

APPENDICES

Appendix 1. Interview Guide

Questions For Consumers (Residents Of The City Of Kigali)

Identification

Cellule

Sector

District

Age

Sex

Education level

1. What do you know about the management of Electrogaz?
2. How have you known it?
3. When and how have you known that Electrogaz has been given to a private manager?
4. What was your reaction when you knew Electrogaz was (to be) privatized?
5. How would you describe services delivered by Electrogaz some years ago when it was managed by the government?
6. What change have you perceived since Electrogaz was put into the hands of a private company?
7. According to you, did the privatization of Electrogaz affect water provision? If yes, in what sense? If no why?
8. According to you, did the privatization of Electrogaz affect electricity provision? If yes, in what sense? If no why?
9. Since Electrogaz has been privatized, how do you describe the speed and facility of services regarding the process of application for connection and connection services?
10. Since Electrogaz has been privatized, how do you describe the speed and facility of services regarding the application for maintenance, repair of equipments and intervention by Electrogaz technicians?
11. What changes have you seen since Electrogaz is managed by privates regarding water interruptions?

12. What changes have you seen since Electrogaz is managed by privates regarding electricity interruptions?
13. Do you perceive any link between the privatization of Electrogaz and the capacity of service provision?
14. Are there any changes in price rates? If yes, how do you describe them?
15. Are there any changes in pricing methods? If yes, how do you describe them?
16. Would you tell me how much you are required to pay for water and for electricity every month? Is that what you used to pay before?
17. Do you think these rates are just and convenient? Why do you think so?
18. Do you find these rates affordable for you? Do you think they are affordable for every consumer? Why is that the case?
19. How do changes in Electrogaz structure affect your life? Do they have an impact on your health? Do they have an impact on the education of your children? Do they have an impact on your overall consumption? Etc.
20. Do you perceive any link between the privatization of Electrogaz and labor issues (job creation, job losses, working conditions, etc.)?
21. How good or bad is the change in the Electrogaz management?
22. What would you like to say else on the privatization of Electrogaz?

Questions With Government Officials

1. Would you explain why Electrogaz has been privatized (through the management contract)? Was it a decision conceived and implemented by the government by its own will or there has been a call or a push from outside?
2. Was the privatization a part of structural adjustment program or a condition to receive loans?
3. Does Electrogaz have any social obligations to the poor and the marginalised people in Kigali city?
4. Why should private companies be involved in supplying public utilities?
5. Do you believe that for better services Electrogaz needed to be privatized?
6. What can private corporations do better than the public sector? Why?
7. How does Electrogaz improve service delivery into poor neighborhoods?
8. In a detailed manner, would you describe the role (responsibilities) of the Lahmeyer International in Electrogaz?

9. What are citizens' (say residents of Kigali) benefits after Electrogaz has been privatized?
10. Are there any losses for the consumers? Would you explain?
11. Do you consider water as a commodity or right?
12. Do you consider electricity as a commodity or right?
13. Is there any thing that is done for those who cannot afford paying bills?
14. Why should investors such Lahmeyer International get interested Electrogaz?
15. How do you ensure that private interests (profits) do not compromise social interests?
16. How do you ensure water and electricity rates are affordable to consumers?
17. How is Electrogaz concerned about keeping water prices down for consumers rather than ensuring returns for investors?
18. Were there any requirements to the contractor (Lahmeyer International) from the government? What were those requirements, if any?
19. To what extent did the contractor meet your requirements?
20. To what extent did the contractor provide quality services considering the government's expectations?
21. To what extent did the contractor provide quality services considering the expectations of the residents of Kigali city?
22. To what extent did the contractor respond in a timely manner and with satisfactory results to service interruptions?
23. Would you describe any problems associated with the contractor's execution of the work or administration of the contract?
24. Were workers consulted before concluding Electrogaz management contract?
25. To what extent did the management contract affect labor? Did the enterprise recruit more workers after privatization? Have all workers been retained by the new managers? Are there any people who were brought to retirement or job loss following the contract management?
26. How do you ensure that the private manager respects and improves working conditions of Electrogaz workers?
27. What happened to salaries and benefits of workers after privatization? Was the change dependent on individual characteristics such as gender, age or education, etc.?

28. What would you propose for a better future of water and electricity provision in the city of Kigali?

29. Would you recommend the contractor be hired for operation, maintenance, repair, and management of a utility system elsewhere? Would you contract for service from the contractor again?

Questions For Electrogaz Employees

Identification

Age

Sex

Education level

Time spent working with Electrogaz

Grade (position in Electrogaz)

- 1 How would you describe Electrogaz when it was full managed by the government?
What do you consider was going wrong and what do you consider was going right?
- 2 How were workers treated?
- 3 How do you describe the working conditions of that time?
- 4 Were workers organized in a union?
- 5 Was there a public information campaign regarding changes in Electrogaz management and labor adjustment?
- 6 How did workers react on this process?
- 7 How would you describe relations between workers and the new management?
- 8 What have changed regarding working conditions?
- 9 Did the change in management affect wages? In which sense?
- 10 Are workers satisfied by their salaries? Why?
- 11 Did the change in management affect the social security of workers?
- 12 What link can you make between the management restructuring and job opportunities or job losses?
 - Are there any workers who were hired following the management contract?
 - Are there any people who lost their job following the management contract?

- Are workers threatened of losing their job? Would you explain why this assumption?
- 13 Do you think the new operator respects workers rights? To what extent?
- 14 What did the new manager do in order to bring workers give better services to consumers?
- 15 Do you think consumers get better services than before the contract management was effected?
- 16 How does the manager stand with regard to corruption that is said on some workers?
- 17 According to you what advantages are linked to the Electrogaz management contract?
- 18 According to you what disadvantages are linked to the Electrogaz management contract?
- 19 Now do you think it was worthy privatizing Electrogaz? What would be your recommendations for the government, the management, the workers and the consumers?

Question For Electrogaz Management

1. Would you describe the separation line between your responsibilities and the responsibilities of the government in the Electrogaz? (What are specific responsibilities of Lahmeyer International)?
2. Would you tell me what got you interested in Electrogaz?
3. Were there any requirements in the contract management of Electrogaz? What were they?
4. Would you describe Electrogaz as you found it when you started operating it?
5. What have changed since you operate this company?
6. To what extent did you reduce Electrogaz losses since you operate it?
7. To what extent does Electrogaz improve service delivery since you started to operate it?
8. What are consumers' benefits after since you operate Electrogaz?
9. Are there any losses for the consumers? Would you explain?
10. What can a private company do better than the public sector in supplying public utilities? Why?
11. Do you consider water as a commodity or right?
12. Do you consider electricity as a commodity or right?
13. How do you ensure that water and electricity rates are affordable to consumers?

14. How do you describe the link between the cost of production and provision of your services and the rates you charge to consumers?
15. How do you conciliate your capital interests and consumers' interests?
16. Does Electrogaz have any social obligations to the poor and the marginalised people in Kigali city?
17. Is there any thing that is done for those who cannot afford paying bills?
18. Is Electrogaz concerned with keeping down prices for consumers? How is that done?
19. To what extent did the management contract affect labor?
20. Is there any relationship between the management contract and job creation.
21. Have you retained all workers or you had to recruit (some) new ones? Have you proceeded to job restructuring? Has it affected Electrogaz workers? In which sense?
22. Were the social security and pension records handled appropriately?
23. To what extent have you improved working conditions of Electrogaz workers?
24. What are costs of this improvement?
25. What do you say with regard to corruption that is said in the Electrogaz water and electricity connection services?
26. What do you say on inequitable distribution of water and electricity that Electrogaz is accused of by consumers in the city of Kigali?
27. Would you describe any problems associated with the execution of the work or the administration of the contract?
28. Would you like to renew your contract after it will have expired?
29. What would you propose for a better future of water and electricity provision in the city of Kigali?

Appendix 2. Participants In Interviews

Government officials

1. Joseph Akilimali, Projects Coordinator, Secretariat of Privatisation, 28/06/2005, 10am-11am, 2pm-3pm, 29/06/2005, 8.30am-11am.
2. Bwanacyeye, Electricity and water section, RURA, 29/06/2005, 9am-11am
3. Alloys Makuza Kanamugire, Director, Department of Energy in the Ministry of Infrastructures, 16/07/2005, 9am-11am

Electrogaz

1. Director of Administration and Finance, 15/07/2005, 9am-10.30am
2. Pacifique Rugina, Marketing Director, 04/07/2005, 3.5pm-4.30pm, 06/07/2005, 4pm-6pm,
3. Anonymous, Data processing agent, Headquarters, 30/06/2005, 8am-10am
4. Anonymous, Customer services Agent, Gikondo Antenna, 30/06/2005, 10am-11am

Households Participants

Kacyiru district

1. Anonymous family, Kibagabaga, 09/07/2005, 6pm-8pm
2. Anonymous family, Kimironko, 13/07/2005, 6pm-7.30pm
3. Anonymous family, Remera, 11/07/2005, 5pm-6pm
4. Anonymous family, Nyarutarama, 04/07/2005, 5pm-6pm

Kanombe district

1. Anonymous, Kabeza, 08/07/2005, 9am-11am
2. Anonymous family, Kanombe, 08/07/2005, 3pm-5pm
3. Anonymous, Giporoso, Kanombe, 08/07/2005, 12.30-2pm

Butamwa district

1. Anonymous, Butamwa, 11/07/2005, 9am-10am
2. Anonymous, Butamwa, 11/07/2005, 11am-12 o'clock
3. Anonymous family, Mont Kigali, 11/07/2005, 2pm-3.20pm

Gisozi district

1. Anonymous family, Gatsata, 07/07/2005, 12-1.30pm
2. Anonymous, Gatsata, 07/07/2005, 2pm-4pm
3. Anonymous, Gisozi, 30/06/2005, 2pm-4pm

Nyarugenge

1. Anonymous family, Muhima, 01/07/2005, 4.40pm-6pm
2. Anonymous, Rugunga, 01/07/2005, 3pm-4.30pm
3. Anonymous, Gitega, 07/07/2005, 9am-11am

Nyamirambo

1. Anonymous family, Nyakabanda, 01/07/2005, 1pm-2.45pm
2. Anonymous, Kivugiza, 11/07/2005, 4pm-5.30pm
3. Anonymous family, Kimisagara, 07/07/2005, 11am-12.30

Kicukiro district

1. Anonymous family, Sonatube, 05/07/2005, 2pm-3pm
2. Anonymous, Niboyi, 05/07/2005, 10am-11.30am
3. Anonymous family, Kicukiro Centre, 05/07/2005, 5.30pm-7pm
4. Anonymous, Kicukiro, 05/07/2005, 3.15-5pm

Gikondo district

1. Anonymous, Mburabuturo, 14/07/2005, 10am-11.30am
2. Anonymous, Kanserege I, 14/07/2005, 6pm-7.30pm
3. Anonymous, Magerwa, 14/07/2005, 4.30pm-5.40pm

Appendix 3. Kigali population per district (in 2003)

District	Total	Male	Female	Sex ratio	Density
Total	603 049	325 778	277 271	117,5	1924
Nyarugenge	98 709	57 704	41 005	140,7	11 434
Nyamirambo	98 580	50 453	48 127	104,8	6336
Butamwa	30 388	14 750	15 638	94,3	357
Gisozi	66 137	33 547	32 590	102,9	1 218
Kacyiru	121 444	69 278	52 166	132,8	4 166
Kanombe	55 609	29 809	25 800	115,5	1 247
Kicukiro	60 895	31 157	29 738	104,8	1 139
Gikondo	71 287	39 080	32 207	121,3	3 157

Source: MINECOFIN (2005), *Monographie de la Ville de Kigali*, MINECOFIN, Kigali, p.5

Appendix 4. Number and average size of Households in Kigali (in 2003)

District	Number of households	Number of Population	Average size of households
Total	124 964	566 450	4,5
Nyarugenge	189 17	84 836	4,5
Nyamirambo	20 507	98 056	4,8
Butamwa	7 207	30 250	4,2
Gisozi	14 887	65 485	4,4
Kacyoru	25 073	110 092	4,4
Kanombe	11 308	52 508	4,6
Kicukiro	13 206	60 531	4,6
Gikondo	13 859	64 692	4,7

Source: MINECOFIN (2005), *Monographie de la Ville de Kigali*, MINECOFIN, Kigali, p.58

Appendix 5. Households and sex ratio in Kigali (in 2003)

DISTRICT	Total	Male	Female	Percentage of male heads of households	Percentage of female heads of households
Total	124 964	94 115	30 849	75,3	24,7
Nyarugenge	189 17	14 348	4 569	75,8	24,2
Nyamirambo	20 507	15 827	4 680	77,2	22,8
Butamwa	7 207	4 414	2 793	61,2	38,8
Gisozi	14 887	10 978	3 909	73,7	26,3
Kacyoru	25 073	19 860	5 213	79,2	20,8
Kanombe	11 308	8 413	2 895	74,4	25,6
Kicukiro	13 206	9 845	3 361	74,5	25,5
Gikondo	13 859	10 430	3 429	75,3	24,7

Source: MINECOFIN (2005), *Monographie de la Ville de Kigali*, MINECOFIN, Kigali, p.59

Appendix 6. Water sources for Households in Kigali in 2003

Water sources	Total	Nyarugenge	Nyamirambo	Butamwa	Gisozi	Kacyiru	Kanombe	Kicukiro	Gikondo
Total	100	100	100	100	100	100	100	100	100
Water tap in the house	4,0	6,0	2,3	0,0	0,5	8,0	2,9	4,3	3,0
Water tap in the concession	16,0	26,7	23,2	0,2	5,8	14,9	16,3	13,7	13,6
Public stand tap/Stand tap outside the concession	45,3	62,1	62,6	12,6	25,7	39,4	59,3	35,2	43,6
Safe well (treated and clean water source)	16,7	2,9	7,3	41,9	42,7	18,4	3,2	15,5	17,6
Unclean open well (unsafe source)	11,7	0,8	2,6	19,5	16,3	13,8	7,0	23,5	19,3
Rainwater	0,0	0,0	0,0	0,0	0,1	0,0	0,0	0,1	0,0
River	2,8	0,5	1,6	14,5	5,6	2,7	0,9	2,0	1,3
Lac/Pond	2,9	0,4	0,1	11,3	2,4	1,8	9,1	5,3	1,1
Others	0,6	0,6	0,2	0,0	0,9	1,0	1,3	0,4	0,4
Access to drinking water	82,0	97,7	95,4	54,7	74,7	80,7	81,7	68,7	77,8

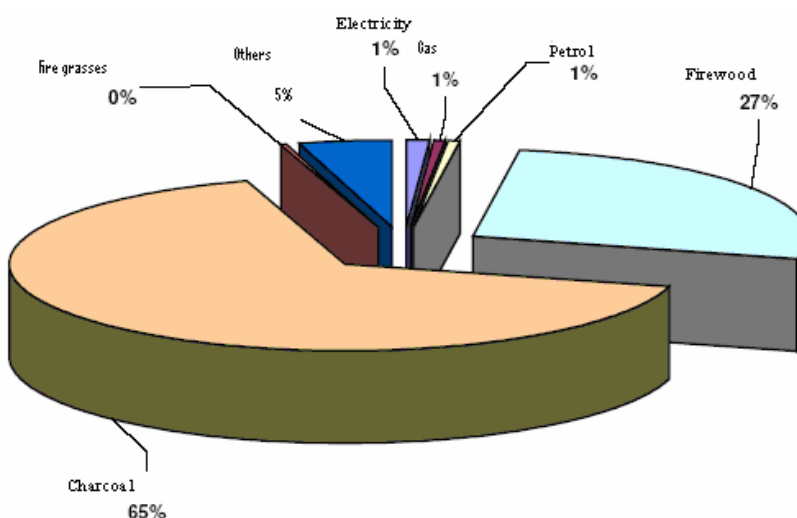
Source: MINECOFIN (2005), *Monographie de la Ville de Kigali*, MINECOFIN, Kigali, p.66

Appendix 7. Energy sources for Kigali households in 2003

Energy sources for lighting	Total	Nyarugenge	Nyamirambo	Butamwa	Gisozi	Kacyiru	Kanombe	Kicukiro	Gikondo
Total	100	100	100	100	100	100	100	100	100
Electricity	37,2	59,1	45,7	4,9	18,7	38,5	36,0	29,4	38,3
Oil lamp	30,3	25,0	31,7	14,2	33,3	33,7	30,3	29,9	34,6
Chinese lantern	26,4	8,6	17,1	74,8	42,0	21,4	27,1	34,4	23,3
Candle	5,3	7,0	5,3	3,5	4,9	5,7	5,6	4,9	3,3
Firewood	0,4	0,1	0,1	1,6	0,5	0,3	0,5	0,8	0,2
Others	0,4	0,2	0,1	0,9	0,7	0,5	0,5	0,6	0,3

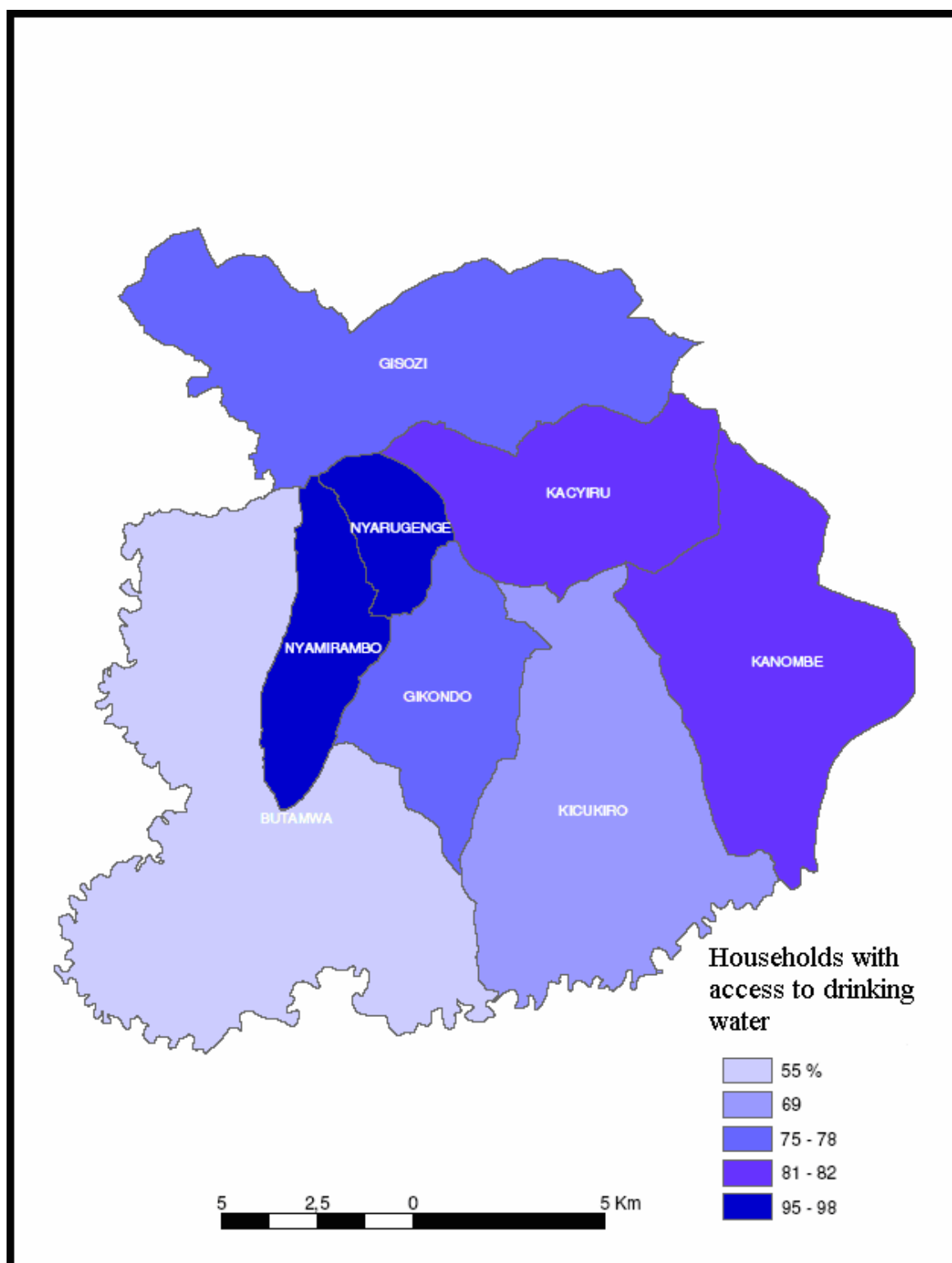
Source: MINECOFIN (2005), *Monographie de la Ville de Kigali*, MINECOFIN, Kigali, p.66

Appendix 8. Energy consumption in Rwanda 2003



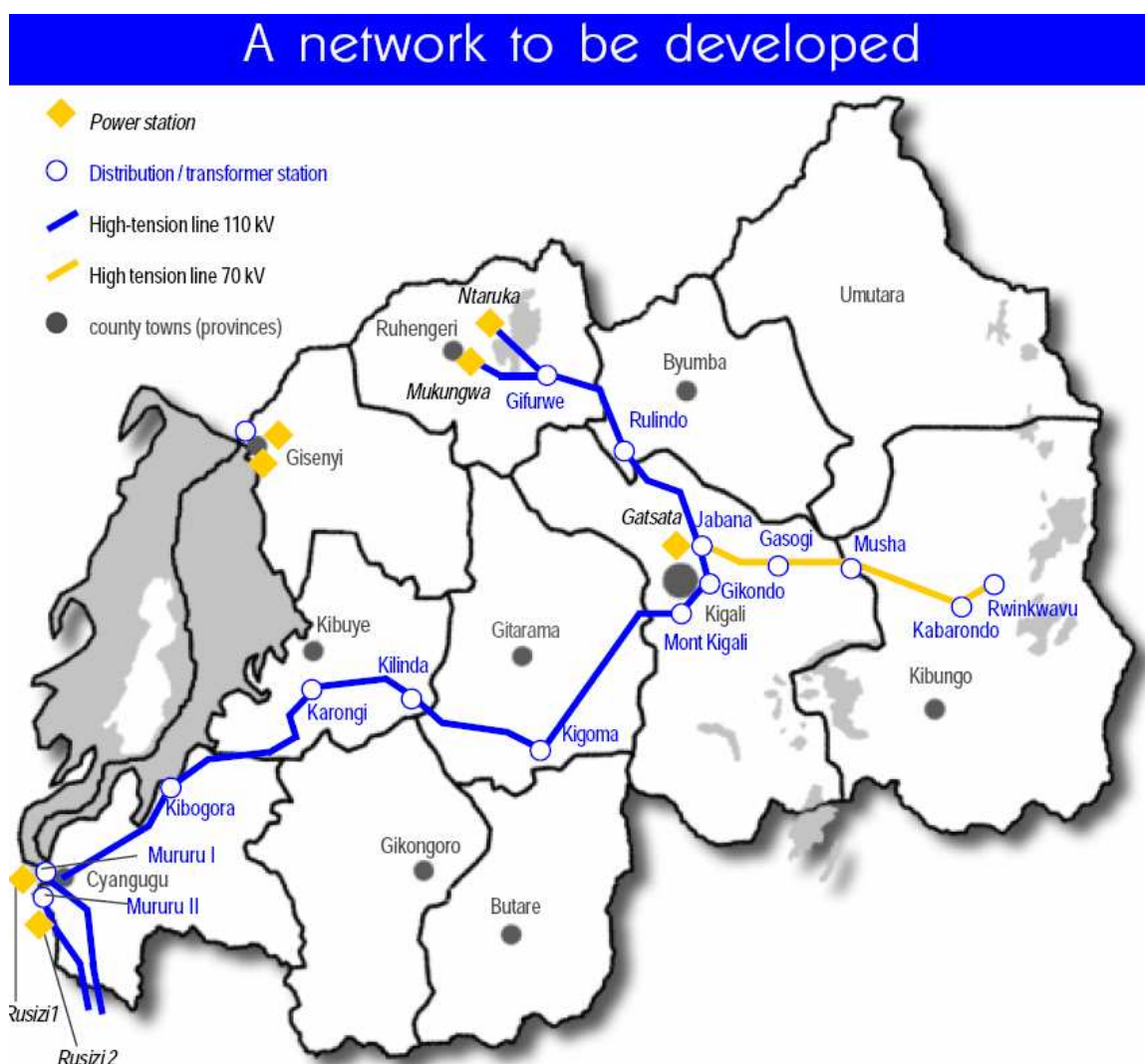
Source: MINECOFIN (2005), *Monographie de la Ville de Kigali*, MINECOFIN, Kigali, p.67

Appendix 9. Households' accessibility to drinking water per district in 2003



Source: MINECOFIN (2005), *Monographie de la Ville de Kigali*, MINECOFIN, Kigali, p.65

Appendix 10. Electricity network to be developed in Rwanda



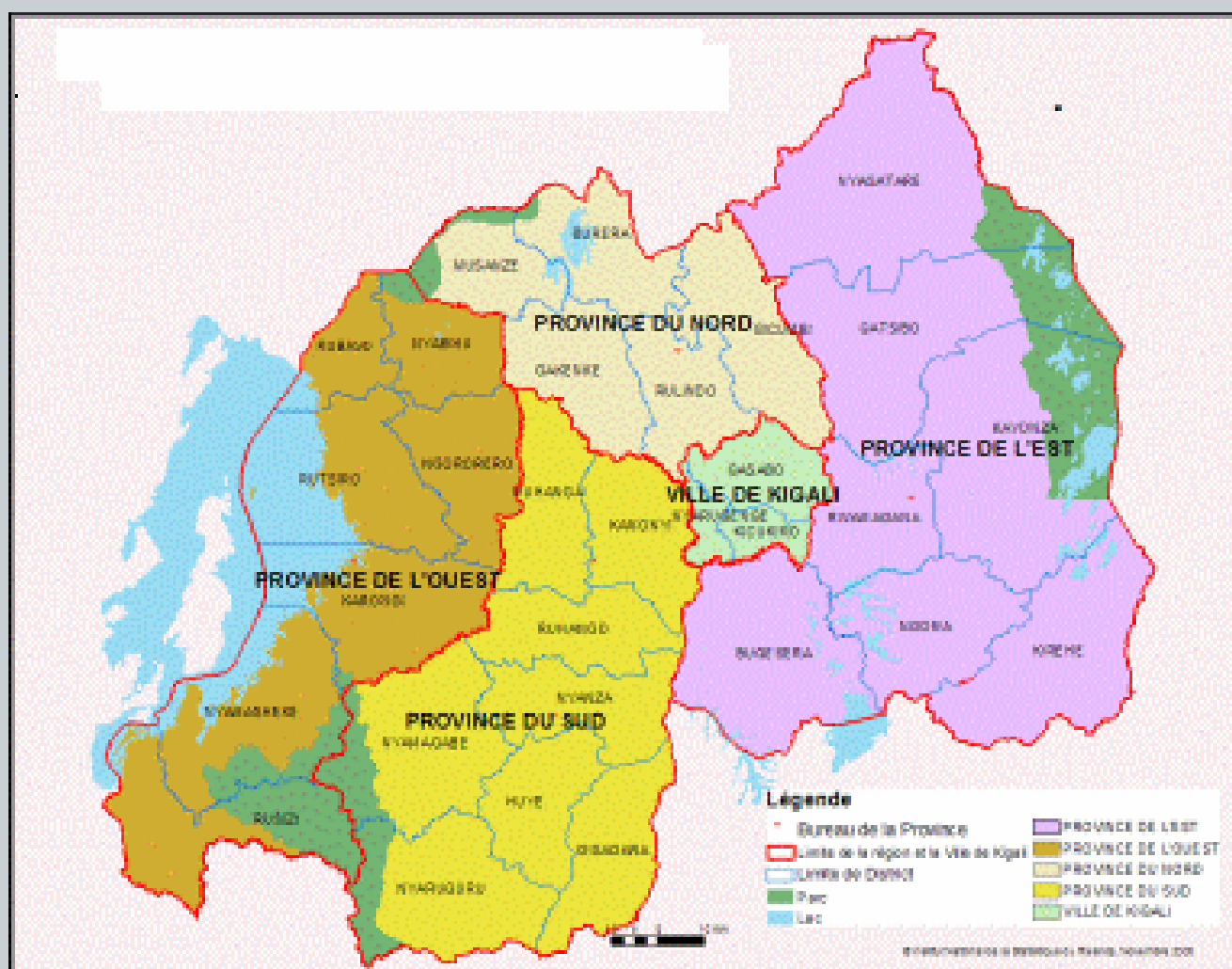
Source: Privatisation Secretariat (2003), 'Special Electrogaz', in *Magazine of the Privatisation Secretariat*, No. 15, p.7

Appendix 11. A sample of electricity load-shedding program

	Monday 6-Jul	Tuesday 7-Jul	Wednesday 8-Jul	Thursday 9-Jul	Friday 10-Jul	Saturday 11-Jul	Sunday 12-Jul
ONATRACOM BIRYOGO USAID & KIST 3 GITEGA 2 KURI 40	17:00-22:00		17:00-22:00		17:00-22:00	22:00-07:00	17:00-22:00
Radio & TVR MINADEF & SORAS USA, BRD, BCR, BNR Rdatel & Rdacell Mille colline & DSK QUART. COMMERCIAL	17:00-22:00		17:00-22:00		17:00-22:00	22:00-07:00	17:00-22:00
LNDC & Gitega 1 Hotel ISIMBI et environ AGAKINJIRO MANUMETAL ELECTROGAZ - SULFO	22:00-07:00	17:00-22:00	22:00-07:00	17:00-22:00	22:00-07:00	17:00-22:00	
CND KIMIHURURA NYARUTARAMA			22:00-07:00		22:00-07:00	22:00-07:00	22:00-07:00
MAGERWA BRALIRWA RWANDEX GATENGA PARC INDUSTRIEL	17:00-22:00	22:00-07:00	17:00-22:00	17:00-22:00	17:00-22:00	22:00-07:00	17:00-22:00
NYAMIRAMBO NYAKABANDA		17:00-22:00	22:00-07:00			17:00-22:00	
KACYIRU GISOZI YA RUGURU	22:00-07:00	22:00-07:00	22:00-07:00		22:00-07:00		22:00-07:00
KABUGA KANOMBE MASAKA MUYUMBU NDERA	17:00-22:00	17:00-22:00	22:00-07:00	17:00-22:00	22:00-07:00	17:00-22:00	
BUTARE NYANZA GIKONGORO	17:00-22:00	13:00-17:00	17:00-22:00	13:00-17:00	17:00-22:00	13:00-17:00	17:00-22:00
RWAMAGANA KARENGE					17:00-22:00	17:00-22:00	17:00-22:00
RUTONGO SUCRERIE	22:00-07:00	22:00-07:00	22:00-07:00		22:00-07:00	22:00-07:00	22:00-07:00
GIKONDO NYARURAMA	22:00-07:00	22:00-07:00	22:00-07:00		22:00-07:00		22:00-07:00
GARE ROUTIERE NAHV ULK & KANOGO RUGENGE & KINAMBA STE FAMILLE PONT & CHAUSSE MUHIMA	22:00-07:00	22:00-07:00			22:00-07:00	22:00-07:00	
KICUKIRO RUBILIZI KABEZA KIMIRONKO REMERA	13:00-17:00		13:00-17:00		13:00-17:00		13:00-17:00
RUHENGIERI VILLE KABAYA MARCHE GISENYI HOPITAL GISENYI KIGUFI	22:00-07:00	22:00-07:00	22:00-07:00	17:00-22:00			
GITARAMA	13:00-17:00	13:00-17:00	13:00-17:00	13:00-17:00	13:00-17:00	13:00-17:00	13:00-17:00
KAYONZA KIBUNGO UMUTARA	17:00-22:00	22:00-07:00	22:00-07:00		17:00-22:00	17:00-22:00	17:00-22:00
KIBUYE VILLE	22:00-07:00	17:00-22:00	07:00-10:00	17:00-22:00	22:00-07:00	17:00-22:00	22:00-07:00
GISOVU MUGONERO	17:00-22:00	22:00-07:00	13:00-17:00	13:00-17:00	13:00-17:00	13:00-17:00	13:00-17:00

Source: <http://www.electrogaz.co.rw/> July 07/2005

Appendix 12. Newly formed provinces of Rwanda



Source: <http://www.minaloc.gov.rw/>

Appendix 13. Proportion of the private sector in Rwandan economy

	2001 USD M	2002 USD M	2003 USD M	change	2004 USD M	change
Current Account						
Exports, f.o.b.	93.6	67.4	63.0	-6.5%	97.9	55.3%
<i>Of which: coffee</i>	19.4	14.6	15.0	2.4%	32.2	114.8%
<i>tea</i>	22.7	22.0	22.5	2.2%	21.6	-4.2%
Imports, f.o.b.	225.0	204.1	217.7	6.7%	257.9	18.5%
Trade balance	-131.5	-136.8	-154.7	13.1%	-160.1	3.4%
as % GDP	-7.6%	-7.8%	-9.2%		-8.8%	
Non Factor Services (net)	-135.5	-140.6	-124.6	-11.4%	-132.8	6.6%
Credit	48.2	46.1	76.5	66.0%	102.7	34.2%
Debit	183.7	186.7	201.1	7.7%	235.4	17.1%
Factor Services Income (net)	-22.50	-19.10	-30.50	59.7%	-33.65	10.3%
Goods and Services Balance	-289.43	-296.53	-309.81	4.5%	-326.47	
Current transfers (net)	192.6	195.3	226.3	15.9%	313.9	38.7%
Private	21.7	24.5	31.3	27.8%	35.1	11.8%
Public	170.9	170.8	195.0	14.2%	278.9	43.0%
Current account balance (inc. official transfers)	-96.8	-101.2	-83.5	-17.5%	-12.5	-85.0%
as % GDP	-5.6%	-5.7%	-5.0%		-0.7%	
Current account balance (ex. official transfers)	-267.7	-272.0	-278.5	2.4%	-291.4	4.6%
as % GDP	-15.5%	-15.5%	-16.5%		-16.0%	
Capital Account and Financial Operation	146.7	115.7	76.4	-34.0%	145.2	90.1%
Capital Account	68.7	41.7	41.1	-1.4%	60.6	47.4%
Financial Operations	78.0	74.0	35.3	-52.3%	84.6	139.7%
<i>Of which: Foreign Direct Investment</i>	3.8	2.6	4.7	80.8%	7.7	63.8%
Errors and Omissions	-36.7	-1.7	-28.7	1588.2%	-24.7	-13.9%
Global Balance	13.2	12.8	-35.8	-379.7%	108.0	-401.8%
Financing	-13.2	-12.8	35.8	-379.7%	-108.0	-401.8%
Memorandum Items						
GDP RWf Billion	766.3	838.5	905.3	8.0%	1,047.7	
GDP USD m	1,730.6	1,760.4	1,683.0	-4.4%	1,823.3	

Source: MINECOFIN (2005), *Annual Economic Report 2004*, MINECOFIN, Kigali, p.27