## APPENDIX D 13 House Type by Community in the Project Area

					S 1 1 1 1	oj comb		_	1 2 2 2 2 2	(1)
į	Name of village (LC1)	Number of		ber of HBL tanent	s by type of Semi	house Thatched		ber of HI Without	is with latrine	With/without electricity
No.	or constantly	bouse-	with		permanent		With sampled	samplat	Total (%)	With With Lack Lack Wi lack time bour/t or
1	of Community	hold			with mud	30000	orsisb		10021 (19)	TOTAL DESIGNATION OF
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10) (11)	(12)(13)(14)(15) (1
	Kyabagamba	63	22	3	18	20		58	58 92.06%	- 1
	Kabale	80	3	•	77	0		10	10 12.50%	
	Kigayaza	80 67	1 6	1 58	. 1	77 0		50	50 62.50%	
	Kalyanjuba Kyambobo	92	1	30	. 91	Ö		. 3 17	3 4.48% 17 18.48%	
	Likonda	100	15	15	20	50		30	30 30.00%	
	Makururu	15		4		. 11	10	Ō	10 66.67%	i
1108	Kyamabale	100	20	. 5	40	35		40	40 40.00%	i
	Kasambya	60	10	50	100	0		54	54 90.00%	4
	Kamengo	436	18	106	6	306		28	28 6.42%	1
	Kirasi	210	59	101		50	5	30	35 16.67%	
	Nakitembe Buyanja	120 130	- 8 50	13	94 50	5 : 30		30 90	30 25.00%	
	Kagongero	552	25	30	70	427	30	514	90 69.23% 544 98.55%	
	Kebwire	57	3	ĭ	13	38	5	46	51 89.47%	1
	Kyetome	288	50	_	120	118	- A T	50	50 17.36%	· i
	Kyengera	70	8	52	3	7	3	48	51 72.86%	ī
	Kyangabakarna	95	2		40	53	2	48	50 52.63%	1
	Kyayi								 # = = = = = = = = = = = = = = = = = = =	_
	Nabugayo Kalumasa A	60 175	11 15	45	20	125	4	44	44 73.33%	1
	Kalwanga A Kuyanonga	173	13 20	50	20 85	135 0	1	29 125	30 17.14% 125 80.65%	
	Kakubansiri B	136	30	20	50	36		136	136 100.00%	ı.
	Lubale B	137	70	10	5	52		130	130 94.89%	·
	Nkokonjeru	80	30	50	•	- 0		80	89 100,00%	i e e e e e e e e e e e e e e e e e e e
1126	Lugaaga	125	90	16	19	0		110	110 88.00%	Ì
	Lasongode	103	15	18	70	0	4	47	51 49.51%	1
	Lozira	345	30	120	164	31	50 :	283	333 96.52%	1
	Bulwadda East	350	3	0	145	0 .	1	149	150 100,00%	1
	Bulwadda West Kawoko	150 116	20 23	30 91	70 2	30 - 0		130 40	130 86.67% 40 34.48%	
	Nakulamudde	78	40	71	10	28		63	63 80.77%	•
	Mawuki	80	50		30	ŏ	1	69	70 87.50%	i
	Kiriri	300	100	3	192	5	10	260	270 90.00%	1 1 2 4
	Mpogo	75	50	25		0 .		60	60 80,00%	. 1
	Buyinjabutoole	75	63	12		. 0 :	1	5	6 8.00%	1
	Part of Kiriri (1133)					0			10 00 000	
	Ngeye Busolo	50 100	35 40	15	50	10	10	0 95	95 95,00%	1 .
	Maseruka	80	20	. 5	30	25	1200	30	30 37.50%	
	Kanzira	44	16	ŏ	28	ő	2	33	35 79.55%	· :
	Ngomanene	54	- 50	4		0	7	47	54 100.00%	î
1142	Kyetune	212	112	100		0		200	200 94.34%	1
	Kyetane	26	0	0	26	0			6 23.08%	o ignarija i jak
	Warnirongo	170	37		102	26	80	60	140 82.35%	1 1 3 2
	Busukuma	190	70 30	20 40	15	100	30	60	90 47.37% 75 88.24%	1 1 10 3
	Kasambya Kikoko	85 100	30	- 40	93	0	20	55 80	75 88.24% 80 80.00%	
	Setta	90	5	3	60	22		90	90 100,00%	1 1 3 3
	Kijjudde	280	200	20	35	25	100	80	180 64.29%	1
1207	Magigi	250	240	4	6	0	. 8	242	250 100.00%	i
1208	Kiwenda T/C	214	186		20	8	120	54	174 81 31%	1 1 4 4
	Kiwenda									
	Nabitalo Busa	100	72	15 20	90	13	15	55	70 70,00%	1 1 7 4
	Buso Menvu	200 220	40 200	20	90 20	50 0	2 2	88 98	90 45,00% 100 45,45%	1 1 4 3
	Kasozi	200	50	30	80	40	4.	80	80 40.00%	1 1 4 3
	Lugo	300	238	18	24	20	50	154	204 68.00%	: i
	Mairye	80	32	. 6	42	0	50	30	89 100.00%	$oxed{\mathbf{i}}$
1216	Kazinga	380	0	0	0	380	340	20	360 94.74%	1 1 3 4
	Bulann/Kasangati TC	72	65	. 7	. 0	0	. 8	61	72 100.00%	1 1 4 5
1217		4.5	200			A -	10	20	30 200 0001	
	Magere Kazinga	30 300	28 200		100	0	10 10	20 190	30 100,00% 200 66,67%	1 1 7 4
	Kazinga Kiwalinu	20	15	2	100	0	12	. 190	20 100,00%	1 1 2 12
	Kiti A	150	130	3	17	Ŏ		52	52 34.67%	1 1 10 1
	Manyangwa	400	364		30	6	50	350	400 100.00%	1 1 7 3
1223	Nalyamagonja	900	60	40	200	600	15	485	500 55.56%	1 1 2 4
	Part of Secta (1217)	106	102	4		0		106	106 100,00%	1 1 1 7
	Part of Magere (1218)					104		100	449 A	
	Kiwala Nasada	150 100	15 15	16	15 10	104 75	10	135 30	145 96.67%	
1302	Ngaodo	100	13		10	13		30	30 30.00%	1
	Kanzira	150		100		50	25	25	50 33.33%	1
			10	Š	29	431	25	5	5 1.05%	i
	Bwetyaba	475	10		67	431				

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	- 110 - 1	<del></del>	(5) 1	(6)	T (7) T	(8)	(9)	lantan l	025183	1774117	(3) (6)
(1) (2) 1307 Ndibulungi	(3)	(4)	1311	60			70	70 63.61%	1	نالكت خيال	1
1308 Batende	85	38	5	10	32		80	80 94.12%			1 :
1309 Bukesa	75	50	14	4	7		75	75 100.00%			l l
1310 Tufibe	80	60		1.0	20		30	30 37.50%			
1311 Bugobargo	110	30		80	0		70	70 63.61% 60 85.71%			- i
t401 Kyengeza	70	20	15	35 80	0 20		60 113	60 85.71% 113 94.17%			i l
1402 Wabiyinja	120	17	3	60	20		117	113 34.1771			
1403 Nakikungube 1404 Masulita A	50	48	2		0		20	20 40.00%			1
1405 Kyanina	350	50	15	280	5		320	320 91.43%			1
1406 Kyampisi	70	30	10	30	0	2	53	55 78.57%			1
1407 Malangaata	60	30	30		0	2	58	60 100.00%			- 1
1408 Bugimba	89	50	20	19	5	5	89 65	89 100.00% 70 87.50%			- i I
1409 Muguluka	80 40	20 9	20	35 30	i	,	30	30 75.00%			i
1410 Buso	180	12	:	168	ō		25	25 13.89%			. 1
1411 Kyasa 1412 Bembe	70	10	10	50	. 0		70	70 100.00%			1
1413 Namayumba	100	90	10		0		80	80 80.00%			1
1414 Busaku	160	130	10	20	0	10	110	120 75,00%			1 1
1415 Buwembo	95	40	45	10	0 100	. 6	95 230	95 100.00% 236 98.33%			- i l
1416 Kasengejie	240 196	35 60	5	100 120	16	5	191	196 100.00%			i l
1417 Mende Central	150	- 50	15	85	Ö		145	145 96.67%	1 1	2	4
1418 Bikasa T/C 1419 Kisimbiri A-B-C/Wakiso T/C	700	430	7	200	63	50	604	654 93.43%	1 1	3 .	5
1501 Kitantu T/C	73	68	-	5	0	2	4	6 8.22%			. 1
1502 Mpigi							-0.0	on 44 108/	1 1	2	3
1503 Kikomazi	121	91		30	0	1,201	8 891	80 66.12% 10,101 0.44%	18 18		4.28 77
Total	14,857 80	5,243 20	1,676 60	4,086	3,852 0	40	30	70 87.50%			
2101 Busooba/Kisombwa 2102 Kilangwa	80 80	20		. 80	Ö		80	80 100.00%			1
2102 Knagwa  2103 Kyengeza	85	30	20	35	0	5	35	40 47.06%			1
2101 Budigaba	86	. 13	48	20	5	10	70	80 93.02%			1
2105 Bwakaggo	80	6	20	50	4	5	25	30 37.50% 130 65.00%			- 11
2106 Kalonga	200	130	60	10 60	0	•	130 180	130 65.00% 180 90.00%			- 1
2107 Mugungulu	200 150	120 6	20 20	35	89	1 1	14	15 10.00%			i
2108 Kisingizi	400	40	15		345	25	15	40 10.00%			1.11
2109 Kyamukona 2110 Kyeguluso	80	40		40	0	2	. 8	10 12.50%		•	1
2111 Bakijelila	100	7		80	13		50	50 50.00%			1
2112 Kabowa	50	25		25	0	1	39	49 89.00% 70 70.00%			1 1
2113 Kabubu	100	50		30	0 209	4 2	66 148	70 70.00% 150 60.00%			1
2114 Kamusengola	250 138	11 18		30 65	55	6	101	107 77.54%			1
2115 Nakawala/Lwegula	136	10				-					
2116 2117							;				
2118 Nakasaga	62	10		15	37		56	56 90.32%			1 1
2119 Kasambya T/C	200	60	26	100	14	60	100 129	160 80.00% 130 61.90%			
2120 Kikoma	210	4	6	100 33	100 16	17	93	100 78.13%			i
2121 Ngabano	128 60	79 5		. 20	35	í	34	35 58.33%	-		1
2122 Katoma 2201 Kassanda	250	25		25	200	_	170	170 68.00%			1
2202 Namahaale	120	20	:		100	*	20	20 16.67%			1
2203 Kyabalanzi	70	9		35	26		: 0	0 0.00%		*	I
2201 Kamuli	100			80	15		20 43	20 20.00% 43 53.09%			1
2205 Bweyongedde	81 66	22	30 10	. 29	· · · · · · ·		51	56 84.85%			î
2206 Kasazi A	60	56	10								
		. 10		50		. 5	20	20 25.64%			1
2207 Kalama 2208 Kikandwa	78 28	10 28		50	18	10	20 0	20 25.64% 10 35.71%			1
2208 Kikandwa	78		. 10	20	18 0 0		20 0 65	20 25.64% 10 35.71% 70 87.50%			1 1 1
2208 Kikandwa 2209 Bulyamagunju A 2210 Makata	78 28 80 130	28 50 50	20	20 60	18 0 0	10	20 0 65 70	20 25.64% 10 35.71% 70 87.50% 70 53.85%			1
2208 Kikandwa 2209 Bulyamagunju A 2210 Makata 2211 Milembe	78 28 80 130 57	28 50 50 25		20 60 7	18 0 0 0	10	20 0 65 70 25	20 25.64% 10 35.71% 70 87.50% 70 53.85% 25 43.86%			1 1 1 1
2208 Kikandwa 2209 Bulyamagunju A 2210 Makata 2211 Milembe 2212 Kalama	78 28 80 130 57	28 50 50 25 3	20 25	20 60 7 10	18 0 0 0 0 137	10 5	20 0 65 70 25 145	20 25.64% 10 35.71% 70 87.50% 70 53.85%	1		1 1 1
2208 Kikandwa 2209 Bulyamagunju A 2210 Makata 2211 Milembe 2212 Kalama 2213 Kyakasengulu	78 28 80 130 57 150 120	28 50 50 25 3 60	20	20 60 7	18 0 0 0	10	20 0 65 70 25	20 25.64% 10 35.71% 70 87.50% 70 53.85% 25 43.85% 145 96.67% 50 41.67% 20 22.59%	1		1 1 1 1
2208 Kikandwa 2209 Bulyamagunju A 2210 Maketa 2211 Milembe 2212 Kalama 2213 Kyakasengulu 2214 Kabanyi	78 28 80 130 57	28 50 50 25 3	20 25 40	20 60 7 10 20	18 0 0 0 0 137 0 10	10 5	20 0 65 70 25 145 40 20	20 25.64% 10 35.71% 70 87.50% 70 53.85% 25 43.86% 145 96.67% 50 41.67% 20 22.59%	1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
2208 Kikandwa 2209 Bulyamaganju A 2210 Makata 2211 Milembe 2212 Kalama 2213 Kyakasengulu 2214 Kabanyi 2215 Bukeba	78 28 80 130 57 150 120	28 50 50 25 3 60 7	20 25 40	20 60 7 10 20 50 10	18 0 0 0 0 137 0 10 153	10 5	20 0 65 70 25 145 40 20 0	20 25.64% 10 35.71% 70 87.50% 70 53.85% 25 43.86% 145 96.67% 50 41.67% 20 22.59% 12 7.27% 100 76.92%	1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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2208 Kikandwa 2209 Bulyamagunju A 2210 Makata 2211 Milembe 2212 Kalama 2213 Kyakasengulu 2214 Kabanyi 2215 Bukoba 2216 Lukira 2217 Kyawatuba 2218 Kasana	78 28 80 130 57 150 120 87 165 130 90	28 50 50 25 3 60 7 15 9	20 25 40 20 20	20 60 7 10 20 50 10 60 5	18 0 0 0 0 137 0 10 155 35 76	10 5	20 0 65 70 25 145 40 20 0 100 10	20 25.64% 10 35.71% 70 87.50% 70 53.85% 25 43.86% 145 96.67% 50 41.67% 20 22.99% 12 7.27% 100 76.92% 10 11.11% 70 77.78%	<b>1</b>		1 1 1 1 1 1
2208 Kikandwa 2209 Bulyamagunju A 2210 Makata 2211 Milembe 2212 Kalama 2213 Kyakasengulu 2214 Kabanyi 2215 Bukoba 2216 Lukira 2217 Kyawatuba 2218 Kasana 2219 Kalagi	78 28 80 130 57 150 120 87 165 130 90 90	28 50 50 25 3 60 7 15 9	20 25 40 20 20	20 60 7 10 20 50 10 60 5	18 0 0 0 0 137 0 10 155 35 76 0	10 5	20 0 65 70 25 145 40 20 0 100	20 25.64% 10 35.71% 70 87.50% 70 53.85% 25 43.86% 145 96.67% 50 41.67% 20 22.99% 12 7.27% 100 76.92% 10 11.11%	1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
2208 Kikandwa 2209 Bulyamagunju A 2210 Makata 2211 Milembe 2212 Kalama 2213 Kyakasengulu 2214 Kabanyi 2215 Bukoba 2216 Lukira 2217 Kyawatuba 2218 Kasana 2219 Kalagi 2220 Kamusenene	78 28 80 130 57 150 120 87 165 130 90 170 400	28 50 50 25 3 60 7 15 9 35 12	20 25 40 20 20	20 60 7 10 20 50 10 60 5	18 0 0 0 0 137 0 10 155 35 76	10 5	20 0 65 70 25 145 40 20 0 100 10 70	20 25.64% 10 35.71% 70 87.50% 70 83.85% 25 43.86% 145 96.67% 50 41.67% 20 22.59% 12 7.27% 100 76.92% 10 11.11% 70 77.78% 140 82.35% 150 37.50%	1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
2208 Kikandwa 2209 Bulyamagunju A 2210 Makata 2211 Miletube 2212 Kalama 2213 Kyakasengulu 2214 Kabanyi 2214 Kabanyi 2215 Bukeba 2216 Lukira 2217 Kyawatuba 2218 Kasana 2219 Kalagi 2220 Karusenene 2221 Manyogaseka	78 28 80 130 57 150 120 87 165 130 90 90	28 50 50 25 3 60 7 15 9	20 25 40 20 20	20 60 7 10 20 50 10 60 5 50	18 0 0 0 0 137 0 10 153 35 76 0	10 5 10 12	20 0 65 70 25 145 40 20 0 100 70 140 140 140	20 25.64% 10 35.71% 70 87.50% 70 87.50% 70 53.85% 145 96.67% 50 41.67% 20 22.99% 12 7.27% 100 76.92% 10 11.11% 70 77.78% 140 82.35% 150 37.50% 100 71.43%			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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									APPENDIX D-13 (3/4)
[(1)]	T (3) T	(4)	(3)_1	(6)	(7)	(8)	(9)_	1 ((0) 1 ((1) 1	(12)((13))(14)) (15) (16)
2304 Bugabo	73	53	20	\_\ <u>-</u> _	0	i	61	65 89.01%	1
2305 Katakala	6	: ,5	1		0 -	_	6	6 100.00%	1 1 5 2
2306 Magorgolo	. 60	56	4		0	5	55 50	60 100 00%	
2307 Nakibanga-Nyanzi	50	8	1	. 12	29 0	5	. 85	50 100.00% 90 75.00%	1 1 3 8
2308 Busimbi	120 134	120 120	1	10	3	1	103	109 81.34%	iiižil
2309 Mitiyana A 2310	134	160	•	10	•	-			
2311 Kalangalo	51	32		15	4		38	38 74.51%	1.1
2312 Lwogero B	68	20	30	10	8	: 2	0	2 2.94%	1
2313 Kiwanda	41	30		10	l i	20	5	5 12.20%	1 1 3 4
2314 Lweyo	100	80	20		0	30 7	70 83	100 100.00% 90 95.74%	
2315 Kasikombe	91 60	60 4	30	4 46	10	•	33	55 91 67%	i l
2316 Katangulu 2317 Budimbo	160	2	10	20	128		160	160 100.00%	1 ]
2318 Kisanba	57	25		20	12		52	52 91.23%	1 1
2319 Kawolongojjo	170	10		100	60		120	120 70.59%	1 1
2320 Namingo	117	80	20	17	0		117	117 100.00%	1
2321 Sakanyonyi	400	370	30		0	3	0	3 0.75% 10 20.00%	1 1 7 3
2322 Bombo	50	35	12 5	3 20	.0 54	10	0 50	50 57.47%	: 1
2323 Kabulamiliro 2324 Barobula	₹ 87 121	8 96	10	15	0	2	13	15 12.40%	i 1
2401 Sserinoya	150	110	10	10	30	30	110	140 93.33%	. 1
2402 Nabale	130		8	20	102		100	100 76 92%	1
2403 Maanyi	40	13:		7	20	10	26	36 90.00%	1
2401 Mpongo	75	6	3	53	13		60	60 80.00%	1
2405 Misimba	62	18	44	20	0	1	32 35	33 53.23% 35 35.00%	1
2406 Kimuli	100 50	50 7	20	30 13	30 30		4	4 8.00%	îl
2407 Kabeele 2408 Buwala	80 20	20	20	30	10		20	20 25.00%	i l
2409 Bekina	90	10	20	3	77	10	50	60 66.67%	· i }
2410 Kkande	50	10		40	. 0	30	20	50 100 00%	1
2411 Kitongo	99	20		75	4	1	19	20 20.20%	1 1 7 9
2412 Nakaziba	100	50	30	5	15		20 90	20 20.00% 90 39.13%	1
2413 Kitebere	230 200	70	85	75	0 200		100	100 50.00%	i I
2414 Watuba 2415 Nabwiri	110	7		80	23		90	90 81.82%	1 1 2 2
2416 Bukandugalu	90	56	9 :	16	9	2	86	88 97.78%	1
2417 Banarize	200	25	5 .	170	. 0	5	155	160 80.00%	1
2418 Kalama	97	15	_	40	42	3	54	57 58 76%	1
2419 Ngupulo	70	15 220	1 19	40	14 0	6 20	44 216	50 71.43% 236 98.74%	1 1 3 4
2420 Mwera 2421 Kakindu	239 150	43	30	77	: ŏ	3	137	140 93.33%	i i i i i i i i i i i i i i i i i i i
2422 Mawanda	120	18		40	62	30	10	40 33.33%	1
2423 Kiwawu	52	31		.21	0	2	49	51 98 08%	1 1 7 5
2424 Magooga	62	6	10	25	21	10	45	55 88.71%	1 1
2425 Lulurnbu	80	10	20	62	8	1 3	39 107	40 50.00% 110 100.00%	1
2426 Kasalaga Tolal	110 10,983	75 3,537	1.017	3,013	3,386	502	5,938	6,440 58.64%	14 13 49 5.69 83
3101 Kateera	126	30	20	60	16	15	105	120 95.24%	1 1 3 4
3102 Kalangala A	150	100	20	10	20		90	90 60.00%	1
3103 Kalangala RCI	150	70	40	20	20		160	100 66.67%	1 1 2 4
3104 Masiriba	60	40	1.5	20	0 47		55 23	55 91.67% 23 28.05%	1
3105 Karwe	82 138	20 38	: 15 50	50	0		38	38 27.54%	i 1
3106 Muyenje 3107 Kayunga	120	20	20	3	77	14.41	115	115 95.83%	11
3168 Kabamba West	80	40	10	10	20	0	70	70 87.50%	<b>.</b>
3108 Kabamba Fast	40	2	0	38	0	1	32	33 82.50%	3 [
3109 Bukomero T/C	104	80	15	7	- 2	10	90	100 96.15%	1
3110 Namukoko	170	70	80	15	5 2	20 5	0 40	20 11.76% 45 69.23%	1
3111 Kagogo 3112 Mwezi B	65 73	48 10	10	5 20	43	,	64	64 87.67%	i l
3112 Mwezi A	/3	10		20					
3114 Kambizi	55	31	24		0	1	20	20 36.36%	1.
3115 Ndibala	220	100	20	100	0.	10	190	200 90.91%	1.4
3116 Bugomolwa	60	. 10	10	10	30	•	50	50 83.33%	11
3117 Ntwetwe T/C	42	30	5	7	0	2	38 20	40 95.24% 20 27.78%	id
3118 Kilemeera/Lubuga 3119	72	32	14	26	U		20	20 21.10/8	
3120 Bulagwe	94	15	- 20	59	0		20	20 21.28%	1
3121 Nkaodwa B	98		38	60	0		83	83 81.69%	4.1
3122 Nakalama St. Kizito	130	30	20	50	30	_	70	70 53.85%	1 1
3123 Nusi	100	50	20	10	20	5	75 5	80 80.00% 5 16.67%	$\frac{1}{1}$
3124 Kikajio	30 60	10 20	5 10	5 10	10 20		40	49 66.67%	i
3125 Lwanjolo 3126 Kasega	200	10	10	180	10		190	190 95.00%	i
3127 Kirinda	107	30	70	7	0	10	67	77 71.96%	1 1
3128 Kizinga	130	5		125	0		. 5	5 3,85%	!
3129 Nyamiringa	50	_			50	•	39	39 78.00%	1
3130 Kagobe	80	8	. 9	50 26	22	3	7 <u>1</u> 26	74 92.50% 26 65.00%	
3131 Sseesa 3132 Kambugu	40 90	5 6	10	30	44		75	75 83.33%	i
111/2 Nonwood									

ΑP	PEN	DIX	D-1	(4/4)
				(4/4)

· · · · · · · · · · · · · · · · · ·	<u> 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 </u>							7.85 1 7.15 1	([2]]([3	(14)	7331	(4) (1)
(5)	[ (3) [		$\mathfrak{O}^{-1}$	(6) 26		(8)	(9) 27	(10) (11) 30 90.91%	1153117	71117		ì
3 Kambugu	33	3	2	77	ŏ		2	2 2.50%				1
4 Kilyankozi	- 80 100	. 3 - 40	40	20	ŏ		40	40 40,00%				1
\$ Katoma		20	40	230	ŏ		200	200 80.00%				. 1
6 Kibiga	250		20	40	ő		0	0 0.00%				1
7 Gogonya	170	100	30	30	17		10	10 20.00%	100			1
8 Bukasa	50	2	1	22	30	4	46	50 74.63%	1 1	2	2	
9 Kalangala/Kibooga	67	15		2.2	30	•	••	• • • • • • • • • • • • • • • • • • • •				
iQ	***	. 10	•	200	8		180	180 72.00%	1 1	2	. 2	
1 Bwizibwera B	250	39	3		ů.	70	10	80 80.00%	1 1	1	2	
2 Lufula	100	25		75	ŏ	70	90	90 100,00%	1 1	3	4	
3 Hospital Village	90	90				10	Õ	10 5,00%	ii	2	4	
4 Bwizibwera A	200	67	_	133	0 :	10		35 87.50%		•		1
is Sinde	40	-15	7	8 -	10		35					i
6 Kawaawa	49	34	⊹ 6	9	0		40					1
7 Nikokonjeru	200	30	10	100	60	3	183					1
8 Kyanika	52			j	50	1	45	46 88.46%				1
9 Lumaya	70	15	10	43	0		68	68 97.14%				
0 Nakaziba	60	20	10	20	10	•	60	60 100.00%				1
1 Kijimagwa	40	3		11	26		37	37 92.50%				1
2 Nsanje	70	6	3		61		40	40 57.14%				1
	94	10	34	50	0		45	45 47.87%				J
53 Buyonga				-								
S4	76	10	6	40	20	2	26	28 36.84%				i
55 Kabutemba	47	10	25	55	ŏ	2	38	40 85.11%				1
6 Kambugu	25	18	. 7		ŏ	· 1	24	25 100.00%	•			1
7 Kayooza	80	10	. ,		89	-	20	20 25.00%				
8 Kyarajoni		14		5	51		68	68 97.14%				
8∮ Kadanabiro	70			20	96	2	118	120 100.00%				
60 Kasalama	120	4	10	30	0	•	0	0 0.00%				
61 Byerima B	. 60	20	10	20	υ.		v					
52				20		2	-68	70 77.78%				
63 Biiko	90	4		30	. 56	2	50	50 25.00%		-		
64 Buguluma	200	3		. 3	194							
65 Nabwendo	80	2	1	50	27		60	60 75.00%				
66								40.0000				
67 Ndiraweru	400	56	6	42	296		120	120 30.00%				
68 Nakasozi	60	.35	25		0	4	46	50 83.33%				
69 Nakasengere	100	5	3	. 81	8	1	79	80 80.00%				
70 Natyole/Magala Mem	78	35	25	18	0	10	50	60 76.92%				
	270	7		250	13		200	200 74.07%				
71 Muwanga	100	30	10	30	30		10	. 10 10.00%				
72 Kikonda	66	10	. 3	47	6		2	2 3.03%				
72 Buraza	50		42	8	0		10	10 20.00%		-		
73 Nakakabala	58	3	55	•	ō	+	58	58 100.00%				
74 Kyambogo	38	3	33				:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			2.7	
75 Kigando/Buraza		•	•	40	40		8	8 8.89%			1	
76 Mujjunza	90	8	2	40	40		~				5.00	
71				70	320		100	100 33.33%				
78 Bananywa	300	1	1	70	229	20	11	31 47.69%			:	
79 Nsanbya	65	25	25	15	0	. 20		5 16.67%			1.7	
80 Kyakabuga	30	2	13	. 5	10			3 10:0174				
81					100					1	1.1	
82						1.0		00 07 050/				
83 Barnusunda	102	13	-	82	7	4	85	89 87.25%				-
81 Kayunga	40	8	31	1	0	2	14	16 40.00%				
85 Masodde	330	50	70	210	0	5	95	100 30.30%	1			
86 Vvikiba	130	15	10	105	0	2	98	100 76.92%				
	150	50	30	40	30	7	123	130 86.67%		1		
87 Kalagi	42	5		12	25	4	36	40 95.24%		5.33		
88 Kiyombya	130	Š		110	15	2	128	130 100.00%	.*			
89 Kiwaguzi	80	20	10	27	23	2	. 74	76 95.00%				
90 Mulagi		150	50		0	10	160	170 85.00%			i .	
191 Kigando	200		- 38	22	ŏ		0	0 0.00%				
192 Bulyanzige	95	35		4	ŏ	4	36	40 61.54%			1	
93 Gayaza West	- 65	38	23		ŏ	1	29	30 65.22%				
191 Kasambya B	46	15		31		1	51	51 63.75%		*	1	
195 Nkondo	80	5	ļ	20	54		70	72 70.59%			-	
196 Butambuka	102	13		13	76	2		60 85.71%	. :			
197 Kiryajjobyo West	70	- 15		55	. 0		60			- 1	٠.	
198 Luvuna	60	: .		7	53		40					
199 Kisala	150	1		12	137	- 1	120	120 80 00%		100	4.7	7
200 Kyerere East	113	10	<u> </u>	70	33	261	108 5,562	108 95.58% 5,823 60.78%	9	7 1	5 3.14	÷
		2,239		3,740	2,369							

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APPENDIX D-14 Population of Live Stocks by Community in the Project Area APPENDIX D-14

	Name of village	Population	Number				umber of	livestoc	ks (beads		(1/4
No.	(LC1) or community	in a community	of household	Cattle	Sheep	Goats	Poultr	D: 22	0.44.55	Others	T. J. D. J
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Pigs (9)		(11)	Turkeys Duck
	Kyabagamba	250	63	300	20	25	150	4	ا. دیگیششد.		1.1.2.1.1.1
	Kabale	230	80	500	100	200	500	20			
103	Kigayaza	400	80	560	20	210	520	50			
104	Kalyanjuba	450	67	600	80	120	1,000	15			
105 106	Kyambobo Lukonda	300 400	92 100	10,000	20 50	180 . 100	600 400	. 50			
107	Makururu	25	15	10	5	12	400	. 30			
108	Kyamabale	700	100	40	25	70	100				
109	Kasambya	156	60	800	20	100	72	10			
	Kameneo	, , : •	436	700	10	100	100	1 10			
	Kirasi	3,550	210	10,000	200	1,000	100	30			
	Nakitembe	300	120	4,000	100	300	200				
113 114	Buyanja	200 800	130	5,000	.20	30	50	1			
115	Kagongero Kabwire	600	552 57	4 143	. 5. 9	20 70	.40 580				
116	Kyeume	563	288	2,000	10	100	1,000	100			
117	Kyengera	300	70	5,000		300	100				•
T T ( 100	Kyangabakama	165	95	600	100	800	2,000				
119	Kyayi	·					-,				
	Nabugayo	140	60	700	20	200	600	10			
121	Kalwanga A	450	175	30	10	40	120				
122	Kuryanonga	350	155	200	40	150	350	100	50		$\tau = \tau_{m_1}$
123	Kakubansiri B	300	136	350	50	75	1,000				20
124	Lubale B	500	137	50	10	7		5			* .
	Nkokonjeru	500	80	40	12	20	150	200	***		
126 127	Lugazga Lusongode	350 467	125 103	350 400	200 20	150 50	300 400	200 80	100		
128	Luzira	1,328	345	1,200	. 54	200	2,500	- 60			
129	Bulwadda East	300	150	40		30	450	30			•
129	Bulwadda West	2,000	150	60	15	50	700	40			
130	Kawoko	400	116	600	25	30	1,200	20			
131	Nakutamudde	800	- 78	60		30	700	50			
132	Mawuki	480	80	40	. 2	30	150	5			
133	Kiriri	1,500	300	150	10	30	1,500				
134	Mpogo	420	75	35	. 8	10	300	40			
135	Buyinjabutoole	1,000	75	50	20	30	750	100			
136	Part of Kiriri (1133)	400	• • •	100			4.000				
137 138	Ngeye Busolo	400 800	50 100	100 200	30	80 50	1,200	150	300		
139	Maseruka	1,000	80	150	30	40	2,500 300	150	50		
140	Kanzira	220	44	40	- 3	10	80	30	٥٥		
141	Ngomanene	350	54	13	20	. 6	100	-0			
142	Kyehrne	800	212	180	30	20.	200	40	4		
142	Kychrne	200	26	2,000	50	150	17				
201	Warnirongo	680	170	210	30	60	610	50			
202	Bustoma	340	190	20	10	. 20	80	10			
203	Kasambya	491	85	30	. 10	20	100	15	i.		
204	Kikoko	225	100	45	15	50	300	200	13.00		
205	Setta	185	90	92	10	13	720	80	1		
200°	Kijjudde Masisi	450 450	280 250	15 500	85 20	70 30	700 40 000	250	, ef e	. :	· 1 .
201 202	Magigi Kiwenda T/C	1,000	230	100	30	: 3U 80	,	45 500	1		
	Kiwenda	1,000	C 1.4	100	30	00	2,000	300			
	Nabitalo	750	100	160	16	- 60	860	30			
	Buso	1,700	200	310	50	100	1,500	116			
	Meavu	1,500	220	40	7	10	200	20			
	Kasozi	5,000	200	80 .	30	. 50	400	200			
	Lugo	1,450	300	610	250	800	2,064	1,208			
	Mairye	250	80	480	10	580	48	20		-	
	Kazinga	500	380	30	12	20	600	10			•
	Bulamu/Kasangati TC	400	72	20	0	` 8	500	15			
217 218	Мадете	400	30	80	10	12	5,000	52			*
	Kazinga	330	300	20	5	10	250	12			-
	Kiwatimu	300	20	30	20	50	. 120	20			-
	Kiti A	250	150	15	7	18	750	30			
	Manyangwa	750	400	70	12	20	1,130				
	Nalyamagooja	4,500	900	400	30	30	1,000	15			
	Part of Secta (1217)	300	106	20	8	8	100				
225	Part of Magere (1218)	-							:		
	Kiwala	800	150	110	6	45	1,000	20	30		
302	Ngando	550	100	300		100	160				
						1.2					
303	**										
301	Kanzira Bwelyaba	400 3,325	150 475	120 3,000	20 100	50 100	200 4,000	60 100			

APPENDIX D414

										AP		(24)
(1)	(2)	(3)	(4)	T (3) T	(6)	$\mathcal{O}$	(8)	(9)	(10)	(11)	(12)	(13)
1307	Ndibulungi	1,000	110	1,500	100	450	15,000	80				
1308	Butende	700	85	150	30	80	750					
1309	Bukesa	300	75	50	12	16	20					:
1310	Tubbe	200	80	250	40	80	300	50				
1311	Bugobango	328	110	150	50	70	400	20				
			70	40	10	150	800	200			•	
1401	Kyengeza	500										
1402	Wabiyinja	750	120	16	21	4	480	30				
1403	Nakikungube				_		1					
1404	Masulita A	250	50	. 3	3	20	120	20				
1405	Kyanina	1,300	350	50	20	100	600					
1406	Kyamoisi	500	70	50	15	30	300					
1407	Malansaata	400	60	32	16	- 50	600	100				
	Bugimba	526	89	40	30	- 25	200	100				
1409		600	80	30	40	70	250	80				
		250	40	10	10	30	400	50				
	Buso			21		40	360	- 70				
3411		600	180		18			7				
1412	Bembe	500	70	15	10	20	200	20				
1413	Namayumba	500	100	100	10	20	50	50				
1414	Busaku	800	160	10	10	30	200	60				
2415	Buwembo	250	- 95	2	30	. 50	200	20				
1416	Kasengejje	1,000	240	16	6	25	1,900	40				
1417	Mende Central	1,000	196	94	15	20	271	4				
		600	150	60	20	20	200	50				
	Kisimbiri A-B-C/Wakiso T/0		700	150	38	185	560	200				
				. 30	10	10	600	60				
	Kituntu T/C	630	73	. 30	10	ŢŪ	000	00				
1502	Mpiei						9 666	***				
3503	Kikomazi	650	121	100		200	3,000	150				
	Total	69,554	14,857	57,501	2,900		115,665	5,695	530	<u> </u>	0	205
2101	Busooba/Kisombwa	250	80	9,000	60	800	100					
2102	Kilangwa	327	80	200	20	50	800	10				
	Kyengeza	595	85	400	50	50	150	60				
2104	Bodigaba	602	86	30	30	40	150	50		5		
2105	Bwakago	400	80	300	100	60	700					
< '		600	200	200	30	70	1,500	30				
2106	Kalonga			700	30	50	100	30				
2107	Mugusgulu	700	200	100	30	_						
2108	Kisingizi	800	150			20	500	50				
2109	Kyamikona	700	400	100	30	150	1,000	30				1
2110	Kyeguluso	400	80	20	10	- 50	200	60				
2111	Bakijulila	325	100	5	1	20	320	1 1	10			
i .	Kabowa	350	- 50	1	10	30	40					
2113	Kabubu	400	100	20	30	30	500	20				
2114	Kamusongola	1,750	250	200	50	80	40	50				1
		700	138	170	34	80	416	22				
	Nakawala/Lwegula	100	. 130	1,0	٠,		710					
2116	•	•		٠,								
2117	44.45						• • • •					
2118	Nakasaga	500	62	30	10	20	100	50				
2119	Kasambya T/C	800	200	200	20	300	400	150				- 1
2120	Kikoma	575	210	300	20	50	200	1				
2121	Ngabano	700	128	180	26	20	540	. 5				
	Katoma	400	60	30	25	100	300	100				
2201	Kassanda	1,700	250	6			500	30				
2202	Namabaale	350	120	100	50	50	200					
;		280	70	30	40	40	100	50				- i
2203	Kyabalanzi			50	40	100	300	50				- 1
	Kamuli	300	100					. 14				
	Bweyongedde	362	81	30	15	25	150	15				
	Kasazi A	700	66	6	7	20	130	10				
	Kalama	369	: 78	20	10	20	50	- 10				
2208	Kikandwa	200	28	. 19								
2209	Bulyamagunju A	560	80	100	, 4	. 10	- 100	30				
	Makafa	700	130	100	25	20	300	50				
	Milembe	390	57	65	5	20	285	57				
	Kalama	450	150	100	50	20	100	20				
	T-11	420	120	60	20	40	100	60				
	Kyakasengulu Kobana	532	87	120	. 20	. 10	50	12				
	Kabanyi				•0	- 60	10	35			-	
	Bukoba	285	165	8,000	50							
	Lukira	910	130	300	120	250	12,000	200				
	Kyawatuba	630	90	120	15	20	100	11	4			
	Kasana	450	90	300	10	10	200	50				
	Kalagi	500	170	202	49	70	2,000	200				
	Kamisenene	600	400	600	150	400	600	150				
2220	Manyogaseka	740	140	300	20	500	1,500	59	30			
	Masawo Kasawo	300	140	50	20	10	300	15				
2221		470	48	20,000	50	100	1,000	30			5	
2221 2222		410	60	20,000	30		46				•	
2221 2222 2223	Lwenyange									125		
2221 2222 2223 2224	Lwesyange Mbale	300		4.0								
2221 2222 2223 2224 2225	Lwenyange Mbale Mabubi	300 200	67	15	5	25	340			123		1
2221 2222 2223 2224 2225	Lwesyange Mbale	300 200 400	67 120	. 100	50	150	600	120		123		
2221 2222 2223 2224 2225 2226	Lwenyange Mbale Mabubi	300 200 400 300	67 120 140	100 230	50 12	150 50	600 700	32		:	٠.	
2221 2222 2223 2224 2225 2226 2227	Lwenyange Mbale Mabushi Kalongo Kitumbi	300 200 400	67 120	100 230 40	50 12 15	150 50 30	600 700 200	32 30		:	٠.	100
2221 2222 2223 2224 2225 2226 2227 2228	Lwenyange Mbale Mabushi Kalongo Kitumbi Kanoga	300 200 400 300	67 120 140	100 230	50 12	150 50	600 700	32		:	٠.	100
2221 2222 2223 2224 2225 2226 2227 2228 2301	Lwenyange Mbale Mabushi Kalongo Kitumbi	300 200 400 300 200	67 120 140 25	100 230 40	50 12 15	150 50 30	600 700 200	32 30		:	٠.	100

APPENDIX Dal4

3304 Bc 3305 Kr 3306 Mc 3307 Nc 3308 Bc 3307 Nc 3308 Bc 3309 Mc 3310 Kc 3311 Kc 3311 Kc 3311 Kc 3311 Kc 3311 Kc 3312 Lc 3311 Kc 3312 Cc 3311 Kc 3312 Cc 3312 Cc 3312 Cc 3313 Kc 3314 Lc 3312 Cc 3313 Kc 3314 Lc 3312 Cc 3313 Kc 3314 Cc 3312 Cc 3313 Kc 3314 Cc 3312 Cc 3312 Cc 3313 Kc 3314 Cc 3312 Cc 3313 Kc 3314 Cc 3316 C	Jugabo  Latakala  Jagongolo  Lakibanga-Nyanzi  Lisimbi  Jitiyana A  Lalangalo  Lawogero B  Liwanda  Liwanda  Liwanda  Liwanda  Liwanda  Liwanda  Liwanda  Liwanda  Liwanda  Lisariba  Lasikornbe  Latungalu  Latungal	\$500 \$600 \$700 \$700 \$250 \$900 \$700 \$520 \$900 \$700 \$450 \$680 \$650 \$600 \$250 \$430 \$620 \$600 \$600 \$200 \$400	(4) 73 6 60 50 120 134 51 68 41 100 94 60 160 57 170 117 400 50 87 123 150 130 40 75 62 100 50 80 90 90 100 230 230 210	36 200 40 7 40 9 36 200 45 200 4 3 200 30 20 18 100 6 7 400 80 60 40 50 40 50 60 40 50 60 40 50 60 60 60 60 60 60 60 60 60 60 60 60 60	60 20 40 5 14 10 13 30 20 5 4 25 50 6 5 10 25 20 10 5 10 23 40 7 6 3 10 10 10 10 10 10 10 10 10 10	20 10 20 25 10 25 10 25 24 15 15 15 30 20 20 20 20 35 50 20 30 10 15 33 40 11 15 15 31 40 11 11 11 10 10 10 10 10 10 10 10 10 10	80 800 800 800 800 800 800 800 800 800	(9) 50 45 40 80 15 35 16 120 100 300 30 25 60 150 30 88 800 60 100 50 30 60 60 60 60 60 60	70	100	((2)	
3305 Ki 3306 M   3307 N   3308 M   3309 M   3310 Ki 3312 Li 3313 Ki 3314 Li 3315 Ki 3316 Ki 3316 Ki 3317 B   3316 Ki 3316 Ki 3317 B   3318 Ki 3318 Ki 3317 B   3318 Ki 3318 Ki 3317 B   3318 Ki 3317 B   3318 Ki 3318 Ki 3317 B   3318 Ki 3318 Ki 3317 B   3316 Ki 331	(atakala Iagongolo Iakibanga-Nyanzi Isisimbi Iitiyana A (alangalo Iwogero B Liwanda Iweyo Lasikombe Latingalu Isidimbo Lisamba Lawolongojjo Isamba Lawolongojjo Isamba Isa	36 700 300 708 250 350 350 350 350 350 450 1,000 450 680 650 660 250 600 600 200 400 400 400 400 400 400 400 1,000 650	6 60 50 120 134 51 68 41 100 94 60 160 57 170 117 400 50 87 123 150 130 40 75 62 100 50 50 99 99 90 50 99 90 90 90 90 90 90 90 90 90 90 90 90	64 40 7 40 9 36 20 45 200 4 30 20 30 20 18 100 6 7 400 80 70 60 80 70 60 40 25 80 40 80 80 80 80 80 80 80 80 80 80 80 80 80	20 40 5 14 10 13 30 20 5 4 25 50 6 5 10 23 40 7 6 3 15 20 10 20 10 20 10 10 10 10 10 10 10 10 10 10 10 10 10	10 20 25 10 25 24 15 13 30 50 20 20 35 50 20 30 40 15 33 100 15 15 15 31 40 11 11 11 11 11 11 11 11 11 11 11 11 11	80 200 500 860 800 40 2,000 500 300 250 600 100 200 400 150 170 750 300 400 310 400 200 200 200 200 200 200 200 200 20	45 40 80 15 35 16 120 100 300 30 25 60 150 30 8800 60 100 50 39				
### ### ### ### ### ### ### ### ### ##	Magongolo Vakibanga-Nyanzi kisimbi Mitiyana A  (alangalo Mogero B  Ganda Meyo  Casikombe Catungulu Sudimbo Cisamba Cawolongojjo Vamungo Vamung	700 300 700 300 700 250 890 350 800 700 450 1,000 450 680 650 600 250 600 200 400 400 400 400 400 400 400 400 1,000 650	50 120 134 51 68 41 100 94 60 160 57 170 117 400 50 87 123 150 130 40 75 62 100 50 80 90 90 230 200	40 7 40 9 36 20 45 200 4 30 20 18 100 6 7 400 80 70 60 80 70 60 40 25 80 40 20 40 20 40 40 40 40 40 40 40 40 40 40 40 40 40	40 5 14 10 13 30 20 5 4 25 50 6 5 10 25 20 10 5 10 23 40 7 6 3 15 20 10 10 10 10 10 10 10 10 10 10 10 10 10	20 25 10 25 24 15 15 30 50 20 35 50 20 30 40 15 33 30 100 15 11 40 11 10 30 10 30 30 30 30 30 30 30 30 30 30 30 30 30	200 500 860 800 40 2,000 500 300 250 600 100 200 40 150 170 300 400 310 400 310 200 400 300 200 200 400 300 200 400 300 300 200 400 300 300 300 300 300 300 3	40 80 15 35 16 120 100 300 30 25 60 150 30 88 800 600 50 39				
1307 N. 1308 B. 1309 M. 1310 K. 1311 K. 1312 L. 1313 K. 1313 K	lakibanga-Nyanzi kisimbi ditiyana A (alangalo wogero B kiwanda weyo (asikombe (ahingulu kidinbo (isamba (awolongojio kanungo kakanyonyi kombo (asikanyonyi kombo (asikanyi dabale daanyi dapongo disimba (ismdi (asikanda (ismdi (asikanda (kande (itongo Vakaziba (itebere Watuba	300 700 250 890 350 800 700 450 1,000 450 680 650 600 250 430 620 600 600 600 600 600 400 400 400 400 40	50 120 134 51 68 41 100 94 60 160 57 170 117 400 50 87 121 150 130 40 75 62 100 50 80 90 90 200	7 40 9 36 20 45 200 4 3 20 30 20 18 100 6 7 400 80 70 60 80 70 60 40 25 80 40 20 40 40 40 40 40 40 40 40 40 40 40 40 40	40 5 14 10 13 30 20 5 4 25 50 6 5 10 25 20 10 5 10 23 40 7 6 3 15 20 10 10 10 10 10 10 10 10 10 10 10 10 10	25 10 25 24 15 15 15 30 20 20 35 50 20 30 40 15 33 30 100 15 15 11 10 31 40 11 11 10 30 30 30 30 30 30 30 30 30 30 30 30 30	500 860 800 40 2,000 500 300 250 600 100 200 40 150 175 300 400 310 400 310 400 200 500 500 500 500 500 500 500 500 5	80 15 35 16 120 100 300 30 25 60 150 30 8 800 60 100 50 39				
308 Ba 309 M 3100 K 3391 K 3492 K 3493 M 349	sisimbi Aitiyana A (alangalo swogero B Liwanda sweyo (assikornbe tatungalu Budimbo cisamba (aswolongojjo vamnago sakanyonyi sombo (asbulamuliro Bambula serinnya labale daamyi dpongo disimba Cimuli cabeele Buwala Bekina Ckande Citongo Vakaziba Citongo Vakaziba Citebere Watuba	700 250 350 350 800 700 450 680 650 600 250 430 620 600 600 600 400 400 400 400 400 400 40	120 134 51 68 41 100 94 60 160 57 170 117 400 50 87 121 150 130 40 75 62 100 50 80 90 90 200	40 9 36 20 45 200 4 3 20 30 20 30 20 6 7 400 80 60 80 70 60 40 25 80 40 20 40 20 40 40 40 40 40 40 40 40 40 40 40 40 40	14 10 13 30 20 5 4 25 50 6 5 10 23 40 7 6 3 15 20 10 21 20 10 21 21 21 21 21 21 21 21 21 21 21 21 21	10 25 24 15 15 30 20 20 35 50 20 30 40 15 33 100 15 15 31 40 11 10 30	860 800 40 2,000 500 300 200 200 200 40 100 150 170 750 300 400 310 400 200 200 200 200 200 200 200 200 20	15 35 16 120 100 300 30 25 60 150 30 8 800 60 100 50 39				
13109 M 13101 K 1311 K 131312 L 131313 K 131313 K 131313 K 131315 K 131316 K 13131	ditiyana A (alangalo wogero B tiwanda weyo (asikombe casikombe cisamba cavolongojjo yamungo ya	250 \$90 350 800 700 450 680 650 600 250 430 620 600 600 200 400 400 400 400 400 400 1,000 650	134 51 68 41 100 94 60 160 57 170 117 400 50 87 123 150 130 40 75 62 100 50 80 90 50 90 90 90 90 90 90 90 90 90 9	9 36 20 45 200 4 3 20 30 20 18 100 6 7 400 80 60 80 70 60 40 40 25 40 40 20 40 40 40 40 40 40 40 40 40 4	14 10 13 30 20 5 4 25 50 6 5 10 25 20 10 5 10 23 40 7 6 3 15 10 20 10 10 10 10 10 10 10 10 10 10 10 10 10	25 24 15 15 30 50 20 20 35 50 20 30 40 15 33 100 15 15 11 10 30 50	40 2,000 500 300 250 600 100 200 40 100 150 170 750 300 400 310 400 200 200 200 500 700 500 700 500 700 500 700 700 7	35 16 120 100 300 30 25 60 150 30 8 800 60 100 50 39				
310 K: 312 Lv 312 Lv 312 Lv 312 Lv 312 Lv 313 K: 314 Lv 315 K: 316 K: 317 B: 317 B: 318 K: 319 K: 312 B: 312 B: 312 B: 312 B: 312 Lv 31	(alangalo woogero B Liwanda weyo (asikombe tatungulu sudumbo Lisamba Cawolongojjo Vamungo sakanyonyi Bombo Cabulamuliro Bambula iserinnya Iabale Idanyi Idpongo Itisunba Litisuli Cabeele Buwala Bekina Ckande Citongo Vakaziba Citebere Watuba	520 890 350 800 700 450 1,000 450 680 650 600 250 600 600 600 600 600 600 400 40	51 68 41 100 94 60 160 57 170 117 400 50 87 123 150 130 40 75 62 100 50 80 90 50 99 100 230 200	36 200 45 200 4 30 20 30 20 18 100 6 7 400 80 70 60 80 70 60 40 25 80 90 90 90 90 90 90 90 90 90 90 90 90 90	10 13 30 20 5 4 25 50 6 5 10 25 20 10 23 40 7 6 3 15 20 10 20 20 20 20 20 20 20 20 20 20 20 20 20	24 15 15 30 50 20 35 50 20 30 40 15 33 30 100 15 15 31 40 11 10 30 10 30	40 2,000 500 300 250 600 100 200 40 100 150 300 400 310 400 310 200 200 200 200 200 200 200 200 200 2	16 120 100 300 30 25 60 150 30 8 800 60 100 50 39				
3311 K: 3312 Li 3313 K: 3314 Li 3313 K: 3314 Li 3315 K: 3316 K: 3316 K: 3317 B: 3318 K: 3318 K	wogero B Liwanda weyo Liswanda weyo Lasikornbe Cabungulu Udimbo Cisarnba Cawolongojjo Vanungo Jakanyonyi Sombo Cabulamuliro Jambula Jabale Maanyi Mpongo disimba Cicauli Cabcele Suwala Jekina Ckande Citongo Vakaziba Citebere Watuba	890 350 800 700 450 1,000 450 680 650 600 250 430 600 600 600 600 600 600 400 40	68 41 100 94 60 160 57 170 117 400 50 87 121 150 130 40 75 62 100 50 80 90 90 100 230 200	20 45 200 4 3 20 30 20 18 100 6 7 400 80 70 60 40 25 80 50 100	10 13 30 20 5 4 25 50 6 5 10 25 20 10 23 40 7 6 3 15 20 10 20 20 20 20 20 20 20 20 20 20 20 20 20	15 15 30 20 20 35 50 20 30 40 15 33 30 100 15 15 15 11 10 30	2,000 500 300 250 600 100 200 200 40 100 150 175 300 400 310 400 125 200 200 200 200 200 200 200 200 200 2	120 100 300 30 25 60 150 30 8 800 60 100 50 39				
2312 Lv 2313 Ki 2314 Lv 2313 Ki 2314 Lv 2315 Ki 2316 Ki 2317 Bt 2318 Ki 2318 K	wogero B Liwanda weyo Liswanda weyo Lasikornbe Cabungulu Udimbo Cisarnba Cawolongojjo Vanungo Jakanyonyi Sombo Cabulamuliro Jambula Jabale Maanyi Mpongo disimba Cicauli Cabcele Suwala Jekina Ckande Citongo Vakaziba Citebere Watuba	890 350 800 700 450 1,000 450 680 650 600 250 430 600 600 600 600 600 600 400 40	68 41 100 94 60 160 57 170 117 400 50 87 121 150 130 40 75 62 100 50 80 90 90 100 230 200	20 45 200 4 3 20 30 20 18 100 6 7 400 80 70 60 40 25 80 50 100	10 13 30 20 5 4 25 50 6 5 10 25 20 10 23 40 7 6 3 15 20 10 20 20 20 20 20 20 20 20 20 20 20 20 20	15 15 30 20 20 35 50 20 30 40 15 33 30 100 15 15 15 11 10 30	2,000 500 300 250 600 100 200 200 40 100 150 175 300 400 310 400 125 200 200 200 200 200 200 200 200 200 2	120 100 300 30 25 60 150 30 8 800 60 100 50 39				
1313 Ki 1314 Lv 1315 Ki 1314 Lv 1315 Ki 1316 K	Liwanda weyo Lasikombe Latingulu Budimbo Lisamba Cawolongojjo Vamungo Lakanyonyi Combo Cabulamuliro Bambula Baribula Lisambi Labale Lazanyi Labale Lizauli Cabeele Buwala Bekina Ckande Citongo Vakaziba Citebere Watuba	350 800 700 450 1,000 450 680 650 600 250 430 620 600 200 400 400 400 500 240 460 400	41 100 94 60 160 57 170 117 400 50 87 123 150 130 40 75 62 100 50 80 90 50 99 100 230 200	45 200 4 3 20 30 20 18 100 6 7 400 80 60 80 70 60 40 25 80 40 25 80	13 30 20 5 4 25 50 6 5 10 25 20 10 5 10 23 40 7 6 3 15 10 21 10 21 10 21 10 21 10 21 10 21 10 21 10 21 10 21 21 21 21 21 21 21 21 21 21 21 21 21	15 30 50 20 20 35 50 20 30 40 15 33 100 15 15 11 10 30	500 300 250 600 100 200 200 40 100 150 170 750 300 400 310 400 125 200 200 500 700	100 300 30 25 60 150 30 8 800 60 100 50 39				
2314 Lx 2315 Ki 2316 Ki 2316 Ki 2317 Bi 2318 Ki 2319 Ki 2319 Ki 2322 Bi 2322 Bi 2322 Bi 2402 Ki 2403 Mi 2403 Mi 2404 Mi 2405 Mi 2406 Ki 2407 Ki 2408 Bi 2409 Bi 2409 Bi 2411 Ki 2412 Ni 2413 Ki 2414 Wi 2414 Wi 2415 Bi 2417 Bi 2418 Ki 2417 Bi 2418 Ki 2417 Bi 2418 Ki 2417 Bi 2418 Ki 2418 Ki 2418 Ki 2418 Ki 2418 Ki 2419 Ni 2419 N	weyo casikorabe Catungulu Sudimbo Cisamba Cawolongojjo Vanungo Sakanyonyi Sombo Cabulamuliro Bambula Serinnya Jabale Jabale Jabale Jabale Gamyi Apongo Jisimba Cicabeele Suvvala Bekina Ckande Citongo Vakaziba Citebere Watuba	800 700 450 1,000 450 680 650 600 250 430 620 600 600 200 400 400 400 400 400 400 1,000	100 94 60 160 57 170 117 400 50 87 121 150 130 40 75 62 100 50 80 90 50 99 100 230 200	200 4 3 20 30 20 18 100 6 7 400 80 60 80 70 60 40 25 80 40 25 80 60 80 70 60 80 70 60 80 80 80 80 80 80 80 80 80 8	30 20 5 4 25 50 6 5 10 25 20 10 23 40 7 6 3 15 20	30 50 20 20 35 50 20 30 40 15 33 30 100 15 15 11 40 11 10 30	300 250 600 100 200 200 40 100 150 170 750 300 400 125 200 200 200 500 700 900	300 30 25 60 150 30 8 800 60 100 30 39				
2315 K3316 K3316 K3316 K3318 K3318 K3318 K3318 K3318 K3320 N32321 K3322 B3322 B3322 B3322 B3322 K3324 B3401 K3402 N K403 K406 K406 K406 K406 K406 K406 K406 K406	Casikombe Catingolu Sudinsbo Cisamba Cawolongojjo Vamungo Sakanyonyi Sombo Cabulamuliro Sambula Iserinnya Jabale Jasanyi Japongo Jisimba Cicabcele Suvvala Sekina Ckande Citongo Vakaziba Citebere Watuba	700 450 1,000 450 680 650 600 250 600 600 600 200 400 400 400 400 400 400 400 400 4	94 60 160 160 57 170 117 400 50 87 123 150 130 40 75 62 100 50 80 90 50 99 100 230 200	3 20 30 20 18 100 6 7 400 80 60 80 70 60 40 25 80	20 5 4 25 50 6 5 10 25 20 10 5 10 23 40 7 6 3 15 20 10 21 21 21 21 21 21 21 21 21 21	50 20 20 35 50 20 30 40 15 33 30 100 15 15 31 40 11 10 30	250 600 100 200 200 40 100 150 300 400 310 400 123 200 200 500 700 900	300 30 25 60 150 30 8 800 60 100 30 39				
3316 Ka 3317 Bu 3318 Ki 3318 Ki 3319 Ka 3320 Na 3321 Sa 3322 Ba 2323 Ka 2323 Ka 2323 Ka 2323 Ka 2323 Ka 2323 Ka 2323 Ka 2323 Ka 2324 Ba 2400 Na 2403 Ma 2404 Ma 2405 Ma 2406 Ka 2407 Ka 2408 Ba 2407 Ka 2411 Ka 2411 Ka 2411 Ka 2411 Ka 2411 Ka 2412 Na 2414 Wa 2416 Ba 2417 Ba 2418 Ka 2418 Ka 2418 Ka 2419 Ka 2418 Ka 2419 Ka 2421 Ka 2422 Ka 2423 Ka 2424 Ka 2424 Ka 2426 Ka 2426 Ka 2426 Ka 2426 Ka 2427 Ka 2428 Ka 2429 Ka 2429 Ka 2420 Ka 2421 Ka 2422 Ka 2423 Ka 2424 Ka 2424 Ka 2425 La 2426 Ka 2426 Ka 2427 Ka 2428 Ka 2429 Ka 2429 Ka 2420 Ka 2420 Ka 2421 Ka 2422 Ka 2423 Ka 2424 Ka 2425 La 2426 Ka 2427 Ka 2428 Ka 2429 Ka 2429 Ka 2429 Ka 2420 Ka 2420 Ka 2421 Ka 2422 Ka 2423 Ka 2424 Ka 2425 Ka 2426 Ka 2427 Ka 2428 Ka 2429 Ka 2429 Ka 2429 Ka 2420 Ka 2420 Ka 2420 Ka 2421 Ka 2422 Ka 2423 Ka 2424 Ka 2423 Ka 2424 Ka 2425 Ka 2426 Ka 2427 Ka 2428 Ka 2429 Ka 2429 Ka 2429 Ka 2420 Ka 242	Cahingulu Sudimbo Cisaruba Cisaruba Cisaruba Samungo Sakanyonyi Sombo Cabulamuliro Sambula Serinnya Jabale daanyi dpongo disimba Cicauli Cabcele Sawala Sekina Ckande Citongo Vakaziba Citebere Watuba	450 1,000 450 680 650 600 250 430 620 600 200 400 400 400 400 240 400 1,000 650	60 160 57 170 117 400 50 87 121 150 130 40 75 62 100 50 80 90 50 99 100 230 200	3 20 20 18 100 6 7 400 80 60 80 70 60 40 25 80	3 4 25 50 6 5 10 25 20 10 5 10 23 40 7 6 3 15 20 10 21 21 21 21 21 21 21 21 21 21 21 21 21	20 20 35 50 20 30 40 15 33 30 100 15 15 11 10 30	600 100 200 40 100 150 170 300 400 310 400 125 200 200 500 700 900	30 23 60 150 30 8 800 60 100 50 39 40 100 60				
2317 Be 2318 Ki 2319 Kr 2318 Ki 2319 Kr 2321 Se 2322 Be 2323 Kr 2324 Be 2400 Mr 2400 M	Sudinso Cisaraba Cisaraba Carvoloncojjo Vanungo Sakanyonyi Sombo Cabulamuliro Sambula Sarabula Sarabula Sistrinnya Jabale daanyi dapongo disimba Cimuli Cabeele Suvvala Sekina Ckande Citongo Vakaziba Citebere Watuba	1,000 450 680 650 600 250 430 620 600 600 400 400 400 500 240 400 400 400 1,000	160 57 170 117 400 50 87 121 150 130 40 75 62 100 50 80 90 50 99 100 230 200	20 30 20 18 100 6 7 400 80 80 70 60 40 25 80 40	4 25 50 6 5 10 25 20 10 5 10 23 40 7 6 3 15 20 10 21 21 21 21 21 21 21 21 21 21 21 21 21	20 35 50 20 30 40 15 33 100 15 15 15 11 10 30	100 200 200 40 100 150 170 750 300 400 310 400 125 200 200 500	25 60 150 30 8 800 60 100 50 39 40 100 60				
318 Ki 319 Ki 319 Ki 32320 Na 32321 Sa 32322 Ba 32323 Ki 32324 Ba 32402 Ni 32403 Mi 4401 Sa 4401 Mi 4405 Mi 4406 Ki 4406 Ki 4407 Ki 4408 Ba 4407 Ki 4408 Ba 4409 Ba 2411 Ki 2411 Na 2411 Na 2412 Na 2413 Ki 2414 Na 2414 Na 2414 Na 2415 Ba 2417 Ba 2418 Ki 2417 Ba 2418 Ki 2418 Ki 2418 Ki 2419 Na 2421 Ki 2422 Na 2423 Ki 3101 Ki 3101 Ki 3101 Ki 3101 Ki	Cisamba Cawolongojjo Vanungo Jakanyonyi Rombo Cabulamuliro Rambula Serinnya Jabale Jasanyi Japongo Jisimba Cisanii Cabcele Buwala Bekina Ckande Citongo Vakaziba Cittebere Watuba	450 680 650 600 250 430 620 600 600 200 400 400 400 240 400 400 1,000 650	57 170 117 400 50 87 123 150 130 40 75 62 100 50 80 90 50 99	20 30 20 18 100 6 7 400 80 80 70 60 40 25 80 40	25 50 6 5 10 25 20 10 5 10 23 40 7 6 3 15 20	35 50 20 30 40 15 33 30 100 15 31 40 11 10 30	200 200 40 100 150 170 750 300 400 125 200 200 500 700 900	60 150 30 8 800 60 100 50 39 40 100 60				
319 K: 320 N: 32121 Sa: 32122 Sc: 32122 Sc: 32123 Sc: 32124 Sc: 32	Cawolongojjo Vamungo Jakanyonyi Bombo Cabulamuliro Bambula Iserinnya Jabale Jahale Jah	680 650 600 250 430 620 600 600 200 400 400 400 400 240 400 400 400	170 117 400 50 87 123 150 130 40 75 62 100 50 80 90 50 99 100 230 200	30 20 18 100 6 7 400 80 60 80 70 60 40 25 80	50 6 5 10 25 20 10 5 10 23 40 7 6 3 15 20	50 20 30 40 15 33 30 100 15 15 31 40 11 10 30	200 40 100 150 170 750 300 400 125 200 200 500 700 900	60 150 30 8 800 60 100 50 39 40 100 60				
2320 No. 2321 Sec. 2322 Bc. 2322 Bc. 2323 Bc. 2324 Bc. 2402 No. 2402 No. 2403 Mc. 2413 Kc. 2414 Wc. 2413 Kc. 2414 Mc. 2412 No. 2415 Bc. 2416 Bc. 2416 Mc. 24	Vamungo sakanyonyi sakanyonyi sambula sambula sambula sambula sampula daanyi dpongo disimba	650 600 250 430 620 600 600 200 400 400 400 500 800 240 460 400	117 400 50 87 123 150 130 40 75 62 100 50 80 90 50 99 100 230 200	20 18 100 6 7 400 80 60 80 70 60 40 25 80	6 5 10 25 20 10 5 10 23 40 7 6 3 15 20	20 30 40 15 33 100 15 15 31 40 1t 10 30	40 100 150 170 750 300 400 310 400 123 200 200 500 700 900	150 30 8 800 60 100 50 39 40 100 60				
2321 S2 2322 B2 2323 K2 2323 K2 2323 K2 2401 S2 2402 N 2403 M 2404 M 2405 M 2406 K2 2407 K2 2408 B2 2407 K2 2418 N 2411 N 2412 N 2411 K2 2411 K2 2412 N 2416 B2 2417 B2 2418 K2 2418 K2 2410 K2 2411 K2 2412 N 2416 B2 2417 B2 2418 K2 2418 K2 2418 K2 2419 N	akanyonyi sombo (abulamuliro sambula serinnya labale daamyi dipongo disimba (imuli cabcele suvvala sekina (kande (itongo Vakaziba (kitobre Watuba	600 250 430 620 600 600 200 400 400 400 500 800 240 460 400	400 50 87 121 150 130 40 75 62 100 50 80 90 50 99 100 230 200	18 100 6 7 400 80 60 80 70 60 40 25 80 50	5 10 25 20 10 5 10 23 40 7 6 3 15 20 10	30 40 15 33 30 100 15 15 11 40 11 10 30 10 30	100 150 170 750 300 400 310 400 125 200 200 500 700 900	150 30 8 800 60 100 50 39 40 100 60				
2322 Bc 2323 Kr 2324 Bc 2324 Bc 2401 Sc 2402 Nc 2403 Mc 2404 Mc 2405 Mc 2406 Kc 2407 Kc 2408 Bc 2409 Bc 2409 Bc 2411 Kc 2411 Kc 2411 Kc 2412 Nc 2413 Kc 2414 Wc 2415 Mc 2416 Bc 2417 Bc 2416 Bc 2417 Bc 2416 Bc 2417 Bc 2416 Kc 2417 Kc 2416 Kc 2417 Kc 2417 Kc 2417 Kc 2418 Kc 2418 Kc 2420 Mc 2421 Kc 2421 Kc 2422 Mc 2423 Kc 2424 Kc 2425 Lc 2426 Kc 3100 K	Combo Cabulamuliro Cabulamuliro Cabulamuliro Cabula Cabula Camyi Capuli Cabuli Cabula Cabula Ckanda Ckanda Citongo Vakaziba Citotec Watuba	250 430 620 600 600 200 400 400 500 800 240 400 1,000 650	50 87 121 150 130 40 75 62 100 50 80 90 50 99 100 230 200	100 6 7 400 80 60 80 70 60 40 50 40 25 80	10 25 20 10 5 10 23 40 7 6 3 15 20 10	40 15 33 30 100 15 15 31 40 11 10 30 10 30	150 170 750 300 400 310 400 125 200 200 500 700 900	30 8 800 60 100 50 39 40 100 60				
2323 Ka 2324 Ba 2401 Ss 2402 Na 2403 Ma 2404 Ma 2405 Ma 2406 Ka 2407 Ka 2408 Ba 2410 Ka 2411 Ka 2412 Na 2413 Ka 2414 Wa 2413 Ka 2414 Wa 2413 Ka 2414 Wa 2412 Na 2413 Ka 2414 Wa 2415 Na 2416 Ba 2417 Ba 2418 Ka 2418 K	Cabulamulico Sambula Serinnya Iserinnya Iserinnya Idpongo disimba Cissuli Cabcele Suvvala Bekina Ckande Citongo Valkaziba Citotece Watuba	430 620 600 600 200 400 400 400 500 800 240 400 400 1,000	87 123 150 130 40 75 62 100 50 80 90 50 99 100 230 200	6 7 400 80 60 80 70 60 40 25 80 40 25 80	25 20 10 5 10 23 40 7 6 3 15 20	15 33 30 100 15 15 31 40 11 10 30 10 30	170 750 300 400 310 400 125 200 200 500 700 900	8 800 60 100 50 39 40 100 60				
324 B: 4401 Ss 4402 N: 4403 M: 4404 M: 4405 M: 4406 K: 4406 B: 4407 B: 4407 B: 4411 K: 2412 N: 2413 K: 2414 W: 2415 B: 2416 B: 2416 B: 2416 B: 2416 B: 2416 B: 2416 R: 2412 N: 2423 K: 2424 M: 2423 K: 2424 M: 2423 K: 2426 K: 3100 K:	Bambula iserinnya Iabale daanyi dpongo disimba timuli Gabeele Buvvala Bekina Ckande Citongo Vakaziba Citebere Watuba	620 600 600 600 200 400 400 500 800 240 400 400 1,000 650	123 150 130 40 75 62 100 50 80 90 50 99 100 230 200	7 460 80 60 80 70 60 40 50 40 25 80 50	20 10 5 10 23 40 7 6 3 15 20	33 30 100 15 15 31 40 11 10 30 10	750 300 400 310 400 125 200 200 500 700 900	800 60 100 50 39 40 100 60				
2401 Ss 2402 No. 2403 Model of St. 2404 Model of Sc. 2405 Model of Sc. 2406 Kolor of Sc. 2407 Kolor of Sc. 2408 Bold of Sc. 2410 Kolor of Sc. 2411 Kolor of Sc. 2412 No. 2412 No. 2414 Model of Sc. 2414 Kolor of Sc. 2414 Kolor of Sc. 2415 No. 2416 Bold of Sc. 2417 No. 2416 Bold of Sc. 2417 No. 2418 Kolor of Sc. 2418 K	serinnya Vabale daanyi dapongo disimba Gizouli Cabcele Suvvala Sekina Gkande Gitongo Vakaziba Gitebere Watuba	600 600 600 200 400 400 400 500 800 240 460 400 1,000 650	150 130 40 75 62 100 50 80 90 50 99 100 230 200	400 80 60 80 70 60 40 50 40 25 80 50	20 10 5 10 23 40 7 6 3 15 20	30 100 15 15 31 40 11 10 30 10	300 400 310 400 125 200 200 500 700 900	800 60 100 50 39 40 100 60				
2402 N. 2403 M. 2404 M. 2405 M. 2406 K. 2407 K. 2408 B. 2409 B. 2410 K. 2411 K. 2412 N. 2413 K. 2414 W. 2415 N. 2416 B. 2416 B. 2417 B. 2418 K. 2418 K. 2420 N. 2421 K. 2422 N. 2423 K. 2424 K. 2425 L. 2426 K. 3101 K.	labale faanyi dpongo dissimba (insuli tabcele Buwala Bekina Ckande Cikande Cikatele Vakaziba Citebere Watuba	600 600 200 400 400 500 800 240 400 1,000 650	130 40 75 62 100 50 80 90 50 99 100 230 200	80 60 80 70 60 40 50 40 25 80 50	10 5 10 23 40 7 6 3 15 20	100 15 15 15 31 40 11 10 30 10	400 310 400 125 200 200 500 700 900	60 100 50 39 40 100 60			. :	
2403 M 2404 M 2405 M 2406 K 2407 K 2408 B 2409 B 2410 K 2411 K 2412 N 2413 K 2414 W 2415 N 2416 B 2417 B 2418 K 2412 N 2424 M 2425 L 2422 M 2422 M 2423 K 2424 K 2425 L 2426 K 3101 K	daanyi dpongo disimba Ginouli Cabcele Buwala Bekina Ckande Citongo Vakaziba Gitebere Watuba	600 200 400 400 400 500 800 240 400 400 1,000 650	40 75 62 100 50 80 90 50 99 100 230 200	60 80 70 60 40 50 40 25 80 50	5 10 23 40 7 6 3 15 20	15 15 31 40 11 10 30 10	310 400 125 200 200 500 700 900	100 50 39 40 100 60			. :	
2404 M 2405 M 2406 K 2406 K 2407 K 2408 B 2410 K 2411 K 2411 N 2411 N 2411 N 2411 N 2411 N 2412 N 2415 B 2415 B 2416 B 2416 B 2417 B 2416 K 2412 N 2421 K 2422 M 2423 K 2424 K 2425 L 2426 K 3101 K	dpongo disimba Cissuli Cabcele Buvvala Bekina Ckande Citongo Vakaziba Citebere Watuba	200 400 400 400 500 800 240 400 400 1,000 650	75 62 100 50 80 90 50 99 100 230 200	80 70 60 40 50 40 25 80 50	10 23 40 7 6 3 15 20	15 31 40 11 10 30 10 30	400 125 200 200 500 700 900	50 39 40 100 60				
2405 M 2406 K 2407 K 2408 B 2410 K 2411 K 2411 K 2412 N 2413 K 2413 K 2414 W 2415 N 2416 B 2417 B 2417 B 2418 N 2419 N 2420 N 2420 K 2421 K 2422 K 2424 K 2424 K 2426 K 3101 K	disimba timuli Survala Sekina Ckande Citongo Vakaziba Citebere Watuba	400 400 400 500 800 240 400 400 1,000 650	62 100 50 80 90 50 99 100 230	70 60 40 50 40 25 80 50	23 40 7 6 3 15 20	31 40 11 10 30 10 30	125 200 200 500 700 900	39 40 100 60				
2405 M 2406 K 2407 K 2408 B 2410 K 2411 K 2411 K 2412 N 2413 K 2413 K 2414 W 2415 N 2416 B 2417 B 2417 B 2418 N 2419 N 2420 N 2420 K 2421 K 2422 K 2424 K 2424 K 2426 K 3101 K	disimba timuli Survala Sekina Ckande Citongo Vakaziba Citebere Watuba	400 400 500 800 240 400 400 1,000 650	100 50 80 90 50 99 100 230 200	60 40 50 40 25 80 50	40 7 6 3 15 20 10	40 11 10 30 10 30	200 200 500 700 900	40 100 60	70			
2406 K 2407 K 2408 B 2419 B 2411 K 2411 K 2412 N 2413 K 2414 W 2415 N 2416 B 2417 B 2416 B 2417 B 2418 K 2418 K 2420 N 2421 K 2421 K 2422 K 2423 K 2424 K 2424 K 2425 L 2426 K 3101 K 3101 K	Cicculi Cabcele Buvvala Bekina Ckande Ckande Citongo Vakaziba Citebere Watuba	400 500 800 240 400 400 1,000 650	50 80 90 50 99 100 230 200	40 50 40 25 80 50	7 6 3 15 20 10	11 10 30 10 30	200 500 700 900	100 60	70	•		
2407 K2 2408 B 2409 B 2409 B 2410 K 2411 K 2412 N 2413 K 2414 W 2415 N 2416 B 2417 B 2418 K 2412 N 2420 N 2421 K 2422 K 2423 K 2424 K 2424 K 2425 L 2426 K 3101 K	Cabcele Buwala Bekina Ckande Citongo Vakaziba Citebere Watuba	400 500 800 240 400 400 1,000 650	80 90 50 99 100 230 200	50 40 25 80 50	6 3 15 20 10	10 30 10 30	500 700 900	100 60			٠	
2408 B 2409 B 2410 K 2411 K 2411 K 2411 N 2413 K 2414 W 2415 N 2416 B 2416 B 2416 B 2417 B 2421 K 2422 N 2421 K 2422 K 2424 K 2424 K	Suwala Sekina Ckande Citongo Vakaziba Citebere Watuba	500 800 240 400 400 1,000 650	90 50 99 100 230 200	40 25 80 50 100	3 15 20 10	30 10 30	700 900	60			٠	
24109 B 24110 K 24111 K 24112 N 2412 N 2412 N 2413 K 2414 W 2415 N 2415 B 2415 B 2417 B 2420 N 2420 N 2421 K 2422 N 2424 N 2423 K 2424 K 2426 K 3101 K 3101 K	Bekina Gkande Gitongo Vakaziba Gitebere Watuba	800 240 400 400 1,000 650	90 50 99 100 230 200	40 25 80 50 100	3 15 20 10	10 30	900					
2410 K 2411 K 2412 N 2413 K 2414 W 2415 N 2416 B 2417 B 2416 B 2417 B 2418 K 2419 N 2420 N 2421 K 2422 K 2424 K 2424 K 2425 L 2426 K 3101 K	Ckande Citorgo Vakaziba Citebere Watuba	240 400 400 1,000 650	50 99 100 230 200	25 80 50 100	15 20 10	10 30		60				
2411 K 2412 N 2413 K 2414 W 2415 N 2416 B 2417 B 2416 B 2417 B 2418 K 2419 N 2420 N 2421 K 2422 K 2424 N 2425 L 2426 K 3101 K 3102 K	Citongo Vakaziba Citebere Wawba	400 400 1,000 650	99 100 230 200	80 50 100	20 10	30						
2412 N 2413 K 2414 W 2415 N 2415 N 2416 B 2417 B 2418 K 2419 N 2420 N 2421 K 2422 K 2423 K 2424 N 2425 L 2426 K 3101 K 3102 K	Vakaziba Citebere Watuba	400 1,000 650	100 230 200	100		100		100				
2413 K 2414 W 2415 N 2416 B 2416 B 2417 B 2418 K 2419 N 2420 N 2421 K 2422 N 2423 K 2424 N 2425 L 2426 K 3101 K 3102 K	Citebere Watuba	1,000 650	230 200		10	100	200	50				
2414 W 2415 N 2416 B 2417 B 2418 K 2418 K 2419 N 2421 K 2422 N 2423 K 2424 N 2425 L 2426 K 3101 K 3102 K	Watuba	650	200		20	1	200	180				
2415 N 2416 B 2417 B 2418 K 2419 N 2420 K 2421 K 2422 N 2423 K 2424 N 2425 L 2426 K 3101 K 3102 K					25	30	400	150				
2416 B 2417 B 2418 K 2419 N 2420 N 2421 K 2422 N 2423 K 2424 N 2425 L 2426 K T 3101 K	ו מי מי מי מי		***	20	30	15	300	50				
2417 B 2418 K 2419 N 2420 N 2421 K 2422 N 2423 K 2424 N 2425 L 2426 K 3101 K 3102 K	Bukundugulu	365	90	100	10	20	450	210				
2418 K 2419 N 2420 M 2421 K 2422 M 2423 K 2423 K 2424 N 2425 L 2426 K 3101 K 3102 K		1,200	200	60	40	50	800					
2419 N 2420 M 2421 K 2422 N 2423 K 2424 N 2425 L 2426 K T 3101 K 3102 K	Bananze	460	97	110	12	30	400	60				
2420 M 2421 K 2422 M 2423 K 2424 M 2425 L 2426 K T 3101 K 3102 K	Kalama	280	70	70	ii	28	430	50				
2421 K 2422 N 2423 K 2424 N 2425 L 2426 K T 3101 K 3102 K	Ngugulo	780	239	230	20	30	2,500	200				٠.
2422 N 2423 K 2424 N 2425 L 2426 K T 3101 K 3102 K	Mwera	1,000	150	80	16	30	120	35				
2423 K 2424 N 2425 L 2426 K T 3101 K 3102 K	Kakindu	330	120	60	15	30	400	20			:	
2424 N 2425 L 2426 K T 3101 K 3102 K	Mawanda	600	52	30	15	4	120	. 8				
2425 L 2426 K T 3101 K 3102 K	Kiwawu	370	62	105	10	8	210	30				
2426 K T 3101 K 3102 K		700	80	30	10	20	210	30		1		
3101 K 3102 K	Lulumbu	500	110	50	15	30	550	200				4
3101 K 3102 K		32,974	10.983	46,469	2,150	5,421	49,772	5,820	200	225	<del>-                                    </del>	\$
3102 K	Total	301	10,563	10,402	3	30	950	3,020				
		900	150	30	20	60	500					
	Kalangala A	400	150	20	10	100	200	50				
	Kalangala RCi		60	40	10	100	302	- 60	1			
	Masiriba Kanan	600	82	420	32	110	120	15				
	Katwe	470			200	3,000	500	50				
3106 N		690	138	12,000		7		50				
	Kayunga	800	120	20	10	500	2,000	6	•			
	Kabamba West	320	80	30	5	10	70	3				
	Kabamba Fast	280	40	15	0	10	.10	3	•			
	Bukomero T/C	800	104	25	. 30	10	500	20				
	Namukoko	1,020	170	400	30	40	90	30			-	
	Karoro	350	65	80	5	25	200	30				
	Mwezi B	480	73	6	50	56	120	25				
	Mwezi A	<u>.</u>										
	Kambizi	175	55	85	20	35	22	. 100				
3115 h		1,320	220		1111	100	200	100				
	Bugomolwa	450	60	. 12	50	100	300					:
	Ntwetwe T/C	200	42	. 1	20	. 50	250			1	1	
3118 k	Kilemeera/Lubuga	288	72	20	6	40	130	20				
3119		•		. A				:				
3120 E	Bulagwe	222	94	23	10	80	300	30				
3121 : 1	Nkandwa B	500	98		20	- 50	150	1				
	Nakalama St. Kizito	200	130	50	10	20	500	100				
3123 . 2		540	100	80	60	100	55	100		100	-	
3124 1		200	30	150	20	30	500	20		* .		
	IVIKS[50	450	60	50	80	40	500	- 30				
	Kikago Lwaniolo	380	200	20	20	80	800	30				
	Lwanjolo		107	70	30	40	100	30				
	Lwanjolo Kasega	600	130	50	20	70	- 50	60				
	Lwanjolo Kasega Kirinda	600 500		1,800	40	60	560					
	Lwanjolo Kasega Kirinda Kizinga		50		10	120	430	35				
3131 8	Lwanjolo Kasega Kirinda Kizinga Nyamiringa	500 210										
3132 3	Lwanjolo Kasega Kirinda Kizinga Nyamiringa Kagobe	500	50 80 40	210 100		70	40					

APPENDIX Dal4

	T		<del></del>	<del>т 8. т</del>	(6)	(7) T	(8)	(9)	(10)	(II) T	(12)	(1/4)
(0)	(2)	(3) 468	(4)	(9)	1 <u>07</u> 1	92	139	30	77.7	L	1.2/_I.	7:24-
3133	Kambugu Kilyankozi	350	80	7	. 3	20	100	4				
	Katoma	200	100	50	15	60	. 100					
	Kibiga	800	250	200	20	350	1,250	450				
	Gogonya	500	170	100	20	180	700	70				i
3138	Bukasa	250	30	6	10	30	70					
	Kalangala/Kibooga	210	67	100	ii	63	120	15				
3140	Karagara Kiovoga		•		• • •							
	Bwizibwera B	1,000	250	10		12	950					
	Lufula	680	100	30		32	600					
	Hospital Village	390	90	ii		24	120					
3144	Bwizibwera A	930	200	23	11	51	1,200	100				
	Sinde	280	40	3	15	20	150	10				
	Kawaawa	320	49	. 3	8	100	700	20				
	Nikokonjeru	1,400	200	31	10	200	500	50				
	Kyanika	300	52	15	6	20	160	16			•	
	Larmya	400	70	20	8	30	500 -	100				. 1
	Nakaziba	360	60	100	15	70	200	100				
7/	Kijumagwa	280	40	2	- 2	15	. 70	6				l l
	Nsanje	350	70	1,500		200	700	20				- 1
	Buyonga	470	91	250	7	100	500					- 1
	Duyonga											
3154 3155	Kabutemba	380	76	40	12	56	1,100	200				1
		235	47	30	12	50	180	35				1
3156		200	25	30		30	200	20				
	Kayonza	515	80	40,000	20	5,000	200	4.				
3158		136	70	20	-6	70	300	10				- 1
3159		480	120	2,500	•		200					ŀ
3160			60	2,700		20	400					
3161		380					,,,,					
3162	5 A.A	400	90	220	30	56	310	42				
3163			200	220	7	50	800					1
3164		580		200	150	250	400	450				- 1
3165		600	80	200	150	2,0	400	430				
3166	and the state of t		'ioa	(7	20	230	1,200	150				
3167		1,100	400	67	10	15	100	6				
3168		350	60	15	-	20	300	40				
3169	Nakasengere	300	100	1	9		300	40				
3170	Natyole/Magala Mem	400	78	75	20	100		200				
3171	Muwanga	600	270	9	20	300	1,000					٠,
3172	Kikoada	140	100	20	10	140	500	50				
3172	Buraza	126	66	8	6	100	1,000	4.				
3173	Nakakabala	300	50	700	10	50	100					
3174	Kyambogo	125	58		5	70	150					
3175	Kigando/Buraza	750	100			4	***					
3176	Meijorza	356	90		10	50	500					
3177		- ·	2.5				2 222					
3178	Banauywa	1,500	300		10	20	2,000	••		. 1	•	
3179	Nsanbya	150	65			100	300	10		4		
3180	Kyakabuga	160	30			300	500	,				
3181		-										
3187	2 1		1 4:22					20				
318	Barnusturia	850	102	29	10	150	1,200					
318		280	40	. 5		52	130	7			20	
318.		900	330	50	. 30	50	3,300	50			20	
	Vyumba	500	130	60		260	650	130				1
318		350	150	29	20	120	400	200				1
	Kiyombya	500	42	30	20	25	400	10				1
	Kiwaguzi	500	130	20	10	30	650	25				1
	) Mulagi	350	80	65	36	28	53.	6				1
	Kigando	500	200	- 30	18	48	100	50				
	Bulyznzige	450	95	80	25	48	250	80				
319		586	65	. 2		20	100	8				. [
319		350	46		2	18	30		01			Ŀ
	Nkondo	500	80		60	40	320	6				
	S Butambuka	520	102	:	50	. 130	420	12	•			
	7 Kiryajjobyo West	400	70	e e e e e e e e e e e e e e e e e e e	40	400	1,000	30	. :		•	
	8 Lawana	300	60	•		30	43					
	9 Kisata	750	150		12	43	450			<b>\</b>		*
	Kisala Kyerere Fast	600	113	1 2 2 2 3 3 3	30	200	1,500	60				
	Total	43.516	9,581	62,580	1,801	15,663	42,431	3,807	10	ŋ	20	10
Same	e: Result of Inventory Sur	vey for Communi	ty made by .	ICA, 1995.			-					-
000	ATTACABLE OF WILDWAY FOR											

D - 31

## APPENDIX D-15

# APPENDIX D-15 Agricultural Land and Products in the Project Area

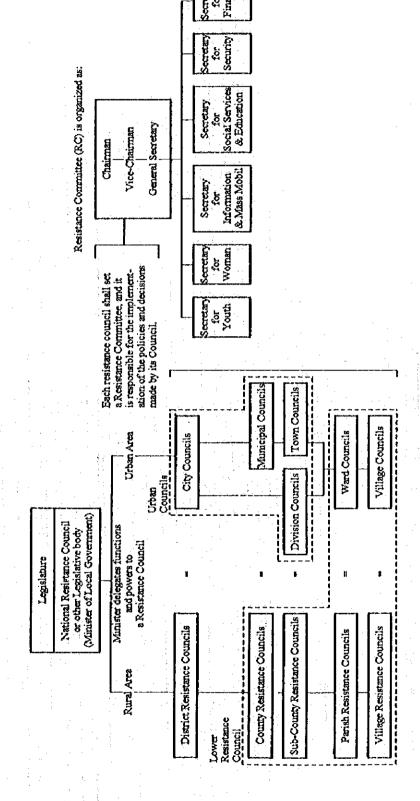
A. Average Agricultual Land Area of a Household (As of 1995) District Average Mpigi Kiboga Item Mubende Accessible Cultivated Cultivated Accessible Cultivated land rate land land land Land area (acre) 47.05% 5.52 2.58 6.04 4.84 53.04% 5.68 2.46 43.32%

	% of commu	nities in 3 I	Districts to:	Number	of communi	ties to:	Number	of commun	ities to:	Nuraber o	of commun	uties to.
Kind of		Use for	Sell to		Use for	Sell to		Use for	Sell to		Use for	Sell to
products	Grow	them-	markets	Grow	them-	markets	Grow	them-	markets	Grow	them-	mærket
		selves			selves			seives			selves	
Total communiti	es of 3 Distri	cis		-	*	-	-	-	-	-		
sampled		285					•	-	-	_	÷	
Kassava	83.86%	85.26%	45.61%	78	80	48	86	87	41	75	76	41
Yaas	50.88%	49.12%	16.81%	47	39	. 17	50	52	15	48	49	ie
Sweet potatoes	95.09%	93.68%	50.88%	90	88	47	95	95	52	86	84	46
krish potatoes	61.75%	58.95%	31.23%	49	48	23	78	69	44	. 49	51	22
Maize	95.44%	91.23%	70.88%	94	84	67	93	90	. 75	85	86	60
Sorbia	64.56%	26.32%	55.79%	67	15	61	69	. 38	61	48	22	37
Beans	96.49%	94.74%	77.54%	95	89	73	95	95	82	85	86	66
Finger millets	42.46%	37.54%	27.02%	45	32	30	33	- 32	25	43	43	22
Soya beans	40.70%	32.98%	25.96%	50	37	36	-31	- 22	20	35	35	18
Matoke bananas	92.98%	90.18%	55.44%	94	88	43	88	90	64	83	79	51
Sweet bananas	79.65%	70.88%	48.77%	74	63	46	80	68	47	73	71	46
Cabbages	48.77%	48.07%	34.74%	56	47	45	52	51	43	31	39	11
Onions	46.67%	51.93%	28.07%	45	50	25	40	48	24	48	50	31
Tomatoes	70.18%	69.82%	60.35%	65	62	62	77	73	67	58	61	43
Pineapples	38.60%	39.30%	19.30%	16	20	10	48	46	25	. 46	46	20
Ground puts	89.12%	86.32%	57,89%	. 88	80	55	88	87	57	78	79	53
Sim sim	9.12%	11.93%	8.07%	. 7	8	5	2	7	2	17	19	16
Cotion	5.26%	2.46%	7.02%	1	0	1	1	: 3		13	4	17
Coffee	89.82%	39.65%	84.21%	81	28	73	93	38		82	47	75
Tee	4.56%	9.82%	5.96%	3	8	5	9	11	10	1	9	2
Sugar cane	7.72%	7.02%	7.37%	3	3	3	11	9	10	8	. 8	8
Avecado	1.75%	1.75%	0.70%	3	3	1	2	2	1	0	0	0
Fruits	1.40%	1.40%	0.70%	2	2	2	2	2	0	. 0	0	0
Mangoes	0.70%	0.70%	0.35%	1	1	0	_	1	1	0	0	. 0
Jack fruits	2.45%	2.11%	0.70%	- 3	2	1	- 3	3	0	1		
Peas	1.05%	1.05%	1.05%	3	3	3	0	0	. 0	0	0	
Vanilla	2.46%	1.05%	2.11%	5	3	4	2	. 0	2	: 0	0	0
Passion fruits	4.21%	3.86%	2.81%	3	2	3	7	. 7	5	2	2	0
Γουθοιτο	1.75%	0.35%	1.40%	2	. 0	2	0	. ,	0	3	i	
Cowpeas	1.40%	1.40%	0.35%	1	1	0	Ů	. 0	. 0	3	3	
Vegitable/greens	2.46%	2.11%	1.75%	5	4	Ā	2	2	1	. 0	0	ī
Green peppers	0.35%	0.35%	0.35%	1	1	1	0	: 6	0	0	. 0	V
Silk	0.35%	0.00%	0.35%	1	ó	1	. 0	0	0	0	. 0	0
Pampkins	0.35%	0.35%	0.00%	0	0	. 0	i	. 1	0	. 0	0	
eg plants	0.35%	0.35%	0.00%	. 0	o	0	. 0	0	0	1		
fotal communitie				1,178	991	797	1,239	1,129	868		1 055	200
Distribution rate (			<del></del>	-,110	84.13%	67.66%	1,637	91.12%	70.06%	1,102	1,055 95,74%	705 63.97%

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APPENDIX D-16 Organization of Local Government

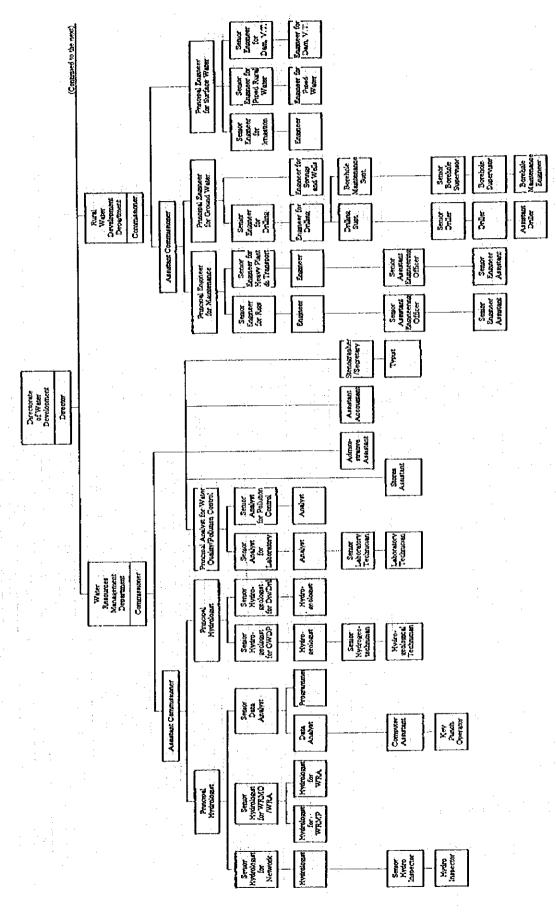


Source: Statute Supplement No.8 to the Uganda Gazette No.55 Volume LXCKVI dated 31st December, 1993, "The Local Governments (Resistance Councils) Statute, 1993", Ministry of Local Government.

There is the Ministry of Local Government too, as of 1995. Planning. Division Antiquies Comby D Commissioner Supporting Services Supporting Services Department of Public of Tourm! Service Commi Vinistry Commissioner Meorology Meteorologica Department Affairs Vinistry Commissioner Directorate Environment Forestry Department Defence Protection Ministry Forestry & Social Welfare Ministry Commissioner Environment Environment Protection Protection Department Source: Information from DWD and Background to the Budget 1995 • 1996, Ministry of Finance and Economic Planning, June 1995. Viniety. Informmation 6 Third Deputy Prime Minister Transport of Works/ Commu. Water Resources Management Commissioner Petroleum Exploitation Department Deputy Minister Health Second Deputy Prime Minister Prime Minister Commissioner Geological Survey & Mines Department Vice President Geological Survey & Mines Energy & Minerals Permanent Secretary Natural Resources Minister President Sports cation/ ommissioner Energy Department Energy First Deputy Prime Minister Housing Commissioner Inspection & Supporting Services Fisherica Supporting Department Inspection 8 Trade & Mirustry Industry utional Water Commissiona tutional Water Urban & Insti-Urban & Insti-Development Development Directorate Water Development Department of Justice of Finance & Constit | & Eco. Administration, accounting and personnel affairs sections are under these secretarion. unional A. Ministry Development Department commissioner Development rincipal Assistant Secretary Senior Assistant Secretary Rural Water Rural Water Assistant Secretary Water Resources Management Department Resources Management Commissioner Public | Service Water

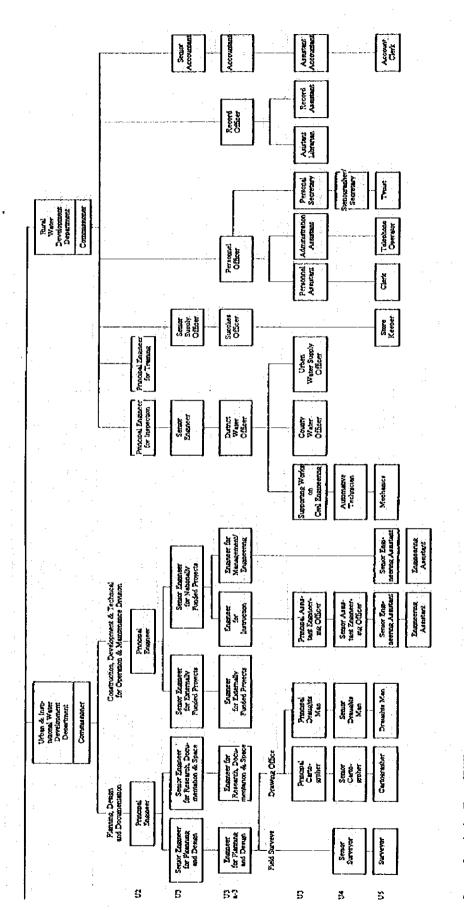
APPENDIX D-17 Organization of the Government and the Ministry of Natural Resources

APPENDIX D-18 Organization of Directorate of Water Development (1/2)



Source: Organization Chart of DWD

APPENDIX D-18 Organization of Directorate of Water Development (2/2)



Source: Organization Chart of DWD

## APPENDIX D-19 Local Government Budget Cycle

Stage	Action	Responsibility centres	Output	Timing
1	Budget conference	Councillors, Chief Executive, Heads of Departments, Central Agencies, and NGOs.	List of Political Priorities/ Guidelines for Sectoral Planning.	April
2	Identification of sectoral priorities	Sectoral Committee members, Chief Executive, and Heads of Departments.	Sectoral PolicyGuidelins, and Costed Sectoral Priorities	May
3	Review of costed priorities	Finance Committee, Chief Executive, Chief Finance Officer, and Heads of Departments.	Examination of Committee Proposals for Consistency with Policy and Resources.	June
4	Debate on Committees proposals	Finance Committee, District Development Committee, and Committee Chairman	Integrated Committee Proposals/ Draft Budget.	July
Ś	Preparation of final draft budget	Chief Executive, Chief Finance Officer & Planner, and Economist.	Final Draft.	August
6	Preparation of budget for Council approval	Members of the Resistance Council, Chief Executive, and Heads of Departments.	Approved, Legal and binding Budget.	September
7	Budget implementation and monitoring	Councillors, Sectoral Committees, Chief Executive, Chief Finance Officer, and Heads of Departments.	Detailed Implementation Plans and Performance Reports, and Increased Accountability.	Continuous

Source: Decentralization Secretariat, Ministry of Local Government.

## APPENDIX D-20 Public Finance

A. Current					(UShs.billion)
	1993/94	1994/	95	*****	Performance
Item	Outturn	Target	Outturn	Deviation	ratio (%)
Revenue and Grants	678.2	690.6	752.5	61.9	109.0%
Revenue	395.7	498.4	525.5	27.1	105.4%
Grants	282.5	192.2	227.0	34.8	118.1%
Expenditure	851.4	841.3	866.6	25.3	
Recurrent expenditure	416.8	441.5	486.0	41.6	110.1%
Development expenditure	431.9	397.8	368.8	-29.0	92.7%
Net lending	2.8	2.0	11.7	9.7	585.5%
Overall deficit					
Commitment	-173.3	-150.7	-114.1	36.6	75.7%
Excluding grants	-455.7	-342.9	-341.0	1.8	99.5%
Change in arrears	-51.0	-37.2	-23.5	13.7	63.1%
Adjustment to cash	9.0	0.0	3.1	3.1	
Overall deficit (cash)	-215.3	-187.9	-134.4	53.4	71.6%
Financing	216.3	187.9	134.4	-53.4	71.6%
Foreign	243.2	234.0	233.8	-0.1	99.9%
Domestic	-27.0	-46.1	-99.4	-53.3	215.7%
Banking system	-36.7	-51.9	-99.4	-47.5	191.4%
Non-bank	9.7	5.8	Ŏ.O	-5.8	0.0%
Share rate (%) in GDP			<u> </u>		
Reenue	9.7%		10.7%		
Expenditure	20.9%		17.9%		
Deficit (commitment)	-4.3%		-2.4%		
Overall deficit	-11.3%		-7.0%		•
Excluding grants	-5.3%		-28%		
Deficit (cash basis)					

B. Target		:		
Item	1995/96	1996/97	1997/98	Annual growth rate (%)
Resources (Revenue)	996.0	1,071.0	1,176.0	8.7%
Recurrent revenue	604.0	702.0	796.0	14.8%
Net foreign financing	452.0	420.0	445.0	-0.8%
Domestic financing	-60.0	-51.0	-65.0	4.1%
Expenditue	996.0	1,071.0	1,185.0	9.1%
Wages	160.0	220.0	260.0	27.5%
Interest	72.0	68.0	56.0	-11.8%
Non-wage recurrent	307.0	323.0	365.0	9.0%
Ministrial expenditure	272.0	278.0	315.0	7.6%
Statutory expenditure	12.0	16.0	18.0	22.5%
Other expenditure	23.0	29.0	32.0	18.0%
Domestic development	63.0	74.0	80.0	12.7%
Foreign expenditure	362.0	367.0	390.0	3.8%
Others	32.0	19.0	34.0	3.1%

Source:

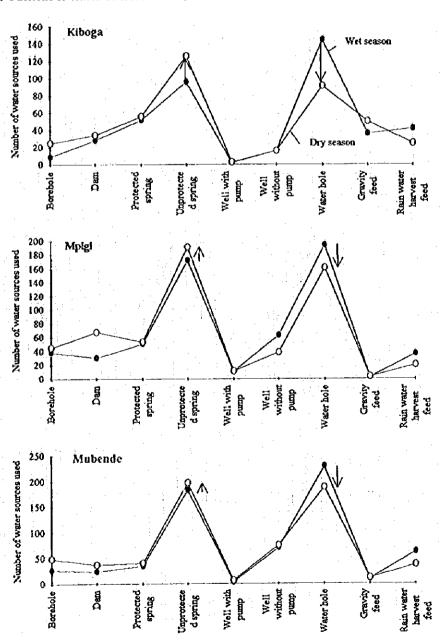
Background to the Budget 1995 - 1996, - Economic Performance 1994 - 1995 and Medium Term Strategy 1995/96 - 1997/98 - , Ministry of Finance and Economic Planning, June 1995.

APPENDIX D-21 Type of Water Sources and Time Spent to and at Water Sources in Wet and Dry Seasons

A. In Figures Type of	District										
Water	Kibo	oga	,	//pigi	Mu	ende					
Sources	Wet season I	by season	Wetseaso	n Dry season	Wet season	Dry season					
Borebole	9	25	38	45	27	48					
Dama	28	34	30	68	24	36					
Protected spring	52	56	.51	54	34	.40					
Unprotected spring	96	126	172	191	184	198					
Well with pump	2	3	10	11	3	6					
Well without pump	16	16	63	38	70	75					
Water hole	145	91	194	161	231	189					
Gravity feed	36	50	2	3	9	11					
Rain water harvest feed	42	25	36	20	62	36					
l'ime spent lo water source	35	80	44.	78	35	74					
Figue spent at water source	- 8	19	12	18	9	20					
Potal time spent to take water	44	99	56	96	43	94					
Average in 3 districts	Wet season:	:	48	Dry season		96					

Source: Result of Inventory Survey for Household made by JICA Study Team, 1995.

### B. Patterns of Water Sources Used by Season





# APPENDIX D-22 Main Water Collector in Wet Season

				ity order	person	s)	T	otal by		Female sha	re rate by a	ee eroud	Female share rat
Age group		Female			Male		priority	order:	group	by priorit	y order pro	up (%)	by age group
	1st	2nd	3rd	1st	2nd	3rd	lst	2nd	3rd	İst	2nd	3rd	in total (%)
Kiboga	· · · · · · · · · · · · · · · · · · ·												Di toui (70)
0 - 5	6	- 3	0	0	1.1	1	6	4	1	100.0%	75.0%	0.0%	81.8%
6 - 10	79	22	6	28	25	12	107	47	18	73.8%	46.8%	33.3%	62.2%
11 - 15	31	33	14	31	59	13	65	92	27	52.3%	35.9%	51.9%	41.0%
16 - 40	132	60	25	65	38	16	197	98	41	67.0%	61.2%	61.0%	61.6%
Over 40	23	: 9	8	24	7	4	47	16	12	48.9%	56.3%	66.7%	53.3%
Total	274	127	53	148	130	46	422	257	99	61.9%	49.4%	53.5%	33.370
Child share					-					01.770	17.470	33.376	<del></del>
rate (0-10)										Child share	rate (0.10)	to the tota	water collector
by gender	31.0%	19.7%	11.3%	18.9%	20.0%	28.3%	26.8%	9 8%	19 2%	Ciaro silar	140 (0-10)	to die tota	23.5%
by priority													23.376
group (%)											-	*	
Mpigi													
0-5	6	3	2	7	4	3	13	7.	5	46.2%	42.9%	40.0%	44.0%
6 - 10	72	47	22	68	45	16	140	92	38	51.4%	51.1%	57.9%	52.2%
11 - 15	61	58	21	56	· 70	. 23	117	128	44	52.1%	45.3%	47.7%	48.4%
16 - 40	150	87	35	104	57	26	254	144	61	59.1%	60.4%	57.4%	59.3%
Over 40	30	14	10	37	7	iĩ	67	21	21	44.8%	66.7%	47.6%	49.5%
Total	319	209	90	272	183	79	591	392	169	51.0%	53.3%	53.3%	49.3%
Child share									107	31.076	33.376	33.376	<del></del>
rate (0-10)										Child share	rate (0.10)	to the tota	l water collector:
	24.5%	23.9%	26.7%	27.6%	26.8%	24 19%	25.9% 2	5 30% 3	25.4%	Cima share	146 (0-10)	to nic tota	25.6%
by priority				2011074 2			43-774 2		63.770	•			23.070
Stonb (%)						•					1	- " .	
Mubende		O Carlo  · • • • • • • • • • • • • • • • • • • •						~		****	·		
0 - 5	11	3	5	2	3	1	13	- 6	6	84.6%	50.0%	83.3%	76.0%
6 - 10	99	46	22	65	60	16	161	106	38	60.4%	43.4%	57.9%	51.2%
11 - 15	41	53	13	57	97	23	98	150	36	41.8%	35.3%	36.1%	
16 - 40	205	71	49	92	71	17	297	142	66	69.0%	50.0%	74.2%	37.7%
Over 40	33	19	20	34	10	8	67	29	: 28	49.3%	65.5%		61.4%
Total	389	192	109	250	241	65	639	433	174	60.9%		71.4%	58.1%
Child share					~ '			733	F14	UV.770	44.3%	62 6%	<del></del> -
rate (0-10)					1.					Child share	mta (0.10)	in the letel	water collector:
	28.3%	25.5%	24.8%	26 8% 2	6 1% 2	6 2%	27.7% 2	5 9% 3	25 394	Cima suare	1ac (V-10)	to the total	
by priority		_ ,,,,,					21, 2						26.7%
group (%)				100	. :								
Source : Result of	Inven	tory Su	rvev fo	Louseh	ld mad	la by II	CA Studi	Toom	1005		-		

## APPENDIX D-23 Estimation of People's Capability to Pay for Water

(A) Times/Day to Collect Wat	er and Number of 2	0 Lirs Jerrycans Used/Day	
		District	1
Item	Kiboga	Mpigi	Mubende
Times/day to collect water	2.5	2.8	2.6
No. of 20 ltr jerrycans used/d	3.6	4.5	4.3

		. a Ni	ss to Pay for	Number	of samples b	y District			
Amount		Kiboga		2.5.3.2.2.6.1	Mpigi			Mubende	
	Actually paid amount to souces		Actually paid amount to water vendor	Actually paid amount to souces	Amount of willingness to pay	Actually paid amount to water vendor	Actually paid amount to souces	Amount of willingness to pay	Actually paid amount to water vendo
0	384	133		379	92	-	561	156	•
Š		. 6	-		15	-	· <u>-</u>	17	: -
10	1	26	. •	2	23	٠-	0	41	· · · · · -
15	•	2	0	-	4	1		1	0
20	0	32	Ó	3	38	1	1	45	1
25	ŏ	30	Ó	2	46	3	4.1	36	1
30	•	7	Ŏ	•	5	0	-	8	1
10			0			0	-		1
so	11	149	6	13	241	16	4	212	9
55		Ó	44.	•	O		· _	1	-
80	-	- · · · · · · ·	0	_	-	1	-	/ <u>-</u> *	0
90	: _	. 0	0		1	0	•	, 0	1
100	16	41	30	41	72	74	17	79	50
125		0	-		0		-	1	. •
150	0	1	4	12	3	21	. 9	9	15
200	7	3	. 8	34	26	61	. 6	17	. 36
250	Ó	ő	ī	0	0	1	2	2	5
300	Ŏ	ī	5	5	2	4	. 0	2	: 1
400	0		0	1	•	2	0		1
500	2	1	6	2	1	2	. 4	2	1
700			1	, .		0	•	•	. 0
1,000	•		0	1 1 •		1	•	•	0
stal samples	458	432	61	526	569	188	615	629	122_
Weighted mean	10	35	180	31	50	149	11	45	144
xcluded 0 UShs)				111			86		
(UShs/20 ltrs)									

Source: Result of Inventory Survey for Household made by JICA Study Team, 1995. (Note) -: No samples.

## APPENDIX D-24 Income Distribution of Average IIII in the Project Area

(As of 1995)

	Averag	ie.	Mpig	d .	Muben	de	Kibo	
Expenditure	Amount	Share	Amount	Share	Amount	Share	Amount	Share
		tate (96)	(USHS)	rate (%)	(USHS)	rate (%)	(USHS)	rate (%)
L Average in whole com			22.450	2 4247	25 501	4.0996	20 626	3.52
7.6	22,926	3.2994	22,450	2.5796	25,691	20.05%	20,636 114,772	19.59
ducation/school fees	138,174	19.85%	173,811	19.8796	125,940			34.07
ledical fees	181,286	26.01%	196,735	22.49%	147,526	23.4996	199,596	
Western	121,955	17.5296	134,617	15.39%	90,005	14.33%	141,183	24.10
Traditional	59,331	8.52%	62,059	7.09%	57,521	9.16%	58,413	9.97
ood/beverage	232,202	33.35%	302,094	34.53%	210,161	33,4794	184,352	31.47
Vater	49,755	7.15%	86,383	9.87%	47,168	7.51%	15,714	2.68
ogenumity activities	27,643	3.97%	27,073	3.099 i	36,063	5.74%	19,793	3.38
others	44,237	6.35%	66,411	7.59%	35,365	5.63%	30,935	5.28
Livery	323	0.05%	553	0.06%	417	0.07%	0	0.00
Ciothina	9,918	1.4296	8,936	1.02%	16,667	2.65%	4,152	0.71
	* .	, "		2.5			543	0.09
Housing	<b>79</b> 7	0.11%	1,536	0.18%	313	0.05%	化多二氯氯苯基甲二氯苯	
Miscellaneous	33,198	4.7796	55,385	6.33%	17,969	2.86%	26,239	4.4
otal-Annual income	696,223	100.00%	874,957	100.00%	627,913	100.00%	585,798	100.00
verage monthly income	58,019		72,913		52,326		48,816	
. Average in communite		lower than I						
.,		6.01%	18,250	4.89%	21,000	6.1396	23,792	7.10
ax .	21,014						80,750	24 31
ducation/school fres	60,916	17,44%	63,888	17.1096	38,200	11.16%		
ledical fees	85,556	24.49%	75,500	20.21%	87,000	25.41%	94,167	28.3
Western	61,764	17.68%	54,875	14.69%	75,000	21.90%	55,417	16.6
Traditional	23,792	6.81%	20,625	5.52%	12,000	3.50%	38,750	11.60
ood/beverage	107,900	30.88%	115,250	30.86%	147,200	42.9996	61,250	18.4
/ ster	24,025	6.88%	51,875	13.89%	200	0.06%	20,000	6.0
ommunity activities	20,406	5.8496	11,250	3.01%	24,800	7.24%	25,167	7.5
thers	29,528	8.4594	37,500	10.04%	24,000	7.0196	27,083	8.1
Luxury	0	0.00%	0	0.00%	0	0.00%	0	0.0
Clothing	20,500	5.87%	37,500	10.04%	24,000	7.01%	0	0.0
Housing	2~,-\\\	0.00%	37,300	0.00%	2-7,000	0.00%	ŏ	0.0
	0.018	2.5896	ŏ	0.00%	Ŏ	0.00%	27,083	8.1
Miscelaneous	9,028		373,513	100.00%	312,400	100.00%	332,208	100.00
otal-Annual income	319,374	100.00%		100.0076	28,533	100.0078	27,684	
verage monthly income	29,114		31,126		20,300	<del></del>	17,001	
. Average in communitie	ta et bobajago	n between 20	1 - 600			4.3047	24 620	2.4
ax .	23,863	3.2996	24,331	2.51%	26,717	4.30%	20,539	3,50
ducation/school fees	154,396	21.28%	233,785	24.13%	123,567	19.88%	105,836	18.0
ledical fees	200,741	27,66%	229,530	23.70%	156,617	25.20%	216,075	36.8
Western	132,836	18.30%	155,558	16.06%	92,250	14.84%	150,700	25.6
Traditional	67,904	9.36%	73,972	7.61%	64,367	10.36%	65,375	11.1
	235,677	32,48%	313,319	32.35%	220,050	35.41%	173,663	29.5
ood beverige	29,369	4.05%	55,936	5.77%	14,800	2 38%	17,372	2.9
Water		4.24%	31,102	3.21%	39,358	6.33%	21,891	3.7
Community activities	30,784		80,649	8.33%	40,333	6.49%	31,578	5.3
Others	50,854	7.0196			0	0.00%	0	0.0
Lixury	252	0.03%	7.55	0.08%	_		5,969	1.0
(1othing	10,690	1.4796	9,431	0.9796	16,667	2.68%		0.1
Housing	430	0.06%	8	0.00%	500	0.08%	781	
Miscellaneous	39,483	5.44%	70,453	7.27%	23,167	3.73%	24,828	4.2
Fotal=Anoual income	725,683	100.00%	968,655	100.00%	621,442	100.00%	586,953	100.0
Average monthly income	60,474		80,721		51,787		48,913	
). Average in communiti	es of population	n between 60	1 - 1,000					
Tax	19,824	2,61%	18,657	2.42%	21,678	4.05%	18,136	1.9
ducation/school fees	158,937	20.9396	110,548	14.33%	153,537	27.39%	212,727	27.4
Medical fees	192,501	25.35%	179,667	23.29%	140,019	24.9896	257,818	27.2
western	135,778	17.88%	120,932	15.68%	94,019	16.77%	192,364	20.3
Western Traditional	56,723	7.4794	58,714	7.61%	46,000	8.2194	65,455	5.9
	280,357	36.92%	322,781	41.83%	142,926	25.5096	375,361	39.6
Food/beverage				8.85%	49,411	8.8116	14,353	1.5
Water	41,017	5.80%	68,286		35,148	6 2794	19,182	2.0
Community activities	29,173	3.81%	33,190	4.30%				
Others	31,491	4.5496	38,438	4.98%	16,852	3.01%	48,182	5.0
Luxury	. 494	0.0796	0	0.00%	1,481	0.2644	0	0.0
Clothing	2,240	0.2999	1,905	0.25%	4,815	0.86%	0	0.0
Housing	2,285	0.30%	6,857	0.8994	. 0	0.00%	, 0	0.0
Miscellaneous	29,471	3.8896	29,676	3.85%	10,556	1.8896	48,182	5.0
Total - Amual income	759,300	100.00%	771,567	100.00%	560,571	100.00%	945,763	100.0
Average monthly income	63.275		61,297		46,714		78,814	
E. Average communities		eser I ohn						
		2.45%	23,567	2.41%	27,250	1.82%	21,400	4.5
lax	24,072			9.52%	83,063	5.51%	91,300	19.5
ducation/school fees	89,093	9.08%	92,917			10.91%	160,600	31.4
Aedical fees	162,311	16.54%	162,583	16.6596	163,750	4.86%		
Western	103,422	10.54%	119,667	12.26%	73,000		117,600	25,2
Traditional	58,889	6.00%	42,917	4.40%	90,750	6.05%	43,000	9.2
Food/beverage	380,217	38.75%	310,875	34.91%	619,375	41.28%	180,400	38.6
Water	251,828	25.97%	275,533	28.22%	487,750	32.50%	1,200	0.2
Consumity activities	10,067	1.03%	9,125	0.93%	19,375	1.29%	1,700	0.3
Others	60,583	6.1796	71,750	7.35%	100,000	6.66%	10,000	2.1
			1,000	0.10%	0	0.00%	0	0.0
Lirony	333	0.03%		0.00%	87,500	5.83%	ő	0.0
Clothing	29,167	2.9794	0					
Housing	. 0	0.00%	0	0.00%	0,	0.00%	0	0.0
Miscellancous	31,083	3.1794	70,750	7.25%	12,500	0.83%	10,000	2.1
				100,000	1,500,563	100.00%	466,600	100.0
Total = Annual income	981,171	100.00%	976,350	100.00%	125,047		38,883	

# APPENDIX D-25 Annual Disbursement of Construction Cost, O/M and Replacement Costs

(A) Annual allocation of	construction works				(Number of places)
William attoration of	Some or doll stories		Distribution	1	
Cost item	1997	1998	1999	2000	Total
	Quantity	Quaritity	Quantity	Quantity	Quantity
Borebole	46	138	131	131	446
Borehole (dry)	ě	30	42	-53	134
Protected spring	10	60	63	54	187
Dugwell/pump	ž	30	8	16	61
Valley dam	í	4	1	7	13
Level II works	Å	1	0	0	1.56
Intervention (%)	10%	30%	30%	30%	100%
Sub total	73	263	245	261	842
Engineering fee (%)	40%	20%	20%	20%	100%
Administration (%)	19%	27%	27%	27%	100%

(B) Unit cost per constrution works					(US	\$1,000
(b) Omi Cost per Consumion works	Labour cost	Material cost	Equipment cost	T	otal cost	
Cost item	LC F.C	L.C F.C	I.C F.C	LC	F,C	Tota
Daniela.	0.4 0.0	1.9 6.9	0.0 5.3	2.3	12.2	14.5
Borebole Borebole (dry)	0.2 0.0	0.0 5.2	0.0 3.8	0.2	9.0	9.2
Protected spring	0.6 0.0	0.5 0.0	0.0 1.3	1.0	1.3	2.3
	0.5 0.0	0.8 1.3	0.0 1.2	1.3	2.4	3.8
Dugwell/pump Valley dam	7.2 0.0	23.2 20.1	0.0 25.3	30.4	45.4	75.9
	5.1 0.0	19.6 173.6	<b>0.0 100.5</b>	24.7	274.1	298.8
Level II works	251.0 0.0	47.0 0.0	0.0 148.0	298.0	148.0	446.0
Intervention	231.0 0.0	77.0		The state of the last of the l		

(C) Annual allocation	oficia	istriicti	on cost												US\$1,000)
C / Manual association	01.00.							Dist	nbution						
Cost item		1997			1998			1999			2000			Total	<u></u>
Cost Rem	LC		Total	LC		Total	LC	F.C	Total	LC	F.C	Total	ĽC	F.C	Total
Borebole	106	561	667			2.001	301	1,598	1,900	301	1,598	1,900	1,026	5,441	6,467
Borehole (dry)	3	81	83	6	271	277	: 8	380	388	10	480	490	26	1,212	1,238
Protected spring	10	13	23	61	77	138	61	80	145	55	69	124	191	239	430
Dugwell/pump	: 9	17	26	40	73	113	11	19	30	21	39	60	82	148	230
Valley dam	30	45	76	122	182	303	30	45	76	213	318	531	396	591	986
Level II works	. 0	0	0	25	274	299	0	0	- 0	. 0	0	. 0	25	274	299
Equipment supply	Ŏ	171	171	0	0	0	0	0	0	0	0	0	. 0	171	171
Intervention	. 30	15	0	- 89	44	134	89	44	134	89	: 41	134	298	148	446
Sub total	187	904	1,016	661	2,605	3,265	504	2,168	2,672	691	2,548		2,013	8,224	10,26
Engineering fee	0	411	411	0	205	205	0	205	205	0	205	205	. 0	1,027	1,02
Administration	98	.0	98	139	0	139	139	. 0	139	139	. 0	139	513	0	513
Contingency	28	131	160	80	281	361	61	237	302	83	275	358	256	925	1,18
Total Financial cost	313	1,446	1,759	879	3,091	3,970			3,318			3,941	2,812	10,176	12,988
Economic cost	283	1,446	1,734	790	3,091	3,881	637	2,611	3,247	819	3,029	3,818	2,534	10,176	12,710

معمد والمحدد والعراج وأراع والأراج	<b>Ant</b>		1					14,17		(US\$)
(D) Unit cost for replacem	E) II	Labou	r cost	Mate	rial cost	Equipment	cost		Total cost	1
Cost item	1.14	LC	F.C	LC	F.C	LC	F.C	LC	F.C	Total
Pursus for wells	Financial cost	50	0	190	1,710	0	50	240	1,760 1,760	2,000
	Economic cost	38	0	176	1,710	0	50	214		1,974
Pumps for Level II works	Financial cost	- 250	0	7	8,325	. 9	500	1,175	8,825	
, <b></b>	Economic cost	191	. 0	857	8,325	0	500	1,048	8,825	9,873
Diesel Generator	Financial cost	600	0	4,900	44,100	-	400	5,500	44,500	50,000
Dieser Ociki wo	Economic cost	459	0	4,541	44,100	00	400	5,000	44,500	49,500

(E) Annual unit cost for op	amilian and mainless	ionce.				(US\$)
(F) Annual tent cost for Op	el andra and manage.	Labour cost	Material cost	Equipment cost	Total cost	
Cost item		LC F.C	LC F.C	LC F.C	I.C F.C	Total
	Financial cost	30.0 0.0	9.5 85.5	0.0 2.5	59.5 88.0	147.5
Pumps for wells	Economic cost	38.3 0.0	8.8 85.5	0.0 2.5	47.1 88.0	135.1
Pumps for Level II works		250.0 0.0	46.3 416.2	0.0 25.0	296.3 441.2	737.5
Multips for Level II works	Economic cost	191.3 0.0	429 4162	0.0 25.0	231.2 411.2	675.4
Diesel Generator	Financial cost	600.0 0.0	245.0 2,205.0	0.0 20.0	815.0 2,225.0	3,070.0
Diesei Generaor	Economic cost	439.0 0.0	227.0 2,205.0	0.0 20.0	686.0 2,225.0	2,911.0

(F) Armual running cost for Level II Works		and the second of the second o	(05)
(F) And themes cost of Devel	Labour cost	Material cost	Total cost
<u></u>	LC EC	LC F.C	LC F.C Total
	5,000 0	180 1,620	5,180 1,620 6,800
Financial cost	3.825 0	167 1.620	3,992 1,620 5,612
Economic cost			

## APPENDIX D-26 Revenue for Operation and Maintenance as Financial Benefit

	_			•					Effective revenue
As of 1995	As of 2005			Number of HH	jerrycan (UShs.)	per month (UShs.)	in UShs. (UShs Mil.)	in US\$ (US\$1,000)	(90 %) (US\$1,000)
67,478	87,650	77,485	4.68	16,557	31	4,185	843	826	744
53,538	72,723	61,535	4.82	12,767	11	1,419	220	216	194
43,988	58,488	39,256	4.54	8,647	- 10	1,080	114	111	100
165,001	218,861	178,276		37,970	19	2,547	1,177	1.154	1,039
	in a com As of 1995 67,478 53,538 43,988	1995 2005 67,478 87,650 53,538 72,723 43,988 58,488	in a community to As of As of Service 1995 2005 population 67,478 87,650 77,485 53,538 72,723 61,535 43,988 58,488 39,256	in a community to be service Samily 1995 2005 population size 67,478 87,650 77,485 4.68 53,538 72,723 61,535 4.82 43,988 58,488 39,256 4.54	in a community         to be served           As of 1995         As of 2005         Service Family Number of HII           67,478         87,650         77,485         4.68         16,557           53,538         72,723         61,535         4.82         12,767           43,988         58,488         39,256         4.54         8,647	in a community         to be served         per 20 ltr           As of 1995         As of 2005         Service Family Number jerrycan           67,478         87,650         77,485         4.68         16,557         31           53,538         72,723         61,535         4.82         12,767         11           43,988         58,488         39,256         4.54         8,647         10	in a community         to be served         per 20 ltr         per 101 ltr           As of 1995         Service Pamily Number opopulation size of HH (UShs.)         per month (UShs.)         (UShs.)           67,478         87,650         77,485         4.68         16,557         31         4,185           53,538         72,723         61,535         4.82         12,767         11         1,419           43,988         58,488         39,256         4.54         8,647         10         1,080	in a community         to be served         per 20 ltr         per HII         reve           As of As of 1995         Service Family Number jerrycan per month in UShs.         1995 2005         population size of HII (UShs.) (USh	In a community   Io be served   per 20 ltr   per 1111   reversue :

District	Popul: in a com	7.7.7.3		sebold () be serve	*:	Amount per 20 ltr	lo be paid per HH	An	nual nue :	Effective revenue
- 	As of 1995	As of 2005	Service population	•	Number of IUI	jerrycan (UShs.)	per month (UShs.)	in UShs. (UShs Mil.)	in US\$ (US\$1,000)	(90 %) (US\$1,000)
Mpigi District	67,478	87,650	77,485	4.68	16,557	50	6,750	1,360	1,333	1,200
Mobende District	53,538	72,723	61,535	4.82	12,767	45	5,805	902	884	796
Kiboga District	43,988	58,488	39,256	4.54	8,617	35	3,780	398	390	351
Total/average	165,004	218,861	178,276	2	37,970	45	5,770	2,659	2,607	2,346

(Note) 1. Supplied water: 18 (Litre/person per day)

District	Popula in a com			sebold (i be serve		Amount toer 20 ftr	to be paid per HH	An reve		Effective revenue
_	As of 1995	As of 2005	Service population	•	Number of 1111	jerrycan (UShs.)	per month (UShs.)		in US\$ (US\$1,000)	(90 %) (US\$1,000)
Mpigi District	67,478	87,650	77,485	4.68	16,557	7	1,000	199	195	175
lubende District	53,538	72,723	61,535	4.82	12,767	7	1,000	153	150	135
Ciboga District	43,988	58,488	39,256	4.54	8,617	. 7	1,000	104	102	92
otal/average	165,004	218,861	178,276		37,970	7	1,000	456	447	402

District	Popul in a con			sebold (1 be serve			to be paid per HH	An reve	wal nue:	Effective revenue
	As of 1995	As of 2005	Service population		Number of HH	jerrycan (USbs.)	per month (UShs.)		in US\$ (US\$1,000)	(90 %) (US\$1,000)
Mpigi District	67,478	87,650	77,485	4.68	16,557	11	1,500	298	292	2.63
Mubeade District	53,538	72,723	61,535	4.82	12,767	10	1,500	230	225	203
Kiboga District	43,988	58,488	39,256	4.54	8,647	11	1,500	156	153	137
Total/average	165,004	218,861	178,276		37,970	11	1,500	683	670	603
(Note) 1. Suppli	ed water :	20	(Litre/person	a per day	<i>i</i> )	·				

	Popula			schold ()	· . •		o be paid	Αn	real .	Effective
District	ia a com	munity	to	be serve	ed	per 20 ltr	per HR	feye	ave:	revenue
- -	As of 1995	As of 2005	Service population	Family size	Number of HH	jerrycan (USbs.)	per month (UShs.)	in UShs. (UShs.Mil.)	in US\$ (US\$1,000)	(90 %) (US\$1,000)
Mpigi District	67,478	87,650	77,485	4.68	16,557	14	2,000	397	390	351
Mubeade District	53,538	72,723	61,535	4.82	12,767	14	2,000	306	300	270
Kiboga District	43,988	58,488	39,256	4.54	8,647	35	2,000	268	203	183
Total/average	165,004	218,861	178,276		37,970	14	2,000	911	893	804

(Note) 1. Supplied water: 20

(Litre/person per day)

APPENDIX D-27 Financial Internal Rate of Return

Column   C	1997 Const- 1997 1,759 1998 3,318 2000 2001 2000 3,941 2000 3,941 2000 3,941 2000 2000 3,941 2000 2000 2000 2000 2000 2000 2000 200	- 중투 <sup>시</sup>		401 i	⋖	Case	Ω	920	Ų	38	$\frac{1}{2}$	Caso	
Truction cost ment Total Revenue Cash Revenue Cash Kevenue Cash Cash Cash Cash Cash Cash Cash Cash	1997 1,759 1,958 3,318 2,000 0	E Y		٠,				7	ł		ı		٦.
0         1,759         0         -1,759         0 </th <th>1997 1998 1998 1998 1999 2000 2000 2000 2000 2000 2000 2000</th> <th></th> <th>25.55 25.55</th> <th></th> <th>Cash balance</th> <th>Revenue</th> <th>Cash balance</th> <th>2.3</th> <th>Cash</th> <th>Kevenue</th> <th>Cash</th> <th></th> <th>Cash balance</th>	1997 1998 1998 1998 1999 2000 2000 2000 2000 2000 2000 2000		25.55 25.55		Cash balance	Revenue	Cash balance	2.3	Cash	Kevenue	Cash		Cash balance
0 3.57	1998 1998 2000 2000 2000 2000 2000 2000 2000 2		9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	0	-1.759	0	-1,759	0	-1.759	0	-1.759	0	-1.759
0 5.551 387 -2.564 873 -2.478 150 -3.502 225 -3.117 229 -3. 0 91 928 887 2.095 2.005 359 2.654 465 7.59  3. 0 91 928 887 2.095 2.005 359 2.655 364 465 7.59  3. 0 91 928 887 2.095 2.005 359 2.69 559 4.65 7.79  3. 0 91 928 887 2.135 1.025 369 2.20  3. 0 91 928 887 2.135 1.025 369 2.20  3.0  3.0  3. 0 91 1.039 9.88 2.346 1.947 402 311 603 512 804  804  3. 0 91 1.039 9.88 2.346 2.225 402 311 603 512 804  804  3. 0 91 1.039 9.88 2.346 1.947 402 311 603 512 804  804  3. 0 91 1.039 9.88 2.346 1.205 402 311 603 512 804  804  3. 0 91 1.039 9.88 2.346 1.205 402 311 603 512 804  804  3. 0 91 1.039 9.88 2.346 1.205 402 311 603 512 804  804  3. 0 91 1.039 9.88 2.346 1.205 402 311 603 512 804  804  3. 0 91 1.039 9.88 2.346 1.205 402 311 603 512 804  804  3. 0 91 1.039 9.88 2.346 2.255 402 311 603 512 804  804  3. 0 91 1.039 9.88 2.346 2.355 402 311 603 512 804  804  3. 0 91 1.039 9.88 2.346 2.355 402 311 603 512 804  804  3. 0 91 1.039 9.88 2.346 2.355 402 311 6.	1999 2000 2000 2000 2000 2000 2000 2000		000 000 000 000 000 000 000 000 000 00	115	3,862	261	-3,717	45	3,933	67	-3.911	8	88
0 4,009 678 -3389 1,419 -2,550 243 -3765 3465 -3,644 486 -3.8 0 91 928 857 2,095 2005 359 269 539 448 779 750 108 199 1,010 812 2,211 2,082 391 2,79 559 463 779 750 108 199 1,010 812 2,211 2,082 391 1,095 868 2,346 1,897 402 31 603 2,32 804 804 805 1,003 948 2,346 1,097 402 311 603 2,04 804 804 804 804 1,003 948 2,346 2,255 402 311 603 512 804 804 805 1,003 948 2,346 2,255 402 311 603 512 804 804 804 804 804 804 804 804 804 804	2000 2001 2002 2003 2003 2004 2005 2005 2005 2001 2011 2011 2012 2012		9 8 8 8 8 8 8	387	2,964	<b>8</b>	-2,478	150	-3.202	225	-3.127	588	-3.052
0 91 928 837 2,095 2,005 359 269 539 4.48 718   0 91 955 864 2,155 2,005 369 279 554 4.48 718   108 199 1,010 812 2,281 2,085 389 279 570 479 760   334 485 1,039 938 2,246 1,947 402 31 603 232 804   308 399 1,039 948 2,346 1,947 402 31 603 2,04 804   309 1,039 948 2,346 2,255 402 311 603 512 804   300 91 1,039 948 2,346 2,255 402 311 603 512 804   301 1,039 948 2,346 2,255 402 311 603 512 804   302 421 1,039 948 2,346 2,255 402 311 603 512 804   303 425 1,039 948 2,346 2,255 402 311 603 512 804   304 485 1,039 948 2,346 2,255 402 311 603 512 804   305 1,039 948 2,346 2,255 402 311 603 512 804   306 1,039 948 2,346 2,255 402 311 603 512 804   307 1,039 948 2,346 2,255 402 311 603 512 804   308 399 1,039 948 2,346 2,255 402 311 603 512 804   308 399 1,039 948 2,346 2,255 402 311 603 512 804   308 399 1,039 948 2,346 2,255 402 311 603 512 804   308 399 1,039 948 2,346 2,255 402 311 603 512 804   308 399 1,039 948 2,346 2,255 402 311 603 512 804   308 399 1,039 948 2,346 2,255 402 311 603 512 804   309 1,039 948 2,346 2,255 402 311 603 512 804   300 1,039 948 2,346 2,325 402 311 603 512 804   300 1,039 948 2,346 2,325 40	2001 2002 2003 2004 2005 2005 2005 2010 2011 2011 2012 2012		888	628	-3,380	1,419	-2.590	243	-3.765	365	-3.64	486	-3.522
0         91         955         864         2,115         2,065         369         279         554         463         739           10         91         982         891         2,217         2,117         380         289         570         479         760           394         485         1,039         668         2,346         1,897         402         31         663         232         804           280         371         1,039         668         2,346         1,897         402         31         663         218         804           308         399         1,039         948         2,346         2,255         402         311         663         218         804           10         91         1,039         948         2,346         2,255         402         311         663         512         804           10         91         1,039         948         2,346         2,125         402         402         403         804           330         425         1,039         544         2,346         1,347         402         303         804           309         1,039         948	2002 2003 2004 2005 2005 2005 2011 2015 2015 2015 2015		88	928	837	2,095	2,005	359	589	539	448	718	628
0 91 932 891 1.217 2.127 380 289 570 479 750 394 485 1.039 668 2.346 1.975 402 31 603 232 884 308 399 1.039 668 2.346 1.975 402 31 603 232 804 308 399 1.039 948 2.346 1.977 402 311 603 512 804 10 91 1.039 948 2.346 2.225 402 311 603 512 804 30 1.039 948 2.346 2.225 402 311 603 512 804 30 1.039 948 2.346 2.225 402 311 603 512 804 30 1.039 948 2.346 2.225 402 311 603 512 804 30 1.039 948 2.346 2.225 402 311 603 512 804 30 1.039 948 2.346 1.977 402 311 603 512 804 30 1.039 948 2.346 1.977 402 311 603 512 804 30 1.039 948 2.346 2.225 402 311 603 512 804 30 1.039 948 2.346 2.225 402 311 603 512 804 30 1.039 948 2.346 2.225 402 311 603 512 804 30 1.039 948 2.346 2.225 402 311 603 512 804 30 1.039 948 2.346 2.225 402 311 603 512 804 30 1.039 948 2.346 2.225 402 311 603 512 804 30 1.039 948 2.346 2.225 402 311 603 512 804 30 1.039 948 2.346 2.225 402 311 603 512 804 30 1.039 948 2.346 2.225 402 311 603 512 804 30 1.039 948 2.346 2.225 402 311 603 512 804 30 1.039 948 2.346 2.225 402 311 603 512 804 30 1.039 948 2.346 2.225 402 311 603 512 804 30 1.039 948 2.346 2.225 402 311 603 512 804 30 1.039 948 2.346 2.225 402 311 603 512 30 2.34 2.35 1.399 2.346 2.225 402 311 603 512 30 30 30 30 30 30 30 30 30 30 30 30 30 3	2003 2004 2005 2006 2007 2011 2011 2012 2013 2014 2015 2015 2022 2022 2023 2023 2025 2025		16	955	864	2,155	2,065	369	279	554	463	339	2
108   199   1,010   812   2,281   2,082   391   192   586   388   782   236   402   813   603   118   804   885   1039   568   2,346   1,947   402   31   603   213   804	2005 2005 2005 2005 2015 2015 2015 2025 202		1 4	82	8	2217	2.127	380	289	570	\$ <del>5</del>	760	8
354         485         1,039         554         2,346         1,861         402         -85         603         118         804           280         371         1,039         668         2,346         1,975         402         31         603         222         804           98         1,039         668         2,346         2,255         402         311         603         523         804           91         1,039         948         2,346         2,255         402         311         603         512         804           10         91         1,039         948         2,346         2,255         402         311         603         512         804           10         91         1,039         948         2,346         2,147         402         311         603         512         804           330         421         1,039         948         2,346         1,847         402         403         803         404         804           330         4,21         1,039         948         2,346         1,847         402         403         803         1404         804           30         1,	2005 2005 2005 2005 2005 2015 2025 2025		3	1010	812	2.281	2.082	391	192	586	88	782	88
280         571         1039         668         2,346         1,975         402         31         663         232         804           308         399         1039         948         2,346         1,977         402         31         663         234         804           91         1039         948         2,346         2,255         402         311         663         512         804           1039         948         2,346         2,255         402         311         663         512         804           108         199         1,039         948         2,346         2,147         402         311         603         512         804           394         485         1,039         948         2,346         1,347         402         311         603         512         804           308         399         1,039         948         2,346         1,347         402         31         603         512         804           309         1,039         948         2,346         1,347         402         31         603         512         804           309         1,039         948         2,3	2005 2006 2006 2007 2011 2011 2012 2022 2023 2025 2025 2025 2025 2025 202		786	050	\$ .	2.346	1861	402	S.	603	118	804	318
200         271         1039         640         2346         1047         402         3         603         204         804           0         91         1039         948         2346         2255         402         311         603         512         804           0         91         1039         948         2346         2255         402         311         603         512         804           108         199         1039         948         2346         2147         402         311         603         512         804           394         485         1039         848         2346         2147         402         402         311         603         512         804           394         485         1039         848         2346         1247         402         402         311         603         512 <t td="">         804           395         421         1039         848         2346         1257         402         311         603         512         804           0         91         1039         848         2346         1257         402         311         603         512</t>	2009 2009 2009 2010 2011 2015 2015 2022 2023 2023 2025 2025 2025 2025 202		È	000	8	277	1 075	S C C	<b>,</b>	608	232	808	6.54
508         399         1,039         948         2,346         1,254         402         31         603         512         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           1         91         1,039         948         2,346         2,255         402         311         603         512         804           394         485         1,039         948         2,346         2,147         402         233         603         188         804           394         485         1,039         548         2,346         1,247         402         233         603         188         804           308         399         1,039         548         2,346         1,255         402         311         603         182         804           0         91         1,039         548         2,346         2,255         402         311         603         182         804           108         199         1,039         548         2,346         2,255         402         311         603         182         804 <t< td=""><td>2003 2010 2010 2010 2010 2013 2013 2023 202</td><td></td><td>₹ 6 1</td><td>9000</td><td>000</td><td>040</td><td>7</td><td>; ; ;</td><td>, ,</td><td>200</td><td>100</td><td></td><td>įč</td></t<>	2003 2010 2010 2010 2010 2013 2013 2023 202		₹ 6 1	9000	000	040	7	; ; ;	, ,	200	100		įč
0         91         1,039         948         2,346         2,255         402         311         603         512         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           108         199         1,039         948         2,346         2,147         402         203         603         512         804           350         465         1,039         544         2,346         1,947         402         203         603         108         804           308         359         468         1,346         1,947         402         303         603         108         804           308         350         1,346         1,947         402         311         603         108         804           108         1,039         948         2,346         2,255         402         311         603         804           108         1,939         840         2,346         2,255         402         311         603         804           108         1,939         1,039         948         2,346         1,255 <t< td=""><td>2008 2010 2011 2011 2011 2012 2013 2022 2023 2023</td><td></td><td>8</td><td>1.030</td><td>3</td><td>240</td><td>1.94/</td><td>402</td><td></td><td>3</td><td>400</td><td></td><td>}</td></t<>	2008 2010 2011 2011 2011 2012 2013 2022 2023 2023		8	1.030	3	240	1.94/	402		3	400		}
0 91 1.039 948 2.346 2.255 402 311 603 512 804 804 1088 199 1.039 948 2.346 2.255 402 311 603 512 804 804 804 805 1.039 6.18 2.346 1.255 402 311 603 118 804 804 805 1.039 6.40 2.346 1.947 402 703 310 603 1.039 840 2.346 1.947 402 311 603 512 804 804 904 1.039 948 2.346 2.255 402 311 603 512 804 804 91 1.039 948 2.346 2.255 402 311 603 512 804 804 91 1.039 948 2.346 2.255 402 311 603 512 804 804 91 1.039 948 2.346 2.255 402 311 603 512 804 804 91 1.039 948 2.346 2.255 402 311 603 512 804 804 91 1.039 948 2.346 2.255 402 311 603 512 804 91 1.039 948 2.346 2	2009 2010 2011 2011 2011 2015 2015 2022 2022		6	1,039	8	2,346	2,255	402	311	603	512		_
0         91         1,039         948         2,346         2,255         402         311         603         512         804           394         485         1,039         840         2,346         2,147         402         203         603         118         804           330         421         1,039         5/4         2,346         1,942         402         -19         603         118         804           308         399         1,039         5/4         1,246         1,247         402         -19         603         118         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           108         199         1,039         948         2,346         2,255         402         311         603         512         804           108         199         1,039         948         2,346         1,925         402         311         603         512         804           390         481         1,039         948         2,346         1,925         402         311         603         118         804	2012 2012 2013 2014 2015 2022 2022 2023 2025		6	1.039	948	2,346	2,255	402	 (5)	603	512		7
108   199   1,039   840   2,346   2,147   402   203   603   404   804   834   485   1,039   554   2,346   1,947   402   203   603   118   804   836   436   436   1,947   402   31   603   1,948   804   804   603   1,039   640   2,346   1,947   402   311   603   2,948   804   804   603   1,039   640   2,346   2,155   402   311   603   512   804   603   1,039   640   2,346   2,147   402   2,03   603   1,039   640   2,346   2,147   402   2,03   603   1,039   640   2,346   2,147   402   2,03   603   1,039   640   2,346   2,147   402   2,03   603   1,039   640   2,346   2,255   402   311   603   2,04   804	2011 2011 2011 2012 2015 2022 2023 2025 2025		o	1 030	870	2 246	2255	402	311	. 203	512		7
106         179         1039         554         2.346         1.861         402         125         603         188         804           350         421         1039         554         2.346         1.925         402         -19         603         182         804           308         399         1,039         548         2.346         1.947         402         -3         603         182         804           0         91         1,039         948         2.346         2.255         402         311         603         512         804           108         19         1,039         948         2.346         2.147         402         23         603         118         804           394         485         1,039         840         2.346         1,247         402         23         603         512         804           394         485         1,039         840         2.346         1,247         402         403         603         512         804           396         421         1,039         840         2.346         1,947         402         403         603         118         804      <	2012 2013 2015 2015 2015 2022 2022 2023 2025		1 2	000	6,0	346	17.0	200	200	, CUY	707		Ş
394         485         1,039         534         1,891         402         -63         110         603         110         604         2346         1,891         402         -19         603         110         604         804	2012 2013 2016 2016 2017 2022 2022 2023 2025		3	7000	3;	9,7	41.4	700	36	200	,		3 8
330         421         1,039         618         2,346         1,925         402         -19         603         182         804           308         339         1,039         948         2,346         2,255         402         311         603         512         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           108         199         1,039         948         2,346         2,147         402         203         603         512         804           108         199         1,039         840         2,346         2,147         402         203         603         182         804           304         485         1,039         640         2,346         1,947         402         402         403         804         804           308         399         1,039         640         2,346         1,947         402         402         403         804           408         399         1,039         640         2,346         1,247         402         402         403         403         804 <td< td=""><td>2013 2014 2015 2015 2017 2022 2023 2024 2025</td><td></td><td>3</td><td>1.039</td><td>400</td><td>2,745</td><td>1,801</td><td>402</td><td>ري- د</td><td>500 500</td><td>011</td><td></td><td></td></td<>	2013 2014 2015 2015 2017 2022 2023 2024 2025		3	1.039	400	2,745	1,801	402	ري- د	500 500	011		
308         359         1,039         640         2,346         1,947         402         311         603         204         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           108         199         1,039         948         2,346         2,147         402         203         603         512         804           394         485         1,039         640         2,346         1,861         402         -19         603         118         804           308         399         1,039         640         2,346         1,947         402         -19         603         182         804           308         399         1,039         948         2,346         1,947         402         -19         603         104         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804      <	2014 2015 2016 2017 2019 2022 2023 2024 2025		421	1,039	618	2,346	1,925	402	61-	603	787		<b>X</b>
0 91 1,039 948 2,346 2,255 402 311 603 512 804 0 91 1,039 948 2,346 2,255 402 311 603 512 804 0 91 1,039 948 2,346 2,255 402 311 603 512 804 108 199 1,039 948 2,346 2,255 402 311 603 512 804 804 334 421 1,039 640 2,346 1,925 402 -19 603 118 804 804 0 91 1,039 948 2,346 1,925 402 311 603 512 804 0 91 1,039 948 2,346 2,255 402 311 603 512 804 0 91 1,039 948 2,346 2,345 1,	2015 2016 2017 2018 2020 2022 2025 2025		380	1,039	3	2,346	1,947	402	(L)	603	204		₹
0 91 1,039 948 2,346 2,255 402 311 603 512 804 0 91 1,039 948 2,346 2,255 402 311 603 512 804 108 199 1,039 840 2,346 2,147 402 203 603 118 804 330 421 1,039 544 2,346 1,947 402 -19 603 182 804 0 91 1,039 948 2,346 1,947 402 311 603 512 804 0 91 1,039 948 2,346 2,255 402 311 603 512 804 108 199 1,039 948 2,346 2,255 402 311 603 512 804 330 421 1,039 840 2,346 1,871 402 203 603 182 804 330 421 1,039 840 2,346 1,871 402 203 603 118 804 334 485 1,039 840 2,346 1,871 402 203 603 118 804 336 421 1,039 948 2,346 1,871 402 -83 603 118 804 337 421 1,039 948 2,346 1,875 402 -19 603 118 804 338 449 1,039 948 2,346 2,255 402 311 603 512 804 0 91 1,039 948 2,346 2,356 402 311 603 512 804 0 91 1,039 948 2,346 2,356 402 311 603 512 804 0 91 1,039 948 2,346 2,356 402 311 603 512 804 0 91 1,039 948 2,346 2	2016 2013 2019 2020 2022 2023 2025 2025		91	1.039	948	2,346	2,255	402	311	603.	512		7
0         91         1,039         948         2,346         2,255         402         311         603         512         804           108         199         1,039         840         2,346         2,147         402         203         603         404         804           394         485         1,039         618         2,346         1,861         402         -19         603         118         804           308         399         1,039         640         2,346         1,947         402         -19         603         118         804           308         399         1,039         948         2,346         2,255         402         311         603         512         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           108         199         1,039         948         2,346         2,255         402         402         403         403         403         804         804           350         449         1,039         948         2,346         1,255         402         402         403	2017 2018 2019 2021 2022 2024 2025	0	5	1,039	<del>\$</del>	2,346	2,255	405	3	603	512		7
108         199         1,039         840         2,346         2,147         402         203         603         404         804           394         485         1,039         554         2,346         1,861         402         -83         603         118         804           308         389         1,039         618         2,346         1,925         402         -19         603         118         804           308         389         1,039         640         2,346         1,247         402         -19         603         182         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           108         199         1,039         948         2,346         2,147         402         203         603         118         804           350         4,85         1,039         840         2,346         1,875         402         403         603         118         804           350         4,85         1,039         840         2,346         1,875         402         403         603         118         804 <td>2018 2019 2020 2021 2023 2024 2025</td> <td>0</td> <td>5</td> <td>1,039</td> <td>948 848</td> <td>2,346</td> <td>2,255</td> <td>402</td> <td>311</td> <td>603</td> <td>512</td> <td></td> <td>K</td>	2018 2019 2020 2021 2023 2024 2025	0	5	1,039	948 848	2,346	2,255	402	311	603	512		K
394         485         1,039         554         2,346         1,861         402         -83         605         118         804           330         421         1,039         618         2,346         1,925         402         -19         603         182         804           308         399         1,039         948         2,346         2,255         402         311         603         512         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           108         199         1,039         948         2,346         2,255         402         311         603         512         804           350         424         1,039         554         2,346         1,861         402         -83         603         118         804           350         424         1,039         554         2,346         1,877         402         -19         603         182         804           350         424         1,039         590         2,346         1,897         402         -19         603         182         904	2019 2020 2021 2022 2024 2025	:	6	1039	840	2,346	2,147	405	203	603	404		Š
330         421         1,039         618         2,346         1,925         402         -19         603         182         804           308         399         1,039         948         2,346         1,947         402         31         603         204         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           108         199         1,039         948         2,346         2,255         402         311         603         512         804           108         199         1,039         948         2,346         2,255         402         331         603         512         804           350         4246         1,877         402         -19         603         182         804           350         4246         1,877         402         -19         603         182         804           350         4246         1,875         402         -19         603         182         804           350         449         1,039         590         2,346         1,897         402         -19         603	2020 2021 2022 2024 2025 2026		485	1,039	\$2	2,346	1.86	402	8	603	118		લ
308         399         1,039         640         2,346         1,947         402         3 603         204         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           108         199         1,039         948         2,346         2,255         402         311         603         512         804           394         485         1,039         554         2,346         1,861         402         -83         603         118         804           350         4246         1,877         402         -19         603         182         804           358         449         1,039         594         2,346         1,897         402         -19         603         182         804           9         1,039         948         2,346         1,897         402         311         603         512         804           0         91         1,039         948         2,346<	2022 2022 2023 2025 2026		421	1,039	618	2,346	1,925	405	61-	603	182		88
0         91         1,039         948         2,346         2,255         402         311         603         512         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           108         199         1,039         840         2,346         2,255         402         311         603         512         804           394         485         1,039         840         2,346         1,861         402         -83         603         118         804           350         421         1,039         554         2,346         1,897         402         -19         603         182         804           358         449         1,039         590         2,346         1,897         402         -19         603         154         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804	2022 2023 2025 2025 2026	-	30	1.039	8	2,346	1.947	402	m	603	507		8
0 91 1,039 948 2,346 2,255 402 311 603 512 804 108 199 1,039 948 2,346 2,255 402 311 603 512 804 804 804 485 1,039 840 2,346 2,147 402 203 603 118 804 804 330 421 1,039 554 2,346 1,861 402 -83 603 118 804 804 358 449 1,039 590 2,346 1,897 402 -19 603 154 804 804 0 91 1,039 948 2,346 2,255 402 311 603 512 804 0 91 1,039 948 2,346 2,255 402 311 603 512 804 0 91 1,039 948 2,346 2,255 402 311 603 512 804 2,500 2,346 2,255 402 311 603 512 804 2,500 2,346 2,255 402 311 603 512 804 2,500 2,346 2,255 402 311 603 512 804 2,500 2,346 2,255 402 311 603 512 804 2,500 2,346 2,255 402 311 603 512 804 2,500 2,346 2,255 402 311 603 512 804 2,500 2,346 2,255 402 311 603 512 804 2,500 2,346 2,255 402 311 603 512 804 2,500 2,346 2,255 402 311 603 512 804 2,500 2,346 2,255 402 311 603 512 804 2,500 2,	2022 2024 2025 2026		6	050	876	2 346	2255	402	311	603	512		Ľ
0         91         1,039         948         2,346         2,255         402         311         603         512         804           108         199         1,039         840         2,346         2,147         402         203         603         404         804           394         485         1,039         554         2,346         1,861         402         -19         603         118         804           350         421         1,039         590         2,346         1,897         402         -19         603         182         804           9         1,039         948         2,346         2,255         402         311         603         512         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           4,560         20,372         32,019         11,647         72,298         51,925         12,389         -7,984         18,583         -1,789         24,7177 <td< td=""><td>2022 2025 2026</td><td></td><td>ō</td><td>1 030</td><td>. o</td><td>2346</td><td>2255</td><td>402</td><td>. E</td><td>.603</td><td>512</td><td></td><td>-3</td></td<>	2022 2025 2026		ō	1 030	. o	2346	2255	402	. E	.603	512		-3
108         199         1,039         840         2,346         2,147         402         203         603         404         804           394         485         1,039         554         2,346         1,861         402         -83         603         118         804           350         421         1,039         618         2,346         1,925         402         -19         603         182         804           358         449         1,039         948         2,346         1,897         402         -47         603         154         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           4,500         20,377         32,019         11,647         72,298         51,925         12,389         -7,984         18,583         -1,789         24,614         -6           10,791         5,962         -4,829         13,462         2,671         2,307         -8,484         3,460         -7,	2025 2026		6	030	0.48	2000	2.255	402	<u></u>	603	512		-
394         485         1,039         554         2,346         1,861         402         -83         603         118         804           350         421         1,039         554         2,346         1,925         402         -19         603         182         804           358         449         1,039         590         2,346         1,897         402         -47         603         154         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           4,560         20,372         32,019         11,647         72,298         51,925         12,389         -7,984         18,583         -1,789         24,777         2           10,791         5,962         -4,829         13,462         2,671         2,307         -8,484         3,460         -7,330         4,614         6           2);         4,778         15,52%         -4,776         -6,051%         -6,61%         2	2026		3	020	978	200	747	203	100	609	404		.8
354         450         1,03         1	0707	•	¥ 0	020	}	246	1 841	200	3 6	603	×		7
350         421         1,035         510         1,325         1,235         1,035         1,035         1,035         2,346         1,897         402         -47         603         154         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           0         91         1,039         948         2,346         2,255         402         311         603         512         804           4,560         20,377         32,019         11,647         72,298         51,925         12,389         -7,984         18,583         -1,789         24,777         2           2%:         10,791         5,962         -4,829         13,462         2,671         2,307         -8,484         3,460         -7,330         4,614         -6           2):         4,73%         15,52%         -4,70%         -6,61%         2	£000		<u> </u>	700	0 4	2 2 2	1005	18	3 2	609	35		18
250 91 1,039 948 2,346 2,255 402 311 603 512 804 0 91 1,039 948 2,346 2,255 402 311 603 512 804 0 91 1,039 948 2,346 2,255 402 311 603 512 804 0 91 1,039 948 2,346 2,255 402 311 603 512 804 0 91 1,039 948 2,346 2,255 402 311 603 512 804 0 91 1,039 948 2,346 3,346 3,469 3,460 -7,330 4,614 -6 1,0,791 5,962 -4,829 13,462 2,671 2,307 -8,484 3,460 -7,330 4,614 -6 1,0,791 2,0,791 2,0	707		177	020	3 6	\$ \frac{1}{2} \fra	1 207	200	147	90	7		4 %
0 91 1,033 948 2,346 2,255 402 311 603 512 804 0 91 1,039 948 2,346 2,255 402 311 603 512 804 4,560 20,377 32,019 11,647 72,298 51,925 12,389 -7,984 18,583 -1,789 24,777 2 2%: 10,791 5,962 -4,829 13,462 2,671 2,307 -8,484 3,460 -7,330 4,614 -6	2078		<u>}</u> {	000	200	7700	7000	25	;	203	i ç		36
0         91         1,039         948         2,346         2,255         402         311         603         512         804           4,560         20,377         32,019         11,647         72,298         51,925         12,389         -7,984         18,583         -1,789         24,777           2%:         10,791         5,962         -4,829         13,462         2,671         2,307         -8,484         3,460         -7,330         4,614           2):         4,73%         15,52%         -4,70%         -0,61%	2029	)	7.5	9 C	y ç	94.6	7777	707	11.0	600	217		7 (
0     91     1,059     3,462     2,623     3,484     3,460     -7,389     -7,984     18,583     -1,789     24,777       2 %:     10,791     5,962     -4,829     13,462     2,671     2,307     -8,484     3,460     -7,330     4,614       2):     4,73%     15,52%     -4,70%     -0,61%     -0,61%	2030	Э <b>(</b>	₹ 8	1,039	y 6	2000	777	707	7 .	200	710		₹6
4,560     20,372     32,019     1,647     72,298     31,925     12,389     -1,384     18,385     -1,789     18,461       2,%:     10,791     5,962     -4,829     13,462     2,671     2,307     -8,484     3,460     -7,330     4,614       2):     4,73%     15,52%     -4,70%     -0,61%     -0,61%	2031	1	7	1,039		200	657	705 6.		500	717	\$08 108 108	
2 %: 10,791 5,962 -4.829 13,462 2,671 2,307 -8,484 3,460 -7,330 4,614 3); 4,614 3,460 -7,330 4,614	Total 12,988 2,82	1	20,372	32,019	11.647	867.7/	27.7	12.589	785	18,585	78/  -	74.777	4,40
(3): 10,791 3,962 -4,823 13,462 4,614 3,464 3,464 -4,1350 4,614 (5): 4,73% 4,73% 15,52% -4,70% -0,61%	in the condition of discount rate a				000		1	1000	0	ſ		13.	. (
(3): 47.3% 13.5%	Present value:		1 √.	70610	4,027		7,07	700.7	0,404	9	į		o O
	Financial internal rate of return (F	IRR):			4.73%		15.52%		-4. /0%		-0.61%		2.14



		r economic	

District	Popu in a coc	lation nominity	· · · · · · · · · · · · · · · · · · ·	ehold (I be serve		Times per day	1 4	spent to twater		d time ay.HH	Annual economic	Annual effective
•	As of	As of	Service	Family	Number	to collect	(m/on	e way)	(m/re	ound)	benefit in	economic
	1995	2005	population	size	offilH	water	(wet	(dry	(wet		each District	
			1.1.3	. ;		di ka	season)	season)	season)	season)	(US\$1,000)	(US\$1,000)
Mpigi District	67,478	87,650	77,485	4.68	16,557	2.8	44	78	130	320	1,220	779
Mubende District	53,538	72,723	61,535	4.82	12,767	2.6	35	74	65	268	556	355
Kiboga District	43,983	58,488	39,256	4,54	8,617	2.5	. 35	80	49	274	351	224
Total/average	165,001	218,861	178,276	4.70	37,970	2.7	39	77	90	292	2,127	1,358

(Note) 1. Ordinary time spent to go water source :

(minutes per one time in one way) 20

2. Hourly value of working time:

(UShs. per hour considering average number of tax payer per IIII) 56

3. Effective economic benefit rate (%):

(Percentage of annual income level per Hill to the official

labour wage)

85%

75%

4. Effective water collector rate:

(Percentage of adult water collectors to the total water collectors)

	•	lation rounity		chold (i se serve		Annual average	Decre med		Annual effective economic benefit in decrease of
District	As of	Aaaf	Service	Family	Number	medical expenditures		ditures Total	nedical expenditures (50 % of full amount of
	As of 1995	2005	population		4	T 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		(UShs.	medical expenditures in decrease) (US\$1,000)
Apigi District	67,478	87,650	77,485	4.68	16,557	31,314	4,659	77	38
Aubende District	53,538	72,723	61,535	4.82	12,767	37,235	5,540	71	35
Kiboga District	41,988	58,488	39,256	4.54	8,617	40,303	5,997	52	25
Total/average	165,004	218,861	178,276	<del></del>	37,970	35,352	5,260	200	98

CHULL G	16108. 102,001 610,011 2.11		
vole)		Rates of	Rates of impact by
		incidence	Improved Water Supply
	1. Water borne disease	12%	17%
	2. Water washed disease	79%	15%
	3. Water based disease	2%	60%
- 1	4. Water related vector borne disea	ise 7%	0%

# APPENDIX D-29 Economic Internal Rate of Return

<u>,</u>	······································		Financia	al cost		Econo	mic
Year in	Year	Const-	O/M	Replace-		bene	lit :
order		niction	cost	ment	Total	Total of	Cash
:		cost		cost	1. P	TS & MS	balance
l	1997	1,734	0	0	1,734	0	-1,734
2	1998	3,881	7	0	3,888	163	-3,725
3	1999	3,247	. 31	0	3,278	543	-2,735
4	2000	3,848	77	0	3,925	882	-3,043
5	2001	. 0	82	0	82	1,300	1,218
6	2002	0	82	0	82	1,338	1,256
7	2003	0	82	0	82	1,376	1,294
8	2004		82	107	189	1,415	1,227
9	2005		82	389	471	1,456	985
10	2006		82	276	359	1,456	1,097
11	2007		82	304	386	1,456	1,070
12	2008		82	0	82	1,456	1,374
13	2009	•	82	0	82	1,456	1,374
14	2010		82	0	82	1,456	1,374
15	2011		82	107	189	1,456	1,267
16	2012		82	389	471	1,456	985
17	2013		82	326	408	1,456	1,048
18	2014	•	82	304	386	1,456	1,070
19	2015		82	0	82	1,456	1,374
20	2016		82	. 0	82	1,456	1,374
21	2017		: 82	0	82	1,456	1,374
22	2018		82	107	189	1,456	1,267
23	2019		82	389	471	1,456	985
24	2020		82	326	408	1,456	1,048
25	2021		82	304	386	1,456	1,070
26	2022		82	0	82	1,456	1,374
27	2023		82	0	82	1,456	1,374
28	2024		82		82	1,456	1,374
29	2025		82	107	189	1,456	1,267
30	2026	·	82	389	471	1,456	985
31	2027		82	326	408	1,456	1,048
32	2028		82	353	436	1,456	1,020
33	2029		82	0	82	1,456	1,374
34	2030		82	0	82	1,456	1,374
35	2031	10000000	82		82	1,456	1,37
	Total	12,710	2,579		19,790	44,873	25,083
In the		on of discount rate	at 12 %				
Prese	nt value				10,540	8,357	-2,183
		ernal rate of return	(EIRR)				8.86%
B/C			<u>. 1</u>				0.79

(Note) TS: Time saving, and ME: Decrease of medical expenditures.

## APPENDIX D-30 Affordability to Pay

Level II system		No. of unit	Total	Remarks
<u> </u>	(US\$)		(US\$)	
O/M Cost Pumps for Level II System	737.5	5	3,687.5	:
O/M Cost for Diesel Generator	3,070.0	1	3,070.0	
Annual Running Cost for Level II Sys	em 6,800.0	i	6,800.0	
Total (a)		4 4 4 1	13,557.5	
Service population: 3,604	Service hous	seholds :	794	
Amount to be paid for O/M ((a)/12/79	*exchange R:UShs1,02	0)(UShs)		1,451
Pumps for wells		Mubende	Kiboga	
O/M Cost Pumps (b)	147.5	147.5	147.5	
1) Based on the criteria				
Service population per unit (c)	430	430	430	•
Average family size by District (d)	4.68	4.82	4.54	
Amount to be paid for O/M ((b)/12/((d	V(d))*exchange R:1,020	)(UShs)		Average
	136	141	132	
2) For minimum community size				***********
Service population per unit (c)	150	150	150	
Average family size by District (d)	4.68	4.82	4.54	100
Amount to be paid for O/M ((b)/12/((c	V(d))*exchange R:1,020	O(UShs)		
	362	384	341	362

(B) For Replacement				<u> </u>
Level II system		No. of unit	Total	Capita
	(US\$)		(US\$)	recover
Replacement Cost Pumps for Level II System	10,000	5	50,000	12,018
Replacement Cost for Diesel Generator	50,000	1	50,000	8,55
Fotoi (a) (Annual amount to be reserved for pum	ps and diesel;	generator)		20,569
Service population: 3,604	Service hous	eholds:	794	<del></del>
Monthly amount to be reserved for pumps and d	iesel generato	r r		- A - L
((a)/12/794*exchange R-UShs1,020)(US			:	2,20,
Pumps for wells	Mpigi	Mubende	Kiboga	
Replacement Cost(b in capital recovery)	2,000	2,000	2,000	18
1) Based on the criteria				
Service population per unit (c)	430	430	430	
Average family size by District (d)	4.68	4.82	4.54	
Monthly amount to be reserved for pumps ((b)/1	2/((c)/(d))*ex	change R:1.02	0)(UShs)	Average
	<b>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</b>	458	431	
2) For the minimum community size				
Service population per unit (c)	150	150	150	
Average family size by District (d)	4.68	4.82	4.54	
Monthly amount to be reserved for pumps ((b)/i	. ,			Average
montal amount to our to to to to be the (for t	1.275	1.313	1.237	

Note: Pumps for both the boreholes and Level II system 0.24036 For diesel generator for Level II system 0.17102 1. Capital recovery factor (CRF):

Where,

CRF = i/(1-(1+i)^-n)

i = 0.15 (15 % as a price escalation rate)

n = recovery period (7 years for pumps, 15 years for diesel generator)

2. Exchange rate: US\$ 1.00 = UShs.1,020 as of March 1996.

## APPENDIX E

Appendix E: Village Inventory Questionnaires

#### APPENDIX E

Appendix E: Village Inventory Questionnaires

# APPENDIX-E: Water Supply, Sanitation and Village Inventory

:		write the numbers bere												:	·-	[	: [		<u> </u>	1
בבריבו	3.0 Socio-Economics of the Community	A D D D	ton in your	B. What is the total number of households (EE) in the community?	C. Now many people are an average HE?	D. How many Exs are headed by a male ?	E. How many EEs are headed by a female?	F. Mow many EEs in your community are permanent structures with iron sheet roof ?	G. Row many WHS in your community are permanent structures, without iron sheet roof?	E. Eow many HEs in your community are semipermanent, structures plastered w/ mud?	1. Now many HHs in your community are grass:	J. Are there any households in your community that have a structure different than listed above? If yes, please specify:	5. Now many NE in your community has a latrine ?	M. Now many ME in your community use a samplat or slab in their latrime?	3.1 Blectricity	Does your community have electricity from UEB ? YES	92	Mow many times a week do you lack electricates	ngth of each	}
CICA INVENTORY STRVEY	Name of the list	Village name Subcounty District	1.0 The Village Revelopment Committee (7DC)		The VDC is not established		1.3 Bow many memoers are women /	taken by a nen or a woman? The chairmareon	The secretary	The treasurer 2.0 Community Realth Workers (CEWS)	2.1 Now many CHWs does your Community, have?	2.3 When were the CRWs trained ? 2.4 Who trained the CRWs ?		2.5 Which are the major ARACIE problems in your community?	<b>.</b>	2.				

How many are there of this livestock in your village 80 Others, specify: Type of 3.2 Live stock Poultry VIIIAGE Cattle Sheep GOAES

80

VILLAGE

What is the main occupation of people living in your community?

Estimated number of HE's in this occupation Subsistence farmers Shop owners/traders Full time labourers Seasonal labourers Cash crop farmers other, specify: Dairy farmers Occupation .

In acres Now much land does an average household in your community have access to cultivate ? Now much of the land that an average household have access to is cultivated ? 3.4 Land access

boss the crop contribute to income ? 8 SEX the crop part 2 YES M 44 community 8 Agricultural products this YES a d Irish potatoes Sweet potatoes Matoke-bananas Finger millet. Sweet-bananas Ground nuts Sove beans Pineapples others specify: Cabbages Tomatoes EIS EIS Sorghum Cotton CABBAVA Coffee Onions MALZE Crops Beans Yans Hea

6

1

- 2 E

CAN		39877114	ONO			
o racope distribution		5.2 Which development the Village Deve	which development projects are presently started or the Village Development Committee in your community	resently started	or being s	being started by
WITHIN LAST YEAR, HOW MUCH MONEY (in USH) DID THE AVERAGE HOUSEHOLD IN YOUR COMMUNITY SPEND ON:	Write the amount in USE here	Briefly describe	write here in contribute to	details now your community	community welopment	
T		Development Flored		our Local	Others	:
2. School fees			Amount			
3. Medical treatment (western medicine)						
4. Medical treatment (traditional)						
Poor Service Control of the Control					:	
Water State of the			· · · ·			: - ·
7; Community activities	Company of the State of the Sta					
Total yearly expenditure in an average household in your community		5.3 Which are the fi by the VDC?	are the future priority community development activities planned (VDC?	mmunity developme	ent activit	ies planned
. 0 Community Participation and development		· ·				
	munity?	8				٠
		S O COMMUNITY WATER SUPPLY	SUPPLX			•
		6.1 Bow does the con	community maintain and repair the existing water the community?	and repair the e	xisting wat	10
.2 Is there any customs or taboos concerning	water in your	community			•	
(e.g. waref Bource, correcting, use or a describe briefly:						
		6.2 How much 18 you	r community willi	community willing to and capable of paying for	aryaq 10 e.	7 COT & 20
		litres jerry o	n of water			
		purchased from a	a water vendor	TSD		
		collec	collected at the tap	TSD		

How much is your community willing to contribute on monthly basis to ensure proper operation and maintenance of a new or improved community water supply?

Amount of money in USE	Labour	Local materials	Others	
				٠
	: 1		•	
				•
				l

6.4 Water collection in the rainy season

whe major water collectors during the wet season in prioritized order	Specify transport, if other than by foot	If they did not have to collect water, what would they be likely to do in the time saved?
7.		

6.5 Water collection in the dry season

The major collector the dry	The major water collectors during the dry season in prioritized order	Specify transport, if other than by foot	If they did not have to collect water, what would they be likely to do in the time saved?
H			and the state of t
7.			en en en en en en en en en en en en en e
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1	g	_						1.		-			<u>1</u>
RAID WATER	ļ		1			11							
Other, epeckfy:				<u> </u>									
Total													

if the number of bouseholds above is different from the number of MR in 3.0, B on page 2, then please explain why:

6.9 Please indicate each source with the above assigned letter on the attached map

If the water is coloured, how many jerry cans are pumped

before it eventually gets clear?

Glean and safe water ?  Glean and safe water ?  Gov many of the above Ene in your community use clean and safe water ?  Gov many of the following water sources to one or many ene of the following water sources to one or many and the thin hand pump, protected spring or many and water ?  6.11 please list, in descending order of preference bet of the above water sources mentioned above.;  No. Source Reason for preference  1. Domestic use, other  2. Domestic use, other  3. Livestock watering  4. Agricultural use  5. Industrial use  6.13 which of the above water sources has;  Glour  Eard (does not easily foam  What is the colour of the water in the morning, when the following questions:	ω	급	SATE VAL	Safe vater access and use		Number of EE
E in your community has access to one the Anola with and pump, protected spring the following water sources to preference.  The following water sources mentioned about a tit the above water sources are used for:  tic use, drinking  tic use, drinking  tic use, drinking  tic use, other  took watering  ultural use  in of the above water sources has:  trial use  tr	μυ	§ 4   E 4	ni EE yuu	your community	access	
the following water sources;  the following water sources;  the following water sources preference,  three best of the water sources are used for:  three best of the water sources are used for:  tic use, drinking  tic use, drinking  tic use, other  tock watering  witural use  in of the above water sources has:  trial use  in of the above water sources has:  the community uses a borehole, please answer questions:  e colour of the water in the morning, when the	ตับ	10 Y 0	Any of 'th	100 E	community	
the Beat of the water sources mentioned above the above water sources are used for:  tic use, drinking  tic use above water sources has:  the Community uses a borehole, please answer questions:  e colour of the water in the morning, when the	йодо	9 H 9 H   4 H 9 H 9 H	wary EE in tra of the tole, well tavity fee	cour community historical water rith hand pump,	access to urces; otected spr	
tic use, drinking  tic use, drinking  tic use, drinking  tic use, drinking  tic use, drinking  tic use, drinking  tic use, drinking  tic use, drinking  tic use, drinking  tic use, drinking  nitural use  trial use  th of the above water sources has:  a not the above water sources has:  the Community uses a borehole, please answer questions:  e colour of the water in the morning, when the	نو [	ដ	Please 1			nce,. led above :
tic use, drinking  tic use, drinking  tic use, drinking  tic use, other  tock watering  witural use  in of the above water sources has:  as not easily foam  sea not easily foam  the Community uses a horehole, please answer questions:  e colour of the water in the morning, when the	<u> </u>	و ا	Source	TOIL OF	ence	
tic use, drinking  tic use, drinking  tic use, other  tock watering  ultural use  th of the above water sources has:  se not easily foam  sea not easily foam  the Community uses a borehole, please answer questions:  e colour of the water in the morning, when the		۲,				
tic use, drinking  tic use, drinking  tic use, other  tock watering  witural use  in of the above water sources has:  tasap)  the Community uses a borehole, please answer questions:  e colour of the water in the morning, when the	<u> </u>			=		
tic use, drinking  tic use, drinking  tic use, other  tock watering  ultural use  trial use  in of the above water sources has:  sea not easily foam  the Community uses a borehole, please answer questions:  e colour of the water in the morning, when the	<u> </u>					
tic use, drinking  tic use, other  tock watering  ultural use  crial use  in of the above water sources has:  sa not easily foam  s soap)  the Community uses a borehole, please answer questions:  e colour of the water in the morning, when the	1	្ត	1 1	the above water	are used	ore
tic use, other  tock watering  ultural use  in of the above water sources has:  sean)  sean)  the Community uses a borehole, please answer questions:  e colour of the water in the morning, when the	L:		Domestic	drinking		· · · · · · · · · · · · · · · · · · ·
nitural use  in of the above water sources has:  sea not easily foam  seap)  the Community uses a borehole, please answer questions:  e colour of the water in the morning, when the	<u> </u>			1		
nitural use  in of the above water sources has:  sea not easily foam  seap)  the Community uses a borehole, please answer questions:  e colour of the water in the morning, when the	<u></u>	Ι.	Livestock			
trial use  th of the above water sources has:  sea not easily foam  seap)  the Community uses a borehole, please answer questions:  e colour of the water in the morning, when the	I		Agricultu			
of the above water sources has:  se not easily foam  se sop)  the Community uses a borehole, please answer  questions:  e colour of the water in the morning, when the	<u> </u>		Industria			
was not easily foam a soap) the Community uses a borehole, please answer questions: e colour of the water in the morning, when the		55		the above water		
es not easily foam 1 soap) the Community uses a borehole, please answer questions: e colour of the water in the morning, when the	l	Tag	921			
seanot easily foam  seanot easily foam  the Community uses a borehole, please answer  questions:  e colour of the water in the morning, when the	l	S S	11,			
ssand easily foam  ssap)  the Community uses a borehole, please answer questions:  e colour of the water in the morning, when th	J	8	, our			
the Community uses a borehole, please answer questions: e colour of the water in the morning, when the	1	#	84	easily		
the colour of the water in the morning, when	] wii	717	the	tty uses a	please	
	3	Jat.	the	of the water		

WATER USER COMMITTEE OUESTIONWAIRE

의 글 찍었	VILLIAGE Mame	District	TREET COMMITTEE (ABSOCIATION	Does you Community have a water User Committee/Association		NO Lif NO then go to question 8.1	How many members are in your committee?	Now many members are women	Are the following positions in the Committe Man Woman taken by a man or a woman?	The chairperson	The secretary	The treasurer	times monthly	when need aruses	Has the committee been trained? YES	who gave the training ? God God	** Arhar nipase speciev	The state of the s	Now many water sources does the Committe take care of?	Boreholes	Wells with band pump	Protected springs	Other	
	CO 1111 8		More, specify																					
	в рожадоте		20 - 25					. *		•								:						
Xore, special, specia	to prime the		15 - 20						:						-									
Xore, special, specia	aved now of		10 -15								•.	: -											:	
Xore, special, specia	4	jerry can '	5 - 10	-						} :										•.		-		
funces do you have to pump the borahole to fill y can ?  - 10		20 litres :	۱۲ ۲۵		ompaled by		a	íne —	ignature										:					

compiled by

Signature

Time Time

VISIT THE WATER SOURCE AND OBSERVE THE POLLOWING  8.8 Water quality from the water source (8.1)  Poor  If poor, please specify (e.g., salty, smelly, brown)	Present condition of the water  Ok Needs repair  edestal  pron.  plitway	8.10 Present condition of water source (8.1).  Yes. No. Other please specify  Surrounding Clear  Grass cut  Soakaway functioning  B.11 If surroundings are dirty, please explain (tick more if needed)  Orass  Debris  Animal droppings	Dirty pools of water Other  8.12 What type of drainage is provided? None Vegetable garden Sanana plants Soak pit Others, please specify Compiled by
VILLAGE NAME  7.9 Has the Committee set rules, res no no for the use of the water source?  7.10 If yes, do you have a written ver no set of rules that I could see?  7.11 Do you have a water source naintenance of their water source?	How do you collect tunes Yearly fee Container fee Container fee Collection at time of maintenance or repair other, If other, please specify:	8.0 water squires 8.1 Which borehole, well with hand pump or protected spring is used most by the community? Indicate letter and number of source in the box (ref. pg 8, 9 of RC1 questionharie) 8.2 How many caretakers does the water source (8.1) have? 8.3 How many of the caretakers are women? 8.4 Is the water source (8.1) functioning now? Yes, fully No	8.6 If yes partly or no. give assessment of fault no water low water s.6 If yes partly or no. give assessment of fault no water mechanical problem no particular please give reason for lack of repair no panes no hand pump mechanic (RPM) RPM not able to repair non table to pay Don't know

HOUSEHOLD OFFSILORMAIRE VILLAGE INVENTORY SUKVEY	HOUSEHOLD				A. ONO	
Aume on the list	Number of people in the household	the bousehol	ש			
		Males	L			
Parish Sub-county		Pemales	y)			
	:	Total		1		
O DEMOGRAPHICS	Number of children		]	]	٠	
	below	below 5 years of age		Boys	Cirls	
č		aged 6 t	aged 6 to 12 years	45		
<b>.</b>	aged	aged 6 to 12 years in achool	in schoo		2 2	
:	2.0 WATER AVAILAD	WATER AVAILABILITY AND UTILIZATION	TLIZATION			
larital Status Single	2.1 Where do you get water from?	get water fro	ç;			
Dayonta Andreas		Rainy season	ţ,	Dry Season		
Markied	Water Source	Time spent in min	in min	Time abent in min	2,00	
Co-habiting		to	at at	to	at at	Prefer
		source	source	source	source	
oes your spouse) / (a friend or a relative)	Borehole		:			
SEL	dan				<del>- )</del>	
Ox.	protected spring					
ribe	unprotected spring					
Other	well with pump					
eligion	well without pump					
Christian	water hole	<u></u>				
Mostem	gravity feed					
Other Specify	rain water harvest feed		1			
Vears of brimary education	2.2 Who collects the vater? (Fill the table in prioritized order)	he water? (Fi	111 the t	ible in pri	oritized o	ا ق
Years of secondary education.	Rainy season	son		Q	Dry season	
	Collector		Age	Coll	Collector	VKe
למתחקות למתחקו	1.			1.		
				2.		
	-			4		

MOUSEMOLD ONO A ONO	HOUSEHOLD QNO_A
2.3 Which container does your household use most for water collection ?	2.13 If no. do you feel there is any role you can play?
Jerry cans	TES
Clay pots	ON
Pans	
Other	2.14 If yes, which one?
If other please specify:	
2.4 Does the container specified above have a lid?	
	2.15 -How many littres of water do you purchase
YES Specify	IROM Water Vendors per day.
	2.16 How much do you pay per 20 latre container?
2.5 By what means does the main collector carry the water from the source?	
Bicycle	3.0 HEALTH AND SANITATION
By foot	
THAT I	3.1 Within the last week, has any member of your family. above one year of age, had diarrhoes?
go to collect water in a day?	ON.
2.7 How many 20 littles jerrycans of water	
does your bousehold use per day?	3.2 Have you ever heard of a san plat, slab or ventilated pit latrine?
2.8 Now much do you pay per 20 littres container	SZI
	2
2.9 What is the money collected used for?	
	3.3 If yes, what was the source of information?
2.10 How much would you be willing to pay for a 20 litre jerrycan of water?	health worker poster chief radio
2.11 Do you play any role in the maintenance of the water source?	RC Official newspaper
O <sub>N</sub>	other (specify)
If yes, proceed to question 2.14.	
2.12 If no, explain why.	
	series that an extended about 30 materials to solve the residence of
	es de edera de da ratifica

HOUS	HOUSEHOLD	ONO_A	HOUSEHOLD QNO_A	
4.0	<b>ECONOMY</b>		K.O Knowledge, Attitudes and Practices	
4.3	Have you in last month bought	YPES NO		
			K.1. Please mention three most common diseases which are spread by dirty hands.	e spread by dirty
	Cooking oil			
	Washing bar-soap			
	Paraffin		7.	
	Salt			
			3.	
4.2	For this crop year, did you			
	Buy fertilizer		h.z how can you prevent diarrhoea?	
	Mire a porter (mupakasi)		1.	
	Do porter's work			
4.3	4.3 How many do you have		3.	
	Mat Chicken			
	Blanket		K.3 Bow can you prevent worms?	
	Chair		1.	
	Bed			
			2.	
			•	

4 .	٠L				
	fired bricks				
	glass window				
	good Gid				
		·	: 1	•	
					. :
7	Type of latrine				
	None				
	Traditional pit latrine with dirt ground				:
	Traditional pit latrine with cement ground				
	Partition with slab	-			
	744 San 5 Sa	•			
	Ventilated improved pit latrine				
	Other(specify)				
m	Is the pit latrine clean?	Г			
		7			
	ON				
		}			
4	is the hole of the pit latrine covered with a lid?				-
	SZA				
	2	T-			
		7	•		
3.	Is there a hand washing facility close by?				
	SZL	ſ			
	S.	Γ.			
	<b>]</b>	<b>1</b>			

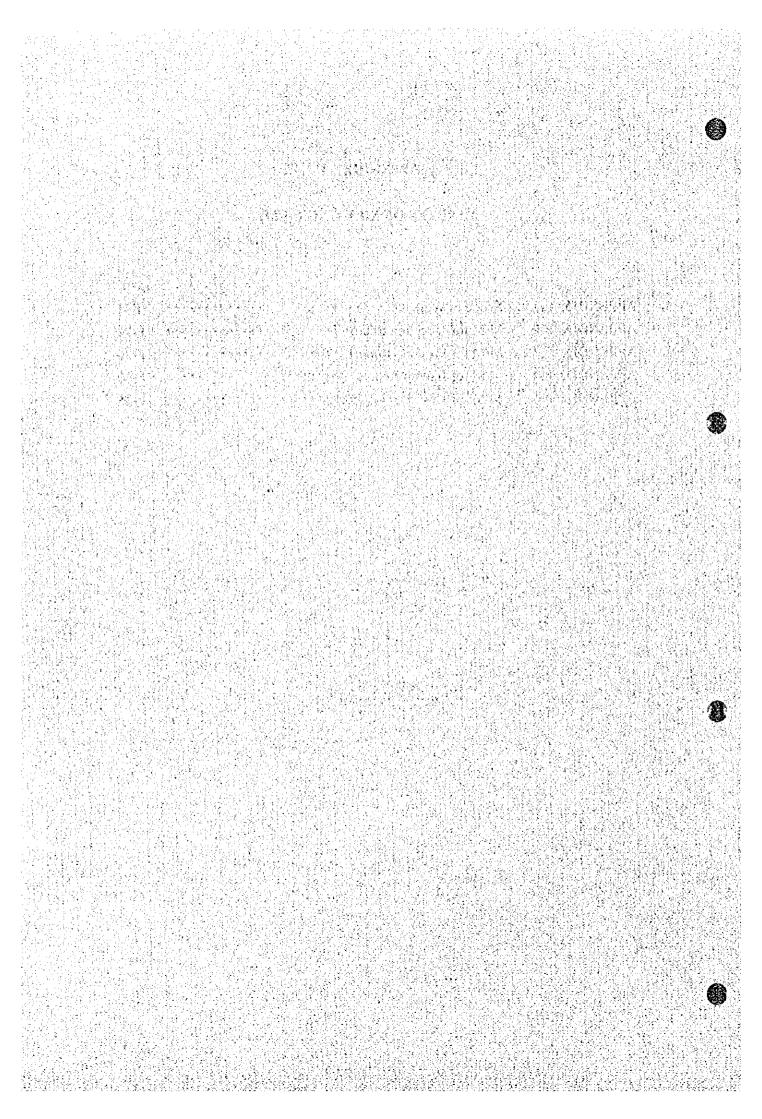
5.0 THINGS TO OBSERVE AND NOTE

MOUSEMOLD

## APPENDIX F

# MINUTES OF MEETING (M/M)

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APPENDIX F-1 : Scope of Work

SCOPE OF WORK

FOR

THE STUDY

ON

RURAL WATER SUPPLY

W

MPIGI, MUBENDE AND KIBOGA DISTRICTS

IN

THE REPUBLIC OF UGANDA

AGREED UPON BETWEEN

THE MINISTRY OF NATURAL RESOURCES

AND

JAPAN INTERNATIONAL COOPERATION AGENCY

Kampala, April 25, 1995

Ms. Kae YANAGISAWA

Leader, Preparatory Study Team,

Japan International Cooperation

Mr. Ben Z. DRAMADRI

Permanent Secretary,

The Ministry of Natural Resources

Agency

#### I. INTRODUCTION

In response to the request of the Government of the Republic of Uganda (hereinafter referred to as "the Government of Uganda"), the Government of Japan has decided to conduct the Study on Rural Water Supply in Mpigi, Mubende and Kiboga Districts in the Republic of Uganda (hereinafter referred to as "the Study") in accordance with the relevant laws and regulations in force in Japan.

Accordingly, the Japan International Cooperation Agency (hereinafter referred to as "JICA"), the official agency responsible for the implementation of the technical cooperation programs of the Government of Japan, will undertake the Study in close cooperation with the authorities concerned of the Government of Uganda.

The present document sets forth the Scope of Work with regard to the Study.

#### II. OBJECTIVES OF THE STUDY

The objectives of the Study are:

- 1. to evaluate potential of water resources in the Study area focusing on groundwater,
- 2. to formulate sustainable water supply plan (mainly using groundwater) for 300 villages including 6 trading centers to the year 2005, and
- 3. to pursue technology transfer to counterpart personnel in the course of the Study.

#### III. STUDY AREA

The Study will cover Mpigi, Mubende and Kiboga Districts.

#### IV. SCOPE OF THE STUDY

Stage I: Basic Study

- 1. Collection and analysis of existing data and information on:
- a. natural conditions including
  - (a) meteorological conditions
  - (b) geological and topographical conditions
  - (c) hydrological and hydrogeological conditions
- b. social and economic conditions
- c. conditions of health and hygiene
- d. environmental conditions
- e. plans and policies on water resources development and water supply services
- f. legal and institutional an angements of water resources development and water supply plans
- g. ongoing and planned projects relevant to the Study and trends of external assistance
- 2. Preliminary survey on actual conditions of water resources through:
- a. aerial photos analysis
- b. geological recomnaissance
- c. hydrological investigation
- d. geophysical survey

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- e. water quality tests of existing wells and surface water
- 3. Survey on village / trading centers inventory and actual conditions of water supply:
- a. village / trading centers inventory survey
  - a) social and economic conditions
  - b) conditions of water use
  - c) conditions of sanitation and health /hygiene education
  - d)conditions of community development and people's awareness
- b. survey on existing water supply facilities
  - a) water sources and their capacity
  - b) conditions of water supply facilities and their operation and maintenance
- 4. Study on institutional aspects
- a. organization and operations of central government, district governments and villages
- b. financial performance of each level of organization
- 5. Evaluation of present conditions and identification of problems with emphasis on:
- a. physical conditions
- b. operation and maintenance
- c. organizational anangements
- d. financial performance
- 6. Identification of potential areas for groundwater development and plan for detailed field survey
  - a. identification of high potential areas for groundwater development
  - b. selection of areas for detailed field survey
- c. initial environmental examination (IEE)

#### Stage II: Detailed Study

- 1. Detailed survey in potential areas
- a. geophysical and geological survey
- b. groundwater table measurements
- 2. Pilot study on community development and hygiene education and evaluation of its effectiveness
- 3. Analysis and evaluation of potential of groundwater and other water resources
  - a. topographical and geological analysis
- b. hydrological and water balance analysis
- c. evaluation on groundwater/surface water potential
- 4. Water demand projection
- 5. Classification of villages I hading centers by size, potential water source, easiness of community development and other factors

Stage III: Formulation of a Water Supply Plan

- 1. Formulation of basic policies and strategies of water supply plans
- a, larget coverage rate

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- b. target level of services in terms of quantity, quality and accessibility
- c. choice of technology
- 2. Water supply plan for each type of villages / trading centers
- a. plan for water source
- b. preliminary design of water supply facilities
- c. guideline for the rehabilitation of existing facilities
- d. facility and equipment plan
- 3. Plan for community development and dissemination of hygiene education
- 4. Guideline for providing sanitation facilities.
- 5. Operation and maintenance plan
- 6. Monitoring plan of groundwater level and water quality
- 7. Cost estimation and financial management plan
- 8. Evaluation
  - a. financial evaluation
- b. institutional and technical evaluation
- c. economic and social evaluation
- d. environmental impact assessment(EIA)
- 9. Formulation of a implementation program
  - a, project packaging
  - b. prioritization

#### V. SCHEDULE OF THE STUDY

The Study will be carried out in accordance with the tentative schedule as attached herewith

#### VI. REPORTS

JICA shall prepare and submit the following reports in English to the Government of Uganda.

1. Inception Report:

Twenty (20) copies at the commencement of the first field study in the Republic of Uganda. This report will contain the basic approach and outline of the Study as well as schedule and methodology.

2. Progress Report:

Twenty (20) copies at the end of Stage I. This report will contain the details and analysis of the Study, including information collected, methodology used and areas selected for Stage II.

3. Interim Report:

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Twenty (20) copies at the end of the first field study in the Republic of Uganda. This report will describe the findings and analysis in both Stages I and II. It will also include basic policies, strategies and technologies chosen for water supply in the study area.

#### 4. Draft Final Report:

Twenty (20) copies at the end of Stage III.

The Government of Uganda shall submit to JICA its comments within one (1) month after receiving the Draft Final Report.

#### 5. Final Report:

Fifty (50) copies within one (1) month after IICA has received the comments on the Draft Final Report.

#### VII. UNDERIAKINGS OF THE GOVERNMENT OF THE REPUBLIC OF UGANDA

- 1. To facilitate the smooth conduct of the Study, the Government of Uganda will take necessary measures:
  - (1) to secure the safety of the Japanese study team (hereinafter referred to as "the Team"),
  - (2) to permit the members of the Team to enter, leave and sojourn in the Republic of Uganda for the duration of their assignment therein, and exempt them from foreign registration requirements and consular fees,
  - (3) to exempt the members of the Team from taxes, duties, fees and any other charges on equipment, machinery, and other materials brought into the Republic of Uganda for the conduct of the Study,
  - (4) to exempt the members of the Team from income tax and charges of any kind imposed on or in connection with any emoluments or allowances paid to the members of the Team for their services in connection with the implementation of the Study,
  - (5) to provide necessary facilities to the Team for remittances as well as the utilization of funds introduced into the Republic of Uganda from Japan in connection with the implementation of the Study,
  - (6) to secure permission for the Team to enter into private properties or restricted areas for the implementation of the Study, if necessary,
  - (7) to secure permission for the Team to take all data and documents including photographs and maps related to the Study out of the Republic of Uganda to Japan, and
  - (8) to provide medical services in case of necessity. Its expenses will be chargeable to the members of the Team.
- 2. The Government of Uganda shall bear claims, if any arises, against the members of the Tean resulting from, occurring in the course of, or otherwise connected with, the discharge of their

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duties in the implementation of the Study, except when such claims arise from gross negligence or willful misconduct on the part of the member of the Team.

- 3. The Ministry of Natural Resources shall act as a counterpart agency to the Team and also as a coordinating body in relation with other governmental and non-governmental organizations for the smooth implementation of the Study.
- 4. The Ministry of Natural Resources shall, at its own expense, provide the Team with the following, in cooperation with other organizations concerned:
  - (1) available data and information related to the Study,
  - (2) additional survey related to the Study, if necessary,
  - (3) counterpart personnel and supporting staff,
  - (4) suitable office space with necessary furniture in Kampala, and
  - (5) credentials or identification card.

#### VIII. UNDERTAKINGS OF JICA

For the implementation of the Study, JICA shall take the following measures:

- 1. to dispatch, at its own expense, the Study Team to the Republic of Uganda, and
- 2. to pursue technology transfer to counterparts personnel in the course of the Study.

#### IX. CONSULTATION

JICA and the Ministry of Natural Resources shall consult with each other in respect of any matter that may arise from or in connection with the Study.

The Study on Rural Water Supply in Mpigi, Mubende and Kiboga Districts in the Republic of Uganda

# TENTATIVE SCHEDULE

MONTH	131	2nd	3	45	5th 6th		7th	800	ž.	10th 11th	11th	12th
WORK IN UGANDA										題		
WORK IN JAPAN						2						
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REPORT PRESENTATION	ន្ត		PR				IT/R	, i	Ц	DFR	11.	F/R
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PHASE		STAGE	ΕĪ	STAGE	GEII	,		STAGE III	111			
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Inception Report

Progress Report

Interim Report

Draft Final Report

Final Report

MINUTES OF MEETING

**FOR** 

THESTUDY

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Permanent Secretary,

The Ministry of Natural Resources

Kampala, April 25, 1995

Ms. Kae YANAGISAWA

Leader, Preparatory Study Team, Japan International Cooperation

Agency

Based on the official request of the Government of the Republic of Uganda (hereinafter referred to as "the Government of Uganda"), the Government of Japan, through the Japan International Cooperation Agency (hereinafter referred to as "JICA"), has agreed to conduct The Study of Rural Water Supply in Mpigi, Mubende and Kiboga Districts in the Republic of Uganda (hereinafter referred to as "the Study").

The JICA preparatory study team, headed by Ms. Kae YANAGISAWA, Visited the Republic of Uganda from April 17th to 25th, 1995. During its visit, the preparatory study team held a series of meetings with the Directorate of Water Development, Ministry of Natural Resources (hereinafter referred to as "DWD") and other authorities concerned of the Government of Uganda. The list of participants is shown in the Appendix 1.

Consequently, both sides agreed to the Scope of Work which defines the terms and conditions of the Study, and in addition to the Scope of Work, they confirmed the following:

#### 1 Study area

The Study area shall cover 300 villages including 6 trading centers in Mpigi, Mubende and Kiboga Districts. The selected 6 trading centers are in the Study area and are as desperate for water supply as other villages. The list of the villages and trading centers is shown in Appendix 2.

In principle, the Study will cover 100 villages in each district. However, the number may be adjusted among the three districts in the course of the Study, according to the strategy and priority of water supply.

Since the preparatory study team was not able to acquire maps which show the location of villages, exact location of villages should be shown to the Study Team at an early stage of the Study.

#### 2 Target year

The target year of the Study is 2005 so the water supply plan will cover a 10 year period.

- 3 Basic approach to the Study
- (1) The Ugandan side explained that the target of the national water supply strategy is to provide the

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rural population with safe water of at least 20 liters per capita per day within a maximum distance of 1.5 km. The Japanese side agreed to follow the strategy in the Study although detailed plans will be formulated based on the actual condition of individual villages.

- (2) The Study will basically examine the possibility of constructing boreholes (wells of approximately 60 m to 90 m depth) in each candidate village, but other water sources and low cost technologies will also be considered when they are found applicable, less costly and more sustainable.
- (3) The water supply plan will deal with water for humans; water for animals will be excluded from the planning.
- (4) The Study will be conducted by participatory planning methodology so that the water supply plan can reflect local needs and technology transfer can be done effectively. The Study will involve organizations at various levels from DWD at the top to villages at the bottom.
- (5) Existing WATSAN schemes will be the core for the Study. WATSAN schemes will be utilized especially for the formulation of village inventory and the conduct of the pilot study on community development and hygiene education.
- 4 Scope of the Study

Considering the importance of integrating water supply and sanitation, proper means of sanitation will also be examined in the Study and a guideline for sanitation facilities will be formulated.

5 Schedule of the Study

Based on the request of the Ugandan side, the tentative Study period has been shortened to 11 months.

- 6 Undertaking of the Government of Uganda
- (1) DWD and the three districts will organize a counterpart team. The list of potential members is shown in Appendix 3.
- (2) DWD will act as a coordinating body of the

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counterpart team. It is also responsible for providing specialists in geology and hydrogeology.

- (3) DWD will provide its drilling rigs, if necessary, for test drilling during in the Study. The spare parts for the machinery will be provided by DWD. The Study Team will provide necessary consumables. Otherwise, the work will be contracted out.
- (4) District governments are responsible for providing specialists in water supply, health and community development.
- (5) District governments will collaborate with the Japanese Study Team in the formulation of village inventory by instructing lower levels of RCs (Resistance Committees) to prepare required data and district people accompanying the Study Team to each village. Likewise, they will take initiative in the conduct of the pilot study.
- (6) District governments will provide office space with furniture. It is preferable that radio communication equipment and portable generators are arranged by the Japanese side.
- (7) DWD will take necessary measures to acquire allocation of frequency for radio communication.
- (8) Considering the limited counterpart budget of DWD, JICA will prepare vehicles for the use of the Study Team.
- (9) DWD will organize a steering committee at the commencement of the Study. The committee will be composed of members from the Ministry of Finance and Economic Planning, Ministry of Health, Ministry of Gender, Community Development, Ministry of Local Government and the Ministry of Natural Resources..
- 7 Counterpart training

The Ugandan side requested that technology transfer would be realized through training in Japan, too. Japanese side replied that one candidate for the Japanese fiscal year 1995 shall be selected in consultation with the Japanese Study Team and official application shall be submitted to the JICA Kenya Office.

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#### ATTENDANTS LIST

#### UGANDAN SIDE

- 1. Mr. Patrick Kahangire
  Director of Directorate of Water Development
- Mr. Moses Gava
   Ag. Commissioner, Rural Water Department
- 3. Mr. Pantaleo Kabateraine Ag. Principal Hydrogeologist
- 4. Mr. Nathan Mujere District Water Officer, Mubende
- Mr. Fred Mulabya District Health Inspector, Kiboga
- 6. Mr. Fred Kato Ssemugera
  District Health Inspector, Mpigi

#### JAPANESE SIDE

- Ms. Kae Yanagisawa Team Leader, Preparatory Study Team
- Mr. Yasuo Mukai Groundwater Development, Preparatory Study Team
- 3. Mr. Satoshi Kimura Study Planning, Preparatory Study Team
- 4. Mr. Satoshi Nakamura
  Hydrogeology, Preparatory Study Team
- 5. Mr. Hiroatsu Narita Rural Water Supply, Preparatory Study Team
- 6. Mr. Yoshiharu Yamada
  / Assistant Resident Representative, JICA Kenya Office

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## PROPOSED BOREHOLES FOR MUBENDE DISTRICT

COUNTY	SUBCOUNTY		AREA	
BUSUJJU:	Maanyi Sub County:	1.	Serinya	
<b>D</b> 000000.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2.	Nabale	
		3,	Maanyi S/C Hors	•
		4.	Mpongo	-
		5.	Misimba	
		6.	Kimuli	
		7.	Kabele	
		8.	Buwala	
	Butayunja Sub County:	ı.	Bekina P.S.	
	pacayanga oab country :	$\hat{\hat{\mathbf{z}}}$ .	Kkande P.S.	
		3.	Kitongo S/Disp.	
•	:	4.	Nakaziba P.S.	
		5.	Kitebere P.S.	
		6.	Watuba	
	Kakindu Sub County:	1.	Nabwiri	
	, , , , , , , , , , , , , , , , , , ,	2.	Bukundugulu	
		3.	Bannanze	
		4.	Kalama	
		5.	Ngugulo	
		6.	Mwera	
•		7.	Kakindu P>S.	
		8.	Mawanda P.S.	
			**************************************	
•	Malangala Sub County:	1.	Kiwawu Town	
		2. 3.	Magonga P.S. Lulumbu	
		4.	Kasalaga	
KASSANDA:	Kassanda Sub County:	ı.	Kassanda T/C 1,800	
		2.	Namabale	•
		3.	Kyabalanzi	
		4.	Kamuli P.S.	
		S.	Ageyongedde	
		6.	Kalwana	
		7.	Kalama	
		8.	Kikandwa Disp.	
		-		
NYANZI:	Nyanzi Sub County:	1.	Bulyamagunju	
1		2.	Kampiri	•
		3.	Milembe	. 1
//		4.	Kalama	
<i>[[</i>		5.	Kyakasengula	
n		6.	Kibanyi-Kabagala	
• •		<b>7</b> .	Wamala (Bukoba)	
		8.	Kambojja	: .
e e e e e e e e e e e e e e e e e e e		9.	Kyawatuba/Gambwa	
		10.	Kasana	Fr
				K.Y.

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	See the code of th	: ::::::::::::::::::::::::::::::::::::	Kalagi
	Kiganda Sub County:	1.	
		2.	Kamusenene
•		3.	Manyogaseka
		4.	Kasawo
		5.	Lwenyange
		6	Mbale
	•	٠.	120420
	Bukuya Sub County:	1.	Mabubi
	Buxuya Sub councy:	$\hat{2}$ .	Kalongo
		3.	Kitumbi
	•	4.	Kanoga
4.00		-	ne d has still had
MITYANA:	Busimbi Sub County:	1.	Kikumbi
		2.	Nakaseta
		3.	Namyeso/Kabuwambo
		4.	Bugabo/Kabuwambo
		<b>S</b> .	Katakala P.S.
		6.	Magongola
		7.	
		7.	Nakibanga
	positive out our construct	: .	
•	Busimbi Sub County:	_	number 0/0 11mm
	Mityana Town Council:	ı.	Busimbi S/C Hars.
		2.	Works Camp Old
			Mubende Road
		3.	Forestry Office
	Bulera Sub County:	1.	Kalangalo T.C
		2.	Buyambi S.S.S.
		3.	Namutamba T.T.C.
		4.	Namutamba Disp.
		••	
•			
4 4 4 4			
MITYANA:	Sekanyonyi S/C	1.	Kasikombe P.S.
maximum.	Sekanyonyi S/C	2.	Katungulu
			Budimbo
		3.	
		4.	Kisamba
•		5.	Kawolongojjo P.S.
		6.	Namungo H/Centre
		7.	Sekanyonyi
			H/Centre
	Kikandwa Sub County:	1.	Nakwaya Parish
		2.	Kabulamuliro P.S.
. 1		3.	Bambula,
1			~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
BINGERIUS. VI.	enga Sub County:		Kisambwa
	lenga bub councy:	1 . 2 .	Kilangwa
<b>/</b>		and the second second	
3		3.	Kyenge2a
		4.	Budibaga
		5.	Buakaggo K
			/ h

Kalingo Bagezza Sub County: l. Muqungulu 2. Busale P.S. З, Kyamukona 4. Kyeguluso Bakijulula 5. 6. 7. Kabowa 8. Kababu 9. Kabbo Kasambya Sub County: Nakawala 2. Lwegula з.

4. Nakasaga Kisongola 5. 6. Kasambya T/C 1,500

Madudu Sub County:

Kikoma P.S. Madudu T.C.

Kiyuuni Sub County:

**1**. Katoma P.S.

#### PROPOSED BOREHOLES FOR KIBOGA DISTRICT

<u>PL/</u>	ACE	<u>PARISH</u>	SUB-COUNTY	POPULA:	
1	Kateera-Bikira	·	Bukomero	337	
2	Katwe	Katwe	Bukomero	356	
3	Kayunga (C.U)	1,450	Bukomero	295	
4	Hasiriba		Bukomero	357	
5	Kabamba	11		56	
6	Kalangala			102	
7	Nabwendo (C.U) Nabwendo	Nabwende	Muwanga	156	
გ	- do (RC)	- do -	- do -	261	
-	Nakasozi Public	Nakasozi	- do -	302	
10	Kuyenje		Bukomero	338	
11	Nakasengere	Biko	Muyanga	178	
$\overline{12}$	Bukomero T/C	Bukomero	Bukomero	3,000	
13	Huboma	DUNOMICIO	Bukomero	83	
14	St. Kizito Ndiraweru	•	Muwanga	152	
15	Kagogo	Kagogo	Bukomero	206	
16	Huwanga	Huwanga	Huwanga	220	4
17	Sinde	Lunya	Lyamata	226	4
18	Mwezi	Hwezi	Bukomero	274	
19	Bikoma			259	
20	Bisika	•	Butemba	202	
21	Kayunga R/C	•	200011120	295	
2.2	Kikonda	Kikonda	Nsambya	140	
23	Kyankwanzi	Kyankwanzi	Butemba	249	
24	Kigando Public	Kigando	Nsambya	147	
25	St. Jude Kigando	Kigando	Masodde	125	
26	Kyabajojo		Butemba	93	
~ 7	Kyakabuga		Nsambya	107	
ال ـ ح	Bamusuuta	Bamusuuta	Masodde	291	
29	Masodde	Masodde	- do -	414	
30	Vyumba	Luwawu	Masodae	612	
31	Kasega	Kasega	Kibiga	207	
32	Kiboga DAS	Kiboga Town	Kibiga	569	٠.
33	Kiyombya	Wattuba	Masodde	216	
34	Kyekumbya	Kyekumbya	Kibiga	300	Å.
35	Mulagi	Kigando	Masodde	314	4
3.6	Kagobe	Kagobe	Kibiga	77	
37	Kambugu	Nkandwa	Kibiga	405	
38	Katoma	Katoma	Kibiga	165	
39	Kibiga Sch.	Kibiga	Kibiga	284	
40	Kiwanguzi	Kiwanguzi	Hasodde	182	
41	Kiboga St.Andrew	Kiboga Town	Kibiga	312	
42	Bukasa	Kibale	Kibiga	195	
43	Kabamba	Mwezi	Búkomero	56	
44	/Kambuzi		Ntwethe	175	
45	// Kawawa	Lwamata	Lwamata	312	
46/	/ Lukuli		Lukuli	190	
17	Maria de la companya	*.		KY	
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47	Lunnya	Lunnya	Lwamata	202
48	Bukoboobo	Nsala	Lwamata	192
49	Kijumagwa	Kasejere	Lwamata	308
50	Ndibata	Ntuetue	Ntwetwe	217
51	Bugomolwa	Ntwetve	Ntwethe	250
52	Kirinda	Kirinda	Lwamata	284
53	Kilemeera		Ntwetre	98
54	Kyamulalama		Gayaza	168
55	Lubuga		Ntwethe	140
	Kyakabuga Dubuga		Nsambya	107
56			Ntwetke	353
57	Bulagwe Butambuka		Gayaza	182
58				353
59	Magala Memorial	•	Ntwetwe	272
60	Nkandwa Moslem		Nthethe	69
61	Nakalama St. Kizito	Nsambya	Ntwetwe	104
62	Kikajo	Regulate	Ntwetwe	179
63	Kiryamukoke		Kibiga	250
64	Gogonya	Nkandwa	Kibiga	90
65	St.Kizito Nkandwa		Kibiga	354
66	Kiboga Islamic	Kiboga Town	Kibiga	39
67	Nyamiringa	Namiringa	Lwamata	220
68	Nsanje		Kiriga	104
69	Kibooba		•	147
70	Kigando Mixed		Nsambya Luamata	31
71	Kiribodda			102
72	Kiryajjobyo		Gayaza	90
73	Nkandwa St.Joseph		Kibiga	159
74	Kiboga St. Paul	Kiboga Town	Kibiga	100
75	Byerima		Butemba	206
76 ·	Kitagenda		Lvamata	144
77	Buguluma		Butemba	500
78	Kiboga Hospital	Kiboga Town	Kibiga	
78 79 80	Senior Quarter	Kiboga	Kibiga	100
80	Kalagi Markets	Luwawu	Hasadde	200
81	Kabutemba	Bamusuuta	Lwamata	200
82	Nakakabala		Nsambya	300
83	Kigande		Nsambya	250
84	Hujunza	Kigando	Nsambya	110
85	Bananywa	Bananywa	Nsambya	1439
86		-county Hatrs		130
87	Ntwetwe T/C		Nsambya	2,000
88	Ntwerwe/Gayaza Rd. Towards F	Kanangalo	Ntwetwe	200
89	Lwanjalo		Ntwetwe	300
90	Gayaza S/H/H/U	Gayaza	Gayaza	190
91	Kasambya Harket	Kijungute	Gayaza	200
92	Luwuna	Luwuna	Gayaza	400
93	Kisala	Luxuna	Gayaza	350
94	Kyerere	Kiyuni	Gayaza	1000
95	Nkondo		Gayaza.	460
96	Kagalama		Butemba	310
97.	Kayonza		Butemba	350
98 //	Kigandi 11		Butemba	225
99//	Kiboga UWESO School		Kibiga	135
180	Kirinda	Kirinda	Kibiga	450 K
My				<i>/</i> '

## PROPOSED BOREHOLES FOR HPIGI DISTRICT

## GOMBA COUNTY

PLAC	E	<u> Parish</u>	SUB-COUNTY	POPULATION
1	Kyabagamba	Kyabagamba	Haddu	1730
2	Kabale	- ฉั	11	?
3	Kigayaza	. 11	45	?
4	Катне	Kigezi	11	716
5	Hakukuru	i ii	<b>11</b>	?
6 .	Kyambogo	11	(Ì	460
7	Luhonda	11	<b>u</b>	465
•	Kyamabale	Haddu	**	689
	Kasambya	<b>11</b>	11	378
10	Katomengo	Degeya	ft ·	436
11	Kirasi	ii	. (1)	1494
12	Nakitembe	48	if .	522
13	Buyanja	<b>41</b>	€€	856
14	Kagongero	Ntalagi	11	503
15	Kabwire	nearagr	,,,,,,,, .	537
16	Kyetume	Kyayi	ır	480
17	Kyengera	tt tt	H	387
18	Kirimanjaga	11	<b>11</b>	?
19	Nakaseeta	11 -	. 11	?
20	Nabugayo	rı .	15	366
21	Nalwanga	Kalwanga	Kabulaasoke	301
22	Lubale	Butiti	er .	379
23	Nkokonjeru	?	11	?
24	Lusongodde	Bulkadda	11	250
25	Luzira P/S	n a a a a a a a a a a a a a a a a a a a	<b>u</b>	405
26	Kayoko P/S	Kisozi	<b>O</b>	305
~ n .	Kiryanongo	Kalwanga	O	?
28	Kakubansiri P/S	Kalwanga	15	502
29	Bulwadda	Bulwadda	•	620
30	Luggaaga P/S	Lugaaga	11	308
31	Nakulamudde P/S	Hawuki	Kabulasoke	404
32	Hawuki T/C	nanakx u	Nabazasoke	706
33	Kiriri	Sabaddu	Hpenja	751
34	Hpopo P/S	Hut. I	X	406
35	Hpenja S.S.S	Kakono	11	500
36	Ngeye P/S	Nkoma	48	450
37	Busolo	Нродо	si .	498
38	Haseruka	Haseruka	<b>13</b> (10)	1292
39	Kanzira P/S	Kanzira	G .	777
40 ,	Ngomanene	Ngomanene	u	899
41./	Buyinjabutoole	Mut.I	in the second second	500
42/	Kyetume P/S	Golola	11	988
<i>f</i>		~~~~~~		
Lu				K. Y.
118		4		
<i>l</i>				

_	PLACE	PARISH	SUB-COUNTY	NOITKINGOG
	1 Wamirango P/S	Wamirongo	Kyambogo	598
	1 Wamirango P/S 2 Busukuma	Busukuma	11	452
	3 Kasambya	Kikoko	18	302
	4 Kikoko	ii .	, at	384
	5 Seeta	Susukuma	16	371
	6 Kijjude P/S	Sabaddu	;·11	450
	7 Hagigye	Hagigye	f1 11	603
	8 Kiwenda P/S	Kiwenda	11	349 727
	9 Kiwenda T/C	**	11	491
•	10 Nabitalo P/S		i i	681
	A Buso P/S Z Henvu T/C	Kabumba	10	588
	Ż Henvu T/C	Sugo	(1	935
	13 Kasozi Disp.	***	· · · · · · · · · · · · · · · · · · ·	780
	14 Lugo Comm.Centre	<b>n</b>	'' If	593
	15 Bulessa P/S	Guluddene		
	16 Kasangati T/C	Kasangati	Nangebo	2,000
	1 Seta Village	Huluka A	*	•
4	2 Hagera	Wampewo		
-	2 Hagera 3 Kide D.B. School	Huluka A		3
	4 Kiwalimu	Huluka B	•	
	5 Kiti	Sabagabo		
	6 Manyangwa P.Ş	Husale		
	7 Malyangonja	<b>(1</b>		
	8 Seta C/U & Hosque	<b>Muluka: A</b>		
	9 Kito Village	11		
•				
	BUTAKBALA COUNTY:			
	Bulunga P/S	Sugali	Ngando	450
. :	Ngando Disp.	Ngando	13	766
	3 Kitagobya S.S.S	Kasozi	ıi	427
		en en en en en en en en en en en en en e	<b>5</b> (	475
•	4 Bwetyaba P/S	Kasozi	10	699
	5 Lugali Village	Sugali	u .	624
	b Kisoba Rutende P/S Bukesa C/O	with the second	it	591
<b>\$</b>	7 Butende P/S	Butendo	. (1	662
<b>3</b>	0 puta - 0 (0)	Bukesa		848
		*	I <b>(</b>	523
	O Tufube Village N Kitagobwa T/C	Sugali	31	600
		Kasozi Bukesa	11	1086
	12 Bogobango T/C	викева		725.
	BUSIRO COUNTY:			
•	1 /Kyengeza P/S	Kyengeza	Kiziba	603
	1 /Kyengeza P/S 2 /Wabiyinja	Swemwedde	(1)	494
	3 / Nakikungube	Nakikungube	; • • •	588
	4 / Hasulita	Masulita	<b>a</b> .	879
	#			•= <del>-</del> 7
	//{}}			K.Y.
	$I^{\bullet}$		•	7 to 1 a

5	Kyanuna T/C	Kyanuna	Namayumba	738
6	Kyampisi	Kyampisi	11	486
7	Hanangata P/S	Musaale B	. (1)	563
8	Bugimba P/S	Kanziro	11	700
9	Kuguluka P/S	Bukondo	et et e	506
10	Gamba T/C	Hut. I A	11 .	920
11	Kyasa P/S	Kyasa	Namayumba	652
12	Bemba T/C	Bbemba	£ŗ.	981
13	Namayumba S/C.Hqrs.	Hunyuka A	**	713
14	Busaka	Nsituse	es .	782
15	Buwambo P/S	Kitayita	\$1	331
; -	Kasengejje P/S	Kasengejje	Wakiso	583
1.	Kende UHEA S.S.S	Hende	16	698
18	Bukasa T/C	Bukasa	tt .	1334
19	Wakiso T/C	Kisimbiri	<i>"</i>	2,000
HAHO	KOTA COUNTY:			
4	Vitameter min			
1	Kituntu T/C	Kituntu	Kituntu	945
2	Hgigi U.H.E.A.P/S	T/Council	Mpigi	500
3	Mabusanke E/P/S	Nabusanke	Nkozi	858
J				KY

#### LIST OF POTENTIAL COUNTERPART TEAM

#### 1. DWD

- (a) Mr. Moses Gava, Ag. Commissioner (RWD)
- Mr. Kabateraine Pantaleo, Ag. Principal, (b) Hydrogeologist
- Mr. Disan Ssozi, Senior Engineer (c)

#### 2. Mpigi

- Ms. Marion Tukahurira, ADES (a)
- Mr. Fred Kato-Ssemugera, DHI (b)
- Mr. Haruna Mwasampijia Ag. District Water Officer Mr. Tonny Mwanje, DCDO (c)
- (d)

#### 3. Mubende

- Mr. Isaac Mudoi, District Executive Secretary
- Mr. Nathan Mujere, District Water Officer (b)
- Mr. Eribankya Muhonge, District Health (c) Inspector
- Mr. Emmanuel Nsubuga, Ag. District Community Development Officer

#### 4. Kiboga

- (a) Mr. Peter Gahafu District Executive Secretary (D.E.S)
- Mr. Fred Mulabya District health Inspector (D.H.I)
- Mr. Philebert Odong Ag. District Water Officer (Ag. D.W.O)
- Mr. Michael Nyakhwashye (d) District Community Development Officer (D.C.D.O)

APPENDIX F-2: M/M for Inception Report

MINUETS OF MEETING
CONCERNING
THE INCEPTION REPORT
FOR
THE STUDY
ON
RURAL WATER SUPPLY
IN
MPIGI, MUBENDE AND KIBOGA DISTRICTS
IN
THE REPUBLIC OF UGANDA
AGREED UPON BETWEEN
THE MINISTRY OF NATURAL RESOURCES
AND
THE JICA STUDY TEAM,

In Kampala, 11th September, 1995

Mr. Ben Z. DRAMADRI

Permanent Secretary,

The Ministry of Natural Resources

Mr. Mitsuru YOSHIKAWA

Leader of the Study Team,

Japan International Cooperation Agency

(JICA)

Based on the Scope of Work agreed upon between the Ministry of Natural Resources and the Preparatory Study Team of Japan International Cooperation Agency (hereinafter referred to as "JICA") in April, 1995, JICA organized another study team (hereinafter referred to as "JICA Study Team") and dispatched it to Uganda in September 1995 to conduct the Study on Rural Water Supply in Mpigi, Mubende and Kiboga Districts in the Republic of Uganda (hereinafter referred to as "the Study").

At the commencement of the Study, the JICA Study Team submitted 20 copies of the Inception Report of the Study to the Directorate of Water Development (hereinafter referred to as "DWD") on 3rd September, 1995. The meeting for explanation and discussion on the contents of the Inception Report of the Study was held on 6th to 8th of September, 1995 at the headoffice of DWD. The list of attendants is given in Appendix-1.

The JICA Study Team explained the contents of the Inception Report in detail to DWD side, namely the backgound and objectives of the Study, the Study Area, scope of the Study, plan of approach, plan of operation and implementation plan of the Study. DWD side agreed on these subjects.

Major issues of the discussion were as below:

- (1) In connection with the undertakings by the Government of Uganda, DWD side replied as follows:
- a) Steering Committee

committee steering organize a DWD will will committee The Study. the οf commencement composed of members from the Ministry of Finance of Health, Ministry Planning, Ministry Economic of Ministry Development, Community Gender, Government and the Ministry of Natural Resources. DWD will coordinate with central government and any other relevant agencies related to the Study.

b) Counterpart Personnel of DWD are:

Mr. Moses Gava,

Ag. Commissioner (RWD)

Mr. Pantaleo Kabateraine,

Ag. Principal Hydrogeologist

Mr. Disan Ssozi,

Senior Engineer

c) Office Space in Kampala and Districts

The office space with six (6) desks and chairs for the Study Team will be provided within DWD Office in Kampala. DWD side emphasized that a diesel generator (5KVA) is to be provided by the Study Team if they desire stable electricity supply in each District offices.

- d) Acquisition of Frequency Allocation for Radio Communication

  The application of frequency license is now underway from the Ministry of
  Works, Transport and Communication and UPTC.
- (2) In connection with the counterpart training in Japan, the Study Team suggested to DWD to make prompt application to JICA Kenya Office.
- (3) In connection with the water supply facility to six (6) Trading Centers, DWD side suggested to examine soft energy systems such as solar or wind powered systems in the Study.

#### Appendix-1: List of Attendants in the Meeting

#### DWD side;

1. Mr. Patrick Kahangire,

2. Mr. Moses Gava,

3. Mr. Pantaleo Kabateraine,

4. Mr. Disan Ssozi,

5. Mr. Fred Kato-Ssemugera,

6. Mr. Nathan Mujere,

7. Mr. Fred Mulabya,

Director of DWD

Ag. Commissioner, RWD

Ag. Principal Hydrogeologist

Senior Engineer

District Health Inspector, Mpigi

District Water Officer, Mubende

District Health Inspector, Kiboga

JICA;

1. Mr. Satoshi Kimura,

Task Management, Second Development Study Division, Social Development Study Department, JICA

#### Study Team;

1. Mr. Mitsuru Yoshikawa,

2. Mr. Haruhiko Nakamura,

3. Dr. Pia Rockhold,

4. Mr. Akira Yamazaki

5. Mr. Masaki Miki

Team Leader/Groundwater

Development

Hydrogeology/Environment

Social Environment/Villager's

Participation/Sanitary Promotion

Geophysics/Water Quality/Well

Construction

Coordinator

MINUETS OF MEETING
CONCERNING
PROGRESS REPORT
FOR
THE STUDY
ON
RURAL WATER SUPPLY
IN
MPIGI, MUBENDE AND KIBOGA DISTRICTS
IN
THE REPUBLIC OF UGANDA
AGREED UPON BETWEEN
THE MINISTRY OF NATURAL RESOURCES
AND
THE JICA STUDY TEAM,

In Kampala, 28th November, 1995

Mr. To figh HAHANGIRE
Director,

Directorate of Water Development, The Ministry of Natural Resources Mr. Mitsuru YOSHIKAWA

Leader,

The Study Team,

Japan International Cooperation Agency

(JICA)

Based on the Scope of Work agreed by and between the Ministry of Natural Resources (hereinafter referred to as "the Ministry") and the Preparatory Study Team of Japan International Cooperation Agency (hereinafter referred to as "JICA") in April, 1995, JICA organized another study team (hereinafter referred to as "the Study Team") and dispatched it to Uganda in September 1995 to conduct "the Study on Rural Water Supply in Mpigi, Mubende and Kiboga Districts in the Republic of Uganda" (hereinafter referred to as "the Study").

The Study Team conducted the Stage-One Study. Upon the termination of the Stage-One Study, the Study Team submitted 20 copies of the Progress Report to the Directorate of Water Development (hereinafter referred to as "DWD") of the Ministry on 24th November, 1995. The meeting for explanation and discussion on the contents of the Progress Report of the Study was held on 27th November, 1995 at the headoffice of DWD. The list of attendants is given in Appendix-1.

The Study Team explained the contents of the Progress Report in detail to the DWD side, namely the findings by surveys and studies conducted during the Stage-One Study, the priority and pilot villages selected and the guideline for the further pilot study, and so forth.

Major issues in the discussion were as below:

- (1) The Study Team confirmed opinion and comment of the DWD side on the four priority and two pilot villages selected and proposed in the report.

  The DWD side agreed on the selected villages in Mpigi and Mubende Districts. While, a counter proposal was placed to select villages in Massode Sub-county in Kiboga District by the DWD side instead of the villages in Lwamata Sub-county selected by the Study Team. However, in view from the criteria for the selection of villages which was set forth in the report, the DWD side finally agreed to select the villages in Lwamata Sub-county as originally proposed.
- (2) The DWD side required to the Study Team to correct the discrepancies and misspelling in the report.
  The Study Team promised to correct those discrepancies and mis-spelling in the further interim report.

The major discrepancies pointed out by the DWD side are as follows:

- Jul

- (a) As per the Paragraph 2.2.2 (Ethnic Group), the Langi group belongs to the third groups (Luo), not to the Atekerin groups in the northern Uganda.
- (b) As per the paragraph 2.5.2 (Relevant Governmental Agency), the Ministry of Women In Development, Youth and Culture (MWDIYC) was replaced by the Ministry of Gender and Community Development (MGCD).
- (c) As per the paragraph 2.5.4 (External Support), 98% of financial inputs from ESAs is to be 95% and one % of that by the government and NGOs to be 5%.
- (3) The DWD side requested the Study Team to consider the government request of supply of drilling equipment because their current stock is very old (more than 10 years). New drilling equipment will be retained by DWD.
  The Study Team replied it will examine the necessity of new drilling equipment for project implementation in the Study.





### Appendix-1: List of Attendants in the Meeting

#### The Study Team:

1. Mr. Mitsuru Yoshikawa,

2. Mr. Haruhiko Nakamura,

3. Mr. Kazuki Muta,

4. Dr. Pia Rockhold,

5. Mr. Akira Yamazaki

TeamLeader/Grundwater Development

Hydogology/Environment

Water Supply Facilities/ Operation

& Maintenance

Social Environment/Usats Participation/

Hygiene Promotion

Georlysics/WaterQuelty/DrillingSuperistandent

#### The DWD Side:

1. Mr. Moses Gava,

2. Mr. Disan Ssozi,

3. Mr. Pantaleo Kabateraine,

4. Mr. Fred Kato-Ssemugera,

5. Mr. Nathan Mujere,

6. Mr. Womugabe Geoffrey,

7. Mr. Philbert Odong.

8. Mr. Fred Mulabya,

Ag Commissioner, RWD

Senior Engineer

Ag. Principal Hydrogeologist

District Health Inspector, Mpigi

District Water Officer, Mubende

Borchole Maintenance Officer,

Mubende

District Water Officer, Kiboga

District Health Inspector, Kiboga

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MINUTES OF MEETING
CONCERNING
INTERIM REPORT
FOR
THE STUDY
ON
RURAL WATER SUPPLY

IN

MPIGI, MUBENDE AND KIBOGA DISTRICTS

IN

THE REPUBLIC OF UGANDA
AGREED BY AND BETWEEN
THE MINISTRY OF NATURAL RESOURCES

AND

THE JICA STUDY TEAM

In Kampala, 7th February, 1996

DIRECTORATE THE KAHANGIRE

Director,

Directorate of Water Development, The Ministry of Natural Resources Mr. Mitsuru YOSHIKAWA

Leader,

The Study Team,

Japan International Cooperation Agency

(ЛСА)

Yasuo MUKAI

Leader, Advisory Team,

Institute of International Cooperation,

**JICA** 

Based on the Scope of Work agreed by and between the Ministry of Natural Resources (hereinaster referred to as "the Ministry") and the Preparatory Study Team of Japan International Cooperation Agency (hereinaster referred to as "JICA") in April, 1995, JICA organised another study team (hereinaster referred to as "the Study Team") and dispatched it to Uganda in September 1995 to conduct "the Study on Rural Water Supply in Mpigi, Mubende and Kiboga Districts in the Republic of Uganda" (hereinaster referred to as "the Study").

The Study Team conducted the Stage-One and -Two Studies. Upon the termination of the Stage-Two Study, the Study Team submitted 20 copies of the Interim Report to the Directorate of Water Development (hereinaster referred to as "DWD") of the Ministry on 2nd February, 1996. The meeting for explanation and discussion on the contents of the Interim Report of the Study was held on 5th and 6th February, 1996 at the headoffice of DWD. The list of attendants of the meeting is given in Appendix- 1.

The Study Team explained the contents of the Interim Report in detail to the DWD side, namely the findings by surveys and studies conducted during the Stage-Two Study, the process of the pilot study, the evaluation of water resources and environmental impact, the proposed allocation of water facilities to each community, the proposed criteria for planning and design and so forth.

Major issues in the discussion were as below:

- (1) As per the paragraph 3.4, the Study Team informed the DWD side that the sixth test borehole drilling in Mubende is cancelled due to the unexpected appearance of dry holes and the time constraint for further study.

  The DWD side understood the matter.
- (2) As per the paragraph 4.3.2, the DWD side asked about the basis of borehole successful rate of 60% proposed to Mubende.
  The Study Team replied that the rate was evaluated from the drilling records of DWD and the test drillings made by the Team inclusive of the effect by introducing the mud-drilling and improved siting technologies.
- (3) As per the paragraph 4.4, the DWD side enquired whether or not the rehabilitation/construction of unprotected springs and hand-dug wells would be

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covered by Japanese grant aid.

The Team replied that it is subject to the decision of the Japanese Government.

- (4) The DWD side requested the Team to pay specific consideration for the allocation of more valley tanks/dams to Mubende because of their cost-effectiveness given the low successful rate of boreholes in Mubende. In this respect, the DWD side requested the Team to pay special attention to construction of valley tanks/dams.
  The Team replied that the those considerations would be made through the further study in Japan.
- (5) As per the paragraph 6.3, the DWD side agreed to the proposed strategy for intervention within the scope of the Japanese cooperation.
- (6) The Team requested the DWD side that it would kindly keep the equipment in custody, which were provided by JICA and brought into Uganda for the Study and listed in Appendix-2, until the next visit of the Team. The DWD side accepted the request.

Further, the DWD side requested that the said equipment be donated to DWD in order to use them for further activities related to the Study. The Team replied that the Team would inform the JICA Headquarters of the request.





# Appendix-1: List of Attendants in the Meeting

The Advisory Team:

Mr. Yasuo Mukai,

Leader/ Groudwater Development, Institute of International Cooperation,

ЛСÁ

JICA Kenya Office:

Mr. Yoshiharu Yamada,

Assistant Resident Representative

The Study Team:

1. Mr. Mitsuru Yoshikawa,

2. Mr. Haruhiko Nakamura,

3. Mr. Kazuki Muta,

4. Dr. Pia Rockhold,

5. Mr. Yoshiaki Ishizuka

6. Mr. Masaki Miki

TeamLeads/GrundwaterDevelopment

Hydrogology/Natural Environment

Water Supply Facilities/ Operation

& Maintenance Plan

Social Environment/Usa's Participation/

Hygiere Promotion Plan

Economy and Finance/

Project Evaluation

Coordination

The DWD Side:

1. Mr. Sottie Bomukama,

2. Mr. Ian Arebahona,

3. Mr. Disan Ssozi,

4. Mr. Pantaleo Kabateraine,

5. Mr. Aaron Kabirizi,

6. Mr. Fred Kato-Ssemugera,

7. Mr. Nathan Mujere,

8. Mr. Philbert Odong,

Commissioner, UIWD

Ag. Principal Engineer

Senior Engineer

Ag. Principal Hydrogeologist

Engineer, Drilling

District Health Inspector, Mpigi

District Water Officer, Mubende

District Water Officer, Kiboga

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# Appendix-2:

# List of Equipment provided by JICA and brought into Uganda for the Study

1.	Vehicles

1.1. Mitsebishi Pajaro	;2,4770C,9scater	3unts
<u>Reg.No.</u>	Chassis No.	
US1045	CHNV3408J00441	-
US1046	CHINV3406J00440	
US1047	CHNV3408J00499	
12 Spare Pars for above		
(1) Oil Filter	;12pcs	
(2) Diesel Filter	; 9pcs	
(3) Air Cleanar	; 10 pcs	
(4) Fan Belt	; 2pcs	
(5) PSBat	; 2pcs	
(6) ACBelt	; 2pcs	
(1) Frant Shodebeabas	; 2pcs	
(8) SabBarBuhas	; брез	٠

#### 2. Wireless Telephone System

21. Transceiver	;FT-80C	; lst
22 Power Supply	;FP-757HD	; lpc
23. Auto Anterna Turce	;FC-1000	; lpc
24 Control Cable	;30m	, lpc
25. Cable	;5D2V,30m	; 1pc
26 Antona	;VSJRS	; lpc
27. Arterna Bese	;AR-2	; lpc
28 Arterna Pole	;AP6	; lpc
29. Antona Stay Kit	;AY-120	; lst
210 Transceiver	;FT80C	; 3sets
211. Auto Anterna	;FC-1000	; 3pcs
212 Mobil Arterna	;YA007FG	; 3pcs

#### 3. PhotocopyMachine

213 Mobil Bukat

;Canon NP6010

;MMB-3841

, ites

5

; 3pcs

-tm