

THE REPUBLIC OF RWANDA

THE STUDY  
ON  
THE RURAL WATER SUPPLY PROJECT  
IN  
THE EASTERN REGION (PHASE III)

FINAL REPORT  
VOLUME V : DATA BOOK

JANUARY 1992

JAPAN INTERNATIONAL COOPERATION AGENCY  
(JICA)

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## REPORT STRUCTURE

The Report consist of following five(5) documents:

VOL.	I	:	SUMMARY REPORT
VOL.	II	:	MAIN REPORT
VOL.	III	:	SUPPORTING REPORT
VOL.	IV	:	DRAWINGS
VOL.	V	:	<u>DATA BOOK</u>



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A : POPULATION/AREA OF SECTEUR  
AND CELLUR



COMMUNE : BIRENGA

1. BARE 5. GASHONGORA 10. MATONGO

1. Karege 1. Kabagera 1. Darwema

2. Mutendeli 2. Rwimondo 2. Kibaro

3. Mutendali 3. Nyakabungo 3. Mukona

4. Rurenge 4. Nyagasenyi 4. Nyagasenzi

5. Muzingira 5. Butezi 11. NDAMIRA

2. BIRENGA 6. KIBARA 1. Gatoro

1. Abarasa 1. Nyamirindi 2. Kabimba

2. Rwankogoto 2. Nyamugali 3. Kiziguro

3. Kazo 3. Nyagasenzi 4. Mahango

4. Resebeya 7. KITAYA 5. Ruhinga

5. Karege 1. Gahama 12. SAKARA

3. SAHARA 2. Karege 1. Gahama

1. Mugogo 3. Nyagahandagazi 2. Kabalushi

2. Rubimba 4. Nyagatovu 3. Kiyagara

3. Butanga 5. Nyakagezi 4. Kukarambi

4. Kagarama 8. KIBIMBA 5. Kukarenge

5. Taraya 1. Tunduti 6. Muvumba

6. Muhamba 2. Rugarama 7. Nyagataba

7. Murangara 3. Kinyonza 8. Narwanya

8. Murehe 9. KIBUNGO

9. Nyakagezi 1. Gasamakamba

4. GANULIRE 2. Karege

1. Irango 3. Husamvu

2. Itambiro 4. Ngoma

3. Mpandu

4. Rugenge

COMMUNE : KABARONDO

1. BISENGA 5. NKAMBA 9. RURAMIRA

1. Mutumba 1. Cyemo 1. Abiyahuzi

2. Ngoma 2. Mabuza 2. Akinkubito

3. Nyakanazi 3. Gitwa 3. Mwazinze

4. Rulenge 4. Agatare 4. Umubura

5. Miko 5. Nyamakaza 5. Ntaremba

2. CYNZOVU 6. RUBIRA 10. RUSERA

1. Rurenge 1. Nyabikenke I 1. Munkuba

2. Rugazi 2. Nyabikenke II 2. Rugavagwa

3. Cynzovu 3. Rubira 3. Itabagire

4. Nyakabungo 4. Agasharu 4. Rurama

5. Nyabisenga 5. Akagerama 5. Rusera

3. KABARONDO 7. RUKIRA 11. RUYONZA

1. Kabarondo 1. Murambi 1. Itaba

2. Rugazi 2. Buhoro 2. Igitwa

3. Cyabajwa 3. Mashiya 3. Rubona I

4. Bitoma 4. Agasharu 4. Rubona II

5. Busindu 5. Agatare 5. Igisenge

4. MURAMA 8. RUNDU 12. SHYANDA

1. Murama 1. Gashoyi 1. Shyanda

2. Rwabugengeri 2. Gisoro 2. Nyakagezi

3. Rusaro I 3. Kabuye 3. Rusave

4. Rusaro II 4. Lyagohoro 4. Bunyatongo

5. Bubindi 5. Murambi 5. Sehengezi

COMMUNE : KIGARAMA

1. FUKWE	5. KABARE II	8. RUMBERA
1. Kabimba	1. Murugunga	1. Kugatare
2. Karege	2. Cyarubare	2. Kaneka
3. Kagusa	3. Gishanda	3. Rugera
4. Murukamba	4. Rubumba	4. Kamvumba
5. Rugazi	5. Rushemyi	9. RUBONA
6. Akabaya	6. Bare	1. Gasoro
2. GASETSA	7. Rubimba	2. Giteme
1. Kurutari	8. Gitare	3. Muliza
2. Murukore	6. KABERANGWE	4. Nyamigina
3. Kiyobu	1. Gasave	5. Gatando
4. Mudekve	2. Rugese	6. Nyagatovu
5. Munkeke	3. Rwikubo	10. RURENGE
6. Gikomoro	4. Rwaromba	1. Nyamata
3. GASHANDA	5. Kabashumba	2. Muhulire
1. Cyerwa	6. Bugarana	3. Gitobe
2. Rwambohero	7. KANSANA	4. Mashyoza
3. Nyakabande	1. Kanyinya	5. Sata
4. Rubabantare	2. Kumutsido	6. Rujambara
5. Rwanyamugono	3. Cyanana	7. Gitaraga
4. KABARE I	4. Kirundo	11. VUKWE
1. Ruhwana	5. Gisenyi	1. Akagarana
2. Kabuye	6. Giseli	2. Rucucu
3. Kukinunga		3. Kuwimana
4. Nyamagana		4. Musha
5. Nyamugali		5. Kamugungu
6. Kinanira		6. Rwasaburo

COMMUNE : KAYONZA

1. GASOGI	5. NYAMIRAKA
1. Gasura	1. Ntemyi
2. Gasogi	2. Rurambi
3. Kinkoronko	3. Muruvumu
4. Karambi	4. Kabuye
5. Kabuye	5. Kabuye
2. KAVONZA	6. RUTARE
1. Munazi	1. Rutare
2. Kucyeru	2. Kanamasha
3. Gasogororo	3. Rugendabali
4. Miyange	4. Gikumba
5. Buhondi	5. Karambo
3. MURABUTURO	7. RWINKAVU
1. Bwingeye	1. Mukoyoyo
2. Gihima	2. Gishanda
3. Mburabuturo	3. CyabaJwa
4. Kinunga	4. Gihinga
4. MUSUMBA	6. Nkondo
1. Musumba	8. SIYOKO
2. Kanango	1. Mugatoki
3. Rusera	2. Rwinyana
4. Nyagasambu	3. Murugagi
	4. Nyakagarana
	5. Gasharu

COMMUNE : HUGESERA

1. CYIZIWIZA	5. KAGASHI	9. KUKABUYE	12. NYANGE
1. Rwibumba	1. Rugarame	1. Rugarama	1. Inunga
2. Kilira	2. Kazomyi	2. Kizenga	2. Igomero
3. Cyerwa	3. Rwinkuba	3. Nyagahinga	3. Rwamusva
4. Nyagatugunda	4. Butaka	4. Kumyange	4. Rugazi
5. Nyabahanda	5. Cyinyo	5. Rubati	5. Ntarana
2. GATARE	6. Rubirizi	6. Dwimbirwa	13. SANGAZA
1. Rusazi	6. KARIMBO	7. Rwamubugu	1. Rumenge
2. Nyabibande	1. Karaba	10. MATONGO	2. Kagarama
3. Nyandama	2. Rwamishiba	1. Mugacekeli	3. Ruhororo
4. Kukabungo	3. Rwamuhimbura	2. Nyagasave	4. Nyakaliba
5. Rudasuma	7. KIBARE	3. Ruhira	5. Ruhinga
3. KABILIZI I	1. Kimanama	4. Nyaminaga	14. SHIYWA
1. Rwakayango	2. Nyamugali	5. Mugatare	1. Kumyange
2. Kalibu	3. Gisenyi	11. NGARA	2. Gihoshi
3. Kashekashi	4. Gishondaro	1. Nyimbyi	3. Rwamuhigi
4. Gitaraga I	5. Nyamabuye	2. Murakizi	4. Rwancuro
5. Gitaraga II	8. KIRAMBO	3. Murubumba	5. Nyagasozu
4. KABILIZI II	1. Nyagacekeli	4. Mukaziba	15. ZAZA
1. Gashekasheke	2. Nyaruteja	5. Nyagasozu	1. Rusenyi
2. Kivugangoma A	3. Rugarama		2. Makoma
3. Kivugangoma B	4. Ruhinga		3. Nyabiku
4. Murambi	5. Kerenge		4. Ruhembe
5. Kabonobono			

COMMUNE : MUIAZI

1. GATI	4. KITAZIGIRWA	8. NCOMANGWA	12. RUJUNDA
1. Agatare	1. Gasharu	1. Nyagahanga	1. Binunga
2. Uruhuha	2. Bulanya	2. Bakanyi	2. Mpungve
3. Umunanira	3. Karwiru	3. Kabuye	3. Nyagakombe
4. Nyamabuye	4. Mwuma	4. Karubisha	4. Nyagahinga
5. Kibonde	5. Ntebe	5. Ryamirenge	5. Palindimura
6. Akabuga	5. MUKARANGE	9. NYAGATOWU	
7. Ingeyo	1. Kabuye	1. Byange	
8. Ruyenzi	2. Kinyemera	2. Nyagatovu	
2. GISHALI	3. Bwiza	3. Mugatagara	
1. Bwinsanga	4. Karambarara	4. Kazirabwayi	
2. Rwagahaya	5. Nyabybare	5. Iragwe	
3. Akanogo	6. MUNYIGINYA	10. NYARUBUYE	
4. Shaburondo	1. Byamugina	1. Buyanja	
5. Mukili	2. Kacyuma	2. Kirebe	
6. Rubona	3. Binunga	3. Mazinga	
7. Mugusha	4. Kabatasi	4. Kimara	
3. KABARE	5. Iviro	5. Babasha	
1. Gatobotobo	7. MURANDI	11. NYARUGALI	
2. Rukomo	1. Gashru	1. Cyinyana	
3. Ibyeza	2. Nyabaranda	2. Nyagacya	
4. Nyarukombe	3. Iragwe	3. Umunini	
5. Migogo	4. Akayenzi	4. Abakina	
	5. Karambi	5. Nyakagarama	
	6. Mubirembo		

COMMUNE : RUKARA

1. GASHIRU	4. MURAGO	7. NTARUKA
1. Rugarama	1. Rusenyi	1. Ruseke
2. Rugoma	2. Nyagatene	2. Cyambwe
3. Rubirizi	3. Karengé	3. Nyamikoni
4. Mutahira	4. Nterere	4. Kiruhura
5. Kirehe	5. Ntungamo	8. RUGARARA
2. GITUKU	6. Rubimba	1. Murehe
1. Gafunzo	7. Rutoma	2. Kanyami
2. Nyarusange	8. Cyetu	3. Tomi
3. Reamuyaga	5. MURAMA	4. Karambi
4. Rwimpongo	1. Kigabiro	9. RURAMA
5. Rugoligondi	2. Tonero	1. Runyinya
3. GITWE	3. Mutara	2. Tonero
1. Cyabagayara	4. Nyakabanga	3. Kibizi
2. Rwagakobe	5. Nyakasozzi	4. Nyakabande
3. Kabimba	6. Rukizi	5. Humure
4. Ruhama	6. MUSHIKILI	6. Kugatsi
5. Bweranka	1. Rwayikona	10. RUFENGE
6. Rwamukobwa	2. Butezi	1. Ruzinga I
7. Rusenyi	3. Gatongo	2. Ruvuzi I
	4. Rwamuhigi	3. Ruzinga II
	5. Bisagara	4. Ruvuzi II
		5. Nyakazinga
		6. Ntara
		7. Rugombe
		8. Kizenga

COMMUNE : RUKIRA

1. GASHIRU	4. NYABERA	6. RWIHISIUNYA
1. Rugarama	1. Murehe	1. Nyabigega
2. Ibiza	2. Muhozi	2. Nyarynazi
3. Umwiga	3. Cyanyabugashi	3. Karagali
4. Rwinkuba	4. Muroli	4. Rwibikona
5. Micanzigo	5. Nyamgali	5. Mumirambi
6. Baganja	6. Mwili	6. Kukabare
2. KAVANGIRE	5. RUKARA	7. Kinunga
1. Karama	1. Bayonza	8. Kigwene
2. Kinunga	2. Karambo	9. Nyarutunga
3. Gitega	3. Butimba	7. KIVENZI
4. Butimba	4. Ryakirenzi	1. Kiyenzi
5. Kidogo	5. Muzizi	2. Kinyinya
6. Gakenyeli	6. Mitungu	3. Kabuye
3. NYAKABUNGU	7. Mumuli	4. Nyagahandagaza
1. Nyakabungo	8. Kinunga	8. RVAMANYONI
2. Nyamiyaga	9. Gacaca	1. Rvanyonyoni
3. Rwanzana		2. Kibali
4. Kamudonga		3. Rvinsheke
5. Juru		4. Rvakabanda
6. Rubaliro		5. Kayonza
		6. Karambi

COMMUNE : RUSUNO

1. GATORE	3. KANKODWA	5. NYABITARE	7. KIREHE	9. NYAMUGALI
1. Cuzni	1. Mhanga	1. Nyabitare	1. Kirehe	1. Nyamugali
2. Rurenge I	2. Rutumbwe	2. Rusarabaga	2. Rutobagu	2. Kamugarura
3. Nyakabare	3. Rwakaboza	3. Rvagitura	3. Mukaziba	3. Gashinga
4. Nyamiryango	4. Rugarama	4. Rugarama	4. Gacumu	4. Kanshongwe
5. Muganza	5. Nyagatovu	5. Nyamateke	5. Nyakukokora	5. Irama
6. Kamomo	6. Ruhama	6. Mpanguhe	6. Murugando	6. Nyarvamura
7. Rvabutazi	7. Nyakabande	7. Nyamisagara	7. Kaduha	7. Mitako
8. Rurenge II	8. Kahi	8. KIGINA	8. Rurenge	8. Kagasa I
9. Kurugarika	9. Murundi	1. Bugarura	9. Bugarura	9. Kameya
10. Rugina	10. Abajuguri	2. Buhwaga	10. Mubuga	10. Kagasa II
11. Kumameya	4. KIGARAMA	3. Gatarama	8. MUSAZA	10. NYARUHUYE
12. Rubona	1. Kabare	4. Mayizi	1. Gatwe	1. Kagabiro
13. Mukiha	2. Cyanya	5. Kavuzo	2. Musaza	2. Rutare
2. GISENYI	3. Gishenyi	6. Nyakibande	3. Kabugiri	3. Nkakwa
1. Gisenyi	4. Nyacyerera	7. Ruhanga	4. Muyoka	4. Gatunguru
2. Mwoga	5. Kigarama	8. Rvanteru	5. Nkavandi	5. Nyabimuli
3. Mahama	6. Ihumire	9. Rugando	6. Kumurambi	6. Bugarura
4. Mvizinga	7. Nyamiyaga	10. Rugarama	7. Nyagahama	7. Nyarutunga
5. Kigufi	8. Kiremera	11. Gasarasi	8. Rugarama	8. Mareba
6. Kigonge	9. Kimesho		9. Kagera	9. Rurenge
7. Saruhembe	10. Nyankurazo		10. Gihenge	10. Nyarubuye
8. Kamombo	11. Kiyanzi			

COMMUNE : RUTONDE

1. KAPUHA	5. NYARUSANGE	8. RWIKUBO
1. Gishike	1. Karambo	1. Bacyoro
2. Kababero	2. Kanwiriri	2. Banyamuliro
3. Rwimbago	3. Impinga	3. Kabuye
4. Kabare	4. Gahondo	4. Miyange
5. Kamamana	5. Kicogo	5. Nyagasenyi
6. Kanbago	6. RUTONDE	6. Nyirakadongo
2. KIGAITRO	1. Munini I	9. SOVU
1. Joyanya	2. Zinga	1. Gasharu
2. Kabuga	3. Munini II	2. Gatare
3. Karutembo	4. Gitega	3. Kabuga
4. Karuhayi	5. Bwiza	4. Nyabishunzi
3. NKUNGU	6. Kigarama	5. Rugobagoba
1. Mataba	7. RWERU	6. Rushangara
2. Rushangari	1. Gatare	
3. Kabuye	2. Mubuga	
4. Nyagakombe	3. Kinganzwa	
5. Rudashya	4. Birayi	
4. NSHINDA	5. Rwisange	
1. Karitutu	6. Kabazeyi	
2. Kibare	7. Kabingo	
3. Gatare	8. Kanyegera	
4. Gasharu		
5. Rubilizi		



COMUNNE : SHKE

1. GITUZA	5. MURWA	8. NSHILI II	12. RUYEMA II
1. Kuruyenzi	1. Jarana	1. Harengo	1. Munega
2. Mfune	2. Kiriyama	2. Kabare	2. Rubamba
3. Gituza	3. Irarire	3. Nyagasani	3. Ruyama
4. Maswa	4. Nyamugari	9. RUBAGO	4. Bitare
5. Gitamu	5. Gisoko	1. Rugenda	5. Cyasusa
2. MADUGA - I	6. Ihamika	2. Nyagitabire	13. SHOLI
1. Gafunzo	7. Kibosha	3. Kavumve	1. Rwimpongo
2. Nyabuhoro	8. Harengo	4. Nyagakizi	2. Shyembe
3. Akabira	9. NGOMA	5. Rubago	3. Ibara
4. Nyaruhangwa	1. Ngoma	6. Kubabungo	4. Kigeshi
5. Akabaya	2. Bukozoza	10. RUKUMBALI	5. Karahara
3. MADUGA II	3. Nkanga	1. Ntovi I	
1. Rurengo	4. Giseso	2. Ntovi II	
2. Gashubi	5. Nyakabungo	3. Cyesero	
3. Gishenyi	6. Mizibili	4. Rukongi	
4. Kumuyange	7. NSHILI I	5. Rvamibabi	
5. Gasava	1. Kibonde	6. Muyantendo	
4. MBUYE	2. Rusave	7. Mugwato	
1. Kigoma	3. Kagomero	8. Rukumbili	
2. Kubaha	4. Nyarusange	11. RUYEMA I	
3. Akabande	5. Ntungano	1. Gako	
4. Murama	6. Rurengo	2. Mizibili	
5. Kibimba		3. Ruyema	

POPULATION DATA OF EACH SECTEUR



POPULATION DATA OF EACH SECTEUR

Commune : BIRENGA (Average Growth Rate = 2.79%)

NAME OF SECTOR	1986		1987		1988		2000		1983	
	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	NO. OF FAMILIES	SIZE OF FAMILY
BARE	1,988	3,178	101.2	140.8	4,421	635	6.96			
BIRENGA	2,287	3,237	116.9	162.6	4,504	767	5.87			
GAHARA	5,637	5,924	96.3	134.0	8,242	990	8.33			
GAHULIRE	2,904	3,107	272.5	379.2	4,323	455	9.50			
GASHONGORA	4,488	4,581	141.4	196.7	6,373	414	15.39			
KIBAYA	3,088	2,566	366.6	510.0	3,570	412	8.67			
KIBARA	3,467	2,615	201.2	279.8	3,638	353	10.31			
KIBIMBA	3,026	2,187	155.1	215.8	3,043	358	8.50			
KIBUNGO	3,190	3,400	278.7	387.7	4,730	?	?			
MATONGO	4,454	4,620	189.3	263.4	6,428	534	12.04			
NDAMIRA	2,443	2,579	277.3	385.8	3,588	467	7.68			
SAKARA	4,119	5,419	282.2	392.7	7,539	774	9.74			
TOTAL	41,091	42,119	43,413	164.7	60,399	229.1	6159	9.81		

Commune : KABARONDO (Average Growth Rate = 3.18%)

NAME OF SECTOR	1986		1987		1988		2000		1983	
	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	NO. OF FAMILIES	SIZE OF FAMILY
BISENGA	2,338	2,421	139.0	202.4	3,704	476	7.78			
CYINZOVU	2,630	2,717	286.0	416.4	4,164	484	8.60			
KABARONDO	2,284	2,347	176.3	256.7	3,542	301	11.77			
MURAMA	1,526	1,557	83.3	121.3	2,353	284	8.29			
NKAMBA	3,090	3,163	283.1	412.1	4,822	528	7.68			
RUBIRA	2,477	2,534	418.4	609.2	3,777	362	10.43			
RUKIRA	2,076	2,108	390.2	568.0	3,124	350	8.93			
RUNDU	3,168	3,252	312.8	455.4	4,918	616	7.98			
RURAMIRA	3,064	3,125	225.1	327.7	4,784	612	7.82			
RUSERA	2,065	2,121	251.6	366.2	3,223	480	6.71			
ROYONZA	2,398	2,461	326.7	475.6	3,710	349	10.63			
SHYANDA	2,632	2,703	91.1	132.7	4,432	315	14.07			
TOTAL	29,748	30,509	31,975	199.5	46,553	290.4	5257	8.86		

(continue)

Commune : KAYONZA (Average Growth Rate = 1.82%)

NAME OF SECTOR	1986			1987			1988			2000		
	DENSITY (hab/km <sup>2</sup> )	POPULATION	NO. OF FAMILIES	DENSITY (hab/km <sup>2</sup> )	POPULATION	NO. OF FAMILIES	DENSITY (hab/km <sup>2</sup> )	POPULATION	NO. OF FAMILIES	DENSITY (hab/km <sup>2</sup> )	POPULATION	NO. OF FAMILIES
GASOGI	2.821	2.917	3.011	209.1	3.739	259.7	543	6.89				
KAYONZA	3.331	3.425	3.523	273.1	4.374	339.1	530	8.25				
MBURABUTURO	2.073	2.121	2.223	231.6	2.760	287.5	365	7.56				
MUSUMBA	2.557	2.630	2.660	137.8	3.303	171.1	324	10.19				
NYAMIRAMA	3.616	3.681	3.776	200.9	4.638	249.4	298	15.73				
RUTARE	2.491	2.542	2.631	208.8	3.267	259.3	354	9.23				
RWINKWAVU	4.996	5.109	5.304	55.7	6.536	69.2	557	11.82				
SHYOGO	2.704	2.734	2.825	392.4	3.508	487.2	409	8.58				
TOTAL	24.589	25.159	25.953	136.6	32.223	169.6	3380	9.53				

Commune : KIGARAMA (Average Growth Rate = 2.30%)

NAME OF SECTOR	1986			1987			1988			2000		
	DENSITY (hab/km <sup>2</sup> )	POPULATION	NO. OF FAMILIES	DENSITY (hab/km <sup>2</sup> )	POPULATION	NO. OF FAMILIES	DENSITY (hab/km <sup>2</sup> )	POPULATION	NO. OF FAMILIES	DENSITY (hab/km <sup>2</sup> )	POPULATION	NO. OF FAMILIES
FUKWE	4.013	4.031	4.092	772.1	5.376	1014.3	552	9.74				
GASETSA	2.620	2.644	2.653	111.9	3.485	147.0	553	6.30				
GASHANDA	2.787	2.816	2.875	175.3	3.777	230.3	451	8.37				
KABARE-I	2.751	2.786	2.868	169.7	3.768	223.0	638	5.91				
KABARE-II	4.909	4.948	5.130	70.9	6.739	93.1	908	7.42				
KABERANGWE	3.566	3.588	3.623	111.8	4.760	146.9	691	6.89				
KANSANA	3.619	3.631	3.646	188.9	4.790	248.2	573	8.36				
REMEBA	2.583	2.609	2.660	151.1	3.495	198.6	506	6.91				
RUBONA	5.737	5.777	5.814	245.3	7.638	322.3	625	12.22				
RURENGE	2.375	2.396	2.442	111.5	3.208	146.5	615	5.22				
YUMWE	3.647	3.674	3.756	158.5	4.934	208.2	672	7.34				
TOTAL	38.607	38.900	39.559	144.7	51.970	190.2	6784	7.66				

(continue)

## Commune : MUGESERA (Average Growth Rate = 2.21%)

NAME OF SECTOR	1986		1987		1988		DENSITY (hab/km <sup>2</sup> ) 1988		POPULATION 2000		DENSITY (hab/km <sup>2</sup> ) 2000		NO. OF FAMILIES		SIZE OF FAMILY	
CYIZIHIRA	3,178	3,190	3,230	3,89.2	4,199	505.9	506	8.30								
GATARE	3,265	3,280	3,316	240.3	4,311	312.4	538	8.01								
KACASHI	3,887	3,922	3,951	215.9	5,136	280.7	587	8.75								
KAREMBO	2,297	2,317	2,363	513.7	3,072	667.8	299	10.27								
KIBARE	3,668	3,689	3,725	503.4	4,842	654.3	483	10.02								
KIBILIZI I, II	5,576	5,500	5,680	326.4	7,384	424.4	815	9.06								
KIRAMBO	2,703	2,729	2,757	308.3	3,584	398.2	327	10.96								
KUKABUYE	3,707	3,720	3,764	522.8	4,893	679.5	653	7.49								
MATONGO	2,806	2,827	2,866	651.4	3,728	846.8	422	8.83								
NGARA	3,140	3,153	3,194	343.4	4,152	446.5	459	9.05								
NYANGE	2,339	2,368	2,389	139.7	3,106	181.6	462	6.72								
SANGAZA	3,141	3,172	3,223	233.6	4,190	303.6	502	8.35								
SHYWA	2,953	2,975	3,024	432.0	3,931	561.6	419	9.38								
ZAZA	2,576	2,596	2,646	407.1	3,440	529.2	329	10.46								
TOTAL	45,236	45,538	46,128	320.1	59,966	416.1	6801	8.82								

## Commune : MUHAZI (Average Growth Rate = 3.04%)

NAME OF SECTOR	1986		1987		1988		DENSITY (hab/km <sup>2</sup> ) 1988		POPULATION 2000		DENSITY (hab/km <sup>2</sup> ) 2000		NO. OF FAMILIES		SIZE OF FAMILY	
GATI	3,865	3,865	3,865	361.2	5,586	517.4	700	7.91								
GISHALI	4,475	4,475	4,475	502.8	6,410	720.2	722	8.88								
KABARE	3,402	3,402	3,402	453.6	4,873	649.7	402	12.12								
KITAZIGURWA	3,091	3,091	3,091	412.1	4,428	590.3	466	9.50								
MUKARANGE	2,533	2,533	2,533	452.3	3,628	647.9	438	8.28								
MUNYIGINYA	2,874	2,874	2,874	495.5	4,117	709.8	522	7.89								
MURANBI	3,630	3,630	3,630	339.3	5,200	486.0	525	9.90								
NKOMANGWA	2,698	2,698	2,698	428.3	3,865	513.4	457	8.46								
NYACATOVU	2,663	2,663	2,663	309.7	3,815	443.6	504	7.57								
NYARUBUYE	3,250	3,250	3,250	541.7	4,655	775.9	512	9.09								
NYARUGALI	2,754	2,754	2,754	466.8	3,945	668.6	525	7.51								
RUHUNDA	3,243	3,243	3,243	400.4	4,645	573.5	538	8.63								
TOTAL	36,550	37,486	38,478	420.1	55,117	601.7	6311	8.73								

(continue)

Commune : RUKARA (Average Growth Rate = 2.49%)

NAME OF SECTOR	1986		1987		1988		1988		2000	
	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION
GAHINI	5,698	217.5	7,654	292.1	521	14.69				
KAWANGIRE	3,930	227.2	5,279	305.1	553	9.55				
KIYENZI	3,734	247.3	5,016	332.2	331	15.15				
NYAKABUNGO	3,010	97.7	4,043	131.3	340	11.89				
NYAWERA	4,279	99.3	5,748	133.4	350	16.42				
RUKARA	6,856	149.4	9,210	200.7	745	12.36				
RWIMISHINYA	5,116	234.7	6,872	315.2	638	10.77				
RYAMANYONI	2,918	47.3	3,920	63.5	377	10.40				
TOTAL	34,066	34,797	35,541	135.7	47,742	182.3	3855	12.38		

Commune : RUKIRA (Average Growth Rate = 4.27%)

NAME OF SECTOR	1986		1987		1988		1988		2000	
	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION
GASHIRU	4,077	142.8	4,197	6,932	235.8	505	13.73			
GITUKU	3,537	156.8	3,607	5,957	259.0	483	12.33			
GITWE	4,040	133.8	4,149	6,853	221.1	477	14.37			
MUBANGO	3,912	278.5	3,982	6,577	459.9	611	10.76			
MURAMA	3,512	331.7	3,582	5,916	547.8	565	10.47			
MUSHIKIRI	3,515	67.0	3,605	5,954	110.7	459	12.97			
NUTARUKA	2,614	79.2	2,707	4,471	130.7	458	9.76			
RUGARAMA	2,440	88.9	2,533	4,184	146.8	367	11.40			
RURAMA	3,596	275.9	3,725	6,152	455.7	572	10.76			
RURENGE	3,763	264.1	3,883	6,413	436.3	642	9.99			
TOTAL	33,996	35,006	35,970	142.1	59,409	234.6	5139	11.56		

(continue)

Commune : RUSUMO (Average Growth Rate = 6.48%)

NAME OF SECTOR	1986		1987		1988		1988		2000	
	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )
GATORE	6.974	7.286	7.731	127.4	16.423	270.6	?	?	?	?
GISENYI	2.904	3.102	3.661	95.6	7.777	203.1	512	15.19	512	15.19
KANKORWA	4.875	6.972	7.504	34.5	15.941	73.2	722	22.08	722	22.08
KIGARAMA	6.751	7.193	7.911	71.7	16.805	152.2	753	22.32	753	22.32
KIGINA	6.222	6.549	6.871	129.9	14.596	275.9	876	16.66	876	16.66
KIREHE	5.567	5.883	6.375	154.7	13.542	328.7	902	15.01	902	15.01
MUSAZA	7.470	7.775	8.212	116.5	17.445	247.4	?	?	?	?
NYABITARE	3.708	3.868	4.062	118.4	8.629	251.6	408	21.15	408	21.15
NYAMUGALI	4.412	4.742	5.271	56.4	11.197	119.8	?	?	?	?
NYARUBUYE	5.880	6.146	6.505	94.0	13.819	199.7	723	19.11	723	19.11
TOTAL	54.763	59.516	64.103	81.3	136.174	172.6	4896	27.81	4896	27.81

Commune : RUTONDE (Average Growth Rate = 2.20%)

NAME OF SECTOR	1986		1987		1988		1988		2000	
	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )	POPULATION	DENSITY (hab/km <sup>2</sup> )
KADUHA	3.599	3.678	3.733	224.1	4.743	291.0	558	8.50	558	8.50
KIGABIRO	3.195	3.243	3.116	1097.9	4.847	1425.6	406	11.94	406	11.94
NKUNGU	3.070	3.471	3.524	297.5	4.211	386.3	501	8.41	501	8.41
NSINDA	3.605	3.605	3.660	384.7	4.046	499.5	216	18.73	216	18.73
NYARUSANGE	3.527	3.527	3.581	335.6	4.576	435.8	500	9.15	500	9.15
RUTONDE	3.339	3.339	3.390	255.9	4.752	332.3	551	8.62	551	8.62
RWERU	3.077	3.077	3.124	477.5	4.650	620.0	700	6.64	700	6.64
RWIKUBO	30.561	30.561	31.024	316.8	4.402	411.4	597	7.37	597	7.37
SOVU	3.077	3.077	3.124	260.3	4.056	338.0	491	8.26	491	8.26
TOTAL	28.858	30.561	31.024	331.1	40.283	429.9	4520	8.91	4520	8.91

(continue)



Commune : SAKE (Average Growth Rate = 3.77%)

NAME OF SECTOR	ESTIMATED 1988		DENSITY (hab/km <sup>2</sup> )		POPULATION 2000	DENSITY (hab/km <sup>2</sup> ) 2000	NO. OF FAMILIES	SIZE OF FAMILY
	1986	1987	1988	2000				
GITUZA	3,012	3,142	3,260	271.7	5,083	423.6	415	12.25
MABUGA I	2,582	2,676	2,777	414.5	4,329	646.1	374	11.57
MABUGA II	2,505	2,580	2,677	424.9	4,174	662.5	378	11.04
MBUYE	3,345	3,447	3,577	208.0	5,577	324.2	856	6.52
MURWA	3,846	4,023	4,175	115.0	6,509	179.3	522	12.47
NGOMA	2,535	2,622	2,721	312.8	4,242	487.6	536	7.91
NSHILI I	3,615	3,732	3,873	484.1	6,038	754.8	496	12.17
NSHILI II	2,504	2,558	2,654	457.6	4,138	713.4	219	18.89
RUBAGO	3,239	3,317	3,442	404.9	5,366	631.3	518	10.36
RUKUMBERI	3,607	3,745	3,886	242.9	6,058	378.6	589	10.29
RUYEMA I	2,013	2,087	2,145	766.1	3,344	1194.3	300	11.15
RUYEMA II	1,973	2,036	2,113	621.5	3,294	968.8	344	9.58
SHORI	3,291	3,412	3,541	245.9	5,521	383.4	348	15.86
TOTAL	38,067	39,357	40,841	279.5	63,673	435.8	5895	10.80

Source: Annual Report of Each Commune, 1984

POPULATION/AREA OF EACH ZONE



COMMUNE	PHASE 1		PHASE 2		EXIST.		REHABIL.		PHASE 3		TOTAL	(a+c)/f	(b+d)/f	(a+b+c+d)/f	
	AREA	POPULAT	AREA	POPULAT	AREA	POPULAT	AREA	POPULAT	AREA	POPULATION					
BIRENGA	20.1	4.062	115.4	17.847	14.1	3.918	0.0	0.0	114.0	17.587	263.6	43.413	0.18	0.41	0.59
KABARONDO	40.5	8.004	0.0	0.0	0.0	0.0	30.4	9.015	89.4	14.956	160.3	31.975	0.25	0.28	0.53
KAYONZA	8.9	496	0.0	0.0	0.0	0.0	0.0	0.0	181.1	25.457	190.0	25.953	0.02	0.00	0.02
KIGARAMA	51.9	5.440	10.5	1.344	20.6	2.933	17.2	6.280	173.1	23.562	273.3	39.559	0.21	0.19	0.40
MUCESERA	0.0	0.0	0.0	0.0	16.7	6.932	0.0	0.0	127.4	39.196	144.1	46.128	0.15	0.00	0.15
MUHAZI	0.0	0.0	0.0	0.0	51.7	23.159	0.0	0.0	39.9	15.319	91.6	38.478	0.60	0.00	0.60
RUKARA	0.0	0.0	0.0	0.0	55.5	11.313	0.0	0.0	205.8	24.228	261.4	35.541	0.32	0.00	0.32
RUKIRA	19.9	5.088	58.8	7.015	0.0	0.0	84.9	15.168	89.6	8.698	253.2	35.970	0.14	0.62	0.76
RUSUMO	18.1	3.653	164.7	37.486	51.2	9.403	41.7	7.635	513.1	72.807	788.8	130.384	0.10	0.34	0.44
RUTONDE	24.0	6.322	0.0	0.0	36.5	14.752	0.0	0.0	33.2	9.950	93.7	31.024	0.68	0.00	0.68
SAKE	0.0	0.0	23.8	6.768	0.0	0.0	0.0	0.0	122.3	34.073	146.1	40.841	0.00	0.17	0.17
TOTAL	183.4	33.065	373.2	70.460	246.4	72.410	174.2	38.098	1688.9	285.834	2666.1	499.866	0.21	0.22	0.43

(continue)

(RUKARA)	a		b		c		d		e		f	
	PHASE 1 AREA	PHASE 2 AREA	PHASE 1 POPULAT	PHASE 2 AREA	EXIST. POPULAT	REHABIL. AREA	PHASE 3 POPULAT	REHABIL. AREA	PHASE 3 POPULAT	REHABIL. AREA	TOTAL POPULATI	TOTAL AREA
GAHINI	0.0	0.0	0	20.4	4,437	0.0	0	5.8	1,261	28.2	5,698	0.78
KAWANGIRE	0.0	0.0	0	17.3	3,930	0.0	0	0.0	0	17.3	3,930	1.00
KIYENZI	0.0	0.0	0	0.0	0	0.0	0	15.1	3,734	15.1	3,734	0.00
NYAKABUNGO	0.0	0.0	0	0.0	0	0.0	0	30.8	3,010	30.8	3,010	0.00
NYAWERA	0.0	0.0	0	0.0	0	0.0	0	43.1	4,279	43.1	4,279	0.00
RUKARA	0.0	0.0	0	14.9	2,226	0.0	0	31.0	4,630	45.9	6,856	0.32
RWIMISHINYA	0.0	0.0	0	3.0	721	0.0	0	18.3	4,395	21.3	5,116	0.14
RYAMANYONI	0.0	0.0	0	0.0	0	0.0	0	61.7	2,918	61.7	2,918	0.00
TOTAL	0.0	0.0	0	55.6	11,313	0.0	0	205.8	24,228	261.4	35,541	0.32

(MUHAZI)	a		b		c		d		e		f	
	PHASE 1 AREA	PHASE 2 AREA	PHASE 1 POPULAT	PHASE 2 AREA	EXIST. POPULAT	REHABIL. AREA	PHASE 3 POPULAT	REHABIL. AREA	PHASE 3 POPULAT	REHABIL. AREA	TOTAL POPULATI	TOTAL AREA
GATI	0.0	0.0	0	10.7	3,865	0.0	0	0.0	0	10.7	3,865	1.00
GISHALI	0.0	0.0	0	8.9	4,475	0.0	0	0.0	0	8.9	4,475	1.00
KABARE	0.0	0.0	0	0.0	0	0.0	0	7.5	3,402	7.5	3,402	0.00
KITAZIGURWA	0.0	0.0	0	0.0	0	0.0	0	7.5	3,091	7.5	3,091	0.00
MUKARANGE	0.0	0.0	0	0.0	0	0.0	0	5.6	2,533	5.6	2,533	0.00
MUNYIGINYA	0.0	0.0	0	5.8	2,874	0.0	0	0.0	0	5.8	2,874	1.00
MURANELI	0.0	0.0	0	0.0	0	0.0	0	10.7	3,630	10.7	3,630	0.00
NKOMANGWA	0.0	0.0	0	6.3	2,638	0.0	0	0.0	0	6.3	2,638	1.00
NYAGATOVU	0.0	0.0	0	0.0	0	0.0	0	8.6	2,663	8.6	2,663	0.00
NYARUBUYE	0.0	0.0	0	6.0	3,250	0.0	0	0.0	0	6.0	3,250	1.00
NYARUGARI	0.0	0.0	0	5.9	2,754	0.0	0	0.0	0	5.9	2,754	1.00
RUHUNDA	0.0	0.0	0	8.1	3,243	0.0	0	0.0	0	8.1	3,243	1.00
TOTAL	0.0	0.0	0	51.7	23,159	0.0	0	39.9	15,319	91.6	38,478	0.60

(continue)

(MUGESERA)	PHASE 1		PHASE 2		EXIST.		REHABIL.		PHASE 3		TOTAL		(atc)/f	(btd)/f	(atb+tctd)/f		
	AREA	POPULAT	AREA	POPULAT	AREA	POPULAT	AREA	POPULAT	AREA	POPULATI	AREA	POPULATION					
CYIZIHIRA	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	8.3	3,230	8.3	3,230	0.00	0.00	0.00
GATARE	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	13.8	3,316	13.8	3,316	0.00	0.00	0.00
KAGASHI	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	18.3	3,951	18.3	3,951	0.00	0.00	0.00
KAREMBO	0.0	0	0.0	0	3.7	1,901	0.0	0	0.9	462	4.6	2,363	4.6	2,363	0.80	0.00	0.80
KIBARE	0.0	0	0.0	0	0.0	0	0.0	0	7.4	3,725	7.4	3,725	7.4	3,725	0.00	0.00	0.00
KIBILIZI-1,2	0.0	0	0.0	0	7.0	2,285	0.0	0	10.4	3,395	17.4	5,680	17.4	5,680	0.40	0.00	0.40
KIRAMBO	0.0	0	0.0	0	0.0	0	0.0	0	9.0	2,757	9.0	2,757	9.0	2,757	0.00	0.00	0.00
KUKABUYE	0.0	0	0.0	0	2.9	1,516	0.0	0	4.3	2,248	7.2	3,764	7.2	3,764	0.40	0.00	0.40
MATONGO	0.0	0	0.0	0	0.0	0	0.0	0	4.4	2,866	4.4	2,866	4.4	2,866	0.00	0.00	0.00
NGARA	0.0	0	0.0	0	0.5	172	0.0	0	8.8	3,022	9.3	3,194	9.3	3,194	0.05	0.00	0.05
NYANGE	0.0	0	0.0	0	0.0	0	0.0	0	17.1	2,389	17.1	2,389	17.1	2,389	0.00	0.00	0.00
SANGAZA	0.0	0	0.0	0	0.0	0	0.0	0	13.8	3,223	13.8	3,223	13.8	3,223	0.00	0.00	0.00
SHYWA	0.0	0	0.0	0	0.0	0	0.0	0	7.0	3,024	7.0	3,024	7.0	3,024	0.00	0.00	0.00
ZAZA	0.0	0	0.0	0	2.6	1,058	0.0	0	3.9	1,588	6.5	2,646	6.5	2,646	0.40	0.00	0.40
TOTAL	0.0	0	0.0	0	16.7	6,932	0.0	0	127.4	39,196	144.1	46,128	144.1	46,128	0.15	0.00	0.15

(continue)

(SAKE)	a		b		c		d		e		f	
	PHASE 1 AREA	PHASE 2 AREA	PHASE 1 POPULAT	PHASE 2 POPULAT	EXIST. AREA	REHABIL. POPULAT	PHASE 3 AREA	REHABIL. POPULAT	PHASE 3 AREA	REHABIL. POPULAT	TOTAL AREA	TOTAL POPULATION
GITUZA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	3,260	12.0	3,260
MABUGA-1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	2,777	6.7	2,777
MABUGA-2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.3	2,677	6.3	2,677
MBUYE	0.0	11.0	2,288	0.0	0.0	0.0	0.0	0.0	6.2	1,289	17.2	3,577
MURWA	0.0	4.7	541	0.0	0.0	0.0	0.0	0.0	31.6	3,534	36.3	4,175
NGOMA	0.0	0.0	2.6	813	0.0	0.0	0.0	0.0	6.1	1,908	8.7	2,721
NSHILI-1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	3,873	8.0	3,873
NSHILI-2	0.0	0.0	3.1	1,419	0.0	0.0	0.0	0.0	2.7	1,235	5.8	2,654
RUBAGO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	3,442	8.5	3,442
RUKUMBERI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	3,886	16.0	3,886
RUYEMA-1	0.0	0.0	1.5	1,149	0.0	0.0	0.0	0.0	1.3	996	2.8	2,145
RUYEMA-2	0.0	0.0	0.9	559	0.0	0.0	0.0	0.0	2.5	1,554	3.4	2,113
SHOLI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.4	3,541	14.4	3,541
TOTAL	0.0	23.8	5,768	0.0	0.0	0.0	0.0	0.0	122.3	34,073	146.1	40,841
(KAVONZA)	PHASE 1 AREA	PHASE 2 AREA	PHASE 1 POPULAT	PHASE 2 POPULAT	EXIST. AREA	REHABIL. POPULAT	PHASE 3 AREA	REHABIL. POPULAT	PHASE 3 AREA	REHABIL. POPULAT	TOTAL AREA	TOTAL POPULATION
GASOGI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.4	3,011	14.4	3,011
KAYONZA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.9	3,523	12.9	3,523
MBURABUTURO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.6	2,223	9.6	2,223
MUSUMBA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.3	2,660	19.3	2,660
NYAMIRAMA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.8	3,776	18.8	3,776
RUTARE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.6	2,631	12.6	2,631
RWINKWAVU	8.9	496	0.0	0.0	0.0	0.0	0.0	0.0	86.3	4,808	95.2	5,304
SHYOGO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2	2,825	7.2	2,825
TOTAL	8.9	496	0.0	0.0	0.0	0.0	0.0	0.0	181.1	25,457	190.0	25,953

(continue)

(RUTONDE)	a		b		c		d		e		f			
	PHASE 1	PHASE 2	EXIST.	REHABIL.	PHASE 3	TOTAL	(a+c)/f	(b+d)/f	(a+b+c+d)/f					
	AREA	POPULAT	AREA	POPULAT	AREA	POPULATI	AREA	POPULATION						
KADUHA	8.6	1.927	0.0	0.0	0.0	0.0	7.7	1.726	16.3	3.653	0.53	0.00	0.53	
KIGABIRO	0.0	0.0	0.0	3.4	3.733	0.0	0.0	0.0	3.4	3.733	1.00	0.00	1.00	
MKUNGU	10.9	3.243	0.0	0.0	0.0	0.0	0.0	0.0	10.9	3.243	1.00	0.00	1.00	
NSHINDA	0.0	0.0	0.0	8.1	3.116	0.0	0.0	0.0	8.1	3.116	1.00	0.00	1.00	
NYARUSANGE	0.0	0.0	0.0	10.5	3.524	0.0	0.0	0.0	10.5	3.524	1.00	0.00	1.00	
RUTONDE	4.5	1.152	0.0	0.0	0.0	0.0	9.8	2.508	14.3	3.660	0.31	0.00	0.31	
RWERU	0.0	0.0	0.0	0.0	0.0	0.0	7.5	3.581	7.5	3.581	1.00	0.00	1.00	
RWIKUBO	0.0	0.0	0.0	10.7	3.390	0.0	0.0	0.0	10.7	3.390	1.00	0.00	1.00	
SOVU	0.0	0.0	0.0	3.8	989	0.0	0.0	8.2	2.135	12.0	3.124	0.32	0.00	0.32
TOTAL	24.0	6.322	0.0	36.5	14.752	0.0	33.2	9.950	93.7	31.024	0.68	0.00	0.68	

(RUKIRA)	a		b		c		d		e		f			
	PHASE 1	PHASE 2	EXIST.	REHABIL.	PHASE 3	TOTAL	(a+c)/f	(b+d)/f	(a+b+c+d)/f					
	AREA	POPULAT	AREA	POPULAT	AREA	POPULATI	AREA	POPULATION						
GASIRU	0.0	0.0	0.0	13.7	1.956	15.7	2.241	29.4	4.197	0.00	0.47	0.47		
GITUKU	1.0	157	12.5	1,960	0.0	0.0	7.0	1,098	2.5	392	23.0	3,607	0.04	0.85
GITWE	2.5	335	10.2	1,365	0.0	0.0	9.0	1,205	9.3	1,245	31.0	4,149	0.08	0.62
MUBAGO	0.0	0.0	5.7	1,587	0.0	0.0	8.6	2,395	0.0	0.0	14.3	3,982	0.00	1.00
MURAMA	4.7	1,559	0.0	0.0	0.0	0.0	6.1	2,023	0.0	0.0	10.8	3,582	0.44	0.56
MUSHIKILI	0.0	0.0	27.4	1,836	0.0	0.0	0.0	0.0	26.4	1,769	53.8	3,605	0.00	0.51
NTARUKA	0.0	0.0	0.0	0.0	0.0	0.0	21.7	1,718	12.5	989	34.2	2,707	0.00	0.63
RUGARAMA	0.3	27	3.0	267	0.0	0.0	2.0	178	23.2	2,062	28.5	2,533	0.01	0.18
RURAMA	0.0	0.0	0.0	0.0	0.0	0.0	13.5	3,725	0.0	0.0	13.5	3,725	0.00	1.00
RURENGE	11.4	3,011	0.0	0.0	0.0	0.0	3.3	872	0.0	0.0	14.7	3,883	0.78	0.22
TOTAL	19.9	5,088	58.8	7,015	0.0	0.0	84.9	15,168	89.6	8,698	253.2	35,970	0.14	0.62

(continue)



(KABARONDO)	a		b		c		d		e		f			
	PHASE 1 AREA	PHASE 2 POPULAT AREA	EXIST. POPULAT AREA	REHABIL. POPULAT AREA	PHASE 3 POPULAT AREA	POPULATI AREA	POPULATION	TOTAL POPULATION	(a+c)/f	(b+d)/f	(a+b+c+d)/f			
BISENGA	2.0	278	0.0	0.0	0.0	0.0	16.3	2,266	18.3	2,544	0.11	0.00	0.11	
CYINZOVU	3.8	1,087	0.0	0.0	0.0	6.2	1,773	0.0	10.0	2,860	0.38	0.52	1.00	
KABARONDO	6.8	1,164	0.0	0.0	0.0	7.2	1,269	0.0	13.8	2,433	0.48	0.52	1.00	
MURAMA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.4	1,616	1,616	0.00	0.00	0.00	
NKAMBA	5.5	1,557	0.0	0.0	0.0	0.0	0.0	6.2	1,755	11.7	3,312	0.47	0.00	0.47
RUBIRA	0.0	0.0	0.0	0.0	0.0	6.2	2,594	0.0	0.0	2,594	1.00	1.00	1.00	
RUKIRA	5.5	2,146	0.0	0.0	0.0	0.0	0.0	0.0	5.5	2,146	1.00	0.00	1.00	
RUNDU	0.0	0.0	0.0	0.0	0.0	10.8	3,378	0.0	0.0	10.8	3,378	0.00	1.00	1.00
RURAMIRA	1.6	360	0.0	0.0	0.0	0.0	0.0	13.0	2,926	14.6	3,286	0.11	0.00	0.11
RUSERA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8	2,214	8.8	2,214	0.00	0.00	0.00
RUYONZA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.8	2,548	7.8	2,548	0.00	0.00	0.00
SHYANDA	15.5	1,413	0.0	0.0	0.0	0.0	0.0	17.9	1,631	33.4	3,044	0.45	0.00	0.45
TOTAL	40.5	8,004	0.0	0.0	0.0	30.4	9,015	89.4	14,956	160.3	31,975	0.25	0.28	0.53

(KIGARAMA)	a		b		c		d		e		f				
	PHASE 1 AREA	PHASE 2 POPULAT AREA	EXIST. POPULAT AREA	REHABIL. POPULAT AREA	PHASE 3 POPULAT AREA	POPULATI AREA	POPULATION	TOTAL POPULATION	(a+c)/f	(b+d)/f	(a+b+c+d)/f				
FUKWE	0.0	0.0	0.0	0.0	0.0	5.3	4,092	0.0	0.0	5.3	4,092	0.00	1.00	1.00	
GASETSA	10.0	1,119	0.0	5.5	616	0.0	8.2	918	23.7	2,653	0.65	0.00	0.65		
GASHANDA	0.0	0.0	1.9	333	0.0	4.4	771	10.1	1,771	16.4	2,875	0.00	0.38	0.38	
KABARE-1	0.0	0.0	0.0	7.6	1,290	0.0	0.0	9.3	1,578	16.9	2,868	0.45	0.00	0.45	
KABARE-2	11.7	829	6.3	446	0.0	0.0	0.0	54.4	3,855	72.4	5,190	0.16	0.09	0.25	
KABERANGWE	20.7	2,315	0.0	2.7	302	0.0	0.0	9.0	1,006	32.4	3,623	0.72	0.00	0.72	
KANSANA	0.0	0.0	0.0	0.0	0.0	7.5	1,417	11.8	2,229	19.3	3,646	0.00	0.39	0.39	
REMPERA	0.0	0.0	0.0	4.8	725	0.0	0.0	12.8	1,935	17.6	2,660	0.27	0.00	0.27	
RUBONA	0.0	0.0	2.3	584	0.0	0.0	0.0	21.4	5,250	23.7	5,814	0.00	0.10	0.10	
RURENCE	7.0	781	0.0	0.0	0.0	0.0	0.0	14.9	1,661	21.9	2,442	0.32	0.00	0.32	
VUMBE	2.5	396	0.0	0.0	0.0	0.0	0.0	21.2	3,360	23.7	3,756	0.11	0.00	0.11	
TOTAL	51.9	5,440	10.5	1,344	20.6	2,933	17.2	6,280	173.1	23,562	273.3	39,559	0.21	0.19	0.40

(continue)

(BIRENGA)	a		b		c		d		e		f				
	PHASE 1 AREA	PHASE 2 AREA	EXIST. POPULAT	REHABIL. AREA	PHASE 3 POPULAT	REHABIL. AREA	PHASE 3 POPULAT	REHABIL. AREA	PHASE 3 POPULAT	REHABIL. AREA	TOTAL POPULATION	(a+c)/f	(b+d)/f	(a+b+c+d)/f	
BARE	0.0	22.6	2,287	0.0	0.0	0.0	0.0	8.8	891	31.4	3,178	0.00	0.72	0.72	
BIRENGA	0.0	8.0	935	0.0	0.0	0.0	0.0	19.7	2,302	27.7	3,237	0.00	0.29	0.29	
GAHARA	0.0	19.9	1,917	0.0	0.0	0.0	0.0	41.6	4,007	61.5	5,924	0.00	0.32	0.32	
GAHULIRE	0.0	5.7	1,554	1.9	518	0.0	0.0	3.8	1,036	11.4	3,107	0.17	0.50	0.67	
GASRONGORA	8.1	1,145	12.7	1,796	0.0	0.0	0.0	11.6	1,640	32.4	4,581	0.25	0.39	0.64	
KIBAYA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	2,566	7.0	2,566	0.00	0.00	0.00	
KIBARA	5.8	1,167	7.2	1,448	0.0	0.0	0.0	0.0	0.0	13.0	2,615	0.45	0.55	1.00	
KIBIMBA	0.0	7.2	1,117	0.0	0.0	0.0	0.0	6.9	1,070	14.1	2,187	0.00	0.51	0.51	
KIBUNGO	0.0	0.0	0.0	12.2	3,400	0.0	0.0	0.0	0.0	12.2	3,400	1.00	0.00	1.00	
MATONGO	0.0	24.4	4,620	0.0	0.0	0.0	0.0	0.0	0.0	24.4	4,620	0.00	1.00	1.00	
NDAMIRA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3	2,579	9.3	2,579	0.00	0.00	0.00	
SAKARA	6.2	1,750	7.7	2,173	0.0	0.0	0.0	5.3	1,496	19.2	5,419	0.32	0.40	0.72	
TOTAL	20.1	4,062	115.4	17,847	14.1	3,918	0.0	0.0	114.0	17,587	263.6	43,413	0.18	0.41	0.59

(RUSUMO)	a		b		c		d		e		f				
	PHASE 1 AREA	PHASE 2 AREA	EXIST. POPULAT	REHABIL. AREA	PHASE 3 POPULAT	REHABIL. AREA	PHASE 3 POPULAT	REHABIL. AREA	PHASE 3 POPULAT	REHABIL. AREA	TOTAL POPULATION	(a+c)/f	(b+d)/f	(a+b+c+d)/f	
GATORE	16.8	3,285	8.4	4,927	0.0	0.0	0.0	0.0	35.5	8,211	60.7	16,423	0.20	0.30	0.50
GISENYI	0.0	26.7	5,444	0.0	0.0	11.6	2,333	0.0	0.0	38.3	7,777	0.00	1.00	1.00	
KANKOBWA	0.0	0.0	0.0	28.9	2,391	15.6	1,594	173.3	11,956	217.8	15,941	0.15	0.10	0.25	
KIGARAMA	0.0	62.4	8,403	0.0	0.0	0.0	0.0	48.0	8,402	110.4	16,805	0.00	0.50	0.50	
KIGINA	0.0	14.6	4,379	10.6	3,649	0.0	0.0	27.7	6,568	52.9	14,596	0.25	0.30	0.55	
KIREHE	1.3	368	12.9	3,647	11.7	3,363	0.0	0.0	15.3	6,164	41.2	13,542	0.28	0.27	0.54
MUSAZA	0.0	22.0	6,978	0.0	0.0	0.0	0.0	48.5	10,467	70.5	17,445	0.00	0.40	0.40	
NYABITARE	0.0	3.6	1,294	0.0	0.0	4.6	1,294	26.1	6,041	34.3	8,629	0.00	0.30	0.30	
NYAMUGALI	0.0	9.4	1,120	0.0	0.0	5.7	1,120	78.4	8,957	93.5	11,197	0.00	0.20	0.20	
NYARUBUYE	0.0	4.7	1,294	0.0	0.0	4.2	1,294	60.3	6,041	69.2	8,629	0.00	0.30	0.30	
TOTAL	18.1	3,653	164.7	37,486	51.2	9,403	41.7	7,635	513.1	72,807	738.8	130,984	0.10	0.34	0.44



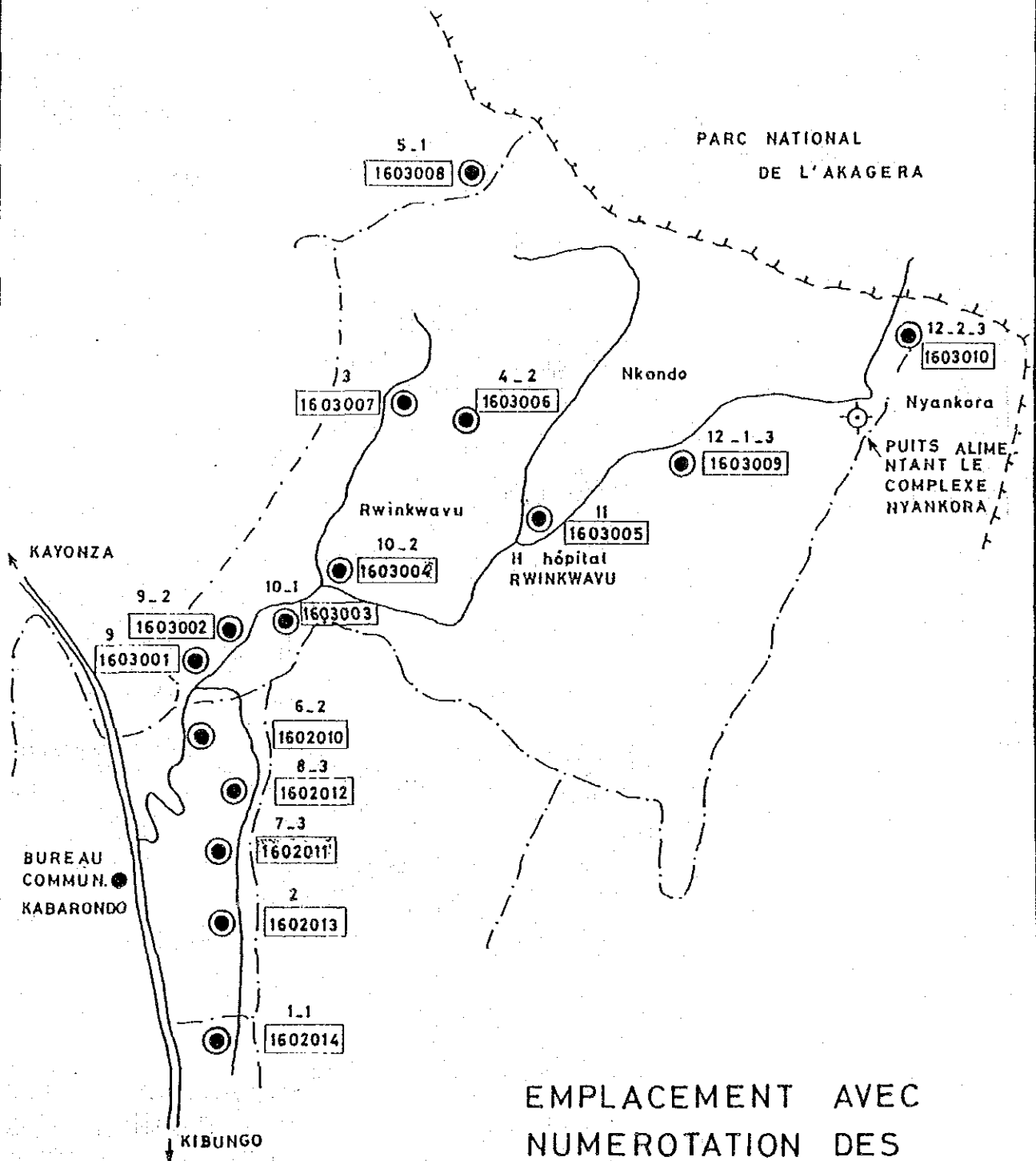
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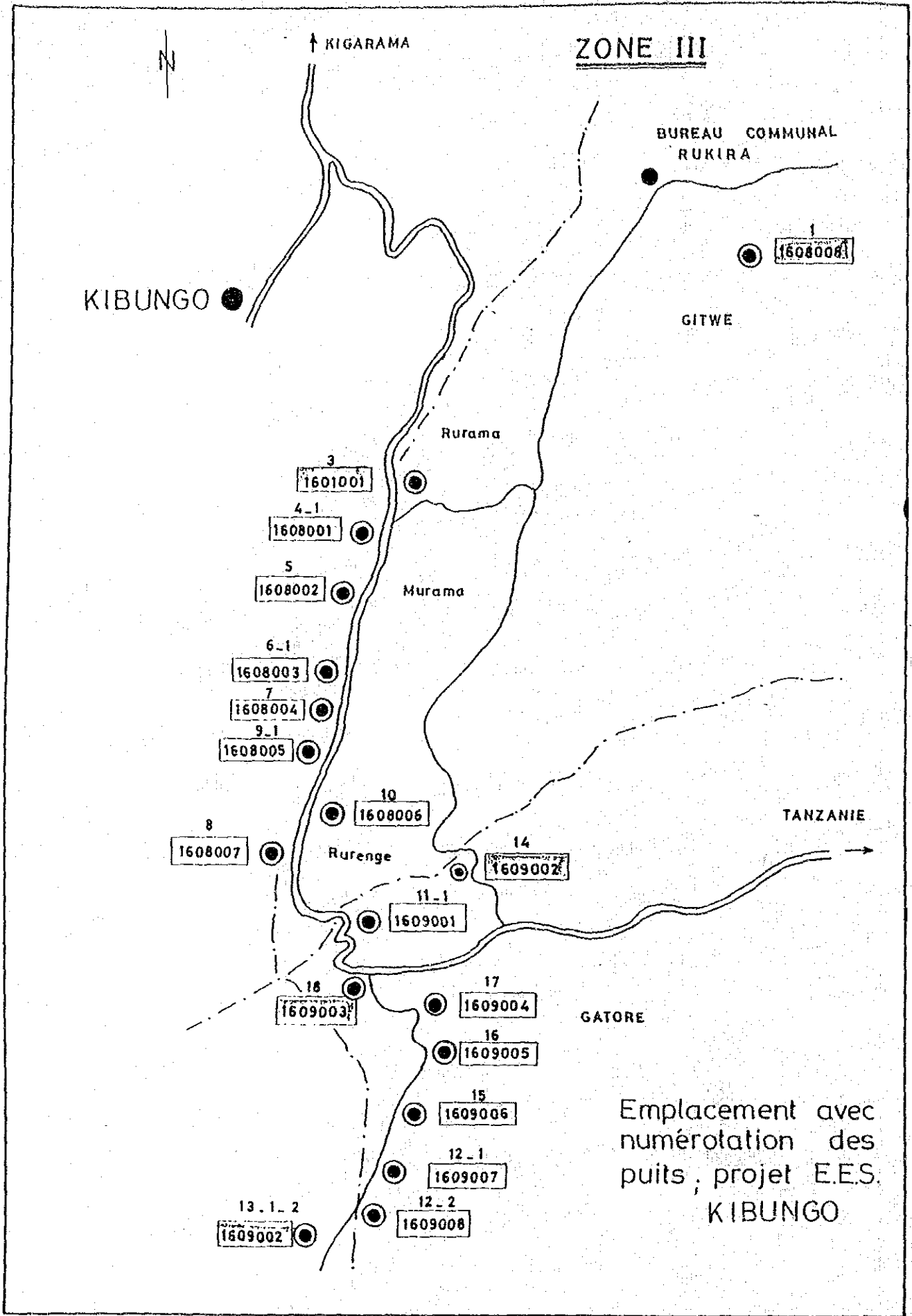
ZONE I - II



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EMPLACEMENT AVEC  
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KIBUNGO



ZONE IV

KIGALI

RWAMAGANA

BUREAU COMMUNAL RUTONDE

BUREAU COMMUNAL KAYONZA

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1602004

RURAMIRA

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BUR. COMM. KABARONDO

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1610008

Kaduha

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Rukira

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1602009

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1610007

Nkungu  
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BUR. COMM. KIGARAMA

KABERANGWE

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1604001

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1604012

KIBUNGO

EMPLACEMENT AVEC  
NUMEROTATION DES  
PUITS ; PROJET E.E.S.  
KIBUNGO

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1604013

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1604014



表4-1 完成井戸緒言一覧表(1)

井戸名	掘削長 m	ストレーナ 位置	地質	揚水量 m <sup>3</sup> /分	摘 要
ゾーンI	63.5	26.0 ~30.0 38.0 ~58.0		0.037	
ゾーンIV					
5	57.5	7.0 ~11.0 19.0 ~27.0		0.038	
1	59.7	23.8 ~31.8 39.8 ~43.8		0.017	
6	64.1	29.5 ~33.5 37.5 ~41.5 49.5 ~53.5		0.018	
3	52.5	8.0 ~20.0		0.052	
22	77.2	52.5 ~68.5		0.003	不成功
7	60.6	17.0 ~23.0 46.5 ~52.5		0.007	不成功
8	63.1	38.8 ~53.8		0.017	
9	59.2	28.5 ~32.5 36.5 ~40.5 44.5 ~48.5		0.042	#10は2 回掘
10	61.0	38.0 ~50.0		0.018	削、1 回目の
24	60.5	40.0 ~52.0		0.052	井戸は石をつ
11	61.1	30.0 ~36.0 54.0 ~60.0		0.034	められる。

表4-1 完成井戸緒言一覧表(2)

井戸名	掘削長 m	ストレーナ 位置	地質	揚水量 m <sup>3</sup> /分	摘 要
ゾーンⅣ					
13	61.1	30.0~36.0 48.0~54.0		0.030	
15	61.0	30.0~36.0 54.0~60.0		0.034	
6	60.5	34.9~38.9 42.9~46.9 50.9~54.9		0.018	
18	56.2	12.0~24.0		0.030	
20	60.0	12.0~20.0 28.0~32.0		0.015	
21	60.5	23.5~31.5 35.5~39.5		0.036	
33	60.0	46.0~58.0		0.024	
25	60.1	13.0~17.0 45.0~49.0 53.0~57.0		0.042	
27	61.1	31.0~39.0 47.0~55.0		0.040	
28	60.6	28.0~32.0 40.0~48.0		0.027	
29	61.1	22.0~34.0		0.015	

表 4-1 完成井戸緒言一覧表 (3)

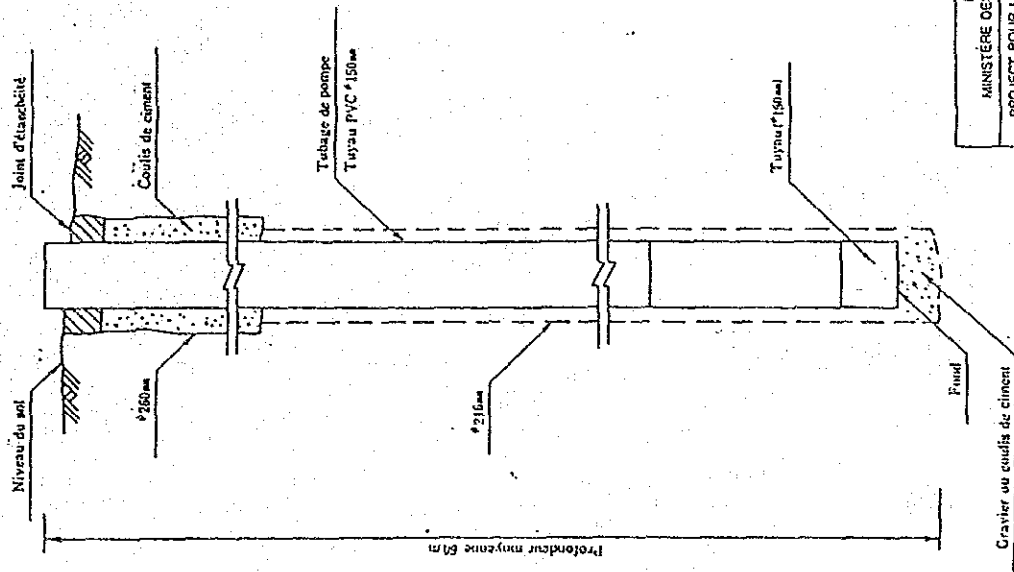
井戸名	掘削長 m	ストレーナ 位置	地質	揚水量 m <sup>3</sup> /分	摘 要
ゾーンⅣ					
31	61.1	40.0~46.0 54.0~60.0		0.017	
30	50.6	33.0~45.0		0.016	
32	49.9	25.8~37.8		0.036	
4	41.0	8.0~20.0		0.015	
17	42.0	19.7~27.7 31.7~35.7		0.030	
16	44.0	32.0~40.0		0.018	
15-1	51.0	24.0~32.0		0.019	
34	51.0	14.0~18.0 30.0~38.0		0.036	
40	60.0	7.0~11.0 27.0~35.0		0.060	
35	51.0	28.0~40.0		0.027	
38	51.0	13.0~17.0 37.0~45.0		0.047	
36	45.0	14.0~22.0 26.0~30.0		0.040	
37	48.0	28.0~40.0		0.027	
39	51.0	13.0~21.0 33.0~37.0		0.027	
43	43.0	15.0~19.0 27.0~35.0		0.024	

表4-1 完成井戸緒言一覧表(4)

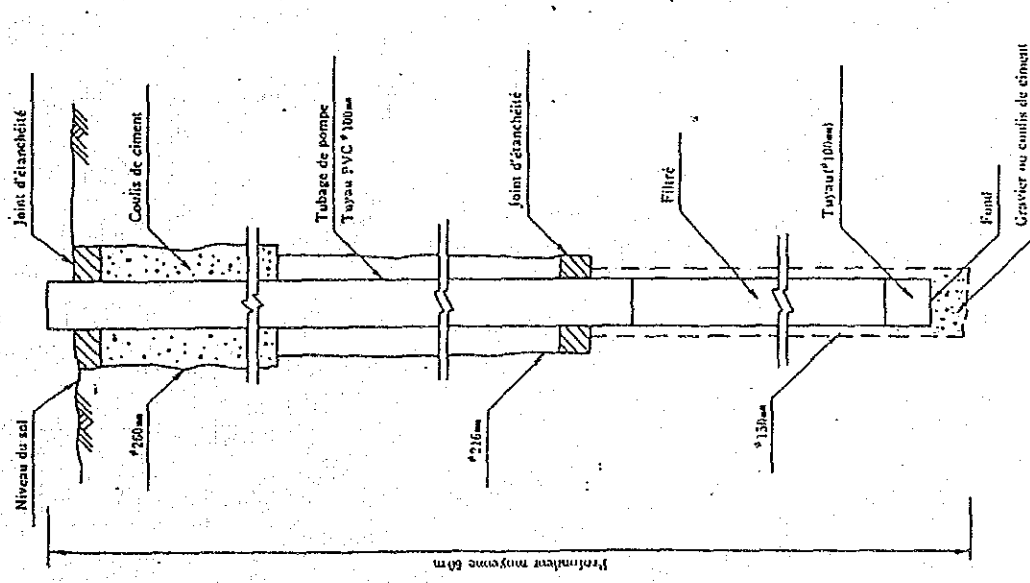
井戸名	掘削長 m	ストレーナ 位置	地質	揚水量 m <sup>3</sup> /分	摘 要
ゾーンⅣ					
41	35.0	12.0~16.0 24.0~32.0		0.015	
42	41.0	28.0~40.0		0.060	
ゾーンⅡ					
3	36.0	16.0~28.0		0.018	
11	36.0	22.0~30.0		0.015	
9-1	38.0	26.0~30.0 34.0~38.0		0.030	
9-2	37.0	27.0~35.0		0.035	
10-1	44.0	29.0~37.0		0.030	
10-2	41.0	20.0~24.0 28.0~36.0		0.030	
2	42.0	31.0~39.0		0.032	
1-1	50.0	3.4~35.4 39.4~47.4		0.017	
ゾーンⅢ					
3	33.0	10.0~14.0 18.0~22.0		0.017	
12-1	45.0	14.0~18.0 30.0~38.0		0.019	
13-1	27.0	14.0~22.0		0.025	
15	60.0	25.0~37.0		0.017	
16	34.0	17.0~25.0		0.025	

表 4-1 完成井戸緒言一覧表 (5)

井戸名	掘削長 m	ストレーナ 位置	地質	揚水量 m <sup>3</sup> /分	摘 要
ゾーンⅢ					
17	30.0	17.0~25.0		0.032	
18	57.0	40.0~52.0		0.018	
14	30.0	16.0~24.0		0.036	



Schema type d'un puits avec installations simples



Schema type d'un puits à pompe manuelle

REPUBLIQUE RWANDAISE MINISTÈRE DES TRAVAUX PUBLICS ET DE L'ÉNERGIE PROJET POUR L'EXPLOITATION DES EAUX SOUTERRAINES DANS LA REGION ORIENTALE			
TITRE:			
SCHEMA TYPE D'UN PUIT			
DATE: S.A.S. '87	ECHELLE: /	NUMERO DE PLAN: /	FIGURE: 5
PACIFIC CONSULTANTS INTERNATIONAL TOKYO, JAPAN			

Longueur Tuyau	_____
Diamètre Tuyau (mm)	_____
Nombre de Borne Fontaine	_____
Débit (m <sup>3</sup> /J)	_____
Point de jonction	□

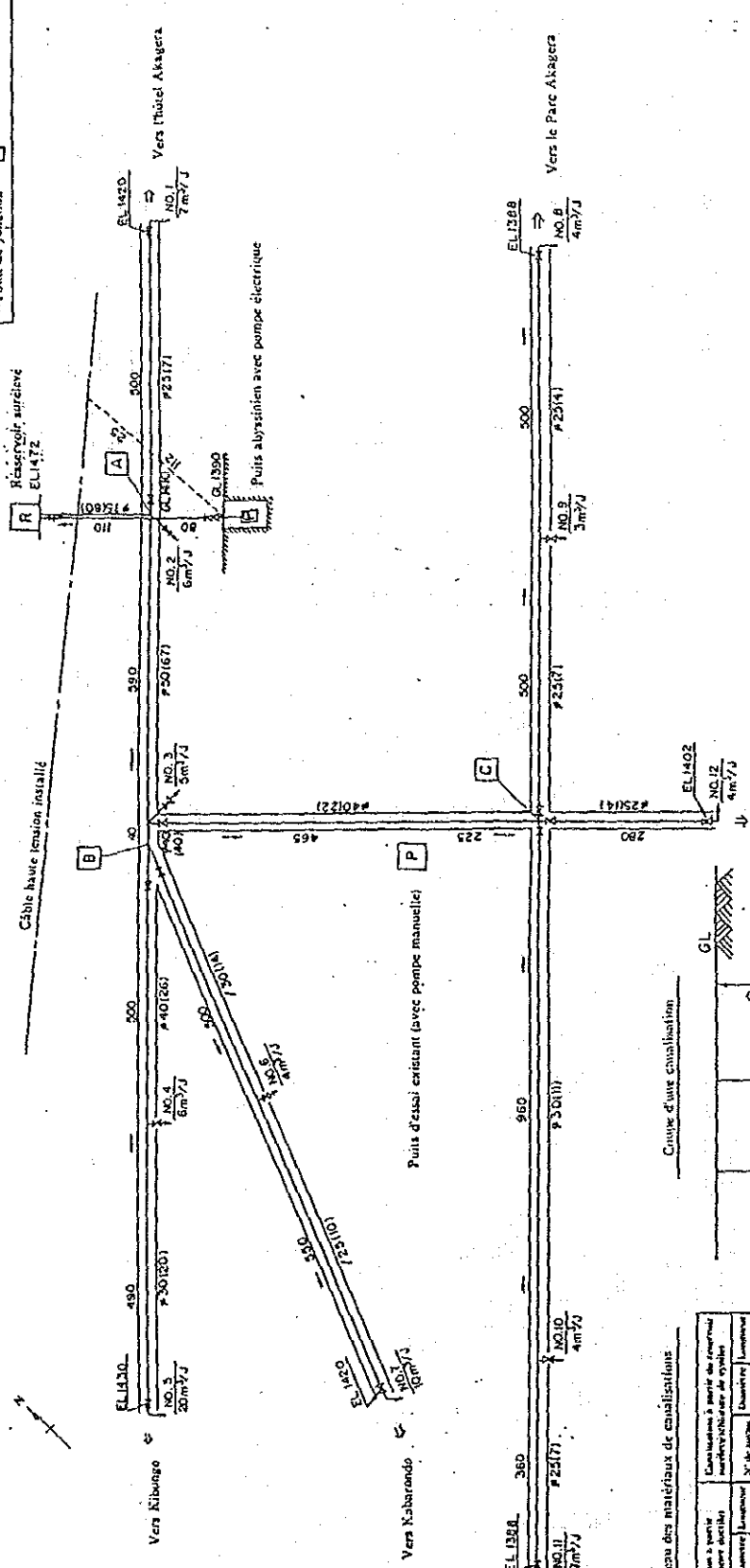


Tableau des matériaux de canalisation

Canaux à partir de l'usine de traitement		Canaux à partir de réservoirs		Canaux à partir de puits	
N° de tuyau	Longueur (m)	N° de tuyau	Longueur (m)	N° de tuyau	Longueur (m)
A-1	25	A-1	25	A-1	25
A-2	118	A-2	118	A-2	118
A-3	118	A-3	118	A-3	118
A-4	118	A-4	118	A-4	118
A-5	118	A-5	118	A-5	118
A-6	118	A-6	118	A-6	118
A-7	118	A-7	118	A-7	118
A-8	118	A-8	118	A-8	118
A-9	118	A-9	118	A-9	118
A-10	118	A-10	118	A-10	118
A-11	118	A-11	118	A-11	118
A-12	118	A-12	118	A-12	118
A-13	118	A-13	118	A-13	118
A-14	118	A-14	118	A-14	118
A-15	118	A-15	118	A-15	118
A-16	118	A-16	118	A-16	118
A-17	118	A-17	118	A-17	118
A-18	118	A-18	118	A-18	118
A-19	118	A-19	118	A-19	118
A-20	118	A-20	118	A-20	118
A-21	118	A-21	118	A-21	118
A-22	118	A-22	118	A-22	118
A-23	118	A-23	118	A-23	118
A-24	118	A-24	118	A-24	118
A-25	118	A-25	118	A-25	118
A-26	118	A-26	118	A-26	118
A-27	118	A-27	118	A-27	118
A-28	118	A-28	118	A-28	118
A-29	118	A-29	118	A-29	118
A-30	118	A-30	118	A-30	118
A-31	118	A-31	118	A-31	118
A-32	118	A-32	118	A-32	118
A-33	118	A-33	118	A-33	118
A-34	118	A-34	118	A-34	118
A-35	118	A-35	118	A-35	118
A-36	118	A-36	118	A-36	118
A-37	118	A-37	118	A-37	118
A-38	118	A-38	118	A-38	118
A-39	118	A-39	118	A-39	118
A-40	118	A-40	118	A-40	118
A-41	118	A-41	118	A-41	118
A-42	118	A-42	118	A-42	118
A-43	118	A-43	118	A-43	118
A-44	118	A-44	118	A-44	118
A-45	118	A-45	118	A-45	118
A-46	118	A-46	118	A-46	118
A-47	118	A-47	118	A-47	118
A-48	118	A-48	118	A-48	118
A-49	118	A-49	118	A-49	118
A-50	118	A-50	118	A-50	118
A-51	118	A-51	118	A-51	118
A-52	118	A-52	118	A-52	118
A-53	118	A-53	118	A-53	118
A-54	118	A-54	118	A-54	118
A-55	118	A-55	118	A-55	118
A-56	118	A-56	118	A-56	118
A-57	118	A-57	118	A-57	118
A-58	118	A-58	118	A-58	118
A-59	118	A-59	118	A-59	118
A-60	118	A-60	118	A-60	118
A-61	118	A-61	118	A-61	118
A-62	118	A-62	118	A-62	118
A-63	118	A-63	118	A-63	118
A-64	118	A-64	118	A-64	118
A-65	118	A-65	118	A-65	118
A-66	118	A-66	118	A-66	118
A-67	118	A-67	118	A-67	118
A-68	118	A-68	118	A-68	118
A-69	118	A-69	118	A-69	118
A-70	118	A-70	118	A-70	118
A-71	118	A-71	118	A-71	118
A-72	118	A-72	118	A-72	118
A-73	118	A-73	118	A-73	118
A-74	118	A-74	118	A-74	118
A-75	118	A-75	118	A-75	118
A-76	118	A-76	118	A-76	118
A-77	118	A-77	118	A-77	118
A-78	118	A-78	118	A-78	118
A-79	118	A-79	118	A-79	118
A-80	118	A-80	118	A-80	118
A-81	118	A-81	118	A-81	118
A-82	118	A-82	118	A-82	118
A-83	118	A-83	118	A-83	118
A-84	118	A-84	118	A-84	118
A-85	118	A-85	118	A-85	118
A-86	118	A-86	118	A-86	118
A-87	118	A-87	118	A-87	118
A-88	118	A-88	118	A-88	118
A-89	118	A-89	118	A-89	118
A-90	118	A-90	118	A-90	118
A-91	118	A-91	118	A-91	118
A-92	118	A-92	118	A-92	118
A-93	118	A-93	118	A-93	118
A-94	118	A-94	118	A-94	118
A-95	118	A-95	118	A-95	118
A-96	118	A-96	118	A-96	118
A-97	118	A-97	118	A-97	118
A-98	118	A-98	118	A-98	118
A-99	118	A-99	118	A-99	118
A-100	118	A-100	118	A-100	118
Total	120	Total	6524	Total	6524

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 MINISTÈRE DES TRAVAUX PUBLICS ET DE L'ÉNERGIE  
 PROJET POUR L'EXPLOITATION DES EAUX SOUS-ERRAINES  
 DANS LA RÉGION ORIENTALE

TITRE: ALIMENTATION EN EAU POTABLE  
 DE NYANKOLA  
 SCHEMA D'INSTALLATION  
 DES CANALISATIONS

DATE MAI 1971 ÉCHELLE 1/10000  
 NUMÉRO DE PLAN Figure 8

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