

**M I N I N F R A
EASTERN PROVINCE
REPUBLIC OF RWANDA**

**THE STUDY ON
IMPROVEMENT OF RURAL WATER SUPPLY
IN THE EASTERN PROVINCE
IN
THE REPUBLIC OF RWANDA**

**FINAL REPORT
PHOTOGRAPHS**

November 2010

JAPAN INTERNATIONAL COOPERATION AGENCY

**JAPAN TECHNO CO., LTD.
NIPPON KOEI CO., LTD.**

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<p>MININFRA</p>	<p>MINIRENA</p>
	
<p>Eastern Province (Temporary Office)</p>	<p>Eastern Province/Rwamagana District Office (under construction)</p>
	
<p>PNEAR</p>	<p>PDRCIU</p>
	
<p>REMA</p>	<p>RWASCO</p>



Nyagatare District



Gatsibo District



Kayonza District



Rwamagana District (Temporary Office)



Ngoma District



Kirehe District



Bugesera District



Secteur Panel (Gashahanda Secteur, Ngoma District)



Secteur Office (Ngarama Secteur, Gatsibo District)



Secteur Office (Mahama Secteur, Kirehe District)



Secteur Office (Munyaga Secteur, Rwamagana District)



Secteur Office (Mukarange Secteur, Kayonza District)











Cell Office (Rwikiniro Cell, Rwimbogo Secteur, Gatsibo District)



Cell Office (Kayumba Cell, Nyamata Secteur, Bugesera District)

Photographs P2. Scenery and Water Resources of Eastern Province

	
<p>A Land of Thousand Hills</p>	<p>Umudugudu Resettlement</p>
	
<p>Spring</p>	<p>Water Fall used for Power Generation</p>
	
<p>Stream</p>	<p>Akagera River (Turbid)</p>
	
<p>Lake</p>	<p>Valley Dam for Cattle Watering and Irrigation</p>



Children carrying water up steep hill



Family transporting water



Children carrying water from far mountains



Woman fetching water from unprotected spring



Girl fetching water from unprotected spring



Children fetching water from stream



Women and children using river water



Fetching water from valley dam for livestock

Photographs P4. Existing Water Supply Facilities (1/4)



Protected Spring



Unprotected Spring



Handpump



Abandoned Broke n Handpump



Spring Intake Facility



Muvumba River Intake Facility



Karege Treatment Plant with Lake Mugesera water source in back



Intake Point of Lake Cyohoha Sud to supply water to Bugesera District

Photographs P4. Existing Water Supply Facilities (2/4)



Pump House



Booster Station



Transmission Pump



Submersible Motor Pump (Borehole)



Diesel Engine



Generator



Prepaid device for commercial power



Control Panel



Treatment Plan for Bugesera District



Transmission Pump for Bugesera District



Distribution pipes



Valve



Locally Constructed Water Storage Tank



Water Tank of Japanese Grant Aid Project



Elevated Water Storage Tank



Elevated Tank of RWASCO (Former ELECTROGAZ)



Public Tap Stand of Piped Water Scheme



Public Tap Stand of Japanese Grant Aid Project



Public Tap Stand of Gravity Water Scheme



Public Tap Stand with 1 tap



Public Tap Stand with Talbot Type Tap



Fenced Public Tap Stand



House Connection



Kiosk Water Stand of RWASCO



Repairing Handpump by WUA Technician



Handpump repair through community participation



Generator Inspection by Pump Technician



Control Panel Inspection by Pump Operator



Repairing Transmission Pump



Recording in Operation Ledger by Operator



District Counterparts (Ngoma District)



District Counterparts (Kayonza District)



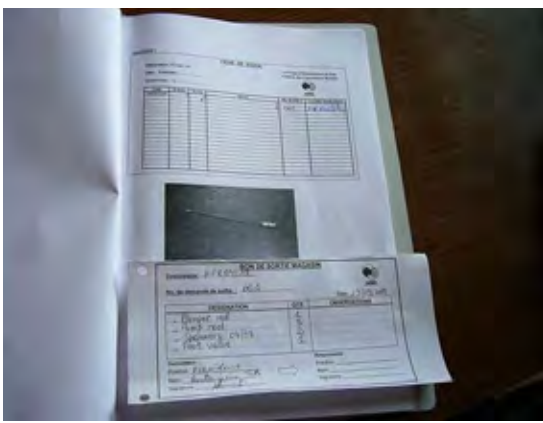
Cooperative (Private Operator) Office



Water Fee Collection at Public Tap Stand

No	Date	Meters		Meters		Meters		Meters		Meters		Meters	
		1	2	3	4	5	6	7	8	9	10	11	12
15	15/06/08	534	41,000	3409	6,000	40	7,000	42,000	5,000	2,000	4,000	5,000	4,000
16	16/06/08	535	41,000	3410	6,000	41	7,000	42,000	5,000	2,000	4,000	5,000	4,000
17	17/06/08	536	41,000	3411	6,000	42	7,000	42,000	5,000	2,000	4,000	5,000	4,000
18	18/06/08	537	41,000	3412	6,000	43	7,000	42,000	5,000	2,000	4,000	5,000	4,000
19	19/06/08	538	41,000	3413	6,000	44	7,000	42,000	5,000	2,000	4,000	5,000	4,000
20	20/06/08	539	41,000	3414	6,000	45	7,000	42,000	5,000	2,000	4,000	5,000	4,000
21	21/06/08	540	41,000	3415	6,000	46	7,000	42,000	5,000	2,000	4,000	5,000	4,000
22	22/06/08	541	41,000	3416	6,000	47	7,000	42,000	5,000	2,000	4,000	5,000	4,000
23	23/06/08	542	41,000	3417	6,000	48	7,000	42,000	5,000	2,000	4,000	5,000	4,000
24	24/06/08	543	41,000	3418	6,000	49	7,000	42,000	5,000	2,000	4,000	5,000	4,000
25	25/06/08	544	41,000	3419	6,000	50	7,000	42,000	5,000	2,000	4,000	5,000	4,000
26	26/06/08	545	41,000	3420	6,000	51	7,000	42,000	5,000	2,000	4,000	5,000	4,000
27	27/06/08	546	41,000	3421	6,000	52	7,000	42,000	5,000	2,000	4,000	5,000	4,000
28	28/06/08	547	41,000	3422	6,000	53	7,000	42,000	5,000	2,000	4,000	5,000	4,000
29	29/06/08	548	41,000	3423	6,000	54	7,000	42,000	5,000	2,000	4,000	5,000	4,000
30	30/06/08	549	41,000	3424	6,000	55	7,000	42,000	5,000	2,000	4,000	5,000	4,000
31	31/06/08	550	41,000	3425	6,000	56	7,000	42,000	5,000	2,000	4,000	5,000	4,000
32	01/07/08	551	41,000	3426	6,000	57	7,000	42,000	5,000	2,000	4,000	5,000	4,000
33	02/07/08	552	41,000	3427	6,000	58	7,000	42,000	5,000	2,000	4,000	5,000	4,000
34	03/07/08	553	41,000	3428	6,000	59	7,000	42,000	5,000	2,000	4,000	5,000	4,000
35	04/07/08	554	41,000	3429	6,000	60	7,000	42,000	5,000	2,000	4,000	5,000	4,000
36	05/07/08	555	41,000	3430	6,000	61	7,000	42,000	5,000	2,000	4,000	5,000	4,000
37	06/07/08	556	41,000	3431	6,000	62	7,000	42,000	5,000	2,000	4,000	5,000	4,000
38	07/07/08	557	41,000	3432	6,000	63	7,000	42,000	5,000	2,000	4,000	5,000	4,000
39	08/07/08	558	41,000	3433	6,000	64	7,000	42,000	5,000	2,000	4,000	5,000	4,000
40	09/07/08	559	41,000	3434	6,000	65	7,000	42,000	5,000	2,000	4,000	5,000	4,000
41	10/07/08	560	41,000	3435	6,000	66	7,000	42,000	5,000	2,000	4,000	5,000	4,000
42	11/07/08	561	41,000	3436	6,000	67	7,000	42,000	5,000	2,000	4,000	5,000	4,000
43	12/07/08	562	41,000	3437	6,000	68	7,000	42,000	5,000	2,000	4,000	5,000	4,000
44	13/07/08	563	41,000	3438	6,000	69	7,000	42,000	5,000	2,000	4,000	5,000	4,000
45	14/07/08	564	41,000	3439	6,000	70	7,000	42,000	5,000	2,000	4,000	5,000	4,000
46	15/07/08	565	41,000	3440	6,000	71	7,000	42,000	5,000	2,000	4,000	5,000	4,000
47	16/07/08	566	41,000	3441	6,000	72	7,000	42,000	5,000	2,000	4,000	5,000	4,000
48	17/07/08	567	41,000	3442	6,000	73	7,000	42,000	5,000	2,000	4,000	5,000	4,000
49	18/07/08	568	41,000	3443	6,000	74	7,000	42,000	5,000	2,000	4,000	5,000	4,000
50	19/07/08	569	41,000	3444	6,000	75	7,000	42,000	5,000	2,000	4,000	5,000	4,000
51	20/07/08	570	41,000	3445	6,000	76	7,000	42,000	5,000	2,000	4,000	5,000	4,000
52	21/07/08	571	41,000	3446	6,000	77	7,000	42,000	5,000	2,000	4,000	5,000	4,000
53	22/07/08	572	41,000	3447	6,000	78	7,000	42,000	5,000	2,000	4,000	5,000	4,000
54	23/07/08	573	41,000	3448	6,000	79	7,000	42,000	5,000	2,000	4,000	5,000	4,000
55	24/07/08	574	41,000	3449	6,000	80	7,000	42,000	5,000	2,000	4,000	5,000	4,000
56	25/07/08	575	41,000	3450	6,000	81	7,000	42,000	5,000	2,000	4,000	5,000	4,000
57	26/07/08	576	41,000	3451	6,000	82	7,000	42,000	5,000	2,000	4,000	5,000	4,000
58	27/07/08	577	41,000	3452	6,000	83	7,000	42,000	5,000	2,000	4,000	5,000	4,000
59	28/07/08	578	41,000	3453	6,000	84	7,000	42,000	5,000	2,000	4,000	5,000	4,000
60	29/07/08	579	41,000	3454	6,000	85	7,000	42,000	5,000	2,000	4,000	5,000	4,000
61	30/07/08	580	41,000	3455	6,000	86	7,000	42,000	5,000	2,000	4,000	5,000	4,000
62	31/07/08	581	41,000	3456	6,000	87	7,000	42,000	5,000	2,000	4,000	5,000	4,000
63	01/08/08	582	41,000	3457	6,000	88	7,000	42,000	5,000	2,000	4,000	5,000	4,000
64	02/08/08	583	41,000	3458	6,000	89	7,000	42,000	5,000	2,000	4,000	5,000	4,000
65	03/08/08	584	41,000	3459	6,000	90	7,000	42,000	5,000	2,000	4,000	5,000	4,000
66	04/08/08	585	41,000	3460	6,000	91	7,000	42,000	5,000	2,000	4,000	5,000	4,000
67	05/08/08	586	41,000	3461	6,000	92	7,000	42,000	5,000	2,000	4,000	5,000	4,000
68	06/08/08	587	41,000	3462	6,000	93	7,000	42,000	5,000	2,000	4,000	5,000	4,000
69	07/08/08	588	41,000	3463	6,000	94	7,000	42,000	5,000	2,000	4,000	5,000	4,000
70	08/08/08	589	41,000	3464	6,000	95	7,000	42,000	5,000	2,000	4,000	5,000	4,000
71	09/08/08	590	41,000	3465	6,000	96	7,000	42,000	5,000	2,000	4,000	5,000	4,000
72	10/08/08	591	41,000	3466	6,000	97	7,000	42,000	5,000	2,000	4,000	5,000	4,000
73	11/08/08	592	41,000	3467	6,000	98	7,000	42,000	5,000	2,000	4,000	5,000	4,000
74	12/08/08	593	41,000	3468	6,000	99	7,000	42,000	5,000	2,000	4,000	5,000	4,000
75	13/08/08	594	41,000	3469	6,000	100	7,000	42,000	5,000	2,000	4,000	5,000	4,000

Pump Operation Record



















Spare Parts Ledger



Water Tariff Invoice

No	Date	Meters	Meters	Meters	Meters	Meters	Meters	Meters	Meters	Meters	Meters	Meters	Meters
1	15/06/08	534	41,000	3409	6,000	40	7,000	42,000	5,000	2,000	4,000	5,000	4,000
2	16/06/08	535	41,000	3410	6,000	41	7,000	42,000	5,000	2,000	4,000	5,000	4,000
3	17/06/08	536	41,000	3411	6,000	42	7,000	42,000	5,000	2,000	4,000	5,000	4,000
4	18/06/08	537	41,000	3412	6,000	43	7,000	42,000	5,000	2,000	4,000	5,000	4,000
5	19/06/08	538	41,000	3413	6,000	44	7,000	42,000	5,000	2,000	4,000	5,000	4,000
6	20/06/08	539	41,000	3414	6,000	45	7,000	42,000	5,000	2,000	4,000	5,000	4,000
7	21/06/08	540	41,000	3415	6,000	46	7,000	42,000	5,000	2,000	4,000	5,000	4,000
8	22/06/08	541	41,000	3416	6,000	47	7,000	42,000	5,000	2,000	4,000	5,000	4,000
9	23/06/08	542	41,000	3417	6,000	48	7,000	42,000	5,000	2,000	4,000	5,000	4,000
10	24/06/08	543	41,000	3418	6,000	49	7,000	42,000	5,000	2,000	4,000	5,000	4,000
11	25/06/08	544	41,000	3419	6,000	50	7,000	42,000	5,000	2,000	4,000	5,000	4,000
12	26/06/08	545	41,000	3420	6,000	51	7,000	42,000	5,000	2,000	4,000	5,000	4,000
13	27/06/08	546	41,000	3421	6,								

 A simple latrine structure made of sticks and logs, situated in a natural, outdoor setting.	 A traditional latrine with a thatched roof and mud walls, featuring a handwashing device on a wooden stand outside.
<p>Simple Latrine</p>	<p>Traditional Latrine with handwashing device</p>
 The interior of a traditional latrine, showing a deep, circular pit dug into the earth.	 A brick pit latrine for a school, with multiple doors and a person standing outside.
<p>Interior of Traditional Latrine</p>	<p>Pit Latrine for School</p>
 A public ECOSAN toilet structure made of brick and concrete, with a small roof and steps leading to the entrance.	 A VIP latrine for a school, constructed with concrete blocks and featuring a handwashing station.
<p>Public ECOSAN Toilet</p>	<p>VIP Latrine for School</p>
 A row of mobile ECOSAN toilets for a school, made of concrete with arched doors.	 A fixed ECOSAN toilet for a school, made of brick with a wooden door and steps leading to the entrance.
<p>Mobile ECOSAN Toilet for School</p>	<p>Fixed ECOSAN Toilet for School</p>

	
<p>Adding ash after using ECOSAN Toilet</p>	<p>Interior of VIP Latrine</p>
	
<p>Rainwater Collection Tank (Metal) for School</p>	<p>Rainwater Collection Tank (Plastic) for School</p>
	
<p>Handwashing Facility using Rainwater</p>	<p>Canacla Handwashing Device</p>
	
<p>Sanitation Education Activity by HAMS Club</p>	<p>Sanitation Education Activity by HAMS Club</p>



Intake Facility Survey



Water Storage Tank Survey



Handpump Survey



Structure Survey



Geophysical Survey



Household Survey



Inception Report Explanation Conference



Steering Committee Conference