	20	7,965	455	2,654	11,074					
7	30	7,997	455	2,654	11,106					
7	40	8,158	455	2,654	11,267					
7	50	8,142	455	2,654	11,251					
8	0	8,254	455	2,654	11,363	193,800	10,900	63,700	268,400	1.47
8	10	8,238	521	2,948	11,707					
8	20	7,852	521	2,948	11,321					
8	30	7,547	521	2,948	11,016					
8	40	7,386	521	2,948	10,855					
8	50	7,281	521	2,948	10,750					
9	0	7,281	521	2,948	10,750	182,300	12,500	70,800	265,600	1.46
9	10	7,161	345	2,654	10,160					
9	20	7,128	345	2,654	10,127					
9	30	7,080	345	2,654	10,079					
9	40	6,992	345	2,654	9,991					
9	50	6,984	345	2,654	9,983					
10	0	6,839	345	2,654	9,838	168,700	8,300	63,700	240,700	1.32
10	10	6,758	623	0	7,381					
10	20	6,766	623	0	7,389					
10	30	6,734	623	0	7,357					
10	40	6,694	623	0	7,317					
10	50	6,557	623	0	7,180					
11	0	6,758	623	0	7,381	161,100	15,000	0	176,100	0.97
11	10	6,638	541	0	7,179					
11	20	6,646	541	0	7,187					
11	30	6,549	541	0	7,090					
11	40	6,509	541	0	7,050					
11	50	6,815	541	0	7,356					
12	0	6,525	541	0	7,066	158,700	13,000	0	171,700	0.94

TABLE A.3.1 DISTRIBUTION FLOW FROM RESERVOIR ON 3RD. AUGUST, 1990 (3)

TIME (hour)	TIME (Minutes)	Measuring Flow(m3/hr) University	Mtoni	Kimara	Total	1 Hour Flow(m3/day) University	Mtoni	Kimara	Total	Hourly Factor
12	10	6,638	493	0	7,131					
12	20	6,477	493	0	6,970					
12	30	6,581	493	0	7,074					
12	40	6,340	493	0	6,833					
12	50	6,429	493	0	6,922					
13	0	6,445	493	0	6,938	155,600	11,800	0	167,400	0.92
13	10	6,501	456	0	6,957					
13	20	6,364	456	0	6,820					
13	30	6,211	456	0	6,667					
13	40	6,348	456	0	6,804					
13	50	6,412	456	0	6,868					
14	0	6,380	456	0	6,836	152,900	10,900	0	163,800	0.90
14	10	6,324	504	0	6,828					
14	20	6,445	504	0	6,949					
14	30	6,605	504	0	7,109					
14	40	6,380	504	0	6,884					
14	50	6,332	504	0	6,836					
15	0	6,187	504	0	6,691	153,100	12,100	0	165,200	0.91
15	10	6,581	351	0	6,932					
15	20	6,605	351	0	6,956					
15	30	6,284	351	0	6,635					
15	40	6,581	351	0	6,932					
15	50	6,549	351	0	6,900					
16	0	6,509	351	0	6,860	156,400	8,400	0	164,800	0.91
16	10	6,380	480	0	6,860					
16	20	6,348	480	0	6,828					
16	30	6,541	480	0	7,021					
16	40	6,533	480	0	7,013					
16	50	6,710	480	0	7,190					
17	0	6,758	480	0	7,238	157,100	11,500	0	168,600	0.93
17	10	6,750	453	0	7,203					
17	20	6,702	453	0	7,155					
17	30	6,734	453	0	7,187					
17	40	6,718	453	0	7,171					
17	50	6,726	453	0	7,179					
18	0	6,726	453	0	7,179	161,400	10,900	0	172,300	0.95

TABLE A.3.1 DISTRIBUTION FLOW FROM RESERVOIR ON 3RD, AUGUST, 1990 (4)

TIME (hour)	TIME (Minutes)	Measuring Flow(m3/hr) University	Mtoni	Kimara	Total	1 Hour Flow(m3/day) University	Mtoni	Kimara	Total	Hourly Factor
18	10	6,686	491	0	7,177					
18	20	6,589	491	0	7,080					
18	30	6,533	491	0	7,024					
18	40	6,614	491	0	7,105					
18	50	6,670	491	0	7,161					
19	0	6,670	491	0	7,161	159,000	11,800	0	170,800	0.94
19	10	6,654	190	0	6,844					
19	20	6,678	190	0	6,868					
19	30	6,654	190	0	6,844					
19	40	6,710	190	0	6,900					
19	50	6,710	190	0	6,900					
20	0	6,686	190	0	6,876	160,400	4,600	0	165,000	0.91
20	10	6,774	190	0	6,964					
20	20	6,702	190	0	6,892					
20	30	6,726	190	0	6,916					
20	40	6,662	190	0	6,852					
20	50	6,726	190	0	6,916					
21	0	6,678	190	0	6,868	161,100	4,600	0	165,700	0.91
21	10	6,654	190	0	6,844					
21	20	6,662	190	0	6,852					
21	30	6,654	190	0	6,844					
21	40	6,646	190	0	6,836					
21	50	6,614	190	0	6,804					
22	0	6,630	190	0	6,820	159,400	4,600	0	164,000	0.90
22	10	6,646	190	0	6,836					
22	20	6,630	190	0	6,820					
22	30	6,614	190	0	6,804					
22	40	6,638	190	0	6,828					
22	50	6,670	190	0	6,860					
23	0	6,630	190	0	6,820	159,300	4,600	0	163,900	0.90
23	10	6,493	190	0	6,683					
23	20	6,485	190	0	6,675					
23	30	6,485	190	0	6,675					
23	40	6,485	190	0	6,675					
23	50	6,581	190	0	6,771					
0	0	6,605	190	0	6,795	156,500	4,600	0	161,100	0.89
Average		6,767	354	461	7,582	162,400	8,500	11,100	182,000	1.00

3.2 Peak Factor for Unsuppressed Demand

TABLE A.3.2 HOURLY UNSUPPRESSED DEMAND IN 1990

TIME (hour)	Domestic *1 Hourly Factor	Domestic Volume (m3/hr)	Industrial Volume (m3/hr)	Commercial Volume (m3/hr)	Institutional Volume (m3/hr)	Leakage *2 Hourly Factor	Leakage Volume (m3/hr)	Total Volume (m3/hr)	Total Hourly Factor
0									
1	0.19	1,015				1.39	4,493	5,508	0.60
2	0.16	855				1.39	4,493	5,348	0.58
3	0.08	427				1.48	4,784	5,211	0.56
4	0.11	587				1.48	4,784	5,371	0.58
5	0.30	1,602				1.30	4,202	5,804	0.63
6	0.52	2,777				1.30	4,202	6,979	0.75
7	1.57	8,385				0.76	2,456	10,841	1.17
8	1.56	8,332		449		0.76	2,456	11,237	1.21
9	1.58	8,439	577	449	765	0.72	2,327	12,557	1.36
10	1.53	8,171	577	449	765	0.72	2,327	12,289	1.33
11	1.35	7,210	577	449	765	0.80	2,586	11,587	1.25
12	1.30	6,943	577	449	765	0.80	2,586	11,320	1.22
13	1.24	6,623	577	449	765	0.80	2,586	11,000	1.19
14	1.21	6,462	577	449	765	0.80	2,586	10,839	1.17
15	1.29	6,890	577	449	765	0.86	2,780	11,461	1.24
16	1.27	6,783	577	449		0.86	2,780	10,589	1.14
17	1.18	6,302		449		0.88	2,844	9,595	1.04
18	1.10	5,875		449		0.88	2,844	9,168	0.99
19	1.25	6,676		449		0.88	2,844	9,969	1.08
20	1.35	7,210		449		0.88	2,844	10,503	1.14
21	1.28	6,836		449		0.89	2,877	10,162	1.10
22	1.20	6,409				0.89	2,877	9,286	1.00
23	0.80	4,273				1.22	3,943	8,216	0.89
24	0.59	3,151				1.22	3,943	7,094	0.77
Total (m3/day)		128,180	4,612	6,282	5,355		77,571	222,000	

Note : Leakage ratio is 35%, wastage ratio is 6%.
*1*2 These value are calculated based on leakage measurement in three model areas.

TABLE A.3.3 HOURLY UNSUPPRESSED DEMAND IN 1995

TIME (hour)	Domestic *1 Hourly Factor	Domestic Volume (m3/hr)	Indust-rial Volume (m3/hr)	Commer-cial Volume (m3/hr)	Institu-tional Volume (m3/hr)	Leakage *2 Hourly Factor	Leakage Volume (m3/hr)	Total Volume (m3/hr)	Total Hourly Factor
0									
1	0.19	1,065				1.39	2,941	4,006	0.47
2	0.16	897				1.39	2,941	3,838	0.45
3	0.08	448				1.48	3,131	3,579	0.42
4	0.11	617				1.48	3,131	3,748	0.44
5	0.30	1,681				1.30	2,750	4,431	0.52
6	0.52	2,915				1.30	2,750	5,665	0.67
7	1.57	8,800				0.76	1,608	10,408	1.23
8	1.56	8,744		494		0.76	1,608	10,846	1.28
9	1.58	8,856	635	494	843	0.72	1,523	12,351	1.46
10	1.53	8,576	635	494	843	0.72	1,523	12,071	1.43
11	1.35	7,567	635	494	843	0.80	1,693	11,232	1.33
12	1.30	7,286	635	494	843	0.80	1,693	10,951	1.29
13	1.24	6,950	635	494	843	0.80	1,693	10,615	1.25
14	1.21	6,782	635	494	843	0.80	1,693	10,447	1.23
15	1.29	7,230	635	494	843	0.86	1,820	11,022	1.30
16	1.27	7,118	635	494		0.86	1,820	10,067	1.19
17	1.18	6,614		494		0.88	1,862	8,970	1.06
18	1.10	6,165		494		0.88	1,862	8,521	1.01
19	1.25	7,006		494		0.88	1,862	9,362	1.11
20	1.35	7,567		494		0.88	1,862	9,923	1.17
21	1.28	7,174		494		0.89	1,883	9,551	1.13
22	1.20	6,726				0.89	1,883	8,609	1.02
23	0.80	4,484				1.22	2,581	7,065	0.83
24	0.59	3,307				1.22	2,581	5,888	0.70
Total (m3/day)		134,518	5,082	6,921	5,901		50,778	203,200	

Note : Leakage ratio is 25%, wastage ratio is 0%.
*1*2 These value are calculated based on leakage measurement in three model areas.

B.
DATA TO CHAPTER 4

1. PIPE EXTERNAL CONDITION