

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: RUSUMO (1)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Popu- lation	Daily Water Demand (ℓ/day)	Total for Secteur in 1990 No. of Pump & Well Required				
											Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
1. <u>GATORE</u>	-	N	8.69	-	-	-	-	-	8,341	125,115	0	0	7	7	D ₁ (10),R(3)
1. Cyunuzi	N	-	-	N	N	0	0	0	-	-	-	-	1	1	D ₁
2. Rurenge I	N	-	-	N	N	0	0	0	-	-	-	-	1	1	D ₁
3. Nyakabare	N	-	-	N	N	0	0	0	-	-	-	-	-	-	R
4. Nyamiryango	N	-	-	N	N	0	0	0	-	-	-	-	1	1	D ₁
5. Muganza	N	-	-	N	N	0	0	0	-	-	-	-	1	1	D ₁
6. Kamemo	N	-	-	N	N	0	0	0	-	-	-	-	1	1	D ₁
7. Rwabutazi	N	-	-	N	N	0	0	0	-	-	-	-	1	1	D ₁
8. Rurenge II	N	-	-	N	N	0	0	0	-	-	-	-	1	1	D ₁
9. Kurugarika	N	-	-	N	N	0	0	0	-	-	-	-	1	1	D ₁
10. Rugina	N	-	-	N	N	0	0	0	-	-	-	-	-	-	R
11. Kumumeya	N	-	-	N	N	0	0	0	-	-	-	-	-	-	R
12. Rubona	N	-	-	N	N	0	0	0	-	-	-	-	1	1	D ₁
13. Mukiha	N	-	-	N	N	0	0	0	-	-	-	-	1	1	D ₁
2. <u>GISENYI</u>	-	512	6.28	-	-	-	-	0	3,211	48,165	0	0	5	5	D ₁ (5),R(2)
1. Gisenyi	73	-	"	458	6,870	0	0	0	-	-	-	-	1	1	D ₁
2. Mwoga	74	-	"	464	6,960	0	0	0	-	-	-	-	1	1	D ₁
3. Mahama	58	-	"	364	5,460	0	0	0	-	-	-	-	1	1	D ₁
4. Mwizinga	74	-	"	464	6,960	0	0	0	-	-	-	-	1	1	D ₁
5. Kigufi	55	-	"	345	5,175	0	0	0	-	-	-	-	-	-	R
6. Kigonge	56	-	"	351	5,265	0	0	0	-	-	-	-	1	1	D ₁
7. Saruhembe	62	-	"	389	5,835	0	0	0	-	-	-	-	-	-	R

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: RUSUMO (2)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Popu- lation	Daily Water Demand (ℓ/day)	Total for Secteur in 1990 No. of Pump & Well Required				
											Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
8. Kamombo	60	-	6.28	376	5,640	0	0	0	-	-	-	1.0	1	1	D ₃
3. <u>KANKOBWA</u>	-	722	8.02	-	-	-	-	0.45	5,787	86,805	38,880	44.8%	2(1)	D(S) 2(2)	D ₁ ,(S ₁),R 2,(2),6
1. Mhanga	55	-	"	441	6,615	0	0	0	-	-	0	-	1	1	(S ₁),D ₁
2. Rutumbwe	79	-	"	633	9,495	0	0	0	-	-	0	-	-	-	R
3. Rwakaboza	52	-	"	417	6,755	0	0	0	-	-	0	-	-	-	R
4. Rugarama	68	-	"	545	8,175	1	0.30	0.18	-	-	(15,552)	F	(1)	(1)	(S ₁),D ₁
5. Nyagatovu	58	-	"	465	6,975	1	0.25	0.15	-	-	(12,960)	F	-	-	R
6. Ruhama	84	-	"	673	10,095	0	0	0	-	-	0	-	-	-	R
7. Nyakabande	71	-	"	569	8,535	1	0.20	0.12	-	-	(10,368)	F	-	-	R
8. Kahi	84	-	"	673	10,095	0	0	0	-	-	0	-	-	-	R
9. Murundi	110	-	"	882	13,230	0	0	0	-	-	0	-	-	-	R
10. Abajuguri	61	-	"	489	7,335	0	0	0	-	-	0	-	-	-	R
4. <u>KIGARAMA</u>	-	753	10.39	-	-	-	-	0.456	7,820	117,300	39,398	33.6%	1	1	D ₁ (7),R(3)
1. Kabare	67	-	"	696	10,440	0	0	0	-	-	0	-	-	-	R
2. Cyanya	57	-	"	592	8,880	0	0	0	-	-	0	1	1	1	D ₁
3. Gishenyi	76	-	"	789	11,835	0	0	0	-	-	0	-	-	1	D ₁
4. Nyacyerera	52	-	"	540	8,100	1	0.45	0.27	-	-	(23,328)	F	1	1	D ₁
5. Kigarama	67	-	"	696	10,440	0	0	0	-	-	0	-	1	1	D ₁
6. Humure	65	-	"	675	10,125	0	0	0	-	-	0	-	-	-	R
7. Nyamiyaga	65	-	"	675	10,125	1	0.31	0.186	-	-	(16,070)	F	-	-	-
8. Kiremera	86	-	"	893	13,395	0	0	0	-	-	0	-	1	1	D ₁
9. Kimesho	72	-	"	748	11,220	0	0	0	-	-	0	-	1	-	D ₁

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: RUSUMO (3)

Secteurs and Cellules	Total No. of Family (1982)	No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Popu- lation	Daily Water Demand (ℓ/day)	Total for Secteur in 1990 No. of Pump & Well Required				
											Discharge Capacity from Springs (ℓ/day)	of Spring Supply	No. of Well	No. of Pump	Type of Well
10. Nyankurazo	60	-	10.39	623	9,345	0	0	0	-	-	0	-	-	-	R
11. Kiyanzi	86	-	"	893	13,395	0	0	0	-	-	0	-	1	1	D ₁
5. <u>KIGINA</u>	-	876	8.28	-	-	-	-	1,086	7,250	108,750	93,829	57.5%	3	3	D ₁ (3),R(4)
1. Bugarura	74	-	"	612	9,180	3	0.62	0.372	-	-	(32,140)	F	(1)	(1)	D ₁
2. Buhwaga	73	-	"	604	9,060	1	0.23	0.138	-	-	(11,923)	F	(1)	(1)	D ₁
3. Gatarama	78	-	"	645	9,675	0	0	0	-	-	0	-	-	-	R
4. Mayizi	79	-	"	654	9,810	0	0	0	-	-	0	-	-	-	R
5. Kavuzo	52	-	"	430	6,450	0	0	0	-	-	0	-	-	-	R
6. Nyakibande	65	-	"	538	8,070	0	0	0	-	-	0	-	1	1	D ₁
7. Ruhanga	100	-	"	828	12,420	1	0.81	0.486	-	-	(41,990)	F	-	-	-
8. Rwanteru	87	-	"	720	10,800	1	0.51	0.09	-	-	(7,776)	(72.0%)	-	-	-
9. Rugando	100	-	"	828	12,420	0	0	0	-	-	0	-	-	-	-
10. Rugarama	100	-	"	828	12,420	0	0	0	-	-	0	-	-	-	-
11. Gasarasi	68	-	"	563	8,445	0	0	0	-	-	0	-	-	-	R
6. <u>KIREHE</u>	-	902	7.28	-	-	-	-	1.32	6,562	98,430	114,048	F	4	4	D ₁ (4),R(5)
1. Kirehe	109	-	"	793	11,895	0	0	0	-	-	-	-	-	-	R
2. Rutobagu	125	-	"	910	13,650	0	0	0	-	-	-	-	1	1	D ₁
3. Mukaziba	80	-	"	582	8,730	0	0	0	-	-	-	-	1	1	D ₁
4. Gacumu	97	-	"	706	10,590	0	0	0	-	-	-	-	-	-	R
5. Nyabukokora	58	-	"	422	6,330	0	0	0	-	-	-	-	1	1	D ₁
6. Murugando	58	-	"	422	6,330	0	0	0	-	-	-	-	1	1	D ₁
7. Kaduha	110	-	"	800	12,000	2	2.20	1.32	-	-	(114,048)	F	-	-	-

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: RUSUMO (4)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Popu- lation	Daily Water Demand (ℓ/day)	Total for Secteur in 1990 No. of Pump & Well Required				
											Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
8. Rurenge	92	-	-	669	10,035	0	0	0	-	-	-	-	-	-	R
9. Bugarura	102	-	-	742	11,130	0	0	0	-	-	-	-	-	-	R
10. Mubuga	71	-	-	516	7,740	0	0	0	-	-	-	-	-	-	R
7. <u>MUSAZA</u>	-	N	N	-	-	-	-	2,472	8,917	133,755	213,579	F	4	4	D ₁ (7),R(2)
1. Gatwe	N	-	-	N	N	1	1.88	1,080	-	-	(93,312)	(F)	(1)	(1)	D ₁
2. Musaza	N	-	-	N	N	1	0.87	0.522	-	-	(45,100)	-	-	-	R
3. Kabugiri	N	-	-	N	N	1	0.48	0.288	-	-	(24,883)	-	-	-	R
4. Muyoka	N	-	-	N	N	1	0.40	0.240	-	-	(20,736)	(F)	-	-	-
5. Nkawandi	N	-	-	N	N	1	0.57	0.342	-	-	(29,348)	(F)	(1)	(1)	D ₁
6. Kumurambi	N	-	-	N	N	0	-	-	-	-	0	-	1	1	D ₁
7. Nyagahama	N	-	-	N	N	0	-	-	-	-	0	-	1	1	D ₁
8. Rugarama	N	-	-	N	N	0	-	-	-	-	0	-	1	1	D ₁
9. Kagera	N	-	-	N	N	0	-	-	-	-	0	-	1	1	D ₁
10. Gikenke	N	-	-	N	N	0	-	-	-	-	0	-	1	1	D ₁
8. <u>NYABITARE</u>	-	408	10.67	-	-	-	-	1,446	4,351	65,265	124,933	F	2	D ₁ ,(R) 3 2,(2)	
1. Nyabitare	115	-	"	1,227	18,405	0	0	0	-	-	0	-	-	-	R
2. Rusarabaga	65	-	"	693	10,395	1	0.27	0.162	-	-	(13,996)	F	-	-	R
3. Rwagitura	65	-	"	693	10,395	0	0	0	-	-	0	-	1	2	D ₁
4. Rugarama	52	-	"	554	8,310	2	2.00	1,200	-	-	(103,680)	F	-	-	R
5. Nyamateke	N	-	"	N	N	0	0	0	-	-	0	-	1	1	D ₁
6. Mpanguhe	42	-	"	448	6,720	0	0	0	-	-	0	-	-	-	R
7. Nyamisagara	69	-	"	736	11,040	1	0.14	0.084	-	-	(7,257)	65.7%	-	-	R

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: RUSUMO (5)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Popu- lation	Daily Water Demand (ℓ/day)	Discharge Capacity		Total for Secteur in 1990 No. of Pump & Well Required		
											from Springs (ℓ/day)	of Spring Supply	No. of Well	No. of Pump	Type of Well
9. <u>NYAMUGALI</u>	-	N	8.69	-	-	-	-	0	4,951	111,397.5	0	0	10	D S 10(1)	D ₁ ,D ₃ , (S ₁) 4,6,(1)
1. Nyamugali	N	-	"	N	N	0	0	0	-	-	-	N	1	1	D ₁
2. Kamugarura	N	-	"	N	N	0	0	0	-	-	-	N	1	1	D ₁
3. Gashanga	N	-	"	N	N	0	0	0	-	-	-	N	1	1	D ₁
4. Kanshongwe	N	-	"	N	N	0	0	0	-	-	-	N	1	1	D ₁
5. Irama	N	-	"	N	N	0	0	0	-	-	-	N	1	1	D ₃
6. Nyarwamura	N	-	"	N	N	0	0	0	-	-	-	N	1	1	D ₃
7. Mitako	N	-	"	N	N	0	0	0	-	-	-	N	1	1	(S ₁),D ₃
8. Kagasa I	N	-	"	N	N	0	0	0	-	-	-	N	1	1	D ₃
9. Kameya	N	-	"	N	N	0	0	0	-	-	-	N	1	1	D ₃
10. Kagasa II	N	-	"	N	N	0	0	0	-	-	-	N	1	1	D ₃
10. <u>NYARUBUYE</u>	-	723	9.88	-	-	-	-	1,344	7,140	107,100	116,120	F	7(1)	D 12	D ₁ ,R 7,1
1. Kagabire	66	-	"	652	9,780	0	0	0	-	-	0	-	1	2	D ₁
2. Rutare	100	-	"	988	14,820	0	0	0	-	-	0	-	-	-	R
3. Nkakwa	40	-	"	395	5,925	1	0.50	0.30	-	-	(25,920)	F	(1)	(1)	D ₁
4. Gatunguru	55	-	"	543	8,145	2	1.21	0.726	-	-	(62,726)	-	-	-	R
5. Nyabimuli	63	-	"	622	9,330	1	0.07	0.042	-	-	(3,628)	-	-	-	R
6. Bugarura	75	-	"	741	11,115	1	0.28	0.168	-	-	(14,515)	-	-	-	R
7. Nyarutunga	77	-	"	760	11,400	1	0.18	0.108	-	-	(9,331)	81.6%	1	1	D ₁
8. Mareba	54	-	"	533	7,995	0	0	0	-	-	0	1.5	1	2	D ₁
9. Rurenge	79	-	"	780	11,700	0	0	0	-	-	0	2.3	1	2	D ₁
10. Nyarubuye	114	-	"	1,126	16,890	0	0	0	-	-	0	3.1	2	4	D ₁

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: RUTONDE (1)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Popu- lation	Daily WATER Demand (ℓ/day)	Total for Secteur in 1990 No. of Pump & Well Required				
											Discharge Capacity from Springs (ℓ/day)	of Spring Supply	No. of Well	No. of Pump	Type of Well
1. <u>KADUHA</u>	-	558	7.53	-	-	-	-	4.015	4,199	62,985	346,860	F	-	-	D ₁ (6)
1. Gishike	98	-	"	737	11,055	2	3.391	2.035	-	-	(175,789)	F	(1)	(1)	D ₁
2. Kababero	87	-	"	655	9,825	1	2.170	1.302	-	-	(112,492)	F	(1)	(1)	D ₁
3. Rwimbago	87	-	"	655	9,825	1	1.00	0.600	-	-	(51,840)	F	(1)	(1)	D ₁
4. Kabare	110	-	"	828	12,420	0	0	0	-	-	0	-	1	1	D ₁
5. Kamamana	88	-	"	662	9,930	0	0	0	-	-	0	-	1	1	D ₁
6. Kangabo	88	-	"	662	9,930	1	0.13	0.078	-	-	(6,739)	(67.9%)	1	1	D ₁
2. <u>KIGABIRO</u>	-	406	10.84	-	-	-	-	0.552	4,399	65,985	47,692	Excluded from the Project			
1. Icyanya	117	-	"	1,268	19,020	0	0	0	-	-	0	-	-	-	R
2. Kabuga	108	-	"	1,170	17,550	0	0	0	-	-	0	-	-	-	R
3. Karutembo	117	-	"	1,268	19,020	1	0.56	0.336	-	-	29,030	F	(1)	(1)	D ₂
4. Karuhayi	64	-	"	693	10,395	1	0.36	0.216	-	-	18,662	F	(1)	(1)	D ₂
3. <u>NKUNGU</u>	-	501	7.37	-	-	-	-	0.468	3,691	55,365	40,435	73.0%	5	5	D ₁ (5)
1. Mataba	101	-	"	744	11,160	0	0	0	-	-	0	2.1	1	1	D ₁
2. Rushangari	100	-	"	737	11,055	1	0.65	0.39	-	-	(33,696)	F	(1)	(1)	D ₁
3. Kabuye	102	-	"	751	11,265	0	0	0	-	-	0	-	1	1	D ₁
4. Nyagakombe	98	-	"	722	10,830	1	0.13	0.078	-	-	(6,739)	(62.2%)	1	1	D ₁
5. Rudashya	100	-	"	737	11,055	0	0	0	-	-	0	2.1	1	1	D ₁
4. <u>NSHINDA</u>	-	216	16.28	-	-	-	-	0.09	3,515	52,725	7,776	14.7%	5	9	D ₂ ,D ₃ ,R 3,2,2
1. Karitutu	N	-	"	N	N	0	0	0	-	-	-	-	-	-	R
2. Kibare	N	-	"	N	N	0	0	0	-	-	-	-	-	-	R
3. Gatare	73	-	"	1,188	17,820	0	0	0	-	-	-	-	2	4	D ₂ ,D ₃

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PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: RUTONDE (2)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Popu- lation	Daily Water Demand (ℓ/day)	Discharge Capacity		Total for Secteur in 1990 No. of Pump & Well Required		
											from Springs (ℓ/day)	of Spring Supply	No. of Well	No. of Pump	Type of Well
4. Gasharu	56	-	16.28	911	13,665	0	0	0	-	-	-	-	1	2	D ₂ , (D ₃)
5. Rubilizi	87	-	"	1,416	21,240	1	0.15	0.09	-	-	(7,776)	(36.6%)	2	3	D ₂ , D ₃
5. <u>NYARUSANGE</u>	-	500*	8.14*	-	-	-	-	1.362	4,068	61,020	117,676	F	0	0	-
1. Karambo	93	-	"	757	11,355	1	0.65	0.390	-	-	(33,696)	F	-	-	R
2. Kamwiriri	90	-	"	732	10,980	1	0.79	0.456	-	-	(39,398)	F	-	-	R
3. Mpinga	93	-	"	757	11,355	1	0.28	0.168	-	-	(14,515)	F	-	-	R
4. Gahondo	112*	-	"	911	13,665	1	0.38	0.228	-	-	(19,699)	F	-	-	R
5. Kidogo	112*	-	"	911	13,665	2	0.20	0.120	-	-	(10,368)	75.8%	-	-	R
6. <u>RUTONDE</u>	-	551	7.65	-	-	-	-	1.404	4,213	63,195	121,304	F	6(3)	8(4)	D(S) D ₂ , (S ₁) 6, (3)
1. Munini I	85	-	"	650	9,750	1	0.57	0.342	-	-	(29,548)	F	(1)	(1)	(S ₁), D ₂
2. Zinga	88	-	"	673	10,095	0	0	0	-	-	0	-	1	2	(S ₁), D ₂
3. Munini II	83	-	"	634	9,510	1	0.13	0.078	-	-	(6,739)	70.9%	1	1	(S ₁), D ₂
4. Gitega	100	-	"	765	11,475	0	0	0	-	-	0	-	1	2	D ₂
5. Bwiza	88	-	"	673	10,095	2	0.38	0.228	-	-	(19,699)	F	(1)	(1)	D ₂
6. Kigarama	107	-	"	818	12,270	2	1.26	0.756	-	-	(65,318)	F	(1)	(1)	D ₂
7. <u>RWERU</u>	-	700	5.95	-	-	-	-	0.798	4,161	62,415	68,946	F	6	6	D ₁ (6), R(2)
1. Gatare	89	-	"	529	7,935	0	0	0	-	-	0	-	1	1	D ₁
2. Mubuga	88	-	"	523	7,845	0	0	0	-	-	0	-	1	1	D ₁
3. Kinganzwa	87	-	"	517	7,755	1	0.18	0.108	-	-	9,331	F	(1)	(1)	D ₁
4. Birayi	94	-	"	559	8,385	0	0	0	-	-	0	--	-	-	R1
5. Rwinsange	89	-	"	529	7,935	1	0.07	0.042	-	-	3,628	(45.7%)	1	1	D ₁
6. Kabazeyi	79	-	"	470	7,050	1	1.08	0.648	-	-	55,987	F	(1)	(1)	D ₁
7. Kabingo	87	-	"	517	7,755	0	0	0	-	-	-	-	-	-	R
8. Kanyegeza	87	-	"	517	7,755	0	0	0	-	-	-	-	1	1	D ₁

Note: R: Rainfall Storage Unit * : Estimated Figures

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: SAKE (1)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Popu- lation	Daily Water Demand (ℓ/day)	Total for Secteur in 1990 No. of Pump & Well Required				
											Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
1. <u>GITUZA</u>	-	415	8.73	-	-	-	-	0	3,621	54,315	0	0	5	D(S) 10(6)	D ₂ ,(S ₁),D ₃ ,(S ₁) 2,(2),3,(1)
1. Kuruyenzi	93	-	"	811	12,165	0	0	0	-	-	-	-	1	2	(S ₁),D ₃
2. Mfuné	70	-	"	611	9,165	0	0	0	-	-	-	-	1	2	(S ₁),D ₂
3. Gituza	96	-	"	838	12,570	0	0	0	-	-	-	-	1	2	(S ₁),D ₂
4. Maswa	100	-	"	873	13,095	0	0	0	-	-	-	-	1	2	D ₃
5. Gitamu	56	-	"	488	7,320	0	0	0	-	-	-	-	1	2	D ₃
2. <u>MABUGA</u>	-	374	7.63	-	-	-	-	0	2,852	42,780	0	0	5	D(S) 9(7)	D ₃ ,(S ₁) 5,(4)
1. Gafunzo	-	374	"	572	8,580	0	0	0	-	-	-	-	1	2	D ₃
2. Nyabuhoro	74	-	"	564	8,460	0	0	0	-	-	-	-	1	2	(S ₁),D ₃
3. Akabira	96	-	"	732	10,980	0	0	0	-	-	-	-	1	2	(S ₁),D ₃
4. Nyaruhangwa	75	-	"	572	8,580	0	0	0	-	-	-	-	1	2	(S ₁),D ₃
5. Akabaya	54	-	"	412	6,180	0	0	0	-	-	-	-	1	1	(S ₁),D ₃
3. <u>MAB GO II</u>	-	378	7.78	-	-	-	-	0	2,940	44,100	0	0	5	D(S ₁) 7(5)	D ₃ ,(S ₁) 5,(4)
1. Rurenge	95	-	"	739	11,085	0	0	0	-	-	-	-	1	2	(S ₁),D ₃
2. Gashubi	52	-	"	404	6,060	0	0	0	-	-	-	-	1	1	(S ₁),D ₃
3. Gishen	59	-	"	459	6,885	0	0	0	-	-	-	-	1	1	(S ₃),D ₃
4. Kumuyange	100	-	"	778	11,670	0	0	0	-	-	-	-	1	2	D ₃
5. Gasava	72	-	"	560	8,400	0	0	0	-	-	-	-	1	1	(S ₁),D ₃
4. <u>MBUYE</u>	-	-	4.54	-	-	-	-	0	3,884	58,260	0	0	3	3	S ₁ (3)
1. Kigoma	89	-	"	404	6,060	0	0	0	-	-	-	-	1	1	S ₁
2. Mubaha	205	-	"	930	13,950	0	0	0	-	-	-	-	1	1	S ₁
3. Akabande	185	-	"	839	12,585	0	0	0	-	-	-	-	1	1	S ₁

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: SAKE (2)

Secteurs and Cellules	Total No. of Family (1982)	No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	Discharge No. of Spring	of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Popu- lation	Daily Water Demand (ℓ/day)	Total for Secteur in 1990 No. of Pump & Well Required				
											Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
4. Murama	197	-	4.54	894	13,410	0	0	0	-	-	-	-	1	2	D ₂
5. Kibimba	180	-	817	817	12,255	0	0	0	-	-	-	-	1	2	D ₂
5. <u>MURWA</u>	-	522	8.69	-	-	-	-	0	4,531	67,965	0	0	4	4	S ₁ (4),R(4)
1. Jarama	84	-	"	729	10,935	0	0	0	-	-	-	-	1	1	S ₁
2. Kiryama	76	-	"	660	9,900	0	0	0	-	-	-	-	1	1	S ₁
3. Irarire	53	-	"	460	6,900	0	0	0	-	-	-	-	1	1	S ₁
4. Nyamugari	57	-	"	495	7,425	0	0	0	-	-	-	-	-	-	R
5. Gisoko	60	-	"	521	7,815	0	0	0	-	-	-	-	-	-	R
6. Ihanika	69	-	"	599	8,985	0	0	0	-	-	-	-	1	1	S ₁
7. Kibosha	68	-	"	590	8,850	0	0	0	-	-	-	-	-	-	R
8. Karengé	55	-	"	477	7,155	0	0	0	-	-	-	-	-	-	R
6. <u>NGOMA</u>	-	536	5.32	-	-	-	-	3.285	2,850	42,750	281,490	F	1	1	S ₁ (1),R(2)
1. Ngoma	72	-	"	383	5,745	0	0	0	-	-	0	-	-	-	R
2. Bukozoza	82	-	"	436	6,540	1	2.08	1.248	-	-	(107,817)	F	-	-	-
3. Nkanga	101	-	"	537	8,055	1	2.08	1.248	-	-	(65,318)	F	-	-	-
4. Giseso	88	-	"	468	7,020	0	0	0	-	-	0	-	1	1	S ₁
5. Nyakabungo	100	-	"	532	7,980	0	0	0	-	-	0	-	-	-	R
6. Mizibili	93	-	"	494	7,410	1	2.09	1.254	-	-	(108,345)	F	-	-	-
7. <u>NISHILI I</u>	-	496	6.82	-	-	-	-	1.302	3,379	50,685	112,492	F	3(3)	D S 4(3)	D ₂ (S ₁),(S ₂)(R) 3(1),(1),(3)
1. Kibonde	68	-	"	463	6,945	0	0	0	-	-	0	-	-	-	R
2. Rusave	87	-	"	593	8,895	0	0	0	-	-	0	-	-	-	R
3. Dagomero	91	-	"	620	9,300	1	1.09	0.654	-	-	(56,505)	F	(1)	(1)	D ₂

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: SAKE (3)

Secteurs and Cellules	Total No. of Family (1982)	No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Popu- lation	Daily Water Demand (ℓ/day)	Discharge Capacity		No. of Pump & Well Required		
											from Springs (ℓ/day)	of Spring Supply	No. of Well	No. of Pump	Type of Well
4. Nyarusange	89	-	6.82	606	9,090	0	0	0	-	-	0	-	1	2	(S ₂),D ₂
5. Ntsngano	74	-	"	504	7,560	0	0	0	-	-	0	-	-	-	R
6. Rugenge	87	-	"	593	8,895	2	1.08	0.648	-	-	(55,987)	F	(1)	(1)	(S ₁),D ₂
8. <u>NSHLI II</u>	-	219	13.24	-	-	-	-	1.860	2,898	43,470	160,703	F	3	3	S ₁ (3)
1. Karenge	77	-	"	1,019	15,285	1	0.74	0.444	-	-	(38,361)	F	(1)	(1)	S ₁
2. Kabare	77	-	"	1,019	15,285	0	0	0	-	-	0	2.9	1	1	S ₁
3. Nyagasani	65	-	"	860	12,900	2	2.36	1.416	-	-	(122.342)	F	(1)	(1)	S ₁
9. <u>RUBAGO</u>	-	518	8.20	-	-	-	-	0	4,245	63,675	0	0	7		D(S) D ₃ (S ₁),S ₁ 13(9) 6,(4),1
1. Rugenda	76	-	"	623	9,345	0	0	0	-	-	-	-	1	2	(S ₁),D ₃
2. Nyagitabire	94	-	"	770	11,550	0	0	0	-	-	-	-	1	2	(S ₁),D ₃
3. Kavumve	74	-	"	606	9,090	0	0	0	-	-	-	-	1	1	(S ₁),D ₃
4. Nyagakizi	70	-	"	574	8,610	0	0	0	-	-	-	-	1	2	D ₃
5. Rubago	84	-	"	688	10,320	0	0	0	-	-	-	-	1	2	D ₃
6. Kukabungo	120	-	"	984	14,670	0	0	0	-	-	-	-	2	3	S ₁ ,D ₃
10. <u>RUKUMBELI</u>	-	589	7.21	-	-	-	-	0	4,244	63,660	0	0	8		D S D ₃ ,(S ₁) 12(9) 8,(5)
1. Ntovi I	71	-	"	511	7,665	0	0	0	-	-	-	1.4	1	2	(S ₁),D ₃
2. Ntovi II	62	-	"	447	6,705	0	0	0	-	-	-	1.3	1	1	D ₃
3. Cyeseo	82	-	"	591	8,865	0	0	0	-	-	-	1.6	1	2	(S ₁),D ₃
4. Rukongi	57	-	"	410	6,150	0	0	0	-	-	-	1.1	1	1	D ₃
5. Rwamibabi	81	0	"	584	8,760	0	0	0	-	-	-	1.3	1	1	(S ₁),D ₃
6. Muyantendo	50	-	"	360	5,400	0	0	0	-	-	-	1.0	1	1	D ₃
7. Mugwato	86	-	"	620	9,300	0	0	0	-	-	-	1.8	1	2	(S ₁)

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: SAKE (4)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	Discharge			Popu- lation	Daily WATER Demand (ℓ/day)	Discharge Capacity		No. of Pump & Well Required		
						No. of Spring	of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)			from Springs (ℓ/day)	of Spring Supply	No. of Well	No. of Pump	Type of Well
8. Rukumbili	100	-	7.21	721	10,815	0	0	0	-	-	-	-	1	2	(S ₁),D ₃
11. RUYEMA I	-	300	7.39	-	-	-	-	0.342	2,217	33,255	29,548	88.9%	2	2	S ₁ (2),R(1)
1. Gako	100	-	"	739	11,085	0	0	0	-	-	-	-	-	-	R
2. Mizibili	100	-	"	739	11,085	0	0	0	-	-	(29,548)	F	(1)	(1)	S ₁
3. Ruyema	100	-	"	739	11,085	0	0	0	-	-	-	-	1	1	S ₁
12. RUYEMA II	-	344	5.79	-	-	-	-	3.648	2,052	30,780	315,186	F	1	1	S ₁ (1),R(2)
1. Muenga	66	-	"	394	5,910	0	0	0	-	-	0	-	-	-	R
2. Rubumba	65	-	"	388	5,820	0	0	0	-	-	0	-	-	1	S ₁
3. Ruyama	67	-	"	399	5,985	0	0	0	-	-	0	-	-	-	R
4. Bitare	92	-	"	549	8,235	3	2.14	1.284	-	-	(110,937)	F	-	-	-
5. Cyasusa	54	-	"	322	4,830	2	3.94	2.364	-	-	(204,249)	F	-	-	-
13. SHOLI	-	348	11.38	-	-	-	0	0	3,958	59,370	0	0	6		D(S)S 11(10)1
1. Rwimpongo	51	-	"	580	8,700	0	0	0	-	-	-	1.6	1	2	(S ₁),D ₃
2. Shyembe	77	-	"	876	13,140	0	0	0	-	-	-	2.3	1	2	(S ₁),D ₃
3. Ibara	91	-	"	1,035	15,525	0	0	0	-	-	-	2.8	2	3	S ₁ ,D ₂
4. Kigeshi	66	-	"	751	11,265	0	0	0	-	-	-	2.0	1	2	(S ₁),D ₃
5. Karahara	63	-	"	716	10,740	0	0	0	-	-	-	2.0	1	2	(S ₁),D ₂

Note: R: Rainfall Storage Unit

JICA