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JAPAN INTERNATIONAL COOPERATION AGENCY

NATIONAL INSTITUTE FOR WATER RESOURCES AND MANAGEMENT REPUBLIC OF CAPE VERDE

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THE STUDY ON GROUNDWATER DEVELOPMENT FOR SANTIAGO ISLAND IN THE REPUBLIC OF CAPE VERDE

FINAL REPORT

Vol. 3 SUPPORTING REPORT

September 1999

KOKUSAI KOGYO CO., LTD., TOKYO JAPAN TECHNO CO., LTD., TOKYO



Contents of Supporting Report

1. Inventory of Rural Water Supply Facilities

2. Questionnaires for Village Survey for

- Villagers (Male / Female)
- School Teachers

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- Sanitation Agents
- Water Vendors
- Group Interview (Male / Female Separate)

3. Results of the Survey for Social Analys in 43 Villages

- Tarrafal : 7 villages
- São Miguel : 6 villages
- Santa Catarina : 8 villages
- Santa Cruz : 8 villages
- São Domingos : 6 villages
- Praia : 8 villages

4. Report on In-depth Survey

(Morabi report)

1. Inventory of Rural Water Supply Facilities

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CONCELHO: SÃO MIGUEL (9/9)	ZONA	No. No. Lugar	20 Тақатта	21 Vila Cantor	22 Portal	21 Varanda	1 Achada Queimado	2 Cantada	3 Cutelo Baixo	4 Cutelo de Funco	5 Cutelo Lopes	6 Lem Pereira	7 Marmulano	8 Mato Grande	9 Quebrada	10 Teimada	11 Poilao	22 Xaxa	1 Cutelo Xaxa	2 Moren Grosso	3 Ponta Curral	4 Xaxa Acima
DNOO	Freguesia	No.	-			• •				oļi	ic 91	¥1	ទី៣៩	98	0ÿS			•				

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-	1378 437 378 437 13 15 105 122 Borchole Well (FB-100) 40m 84 97 63 73 67 77 67 77		148 148 216	186 216 Spring 2,390 2.762 Spring 2,390 2.762 Si 74 86 Si 91 105 L-10 71 43 L-10 77 43 L-10 77 43 L-10 77 43 L-10 79 11 12 80 69 L-10 60 69 L-10 73 31 L-10 104 120 Borehole Welt(FT-127) 104 120 Borehole Welt(FT-127) 104 120 Borehole Welt(FT-127) 104 120 Borehole Welt(FT-127) 11 12 L-10 122 176 L-10 133 154 L-12 133 154 L-13 133 154 L-13
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Tariff Remarks Esc/2010	1	61		بې س کې

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	Type of Public	Faucets			Chufariz				Chatariz		Chafariz		2Chafariz														•							
	Reservoir	(m ³)			<u> </u>				ا ۱۳۵۳				40m ³	l				80m ²												1100	_	•		•
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SUPPIY FACIITY and WALET USE CONTIGUT BY TIMES CONCELHO: SANTA CATARINA (2/19)	ZONA	No. No. Lugar	5 Achada Lém 20 Mato Fundura	21 Passo de Vaca		24 Quintal Varela		26 Sobrado			30 Volta de Monte	×		7 Achada Tossa	I Achada Pelado	2 Achada Tossa	3 Assomatinho	4 Barreira	5 Boca Mato	6 Carvociro	7 Chao Oliveira	8 Curclo		10 Malveira 11 Monte	8 Aguas Podres	1 Achada Fora	2 Chao de Monte	3 Ribeirao Areia	9 Arribada			10 Banana Semedo	1 Banana Semedo ? Cova Furtado	3 Fonte Semedo
iddno ONOO	Freguesia	No.													- 	C	nine.	ж)	6) 05	\$. 	•						· • • -	·	

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Tyme of	Public Public	Faucets									Chafariz													•								•··••• • •	·				•· :		· · · ·	
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	Type of Water	Source		Spring	Spring	Spring	Spring	Spring	Spring	Spring	215 Borchole Well(FBE-74)								Tank Lorry	· · · · ·		• • •	 	•	-					• - · · · · · · · · · · · · · · · · · ·	Dug Well	5					Spring			_
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CATARIN	ZONA	No. Lugar	Boa Entrada	L Canico	2 Carreira	3 Covao da Veiga	4 Cutelo	5 Galeao	6 Julangue	7 Lem Grande	8 Poilao	Boa Entradinha	1 Alentejano	2 Boa Entradinha	3 Carreira	4 Chao Formosa	5 Curelo	6 Cutelo Djabe	7 Djabe	8 Fonte Grande	9 Fundao	10 Lapa Coruja	11 Lem Moreira	12 Longueira	13 Palha Carga	14 Purgueira		16 Romao 17 Subida Granda	12	1 Beco	2 Bombardeiro	3 Carreita	4 Carrico	5 Châ de Cana	6 Cha de Carreira	7 Cha de Pinha	8 Cha de Riba			11 Momonda
CONCELL	Fregucsia	No. No. No.	1 1 1 2	·								12 E	•							Ei	ι'nε	16)	ein:	25				· · · · · · ·	5									 	i	_

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y Village	ater	Somoc	Spring)		Spring		:	Tank Lorry					Tank Lorry		• · · ·	Spring	Tank Lorry		Spring	Smide		Spring		Spring		4.40 Borchole Well(FBE-07)			Tank Lorry	:	Sarine	G	Tank Lorry
idition b	i.	1998	56	246	9	69	2	552	3	<u>S</u> 1	27	42 <u>3</u> 8	1,396	523	×	208	32	238	4	2 8		270	39	361	361	591 200	01 001	52	339	\$	118	88 29	345	342
Jse Con A (4/19)	Population		49	212	-9 -	8	21	476	8	168	62	39	1,204	161	74	621	28	205	4	E	<u>, 9</u>	533	<u>,</u>	3115	311:	ŝ	5/0 5/0	 	293,	• • • •	102	<u>8</u> ×	362	295
Supply Facility and Water Use Condition by Village CONCELHO: SANTA CATARINA (4/19)	ZONA	No. No. Lugar	13 Bombardeiro	13 Ribeirao Carrico	14 Telhal	15 Travessa	16 Volta de Ouro	14 Ch1 de Lagoa	Cha de Cruz	2 Cha Cabra	3 Lem de Parede	4 Lem Monteiro 5 1 cm Vieiro	15 Chả de Tanque	I Achada Grande	2 Achada Grecono	3 Boa Vista	4 Cha de Pombal	5 Cha de Tanque	6 Desdes	7 Gamboa	8 Mina de Ouro	10 Ribeirao Engracia		16 Charco	1 Charco	17 Cruz Grande	1 Cruz Grande	2 Portal de Fortal 3 Ouerro Ceminho	18 Entre Picos		2 Covao Portal	3 Entre Picos	19 i Frire Picos de Reda	1 Entre Picos de Reda
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Reservoir (m ³)														4	700m ³								!							:			
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eguesia ZONA Popul o. No. No. Lugar census	Figueira das Naus I Achada da Agua	Achada Hilano	Achada Nho Marco Achadinha	Bolc	Cacheu	Cha de Cuba	Cha de Curral	Cha de Figuelra	Cha de Lagoa	Chao de Pinto	Covao Baixo	Cruz	Curral de Cabra	Feital	Figueira das Naus	Ganchumba	Carganta	Marmulano	Monte Mosca	Pedra Branco Donie Doco	Rufen	una.	Achada Braz	Cubeca Curreira	Chororo	Cruz de Cima	Fontcana	Fontianinho	Futalcza	uncu 1 cm Gomes	Massape	Monte Tiro	Vila Cantor
No. No.	20 Figueir 1 /	Cł ł	ν 4 	~ ~	v v		~ >0	<u>م</u>	2:	2 2	<u> </u>	; 4	5	9	17	18		<u>ຂ</u>		នេះ		21 Fontcana		~~ ~	<u> </u>	4	<u>v</u>	vo (00	2	=	2

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ی بو بو	I ype of Public	Faucets			-	Chatanz																													:		
	Reservoir	(m ³)		•									•													 										·	
	Type of Water	Source				Spring (Gullery)				Carino	Sunds	Spring	Spring	Spring	Spring	Spring	Spring	Spring	:	Dug Well (HP)	Spring	Spring						:			•	Spring	Spring	Cruz Grande	Cruz Grande	Cruz Grande	Cruz Grande
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Supply Facility and water Use Conduction by Vinder CONCELHO: SANTA CATARINA (6/19)	ZONA	Lugar	Fonte Lima 1 Banana	2 Cha de Moreira	3 Culegio	4 Fonte Lima	5 Lcm de Almeida	6 Nona	7 iPodra Vermelha	Fuma	l Boqueirao	2 Cada Vez		S Covao Ribeiro	6 Cutclo Varcla	7 Funco	8 Fuma Abaixo	9 Pico Rebelo	Gamchemba	1 Chao Grande	2 Cruz	3 Gamchemba	Cil Bispo	1 Achada Riba	2 Currapate	5 Lem Teixeira	6 Ponta Lopes	7 Rabolo	8 Serra Pau	9 Vila Nova	Japluma	1 Cidreira	2 Covao de Goiaba	3 Covao Robato	 Cutolo de riorumida Cutolo Momina 	6 Fonte Goncalves	7 Japluma
SUPPIY -	Freguesia	No. No. No.	1 22 1			·				53			=					19	5	Te D	ejut		វ			 					8						

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	Remarks												Project is on-soluti				- . <i>P</i>																•	Delivery : < " Innex week
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	Reservoir (m ³)				•											~-		-					· · ·											60m ³
	Type of Water Source		Spring	Spring		Spring	Spring				Dug Well	Spring		Dug Well	Due Well		Dug Well	Dug Well		•	Spring	Spring					FBE- 87		Spring			•	•	Tank Lorry
		76	275	83 45	117	161	179	\$ <u></u> ``	8 8	488	13	4	•	53	<u>, 1</u>	5	-12	86	•	•	130	911	1,444	8	tar Sort Sort) 	5	1	36	191	5	141	0	181
A (8/19)	Population CENSUS Estimation		237	30	101	139	<u>2</u>	ุ่ม (8 ¥	459	12	39	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	8	13	<u></u>	<u> </u>		- 6-	13	21	8	1,248	<u>.</u>		3°5		} ` ¢	6	165	51	122	2 00 4	156
CONCELHO: SANTA CATARINA (8/19)	ZONA No No Lucar	Gege Chao Mer	9 Convento	10 Cumberia	12 Ilheu	13 Olho d'Agua	14 Poiluo	15 Ponta Lopes	16 Prenca 17 Travessa	34 Mato Sancho		2 Achadinha	3 Batateira	4 Cabeca Carreira	5 Cha de Forno	o Chao de Penedo	7 Chocalho	6 Conterro	10 Meio de Horta	11 Ribeirao Breu			35 Palha Carga	1 Boca Mato	2 Casa Branca	3 Cha Almada	4 Cha Duarte	6 Cho do Babwea	7 Cha de Mau Passo	8 Covada	9 Cutelo Vaz	10 Lem Cabral	11 Lem Moreira 12 Remuda	
CON	Freguesia												•			8U1	- 1636) 61	ues													. <u> </u>		

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	Remarks																								Deviant is no-doing	Livia to or going												
	water Tariff	(Esc/20/)									4	<u>^</u>																			v	• •				_	v r	
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	Reservoir	(m ³)						40m			•	22m				~						•									e	20m					[~~]	11101
	Type of Water	Source				:		247 Borchole Well(FBE-89)!				Tank Lorry				Dug Well	Dug Weli	Dug Well		•	Saltos Acima	Saltos Acima	Saltos Acima	Saltos Acima	Saltos Acima							Tank Lorry	•				Base Mail	BOTERIOIC WEIL
	noi		1,100 201	217	149	152	134	247 Bo	295	295	1,809	67	116	726	865	45	ม	8	12	0	ت ون	45	67	139	159.	646	31	Ξ		54	129	151	: : : : :	45	б	877	561	790
A (10/19	Population	CENSUS Estimation 1998	949	187	82	131	116	213	254	52	1.557	832	00	625.	515	39	52	Ϋ́,	Ξ	¢	9	39	30	120	137	559	8			47	E	130	4	66 T	S.	755	168	:190
SUDDIY FACILITY and Water Use Conducion by Vinage CONCELHO: SANTA CATARINA (10/19)	ZONA	No. No. Lugar	41 Pinha dos Engenhos	2 Cha de Acouge	3 Cha Coelha	4 Chaozinho	5 Joao Goto	6 Pinhu	42 Ribeira Acima	I Ribeira Acima	43 Ribeira da Burca	1 Port 1	2 Роп 2	3 Ribeira da Barca	44 Ribeirão Isabel	1 Achadinha	2 Baixo Carreira	3 Bicu	4 Covao Lopes	5 Da Cruz	6 Figueira de Ferro	7 Massape de B. Carreira	8 Mato Garca	9 Mato Real	10 Ribeirao Isabel	45 Ribeirão Manuel	1 Achada Mato	2 Chao de Monte	3 Chao Tavares	4 Ilheu	5 Monte Vermelho	6 Ponta do sol	7 Ponta Fundao	8 Ponta Lopi	9 Ribeirao Manuel	46 Rinctio	1 Baixo la	2 Riba Cha
	Freguesia		-															EI		Cat	EIU	°S -										. <u></u>						

Supply Facility and Water Use Condition by Village

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ALC: N

Lype of Augustance Supply Tariff Public Taps Source (Km) (hr/day) (Esc/207)	· · · · · · · · · · · · · · · · · · ·	5 2 2 2							1.15					S Delivery: 1 time/week	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	L-1S				· · · · ·														-	
Type of Water Reservoir Source $\langle m^3 \rangle$		4 ô.		œ.	20	41		22	70	0.7		10			Tank Lorry	022		321 02 Sarine	:			•••••	23 Spring		16 Spring		32 Spring	1		47 Spring		•		48 Sphne -	
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cgucsia ZONA Populati	s Acima	1 Bianga	3 Carrical	4 Chao Beim	5 Chao de Nona	6 Chao de Papaia	7 Covao de Agua	8 Cutelo Mendes	9 Da Cruz	10 Lem da Veiga	11 Lcm Gomes	12 Limoeiro	13 Monte Sal	14 Montinho	15 Saltos Acima	16 iSole	[48 Sedeguma		2 Chao de Cava Grande		5 Cutelo de Bol	6 Expinho Branco	7 Galo Canta	8 Manipo	9 Ourinho	10 Ourizinho	11 Palacio	12 Quintal	13 Ribeirinha	49 Serra Malagueta	1 Cha Baixo	2 Cha de Casa	• •	3 Cha de Curral

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	Remarks	Project is on-going		N N N N N N N N N N N N N N N N N N N	Delivery : 2 times/week
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	Water Source				
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Supply Facility and water Use Conduced by Village CONCELHO: SANTA CATARINA (12/19)	ZONA No No Lucar	Malagueta Locotano Rosto Bra Saquinho Saquinho Saquinho Saquinho Chao de II	 2 Chao Coclho 3 Chao de Capela 4 Cutelo 5 Lem da Mora 6 Lem Pereira 7 Lem Tavares 8 Lem Varela 9 Lem Vieira 10 Passinho 		10 Pedra Barro 11 Portaozinho 52 Aboborciro 1 Aboborciro 2 Baila Minhoto 3 Chao de Carvalho 4 Cha Rodrigues 5 Covao Grande 6 Cruz dos Picos 7 Cutelinho 8 Cutelo Barraca 9 Cutelo Tavares 10 Fumaca
	Freguesia		earnese Saran	25 	67 Salvadot do Mundo

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	Taps	e					Ţ	°,										•	- 						
Tvne of	Public Faucets	Chafariz					(Charariz								- Pr			Fontenario	Fontenário					
	Reservoir (m ³)	40m ³						40m					•							د0.2					
	Type of Water Source	38 97. Borcholc Well(FBE-97)						138 Borcholc Weil(FBE-97) 96										-	Achada Igreja	Achada Igreja A-bada Igreja	Venuera Igreja	Dug Well	Dug Well		
ndition 9)	Population CENSUS Estimation 1990 1998		8 8 8 8	49 67	1,149	22				8	C 8	37	ý	8	4 5	Ξ	40		ся : 	64	45	ខ្ល	01	88 13	I
Use Co	Popul CENSUS 1990	С. Ж. (23 33 58 18 51 33 58	43 58	996 218		5 . <u>2</u> .	8119 83	102	<u>x</u>	9 K	3 8	9	36	<u> </u>	2	35	672	58	- 68		8	~ 	7 1	
Supply Facility and Water Use Condition by Village CONCELHO: SANTA CATARINA (13/19)	ZONA No. No. Lugar	boreiro Gambia Goiaba	13 Lem Varela 14 Rocha Preta 15 Seminguinho 16 Soora Boli		53 Achudu Igreja (Picos) 1 Achuda Iureia (Picos)	2 Betania	3 Bao Esperanca 4 Cacheu	5 Casa Grande 6 Chao de Tabema	7 Cruz de Portal	8 Cutclinho	9 Funte Leao	11 Lem da Rua 12 Tem de Monte	13 Murro		15 Penedo Acima		18 Telha	54 Achada Leitão	1 Achada Leitão Acima	2 Achada Leitão Baixo	3 Achada Leitao de Meio	5 Covada	6 Ilheu	7 Leitfo Baixo 8 Dechinhs	-
Suppl	Freguesia No.	ы			·····		<i>.</i>	(opunt	v, ob	Tobev	[*S .S						· · ·						···· ,	

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Type of Water	Source		•	Spring								Borehole Well(FBE-104)							Spring	Spring	Spring	Spring	Spring		Spring	Spring	-			Spring		Spring	Spring	;	Spring	Spring
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csucsia ZONA Populat	Lugar	cento Grande	Bonson	Chao de Mangul	Снио Валхо	Chao Riba	Covao Segredo	Cruz Rebelo	Cutelo Rocha	Cutelo Tandonga	Cutelo Zimbrao	Descanso	Fatcho	Fonte Baixo	Fundao	Gugao	Gundao	Laranjeira	Lem Tavares		Malveira	Monte Fula	Mundo Grande	Nona		Pedra Severina	Pedregal	Pegada	Ponta Traz	Ponta Rubera	Ponto Ferro	Quebrada	Ribeira Grande		•••••	I Lem Rocha
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	Reservoir (m ³)							,																	:					•••		• ••						
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CONCELHO: SANTA CATARINA (18/19)	ZONA No No Lurear	Fortes		7 :Tombado		66 Mato Limão	1 Carreira	2 Covao Almeida	3 Covao Dentro	4 Covao Sanches	5 Curta	6 Cutelo	7 Curral de Porco	8 Fontinha	9 Lem Lopes	10 Mato Limao	11 Rocha Preta	67 Picos Acima	1 Alegrete	2 Banana	3 Bombida	4 Chao Cardoso	5 Chao de Mora	6 Chuo de Limao	7 Chao Grande	8 Chão Pariba	9 Chao Varela	10 Choupana	11 COVED MURCH	13 Cutelo Paía	14 Cutelo	15 Cutelo Dias	16 Cutelo Fernandes	17 Demanda	18 Funco Banana		20 Lugar Grande	21 Matos 22 Milho Branco
CONCI	Freguesia	<u>-</u>																<u> </u>	ounj	W O	or d	ope/	182	: 'S														

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	Reservoir	(m³)								40m	••••										•					 - -	60m			
	Type of Water	Source								56 Borchole Well(FBE-90)																:	Tank Lorry	-		Spring
()	ition	Estimation 1998		22	61	56	162.	471	24	<u>56 B</u>	4	111	4	45	<u>o</u>	Ē	m ļ	22	495	43	56	3	9	53	5	37	86	119	154	151
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CONCELHO: SANTA CATARINA (19/19)	ZONA	No. No. Lugar	67 Picos Acima	23 Pedra Barro	24 Penedinho	25 Rocha Belem	26 Tomba Pilon	68 Pico Freire	I Bandeira	2 Carreira	3 Chao de Zimbrao	4 Cutelo	5 Cutelo Lopi	6 Jabacoche	7 Lcm Varela	8 Manipulo	9 Monte Rama	10 Nona	69 : Purgucira	1 Cobi	2 Covada	3 Cutelo	4 Manipo	5 Monte	6 Papaia	7 Paredona	8 Purgueira	9 Rebclo Acima	70 Rebelo	1 Rebelo Acima
CONCE	Freguesia	No.	~					- • •				: ·		opui	٥W	op	1001	елі	62 .	S .										

Remarks		Project is on-going		Delivery : 3times/week	•								House Concetion		Project is on-some		Delivery : ltime/week		Private W. vendor : 20Esc/20/			 ,													
Water Tariff		<u>a,</u>		<u>п</u> 	<u> </u>				<u> </u>				~			<u> </u>	9		<u>.</u>		•			 					- -		- -				
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Type of	Faucets												2Chafariz				Chafariz			_ • -															
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Type of Water	Source	Tank Lorry		L series	Due Well	Dug Well	• ···-	Dug Well	Dug Well	:	Dug Well		Borchole Well(PT-33)				Tank Lorry		-	Dug Well	Dug Well	Dug Well	Dug wei	Dur Well	Dug Well	Dug Well	Dug Well	Dug Well	Dug Well	Dug Well	Dug Well	Dug Well	······	Spring	Spring
tion	Skimation 1998	98. 198	1,160	30		10	.4	189	169	8	86 E1	2,394	2,279 B	011			457	ŝ.	522	8	45	22	7	3	15	52	8	10	6	ō	16	5	580	62	
13) Population	CENSUS Extimation	298	766	31	<u>.</u>	5 8	5 6	145	<u>4</u>	8	38	1,073	986	<u>∞</u> '			317		477	8	37	×;	n F	20	· · ·	40	29	30	ह	12	85	Ξ	289	42	16
CONCELHO: SANTA CRUZ (1/13) sguesia ZONA	No. No. Lugar	I Achada Laje	2 Achuda Bel Bel	I Achada Bel Bel	2 Achada Bel Bel Acima	3 Aguada 4 Casona	5 Chuo Poilao	6 Geu	7 Manipo	8 Mato Boi	9 Sarrado 10 Varrea Larania	1 ă	1 Achada Fazenda	2 Cha de Cutelo	3 Zimbrom	 Achada Ponta I Achada Cayunda 	2 Achada Ponta	3 Cutelo	5 Boaventura	1 Bao Esperanca	2 Boaventura	3 Casona	4 Cha de Casa	6 Cutelo Salto	7 Formosa	8 Horta Nova	9 Oril	10 Orissinho	11 Pedra Sarrado		13 Toni	14 Traz de Monte	6 Boca Larga	1 Achadinha	Z Achadona 3 Andecal
CONC Freguesia		्रम्बरः ॥ इम्प्रदेश्य २ — -	7		•										k		30ie	3X (1 D3Bil	UB9	\$														

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No. No. 6 Boca								-			Tariff	Remarks
à o	lo. Lugar	CENSUS	CENSUS Extimation	Source	(m ³)	Faucets		Source	(Km)	(hr/day)	(Esc/20!)	
_	Boca Larga			·					QC V			
	4 Bom Bida	15	8 N	Spring			•		05.0			
	5 Cao Bruto		ōï	Spring					00.0			
	6 Casa Grande		-	Spring					8		•	
	7 Cutelo Mendes			Spring	-				080		<u> </u>	
	8 Fontinho	20		Sunds					0212			
	9 Codelha	3	14	Spring					2	•		
	10 Joao Lobo	34	34	Spring					0.00			
	11 Lem Coelho	2	4	Spring	•				200			
	12 Lem da Costa	14	81	Spring	•••				0.60			
	13 Lem de Mato	Ŷ	•	_					•			
	14 Mato Correia	16	•									
	14 Match	-1									-	
	·····	r i	 -									
	16 Pedra Parede											
-	1/ Ponta Klocina								-			
0 6	Cancelo	5.5	<u> </u>	ŧ		Charles in	"			00	~	Deliverv : <2 times/week
	1 Achada Abaixo	200		Tank Lorry	mon	Characte	n	(-	0000	2	•	
:	2 Assomada	6 9			,,			3	0 . .0	<u>-</u>		Dulinear 1 simer humb
	3 Cancelo	385		Tank Lorry	10m,	Chafariz	(°,			2	~	
	4 Covão Sanches	147						3	0.20			Project 18 on-going
Ŭ ×	Châ da Silva	966	. .									
	1 Boqueirao	18	-	Spring					0.60			
	2 Cha de Casa	91	24						1.50	I~16		
•	3 Cha da Silva		21		-				0.50	L-16		
•	4 Châ de Gui	้ส	<u>8</u>			• ·	-		1.50	1-16		
	5 Fonte Machado	48		•					0.80	۲ <u>ة</u>		
	6 Ilben	00	-		• ••		-		1.50	L-16		
	7 Iolo Tourn	8			••••	• •			0.40	L-16		
• •	X Majama	22		Dug Well	•	• =			150			
	9 Maria Pereira	E	;	Dug Well		;			5.00			
	10. Polonínho	76	;	· · · · · · · · · · · · · · · · · · ·					8	2		
		4	:	54 Borchole Well(FT-59)								
	12 Sachana	37			·				0.40	L-16		
		35	;	•					0:30	1-16		
		C11		137 Borchole Well(FT-93)						-		
		2	:						8.			
		Ξ		16 Borchole Well(FT-169)								
9 Ju	Julangue	16	¢			:						No Body
	I Covao Dentro	\$	•		•							
÷	2 Lem Gomes	12	•								1	

					<u>.</u>							A. 1.									- ~			4 7							·									
	Remarks																																							
		· e	No Body													3																			_, .		- 4			_
Water	Tariff	(Esc/20f)																					-		-			_	_	-							·		-	
Sumar	Time	(hr/day)																								-					•									
	Distance (Km)						0.5 5		090	0.30	0.40	5	0.0		0.80	0.85	0.45	02.0	0.0	0.30	0.85	1.20	. 1.28	- • •		0.00	8.6	000	04.	8 5	8 G		89		080 1	800		010	950	
	Water Source																					•,			_		-													-
	Taps																						-								-,									
B. C. C.	I ype of Public	Faucets														Chafariz																								
	Reservoir	(()			-,										•	10m																		•						
CONCELHO: SANTA CRUZ (3/13)	Type of Water	Source						:				•				Tank Lorry	•			:	:						Spring	Dug Well	Dug Well	Dug Well	Dug Well	Dug Well	Dug Well	Dug Well	Dug Well	Dug Well	Dug Well	Dug Well	Dug Well	Dug Well
	ų	1998		 • _ •	•	 4		515	35	0 C	\$`{	0	7	ନ୍ନ	8	61	32	37	۲.	18	13	16	5	,	•	1,141	01	61	8	G.	'n	87	3	240	9	112	113		40	Ř
	Population	CENSUS Externation 1990 1 1998		22	2	- -	4	44	= ; ;	5.5	<u>.</u>	85	37	16	110	17	3	35	~	14	17	22	16	Ś	19	579.	لا	~	5	15	<u>6</u>	52	=	153	ŝ	27	63	~	÷	15
CONCELHO: SANTA CRUZ (3/13)	NA N	Lugar		cha			-		ocha		Cha de Laranjeira		Covao Comprido	la Veiga		Псіа	Costa	inteiro	nedo				ly	nia	emedo				77			E	nches		Matinho Acima	ladeira	da	Ribeira dos Porcos	CI	into
HO: SANT	ZONA	No. No.	Julangue	3 Lem Rocha	5 Mavane	6 Monte	7 Papuia	Libri	1 Baixo Rocha	2 Bonna	3 Chadel	4 Coqueiro	5 Covao C	6 Cutclo da Veiga	7 Lutada	8 Lem Correia	9 Lem da Costa	10 Lem Monteiro	11 Lem Semedo	12 Lima	13 Macurta	14 Mancelo	15 Mancholy	16 Mato Raia	17 Ponta Semedo	Marinho	l Aguada	2 Banana	3 Bandeira	4 Carrical	5 Ilheu	6 Laranjeira	7 Lem Sanches	8 Matinho	9 Matinh	10 Mato Madeira			13 Ribeira Cil	14 São Jacinto
NCEL	sia	, No	<u>а</u>					01					-						I	Diel	140	<u>Îei</u>	ues			[=								<u> </u>					·	-
8	Freguesia	No.										· - ··-		•																										

Source (Km) Source (Km) L-4 0.36 L-4 0.36 0.26 0.
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Remarks		Delivery : I time/week	Project is on-going	Delivery : 3 times/week													Project is under planning	 															
Water Tariff	(Esc/20/)	3 [<u>n</u>					<u></u>										-				·					 					
Supply Time	(hr/day)	8.0		5.0												_											• •						
Distance	(Km)	09:0		00	250	58	40	8	1.30	8 9	08.0	0.50		0.50	0.0 0	0.50		2.00	090				ç	8.6	8.0	8	0.80		1.50	0.15	0.85	8 9	0.20
Water	Source			77	5 1	7-7	671	5	L-2	22	3 3	1	27	•				41	4	2									71				
Taps		7		e			r.																										
Type of Public	Faucets			Chafariz			Chafariz																	- • ·				Chafariz					
Reservoir	(m ³)	10m°		40m ³			22m								<u> </u>													20m ³	••• ·	• •		Private	
Type of Water	Source	Tank Lorry	1,008	Tank Lorry		• • • •	Tank Lorry					Spring	: : •	Spring	Spring	Spring	30000				Borchole Well(FT-63)		;	Dug Well	Dug Well	Dug well	Due Well	Borchole Well(FT-9)		17 Borehole Well(FT-169)	Dug Well	Tank Lony	Dug Well
uo	tumation 1998	8.8	1,008	88	<u>8</u>	72	ង	₹ <u>-</u>	22	6	32	61	55	192	175	8 2	101		1 ' d		Т П	•	•	20	5	0 F	2.3		\$0 50	17 Bo	15	82	28
3) Population	CENSUS Eximation 1990 1998	147	774		5	: 22	2	× ×	9		ล้า	15	÷	148	133	2 2		10	n j t		Ĩ	4	e	19	<u>ุ่ม</u> เ	2 2	19	149	32	<u>ē</u>	90	2 2 2	52
CONCELHO: SANTA CRUZ (5/13) cencsia zona	No. No. Lugar	14 Rebelo	15 Renque Purga	1 Bamdim	2 Capta de Suo Jose 3 Chil de Nispre	4 Cha de Tossa	5 Cutelo	6 Cutelo Malagueta	8 Cruz de Barajo	9 Dja Cafu	10 Guarda Vento	11 Pedra Barro	13 Ponta de Cumba	14 Renque Acima	15 Renque Baixo	16 Sulva Terra		10 Kibeira Seca	1 Achada Braz	2 Bargado 3 R Chonchoron	4 Cutelo de Coelho	5 Estancia	6 Fazenda Grande	7 Forno	8 Lém Drigues	9 Lem Jorge	10 Lem Viena	12 Macati	13 Mitra	14 Paulado	15 Poilao Fonseca	16 Ribeirao Moura	17 11 aberna 18 Vila Quente
CONC Freguesia	No.									•			:		0t (ois M	[03	ទរំរប	ies													.	

Remarks	Project is on-going	Delivery : 2 times/week	Delivery : 2 times/week Delivery : 2 times/week
Water Tariff (Ese/201)	<u>a.</u>	C 2	en en
Supply Time (hr/day)		° S	4 4 0 0
Distance (Km)	1.50 0.80 0.20 0.20 0.20 0.20 0.20 0.20 0.2	2.00 2.00 2.00 0.20 0.20 0.20 0.20 0.20	2.00 0.30 0.50 0.50 0.50 0.30 0.30
Water Source		<u> </u>	
Taps		60 M	00
Type of Public Faucets		Chafariz	Chafariz
Reservoir (m ³)		e On Jun	20m 30m
Type of Water Source	Dug Well Dug Well Dug Well Dug Well Dug Well Dug Well Dug Well Dug Well Dug Well	126 Spring 6 Spring 71 Spring 103 Spring 45 35 35 35 35 35 35 35 35 35 35 35 35 35	Dug Well Dug Well Tank Lorry Tank Lorry Dug Well Dug Well Dug Well Dug Well Dug Well
opulation T ₃	5 5 5 8 8 7 6 3 5 7		8 8 9 8 8 9 9 9 9 9 9 9 8 9 8 9 8 9 8 9
- 19 91	5 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	68. 8. 8. 8. 9. 8. 9. 18. 5. 8. 8. 8. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19
CONCELHO: SANTA CRUZ (7/13) cgucsia ZONA CRUZ (7/13) cgucsia CBN	Abalixo Imperador Len Dias Margosa Pinchoza Ribeirao F Ribeirao P Rombado Sarradinho		0
Freguesia Mo		Santiseo Stânt	· · · · · · · · · · · · · · · · · · ·



ķs																				cek									
Remarks																				Delivery : < 2 times/week			NYANO						
Water Tariff (Esc/20ℓ)																													
Supply Time (hr/day)																				7.0					-				
Distance (Km)	0.80	020	0.60	06 0	0.70	0.20	040	080	0'40	0.80				· -			- • ·				- ·			•					
Water Source				····									= د (Ē		Ξ		3 3	Ē	 	3:								-
Taps				·															•.	ы	• · ·								
Type of Public Faucets														•	 .		· ·				• ·• •·	·			• • ·	-		•	:
Reservoir (m³)														•						Ĵu I	 : :		·	• -	• • •	· •	· ·		
Type of Water Source	Dug Well	Dug Well	Dug Well	Dug Well	Dug Well Dug Well	Dug Well	Dug Well	Dug well	Dug Well	Dug Well					:				•	Tank Lorry				•					•••••
tion Extimation 1998		3 8	121	: ف ^ر :	* -	32	<u>त</u> ;	5	2 7	0	468	81	- y g	31	20	8	2	36	<u>،</u> م	7	×	80	8,544 2,813	67	874	173	547	1.297	1,42,1
Population CENSUS Estimation		2 C	125	2 20	° 80	58	Ϋ́ς	812	<u>2</u> 2	~	434	8		58	18	27	76	33		0	33	5	5,302	37	672	133	574	672	7/0
cgucsia ZONA o. No. Lugar CE		Damasco Espinho Preto Galiao	Janciro	Lem Aimenaa Lem de Horta	Lem Gomes	Lem Quebra	Lem Varcla	Manipo	Mato Vaz Ribeirao Abobora	Santa Helena	0	Banana	Covao Lentro Ceneo Becitro	Covao Percira	Cutelinho	Cutelo Duarte	Cutelo Selada	Galiao	Lan Eamadac	Ponta Majama	Scretho Abaixo	Scretho Acima	Vila de Pedra Badejo 1 - Achada Farima	Covao de Barro	Cutelinho	Monte Bode	Ponta Achada Dorro Abaiyo	har Acima	Роп Асіта
A No. No.		7 0 4	· · · · · · ·		<u>20</u>	-,			2 7 2 8	25	23 Serelho	- (· · ·		<u>```</u>	Ŷ	~	∞ ⊂	1 <u>-</u>				24 Vilade	. <u>0</u> . 10	<u> </u>	4	<u>ה</u> מ א ע	<u> </u>	<u>-</u>
Freguesia No.	4	· ·								• • • • •		jot	вK	ogei	tus2			. <u> </u>		• • • • •	/								

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	Remarks		Delivery : 2 times/week					Project is on-going										Delivery : 1 time/week								Delivery : < 2 times/week							
Water	Tariff (Esc/200)		m												<i></i>		·									6	.	• •				• · ·	
Supply	Time (hr/dav)		0; ;		=						. -							_ .	• •							5.0							
	Distance (Km)		0.9 25	0.15	0.35	0.30	0.35																	****	0.20		0.80	09.00 09.00	1.20	0.80	80	0.30	0.30
	Water Source		3	2	33	53	ĿI			•															F-7		L2	L-2 L-2	1.2	1.2	T I	£ 2	L4
	Taps		6												:			64								C4				:	:		
	Type of Public	Laucia									.												•-							:			• -
	Reservoir (m ³)		som,															22m ³								11m ³			• • • •		. .	• • • • • • • •	
	Type of Water Source		Tank Lorry					-										Tank Lonv			•	:	:			Tank Lorry						•	
(13)	Populati NSUS E	1990 199X 3031 360				14 47 54		630 767	16	11	17 21	11 13	29 35			34 41	5 F	/9 //			57 69	14: 17		5 9 7	219 282 20 45	20 51		79 99 1	20 20	:	2321 357	13 22	19 25
HO: SANTA CRUZ (9/	ZONA	No. Lugar Achada Costa	(2 Cassenngal 3 Covao de chiqueiro	4 Covao Moreno	5 Lem Cavalho	7 Ribeirao dos Orgaos	26 Boca Larga		2 Cha de Forte	4 Convento	5 Cutelo Correia	6 Cutelo Costa	7 Cutelo Montanha	8 Cutelo Pelado	9 Fonte Pulga	10 Goiabera	11 Manipo		14 Penedo	15 Pizatta	16 Rincadura		18 Travessa 19 Moreno	27 Fundura	Caxierra Chn	2 Cruz de Bica	4 Cutelo Correia	2 Lich Fresco	o Matinbo	28 João Goto	1 Capria 2 Covan Lones	3 Cutelo Marques
CONCEL	Freguesia	No. 2 10.						<u> </u>						· · · · ·	so:	S31C	5 0	Q 05	uə)1	01	082		·. 		<u>r</u>						L `		

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Remarks		Delivery : 2 times/wock														Project is on-going								• • •			House Connection									
Water Tariff	(Esc/20f)	ñ							64							•	4 C	۹ 						.			r	.								
Supply Time	(hr/day)	5.0							4.0							01	2 C	5 7									4	20				_				
Distance	(Km)		0.60	80	02.0		0.40	0.60		0.0	9-0 9-0	0.80		3 2	3 5	8		0.0	00.0		08.0	07.0	0.50	0.40	0.30	~	0.20	080	08	51.0	090	0.60	0.40	Ğ	0.10	0.50
Water	Source		3	7	4 4				• ·														- • -				3	<u>-</u>	3 2		י קי קי	3	L-2	•	0 q	6-1
Taps		, 4							ы							c	N (7									¢	۰,				•				
Type of Public	Faucets								Chafariz				•••		•	ĩ	Chatanz	Chatariz							'			Charanz				· · ·				
Reservoir	(m [;])	⁴ س۲															Ĺ	40m										e or	· ·	· · ·						
Type of Water	Source	Tank Lorry	•	• • • • •														Borehole Well (FT-84)				:		:				Borchole Well(FT-80)				•	• • • • • • • • • •			••••
tion	Stimation 1998	22	28	78	2	8	1,0/0,1	37.	58	158	6	3	<u>8</u> `8	3	11	4			11	8	3	47	• =		154	403	2		3	2	4 6	. .	48	310	42	<u>a</u> 4
Population	CENSUS Estimation 1990 1998	Ě	16	55	<u>ម</u> (71	0001	3 2	5	611	4	56	2	. 61	Ξ	4	135	321	<u>ਤ</u>	5.5	111	3	ਲ <u>ਦ</u>	20	o , 51	335!	3	<u>ي</u> ب	n -	4 ,	0	5	\$ \$	218	<u>+</u>	n g
cguesia ZONA P	No. No. Lugar	28 Jodo Goto A Crualo Tavares	5 Gaspar Alto	6 Gasper Vaz	7 Mato Novo		Joio	1 Acmazem	3 Canaria	4 Carreira	5 Covao Carrico	6 Covao Lopes	7 Covao Sequeira	8 Cutelo Tavares	9 Fontcana	10 Funco Bandeira	11 Funco Marques	12 Joao Teves	13 Lagedo	14 Massape	15 Mato Raia				19 Iravessa 20 Varzea da Jereja	Lage	1 Atras	2 Budjendji	3 Cutelo Gomes	4 Djobe	5 Lage		8 Varanda	Leva	.	2 Butateira 3 Rom Pau
resia	^o X	28					6			<u>.</u>		• •				S 01	531() 50	o qu	5422	Juo	108	s			8		<u> </u>			<u> . .</u>	<u>-</u> -		31		<u>. </u>
Freguesia	No.	ر ،																				••••											- · · · -		-	

Remarks	Delivery : 1 time/week		Project is on-going
Water Tariff (Esc/20ℓ)	<u>م</u> «		<u> </u>
Supply Time (hr/day)	5.0		
Distance (Km)	0.75 0.90 1.50 0.70 0.80	0.40 0.20 0.80 0.60 0.15 0.15 0.15 0.15 0.35	0.40 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.7
Water Source	33333 3		
Taps	м		
Type of Public Faucets			
Reservoir (m ³)	50m ³		
Jy Village Type of Water Source	Tank Lorry	Spring Spring Spring Spring Spring Spring Spring	
Population Population Population Population	6614182		2 0 8 5 5 5 8 8 8 8 7 7 8 8 4 7 7 4 8 8 8 7 8 8 8 7 8 8 8 7 7 8 8 4 7 8 4 8 8 7 8 8 8 7 8 8 8 7 8 8 8 7 8 8 8 8
ility and Water U SANTA CRUZ (11/ ZONA Lugar	Evada 4 Coqueiro 5 Covao Boi 6 Lapa 7 Lem Conteio 9 Levuda 0 Veruda	ongueira ongueira 2 Cava Grando 3 Covao 5 Fricza 8 Mato Furtes 8 Taberna 9 Vazagua	10 Peofra Comprida Montanha 1 Achada Mamipo 2 2 Banana 3 Bandam 4 Beckara 5 Bica 6 Cha de Lagoa 7 Cha de Lagoa 7 Cha de Coelho 8 Cutelo Fernandes 9 Cutelo Serrado 10 Fundao 11 Calcao 12 Larmjeira 13 Lem de Brito 14 Lem Sanches 15 Monte da Veiga 16 Montanhinha 17 Monte da Veiga 18 Nhugar 20 Rasta 20 Rasta
Supply Fac CONCELHO: Freguesia No. No. No.	м м	32	nO sob opnatuol of 2

D Remarks	Protect is under planning						-																													-		-			
Tariff (Esc/20ℓ)							,						-												, 	ı						-									
Time (hr/day)														6.0											0.4	5															1
Distance (Km)																-		200	000	800			<u>8</u>	3	2.0		0.70	2	02.0	2	0.40	0.45	0.50	0.65		0.30	0.20	0.50	0.80	0.60	
Water Source				L-13	51	5	L-13	L-13	L-13	۲13 13	55	1.13		1 1	 	2			3.	3			3.3	, r	3	•	3 2	3	0	s S	<u>}.</u>]	1		1		وم.1 ا	3	13	6-7	6	
Taps												-			e			-		-					c	n,														•	
Public	Laucco												-	, of only				•• -		-			• -	•		Chatanz	•			•••								•			-
(m)				• - ·						•	• •			[-V,	E										-	40 1						•		•				:			-
Type of Water Source		Dira Well	Due Well	0								,			122 Borehole Well(F1-3/1)			Spring				Spring	+	-		Borehole Well(FT-21)					·•		•••••••••••••••••••••••••••••••••••••••				· · · · · · · · · · · · · · · · · · ·				
tion Estimation	199X	107	<u>3</u> 2	1	16	108	43	6	Ŷ	<u>.</u>		5 2	\$ _1	8	8	97	Ş	Ξ	4	37	•	8	68	32	9		<u>9</u>	26	•	;	•	2	- - -	1	755	3	3.5	÷. 0	<u>x</u>	2 2	195
Population CENSUS Estimation	0661	573	3 2	<u>ि</u> श्च		· 58	35	16	2			2	28	4	8	21	629	Ξ	\$	33	ŝ	61	26	8	43	8	18	2	C4 .	4	2	3	3	2 °	0 VV	ìž	<u>e</u> ?	2 2	3.5	2 2	ŝ
NON	lo. Lugar	Orgaos Pequeno	I Achadinha	2 Acreating Cana		5 Radio Mesa	K Ranana	7 Reco			Purtona	10 Latada	11 Lem Martins	12 Mato Ferreira	13 Pe de Subida	14 Ribeira Grande	Pico Antónia/Padjom	1 Benfica	2 Casa Grande	3 Cha de Curral	4 Covao Gramde	5 Curral Velho	6 Cutelo Moreno	7 Fonte Grande	8 Joao Sanches	9 Laranjeira	10 Lem de Mato	11 Lcm Veira	12 Monte de Ouro	13 Monte Varela					18 Varzea da Moura	Pcdra Molar	Cha	2 Costa da llorta	3 Covadinha	4 Cutelo dos Orgaos	5 Cutelo Moreno
Freguesia	No. No.	34 O									-			· ·			35 Pi	• -	:				arno		. n.				• 				`			2 2 2	: 				

Supply Facility and Water Use Condition by Village CONCELHO: SANTA CRUZ (13/13)

				•			-	Concelle	Warer	
ZONA	Population	Type of Water	Reservoir	Type of Public	Tank	Water	Distance	Time	Tariff	Remarks
Lugar	CENSUS Estimation 1990 1998	ion Source	(m [°])	Faucets		Source	(Km)	(hr/day)	(Esc/20/)	
Pedra Molar						, ,	6			
Lem Jorge	<u><u></u><u></u></u>	15,			•	3:	0.0			
Mato Vaz	30	37				9-7 9-	(0.0)	1	4	
Mercado		287 Tank Lorry	Ē	Chafariz	4			5.0	64 -	Delivery : 2 times/week
Varzea Fernandes/Saniana	-73 	252 Borchole Well(FT-21)		Chafariz	ę	,	4	6.0	4	
10 Telha	48	58:				6-1	0.40			
37 ; Poitão Cabral	244	674								Project is under planning
Achadinha Baixo	44	56				φ L	0.30			
Lém Bega	ន	19				Ŷ	0.35			-
Lem Vaz		37				ج ج	0.50			
Macaroca	18	14				ž	0.80			
Palha Carga	89	8				ž	1.20			
Poilao Cabral	29	458: Orgaos Pequeno	40m	Chafariz	۳			6.0	c a	
38 São Jorge	1,132 1,	451,								
Covada	277	00				5	8.			Project is on-going
Caiada	<u>9</u>	27				L-3	1.20		,	
Cha de Vaca	175	228 Borehole Well(FT-23)	16m ³	Chafariz	4			8.0	c.	
Joho Guela	152	198	•····			L-3	0.60			
Matao	5	50	• · - ·			L-3	0.80			
Pedra Janela	<u>ิ</u> ม	27				L.	1.20			
Ponta Cruz	•	18				5	1.50			
Ribeituo Galinha	372	483 Borchole Well(FT-145)) IIm		~			2.0	m	_
São Jorge	71	50.				3	0.10		_	

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Remarks								Delivery : 1 time/week	<u> </u>					Delivery : I time/week										naud da so d		Delivery : 3 times/week								,	Under Construction	
Water Tariff	(Esc/20/)	2		54 C	ł			4		¢	*			4					C1							4										
Supply Time	(hr/day)	7.0		0,0	>			2.0		60	22			3.0					04		-					3.0			-							
Distance	(Km)					•							•																		-					
Water	Source				-	53	5		-	1	2		52		3	3:	3:	1.27		Ŀ	•	÷ د	<u>ب</u>	<u>ና</u> .	р ч 1 -	2	Ŷ	ې د (3	2	Ľ	دو		3	-	
Lanc	ede -	3		с л (*3		•	ы		•	4			7					~	•						•	•								ľ	
Type of Public	r uone Faucets	Chafariz		Chafariz	Chatariz			Chatariz			Charanz			Chafariz			• ,		in the second		1					Chafariz								· · ·		
Reservoir	(, m)	33m ⁵		Ĺ	22m			11m ³		 67	Ē			22m ³				[2.2m				 - -						
Type of Water F	Source	317, 317: Borehole Well(FT-25)			75 Borehole Well (FT-44)			'Fank Lorry			72 Boreitole Well(F1-25) 72i			Tank Lorry		., .	•		1000 July 11	77 Borenoio Weller 1-200/			-			Tout I can			•		•	• • • • • • • • • • • • • • • • • • •			Dug Well	
5) Population	CENSUS Extimation	267 267		-		31 30		123 148			60 72 E			40 44	16 17		26 28	33		2 2	538 650	48 58	29 35	8	11	78 94	:	40 22 22	-			26 31	368: 440:	104 124	131 157	
S (1/6)	CENSI																:	_										-	· ·							
CONCELHO: SÃO DOMINGOS (1/6) cencia ZONA Po	No. No. Lugar	I Achada Baleia 1 Achada Baleia	2 Baia	I Achada Baixo	2 Achada Riba	3 Castclinho	4 Covao Santana 5 Lem da Veiga	6 Moia Moia	3 Cancelo	I Achada Lama Abaixo	2 Cancelo Baixo	2540	4 Citato de Coqueiro 1 Achadimha	2 Coqueiro	3 Cutelo de Jatar	4 Lage Vermelho	5 Limeira	6 Crazote	S Dobe	1 Dobe	6 Milho Branco	I Cabeca Borta	2 Cha Cardoso	3 Cutelo Tavares	4 Grazote	5 Limao	6 Mulho Branco		S Sczimora	y tamanna 10 freihe		12 Varanda	1 1		2 Capela	
CONCI	No.		1		-				<u> </u>			- .				21	r] e	2p e	- - -	8 			:										<u> </u>			

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	Time Tariff Remarks (hr/dav) (Esc/20/)	·· - -			- · · · · ·		Ś	4.0 5 Delivery : 2 times/week		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	· · · ·	4.0 4 Delivery : 2 times/week				3.0 + Delivery			Project is under planning	· · · · ·			4.0 5 Delivery : <1 time/week							6.0 5 Delivery : <2 times/week				
	Distance (Km)												. •								• ••													
	Water Source	27		23	<u>s</u> -	22				8- L	\$ 4		4		7			<u>1</u>	2	- •	. 1	7	-	•	د د د			ກໍາ 	3 -	,	د د	, , , ,	Ľ	L-6
-	Taps	č					1	6	·			.ω				64							ñ								4 			
	Type of Public Faurets						Chafariz	Fontenário				Chafariz				Chafariz				•			Chafariz	_										- - -
	Reservoir (m ³)					 - -	22m ³	22m ³				22m ³				22m,							33m ³							- - - -	E177			
UY VIIIAGO	Type of Water Source			- · · ·	•		Tank Lorry	Tank Lorry				Tank Lottv				Tank Lorry				c	Spring	•	Tank Lorry	:		Spring	Spring				Tank Lorry			
se Corigiuori 2/6)	opulatio US Bs	1990 1998		106 126	•	147 175		:			10	40 66 70		•	107 127						67 80	11 61		255; 303;	16		21	17 20		-	58 69		1007'I 1/06	
Supply Facility and water Use Condition by Vinage CONCELHO: SÃO DOMINGOS (2/6)	ZONA	0. Ivo. Portal	3 Portal X Praia Baixo		2 Cha de Mosquito	3 Ponta da Achada	4 Ponta Port	6 Rochinha	9 Praia Fornosa	1 Achada Cativo	2 Achada Cavalo	3 Belem	 Criatics Curveta Covaria 	6 Criz	7 Dabreu	8 Faial	9 Jardim	10 Lem Ferreira	11 Nazaré	10 Vale da Custa	1 Cachopo	2 Lem de Brito	4 Ponta Riba	11 Achada Mitra	1 Achada Largo	Z Achada Vassoura	4 Cancelo	5 Fabrica	6 Figueira Portugal	7 Lage Vermelho	8 Pedra Galinha	9 Ponta de Forno	12 Agua de Gato	2 Bom Jardim
	Freguesia		^						L		287]	ep e	Sri	N.										сч			0		sor	'N	°S			

					50					3.0	0.80	0.50	0.90	<i>S.</i> 0		× × ×		
Taps Water Source	<u>د د د</u>	Y Y	2 2 2	\$ 6 6 7 7 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8	2 L2	33	222	23	L-2	· · · · ·	3	22	5	L-2		133	* ·	. L.
Reservoir 1ype of Public T (m ³) Faucets	• • • • • • •		• • • • • •	• · · · • · · · · ·	33m ³ Chafariz				•••••	22m ³		· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	Som			
Type of Water Source		2Spring(Gallery)			Tank Lorry		-			Tank Lorry	Spring	· ·	· · ·		Tank Lorry			
Population CENSUS Estimation 1998	<u> </u>		152 40 69 87 87		266 316 20 24 65 76		24 18 29 21	,	1	119 150	20 8 10	3 16 2 2	, . ¹	210, 250 18 21			56 698 8301	32: 39
eguesia ZONA Fo o. No. No. Lugar Censi	Agua de Gato 3 Caisda 4 Chaozinho 6 Chaozinho	Luranjeira Lem Freire	Lem Mendoca Lem Pereira Monto	Rema Rema Travessa Baixo Covao d'Avua	Banana 1 Aldeia 2 Banana	Chacona Lem Fonseca	Lem de Zimbrao Mato Vaz	Ponta Acima Ponta Ribeita Takema	Varzea Grande	Chaminé I Cháqueira	Costa de Nora Outelo Golaba	Loal Loal Lem Semodo	Mato Sociro Videla	Dacabalaio 1 Carredinha	Guarda Vento	Massape Mostarda	5 Rochinha Fonte Almeida	Achada Podra

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	Remarks						Delivery : <2 times week			in 1								Delivery : <1 time/week				Keservoir and Chalariz not in use	2	Month a vear									Delivery : 1 time/week				
	water Tariff	(Esc/20/)					÷		,									4		-		Free	•	n	4								v			-	
	Supply Time	(hr/day)					0.1											2.0															2.0				-
	Distance																,								• •							•					
	Water	Source	L-7	L-7	5	F-1		3	, ,	3			5	5			5		Ľ-7	1-2					,	3.	5.	5 -	5 5		L-3	3	.	£1			L-3
	Taps						6											3					-	ç	n								n				
	Type of Public	Faucets					Chafariz	•						~ •				Chafariz			•	Chafariz	=		Chatariz								Chafariz				
	Reservoir	(m,)				•	е П					22m2						33m ⁵	-			33m ³		Private	400m						•	• • • • •	22m ⁵				
	Type of Water	Source					Tank Lorry					112 Borchole Well (FFT-25)			Dug Well			Tank Lorry			,	Spring	-	Tank Lorry	Kaintall Collection							4	Tank Lorry		Spring	•	
/6)	Population	CENSUS Estimation	84 103	31 38	14 17	:	- -	51 62	1	101 122	1	92 112 E	4	31	98 120	277; 330:	6	169 201	63 75	36 43		190: 230:	350 390	54 60		_			104		:	:	-	48 57	12	•	25i 30i
CONCELHO: SÃO DOMINGOS (4/6)	ZONA	No. No. Lugar	16 Fonte Almeidu 3 Aeus Panelo	4 Cha de Cardoso	5 Cutelo Babosa	6 Fonte Acima	7 Massape	8 Monte Queimado	9 Montinhos	10 Olho de Agua	11 Quebrada	12 Ribeirao Areia	13 Robeirao Sana	14 Taberna	15 Ventreiro	17 Godim	1 Cutelo Acima	2 Cudim	3 Mundo Grande	4 Telha	18 Lagua	1 Lagoa	19 Louru	1 Cancelo	-	2 Chanzinho	3 Dacabalaio	4 Dires		20 Mato Afonso	1 Covao Vicente	2 Cutelo Gomes	3 Mato Afonso	4 Mato Martins	5 Sola	6 Tambarina	7 Volta Romao
	Freguesia	No.	ณ															0	រព្វាម	No I	. 'N	°S				· · · -									···		

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Supply Facility and Water Use Condition by Village

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Remarks	Postivosov - 1 simo/woeck		Delivery : 3 times/week		Drum Delivery : 2 time:/week Delivery : ≺1 time/week	Proiect is under planning		Project is on-going
Water Tariff (Esc/201)			4		4 vî		¢\$	
Supply Time (hr/day)	ž	3	ç	2	5.0 0		0.7	
Distance (Km)						1. 00 1. 00	1 - 1 - 1 4 - 4 - 4 - 7	
Water Source	22222	2 2 2	2222	222	2			
Taps		(4		m	(1 C1		cy.	
Type of Public Faucets				Chafariz	Fontenário Fontenário		Chafarriz	
Reservoir (m ³)		23m ³		33m [°]	Drum 22m ³ 22m		33a ¹	
Type of Water Source		Tank Lorry		Tank Lorry	Tank Lorry Tank Lorry Tank Lorry	Spring(Gallery) Spring(Gallery)	664 27 58 154 329, Borehole Well (FT-53)	
Population Population CENSUS Estimation 1990	28 <u>7</u> 23 8 6 5	4 5 16 19 218 260 46 55	24 85 1 24 85 56 11 20 11 1 13 9 11 1 16	38 21 4 3 8 25 5 4 5 25 5 4 5	380 458 17 20 180 220 181 151		559 664 23 27 49 58 129 154 277 329 1	
CONCELHO: SAU DOMINGOS (J/ 9) eguesia ZONA P No. No. No. Lugar Cens	les Falciro Cha de M Cha de Ta Covao De Cruz	6 Pizarro 7 Telha 22 Mendes Faleiro Rendeiro 1 Covao	2 Cutelo 3 Lem Moreira 4 Lem Sanches 5 Lem Soares 6 Massape	7 Sacramento 8 Sibe 9 Travessa 10 Volta Roman		24 Po de Saco 2 Saco 2 Saco	 25 Ribeirdo Chiqueiro 1 Cha de Baixo 2 Cha de Cachorro 3 Cutelo Grande 0 Enciro Chimeiro 	5 Vazagua 26 Robio de Cal 2 Caldeira 2 Caldeira

	Remarks		Project 1s on-going									- <u></u> -																~~~								/	
1/2011	Taniff	(Esc/201)			- • • • •																	- -				• • • • •		. ,									
2	Supply	(hr/day)																				с. У	0.0														
	Distance																																				-
	Water	source											[]-]		2		3	Ξ	Ξ	Ξ								_									
	Taps		~																				r.4			•-		•••									
	Type of Public	Faucets																				··	Fontenário								,					:	
	Reservoir	(m.)								- -	***				•							•	33m	-						• • •			•			;	
	Type of Water	Source		:												:					Spring	Spring	Tank Lorry						:							•	
3/6)	Population	CENSUS Estimation 1990 1998		7			10	6	39 46	39 46	8, 10	812, 956	68 80	132 155	50 59	54 64	84 99	29	112 132	600	17 20	:					47 00 103	_	54 64		480 571	82 98	89 106	33		:	202: 240
CONCELHO: SÃO DOMINGOS (6/6)	ZONA	No. No. Lugar	26 Robio de Cal	5 Faci	6 Lem Fernandes	7 ILET Comes	& Noncira	9 Pinga Mcl	10 Ponta Mendes	11 Robuo de Cal	12 Sarradao	27 Rui Vaz	1 Cancelo	2 Cidreira	3 Covao de Rui Vaz	4 Curralinho	5 Cutelo Mendes	6 Lem da Veiga	7 Lem Vieira	8 Monte Fundo	9 Monte Leuo	10 Ponta Baixo	11 Vila	28 Várzea da Igreja	1 Boa Vista	2 Colegio	3 Cova de Barro	5 Covao Lourenco	6 Cutelo Branco	7 Figueira Branco	8 Joao Carrido	9 Lem Lopes	10 Pinha	11 Sarradinho	12 Tamarcira	13 Tenda	14 Varzea da Igreija
CONC	Freguesia	No.	7									!						C	ыņ	uslo	2.1	1'S															

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	Tariff Remarks Esc/201)				URBAN								, <u> </u>																	Project is under planning									
Supply	Time (hr/day) (•••										• -			~ •							• •	• • •		·			-		•••				
Distance						-:	• •												- • •																			• • •	
Water	Source			• • • •																							• -				•••								
	Taps		7																		:																	_	
Type of	Public Faucets													•																									
Reservoir	(m ³)	· · · · · · ·	40m				- · •											•							· · ·				:					:					
	Type of water Source	-	Tank Lorry							. 										- - -	•					•••••••••••••••••••••••••••••••••••••••		•							• • • • • • • • • • • • •	· · · · · · · · · · · · · · · · · · ·			
	Estimation	126	126	<u>o</u>	ğ	89,680	4,136	4,177	918	1,033	15,931	2,313	14,614	3,048	1,194	243	775	2,623	324	1,671	1,705	- 38 0	868	2,675	1,172	8	2,485	4,094	8/5	3,401	8 8	2	471	2,510	5,391	3,166	5,412	4	14
Domilation	CENSUS Estimation	113	113	<u>5</u>	9	61,644	2,843	2,871	631	210	10,949	1,590	10,044	2,095	£3	167	533	1,803	53	1,149	1,172	674	597	1,839	808	89	1,709	062.6	8	2,379	183	8	324	1,725	3,705	2,176	3,720	5	13
CONCELHO: PRAIA(1/5)	No No Lugar	inho Alve	1 Agostinho Alves	2 Calheta São Martinho	1 Calheta São Martinho	3 Cidade da Praia	1 Achada Eugenio Lima	2 Achada Grande Frente	3 Achada Grande Tras	4 Achada Mato	5 Achada Sto Antonio	6 Achada São Filipe	7 Achadinha	8 Calabaceira	9 Castelao	10 Cha de Arcia	11 Coqueiro	12 Fazenda	13 Latada	14 Lem Cachorro	15 Lem Ferreira	16 Moinhos	17 Monte Vermelho	18 Paiol	19 Palmarejo	20 Pensamento						26 Simao Ribeiro		*. **	29 Tim Chaapeu	30 Varzea da Companhia	31 Vila Nova	4 Costa Achada	I Couta Achada
CONC	Preguesia No																	1	2.76	9	вb	ē1	5.1	N														<u>i</u>	-, .

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	Remarks			····		Project is under planning	' ' ' ' ' ' ' ' ' ' '							Chafariz not in use												- '								Delivery : <2 times/week			
Water	Tariff	(Esc/20/)								64	ç	·	•				(1																	*			
Supply	Time	(hr/day)								3.0	<	o u c i	3				5.0					• • •												3.0			
	Distance (Km)		/																• • •												<i>.</i>			· •			
	Water Source												•	4	r L	5 3	,							.		-											
	Taps									£		4	с э	,	74		~	•																6	_		
Tune of	A ype of Public	Faucets								Chafariz		Chafariz	Chafariz		Chafariz		Charlesers	Citatians																Fontenário			
	Reservoir	(E)								40m ³		30m,					1.00	MUK													·		•	,	11177	•	
)	Type of Water	Source	•	•	-	· · ·		Spring	Spring	Spring Borchole Well		439 Borchole Well(FBE-138)	73 Borehole Well(Sana Clara)		Spring	:		1,279 Borchole Well(F1-200)				•											:	Task Lonu	Lank Louy		
	Population	1990 1998	79 88		2 F	446 490	•	12 13		283 316	ſ	393 439 E				·			0/1 501	41 05		72 80		2 F	88 64	149, 166	П 0		1	:				121 (29)	102: 106:	176 196	
CONCELHO: PRAIA(2/5)	ZONA	No. No. Lugar	5 Palmarejo Grande	6 Pedregal	1 Achada Lalanja 2 Pedregal	7 São Francisco		2 Ponta Lopes	3 Ponta Mendes	4 Portete de Cima 5 São Francisco	8 Slo Murtinho Grande		2 Caiada	3 Isabel Lopes	4 Lem Dias	5 Ponta do Sol	6 Sanharre	9 São Martinho Pequeno	1 Achada Bombena	2 Achada Carreira	J BOM COL	4 Cambodjane	5 Chao de Poeita	o Jouo Bom	8 Marao	9 Pesada	10 Purga Nova	11 Ribcirinha	12 Sao Jorginho	13 Sarrado	14 Trindade	15 Vera Cruz	10 São Tomé	1 Ponete de Baixo		11 Veneza	
CONC	Freguesia	No.	-													E.	L9C	יפי	sb (518	'N	Į 						·		= .	- • -						

Supply Facility and Water Condition by Village

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Q Amorico C	VCILIZE XS	Project is under planning Wind power	Project is under planning							Hourse Constricts							Project is under planning		Borchold Well is Salty	Project is under planning										·	Delivery : <2 times/week				
Water	(Esc/20/)	s		.					5.0	<u>,</u>	2		• -			61			v	•										ć	~	•			
Supply	, hr./day)								7.0	ſ	2					3.0			C F	2.								-			0.6		• .		• •
Distance	(Km)																																		
Water	Source			۲¢	4	ک	ې ۲	ጟ	د •	ŝ		L-8	L-8	:	2			-							5	5	21	5	5	3		£-1	23	5	5
Ę	sder	e					4		'n	۰	n			=		e				•			, , , ,							:	ŝ				
Type of	Faucets	Chafariz							Chafariz		C natariz					Chafariz	-		ŧ	CUALANZ		-						 :			Chafanz		:		
Reservoir	(^m 3)	lom ³		·					70m ⁴										 	moc		•	: -		•				 :		40m ³	:	· • •	•	
Type of Water	Source	201 169 Borchole Well(FT-280) 32 Sovino	- -						Spring				-			290 Borchole Well(FEV93)				Lank Lorry Spring		•	•								Spring (Gallery) Tank Lorry				
Population	CENSUS Extimation	81 52 29			13 14	×	12 13	77 86			552 010	18		309 344	49 54	260 290 1	•	118 131	856 956	856 956		? !	89 99	7	94 105	9	30			12	62 69	PC	:	1	12 13
CONCELHU: PKAIA(3/3) cguesia ZONA	No. No. Lugar	12 Calabaceira 1 Calabaceira 2 Cha de Zimbeo	13 Cidade Velha		2 Larnjeira	3 Monte Sowsego	4 P. Mendes	5 Rua Banana	6 Rua Calhau	7 São Braz	8 São Sebastiao	9 S. Marta 10 Rua Terra P.		14 João Varela	1 Djobe	2 Jouo Varela	15 São Martnho Grande	1 Bota Rama	16 Salinciro	1 Salinciro	17 Beatriz Percira	I Alfarroba	2 Beatriz Pereira	18 Belém		2 Cha	3 Cha de Couve	4 Chanzinho	5 Cova	6 Julangue	7 Lem Freire	the second se	9 Mato Sanches		
Freguesia	No.	2	- L					~	sns	əla	əb .	N 'S	S	.				· · ·			6					etei	jde	B	.1 c	₽₽ ₽₽					

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Supply Facility and Water Condition by Village

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Remarks																	Project is on-going	~~~					Project is on-going									
Water Taniff	(Esc/20 <i>t</i>)	2					4										Project						Project	. <u> </u>								
Supply Time	(hr/day)	10.0				,	8.0																				•••	-	-			
Distance (Km)	(-	•·· · •				••		=				- ,			-				
Water				-	ĩ	ĩ	4	33		3	3.	5	1 4						-			•••••										
Taps		£	ň	-		:	en 1						4															•	- · ·			· · ·
Type of Public	Faucets	Chafariz	Chafariz				Chafariz		·			Chafacta										•					•		••••		- • • -	
 រដ្ឋ	(m.)	Som	# #	• - -			50m ³	- •				(~-	 E		• •	• • • •						•					·					-
Type of Water F	2041.00	203 203 Borchole Well(FT-153)	Spring (Gallery)		· • • • • • • • • • • • • • • • • • • •	 	75 Borehole Well(Santa Clara)	 :			· • .	32 73 Bombole Well/ET 077		-				Spring	Spring	Spring	Spring	Spring	Spring	Spring	Spring	Spring	Spring	Spring	Spring	Spring	Soring	Spring
Population CENSUS Estimation	1990 1998	182 203 B	164 183	49 49 54 54	249i 219 51i 56			- 99 - 22 - 22	117 128	00 00		29 26		122 135	93 103	29 32	653 718		53	25 27		51 56	97 108	18 20	90 90	30	12	24 26		41 45	12 12 12	86 96
ZON ZON	No. No. Lugar	19 Chá de Igreja 1 Châ de Igreja	20 Chá Gonçalves	21 Delgado 1 Delgado	22 Gouveia 1 Cha Sanches	2 Lem Correia	3 Tche Lem	4 IIra Iema 5 Travessa	23 Mosquito de Horta	1 Achadinho	2 Chadenho	3 Montinho	 4 Introducto u norta 5 Ponta d'Agua 	24 Mosquito Grande	1 Achada	2 Mosquito Grande	25 Pico Leto	1 Achadinha	2 Bafaria	3 Bociro	5 Cha de Riba	6 Cha Grande	7 Chuva Chove	8 Cutelinho	9 Cutelo Cabral	10 Cutelo Moreira	11 Curral Velho	12 De Grande		14 Galeco		
Freguesia	No.		L	I		•			<u> </u>				e1s	<u> </u>	e8	· I <	L	<u> </u>														

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ž oo	CONCELHO: PRAIA(5/5)									0	Water	~ –
Freguesia	ZONA	Population		Type of Water	Reservoir	I ype of Public	Tans	Water	Water Distance	Time	Tariff	Remarks
No.	No. No. Lugar	CENSUS Eximation	vimation 1998	Source	(m ³)	Faucets		Source	(Km)	(hr/day) (Esc/201)	(Esc/201)	
e	25 . Pico Leão			_				• ·		- • •		
	18 Rochinha	57	36	Spring					-			
	19 Rua Baixo	~	7.	Spring	-	1			-			
	26 Porto Mosquito	492	549							4	• •	
	1 Porto Mosquito	492	549 Borch	549: Borehole Well(Santa Clara)	20m ⁻¹	Chafariz	63	-		5. U	7	
	27 i Santana	906	1,008								~	Kenervoir and Charanz not in use
	1 Achadinha	209	233			• •		5	0.80			
ejs	2 Chupana	92	102 Sprin	102 Spring (Gallery)	50m	Chafariz						
ŋđ	3 Errado	8	24					-7 -1	1.20			
£8	4 Lem Gomes	186	207	-				L-2	8.1	•		
J .	5 Madjada		•		••••					-		
oş	6 Ponta d'Achada	233	260	-				1-7 1	8.1			
S	7 Quebrada	163	182					3	8.1			
	28 Tronco	186	206				-					
	1 Cassengal	36	07	Spring			-	-				
	2 Terra Branca	13	'n	Spring								
	3 Tronco Baixo	69	17	Spring								
	4 Tronco Riba	66	73	Spring						-		
	5 Vassoura	3	<u></u>	Spring								

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2. Questionnaires for Village Survey for

- Villagers (Male / Female)
- School Teachers

- Sanitation Agents
- Water Vendors
 - Group Interview (Male / Female Separate)

Questionnaire	for Villagers	(Male/Female)

Date

Starting Time Finishing Time _____

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1. Household Roster

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Household members	Resident status	Marital status	Sex	Age	School
	Present1	Single1	MaleM		None1
	Absent2	Married2	FemaleF		1~6 yrs2
	Visitor3	Divorced3			7~10 yrs3
		Widowed4			Others4
Head					
· · · · · · · · · · · · · · · · · · ·					
	-				

2. General Information

2.1 What is the religion of the family?

Catholic _____

Protestant _____

Muslim

Others _____ (specify what)

2.2 How long has this household been living in this dwelling?

· .

Number of months _____ Number of years _____

2.3 On v	vhat basis does	the nousehold be			
í	Owned		Borrowed, free of	f charge	
]	Rented	·	Other ()	
2.4 Hav	e any member o	f your household	been away for mor	re than 6	months ?
	Yes	No			
2.5 Ifye	es, how many pe	rsons are away ii	n total ?		
	One	Two	More ()		
2.6 Ist]	ne household hea	ad one of these ?			
	Yes	No			
2.7 Wha	at are the main 1	reasons for the al	osence?		
	Seeking jobs ove	erseas			
	Seeking jobs out	tside zona			
	Seeking jobs out	tside the island	······		
	Study				
	Study Others omic Activity		(specify	why)	
3. Econ	Others omic Activity t is the main sou	urce of this house	hold ?		
3. Econ 3.1 Wha	Others omic Activity t is the main sou Crop cultivatior		hold ? Wage earning		
3. Econ 3.1 Wha	Others omic Activity t is the main sou		hold ?		
3. Econ 3.1 Wha	Others omic Activity t is the main sou Crop cultivatior Livestock		hold ? Wage earning Other		
3. Econ 3.1 Wha	Others omic Activity t is the main sou Crop cultivatior Livestock	ry income source	hold ? Wage earning Other		(specify what
3. Econ 3.1 Wha	Others omic Activity t is the main sou Crop cultivatior Livestock t is the secondar	ry income source	hold ? Wage earning Other ?		(specify what
3. Econ 3.1 Wha	Others omic Activity t is the main sou Crop cultivation Livestock t is the secondan Crop cultivation	ry income source	hold ? Wage earning Other ? Wage earning		(specify what (specify what
3. Econ 3.1 Wha 3.2 Wha	Others omic Activity t is the main sou Crop cultivatior Livestock t is the secondar Crop cultivatior Livestock	ry income source	hold ? Wage earning Other ? Wage earning		(specify what (specify what (specify what
3. Econ 3.1 Wha 3.2 Wha	Others omic Activity t is the main sou Crop cultivatior Livestock t is the secondar Crop cultivatior Livestock	ry income source	hold ? Wage earning Other ? Wage earning Other		(specify what (specify what (specify what
 Econ 3.1 Wha 3.2 Wha 	Others omic Activity t is the main sou Crop cultivation Livestock t is the secondan Crop cultivation Livestock t is the total num	ry income source	hold ? Wage earning Other ? Wage earning Other your household ow		(specify what (specify what (specify what
 Econ 3.1 Wha 3.2 Wha 	Others omic Activity t is the main sou Crop cultivation Livestock t is the secondan Crop cultivation Livestock t is the total num Cow	n ry income source n mber of livestock	hold ? Wage earning Other ? Wage earning Other your household ow Sheep	rns today	(specify what (specify what (specify what
 Econ 3.1 Wha 3.2 Wha 	Others omic Activity t is the main sou Crop cultivation Livestock t is the secondar Crop cultivation Livestock t is the total num Cow Horse	n ry income source n mber of livestock	hold ? Wage earning Other ? Wage earning Other your household ow Sheep Goat	rns today	(specify what (specify what (specify what ?
 Econ 3.1 Wha 3.2 Wha 	Others omic Activity t is the main sou Crop cultivation Livestock t is the secondan Crop cultivation Livestock t is the total nun Cow Horse Donkey	n ry income source n mber of livestock	hold ? Wage earning Other ? Wage earning Other your household ow Sheep Goat Chicken	rns today	(specify what (specify what (specify what ?

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3.4 What is the total size of land holding of your household?

_____ liters

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3.5 On what basis does the household occupy the land for agriculture?

Owned	 Borrowed, free of	charge
Rented	 Other ()

3.6 What was the total area under crop cultivation during the last season?

3.7 What is the main crop ?

3.8 What are the second crops?

4. Household Income/Expenditures

Item	Value
4 Income	
a.	
b.	
c. Others ()	
5 Expenditure	
a. Food and drinks	
b. Clothing	
c. Education	
d. Medical expenses	
e. Water fee	
f. Others()	

5. Activities (productive/reproductive/community activities)

- 5.1 Are you a member of any group ? (such as construction group, women's group, funeral group, etc)
 - Yes ____ (specify what) No _____
- 5.2 Any community activities commonly organized in your zona?

Festival	
Community meeting	
Others	

5.3 How do you get to know the news?

Through community meeting	
Through zona ocmmission	·
Through camara staff	<u> </u>
Through friends / neighbours	
Through radio	
Others	(Specify what)

5.4 How many hours did you spend yesterday for the following activities?

	Hours	Location	Remarks
1. Productive Activities			
1.1 Agriculture	hours		
1.2 Fishing	hours		
1.3 Animal care	hours		······································
1.4 Kitchen gardening	hours		
1.5 Income generation	hours		
1.6 Wage labor	hours		,
1.7 Others	hours		· · · · ·
2. Reproductive Activities			
2.1 Collection of water	Hours		
2.2 Collection of firewood	Hours		
2.3 Washing clothes	Hours		
2.4 Preparation of meals	Hours	1	
2.5 Cleaning	Hours		
house/maintenance			
2.6 Child rearing	Hours		and the second
2.7 Family health care	Hours		······

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2.8 Shopping	Hours	
2.9 Other household chores	Hours	••••••••••••••••••••••••••••••••••••••
3. Community Activities		
3.1 (specify)	Hours	
3.2 (specify)	Hours	

6. Access and control

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	Access	Control	Remarks
1. Resources			
1.1 Water			
a. Domestic water			
b. Irrigation water		<u> </u>	
1.2 Equipment			
a. Equipment for maintenance			
1.3 Skills/training			
a. Water system maintenance			
1.4 Labor support for water		:	
collection			
1.5 Credit for water fee			
2. Benefits			
2.1 Water			L

O = have access and control

 Δ = have some access and control

 \times = have no access and control

<Water>

6.1 Who collects water for the domestic use?

Husband/Male partner () Wife/Male 1	partner ()
Girl child ()	Boy child ()	Others () (specify who)

6.2 Do you get help from outside the household in water collection ?

Yes () No ()

6.3 Who decides where to take water, when to take water, who to take water, how to take water, how much water (amount) to take, for domestic use ?

Husband/Male partner () Wife/Female partner () Together ()

0,4 WI	no makes the final decision ?
	Husband/Male partner () Wife/Female partner ()
6.5 Wł	no collects water for the irrigation purpose ?
Hu	isband/Male partner () Wife/Female partner ()
Gir	rl child () Boy child () Others () (specify who)
6.6 Wł	no decides where to take water, when to take water, who to take water, how to
tal	ce water, how much water (amount) to take, for the irrigation purpose ?
	Husband/Male partner () Wife/Female partner () Together ()
6.7 WI	ho makes the final decision ?
	Husband/Male partner () Wife/Female partner ()
<equi< td=""><td>pment></td></equi<>	pment>
6.8 Do	you repair/maintain the water supply system ?
	Yes () No ()
6.9 If	yes, are tools you need for repairs/maintenance available to you ?
6.9 If	yes, are tools you need for repairs/maintenance available to you ? Yes () No ()
6.9 If	
	Yes () No ()
6.10	Yes () No () Are the tools yours ?
6.10	Yes () No () Are the tools yours ? Yes () No ()
6.10 <knov< td=""><td>Yes() No() Are the tools yours? Yes() No() wledge/training></td></knov<>	Yes() No() Are the tools yours? Yes() No() wledge/training>
6.10 <knov< td=""><td>Yes () No () Are the tools yours ? Yes () No () wledge/training> Have you learned any skills for repairs/maintenance ?</td></knov<>	Yes () No () Are the tools yours ? Yes () No () wledge/training> Have you learned any skills for repairs/maintenance ?
6.10 <knov< td=""><td>Yes () No () Are the tools yours ? Yes () No () wledge/training> Have you learned any skills for repairs/maintenance ?</td></knov<>	Yes () No () Are the tools yours ? Yes () No () wledge/training> Have you learned any skills for repairs/maintenance ?
6.10 <knov 6.11</knov 	Yes () No () Are the tools yours ? Yes () No () wledge/training> Have you learned any skills for repairs/maintenance ? Yes () (specify where) No ()
6.10 <knov 6.11</knov 	Yes () No () Are the tools yours ? Yes () No () wledge/training> Have you learned any skills for repairs/maintenance ? Yes () (specify where) No () Did you participate in any training for repairs/maintenance ? Yes ()(where and when) No ()
6.10 <knov 6.11 6.12</knov 	Yes () No () Are the tools yours ? Yes () No () wledge/training> Have you learned any skills for repairs/maintenance ? Yes () (specify where) No () Did you participate in any training for repairs/maintenance ? Yes ()(where and when) No ()
6.10 <knov 6.11 6.12 <crea< td=""><td>Yes () No () Are the tools yours ? Yes () No () wledge/training> Have you learned any skills for repairs/maintenance ? Yes () (specify where) No () Did you participate in any training for repairs/maintenance ? Yes ()(where and when) No () lit></td></crea<></knov 	Yes () No () Are the tools yours ? Yes () No () wledge/training> Have you learned any skills for repairs/maintenance ? Yes () (specify where) No () Did you participate in any training for repairs/maintenance ? Yes ()(where and when) No () lit>

<Household budget>

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6.14	Who is in charge of household	cconomy .	(
	buy, how much to buy, what no	t to buy, et	c ?)
	Husband/Male partne	r ()	Wife/Male partner ()
	Together ()		Others () (specify who)
6.15	Who makes the final decision ?	2	
	Husband/Male partne	r()	Wife/Female partner ()
7. He	alth condition		
7.1 Wh	aat are the major health problem	s your fam	ily faces ?
	Diarrhoea	Paras	ite
•	Cold / Fever	Typho	
	Skin diseases	Eye d	iseases
	Headache	Other	s (specify wha
7.2 Ar	e there any seasonal variations f		ases occurrence ? No
	·)	No
	Yes (specify what here do you go when your family Nearest health center) members a	No
	Yes (specify what here do you go when your family Nearest health center Nearest sanitation agency) members a	No
	Yes (specify what here do you go when your family Nearest health center Nearest sanitation agency Traditional healer) members a 	No nre sick ?
	Yes (specify what here do you go when your family Nearest health center Nearest sanitation agency) members a 	No
7.3 WI	Yes (specify what here do you go when your family Nearest health center Nearest sanitation agency Traditional healer) members a 	No nre sick ?
7.3 WI 8 Do	Yes (specify what here do you go when your family Nearest health center Nearest sanitation agency Traditional healer Others) members a (speci	No nre sick ?
7.3 WI 8 Do	Yes (specify what here do you go when your family Nearest health center Nearest sanitation agency Traditional healer Others omestic Water) members a (speci	No nre sick ?
7.3 WI 8 Do	Yes (specify what here do you go when your family Nearest health center Nearest sanitation agency Traditional healer Others omestic Water) members a (speci stic use ?	No nre sick ? Ify where)
7.3 WI 8 Do	Yes (specify what here do you go when your family Nearest health center Nearest sanitation agency Traditional healer Others omestic Water /here do you take water for dome Dry) members a (speci stic use ?	No nre sick ? Ify where)
7.3 WI 8 Do	Yes (specify what here do you go when your family Nearest health center Nearest sanitation agency Traditional healer Others omestic Water /here do you take water for dome Dry River) members a (speci stic use ?	No nre sick ? Ify where)

Buy from public faucet		
Buy from truck directly	·	
Others		

8.2 How long does it take to get there ? Dry season _____ hours Rainy season _____ hours

8.3 Have you always been taking water from there ? If not, where ?

Yes _____ No _____ (specify where)

8.4 How much water do you collect every day ?

8.5 How much time do you spend each day for collection of water ?

	Dry season	Rainy season
Less than one hours		· · · · · · · · · · · ·
1~3 hours		
More		

8.6 How much do you pay for the water ?

_____ per liter

8.7 If not paying, why?

Do not have money _____ Not collected _____ Other _____(specify)

8.8 Do you have any problems with current domestic water supply ? If so, what problems ?

Quantity of water		۰ ۱	1
Quality of water			
Access to facilities	;		
Fees		н. 	
Reliability			
Others			

8.9 Do you have any requests or suggestions for better water supply system ? If so, what are they ?

Items	Priority Order (1 to 6)
a. Improvement of water quality	
b. Improvement of the existing facility	
c. Increase in the amount of water to be supplied	
d. Reduction of water fee	
e. Reduced distance	
f. Others (what)	

1: Highest priority

6: Lowest priority

8.10 If there is an improved water supply system available, are you willing to contribute to the operation and maintenance of the system ?

Yes _____ (specify how) No _____ (why)

8.11 If there is an improved water supply system available, are you willing to pay for the water ?

9

Yes _____ No _____ (why)

9 Sanitation and Hygiene

No

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9.1 What is a more important purpose for using water ?

Drinking / cooking / dishing _____ Personal hygiene _____

Laundry Agriculture / kitchen garden

9.2 Do you have a toilet in your house?

Yes _____ (what type, where)

9.3 If	yes, does your far	nily use the	em ?	
	Yes, always	<u> </u>		
	Sometimes			
	Never	<u>. </u>		
	Only women	<u></u>		
9.4 W	hat about childre	n ?		
	Yes, always			
	Sometimes			
	Never			
9.5	lf you do not h	ave a toilet	at your house, do you find it inconvenient?	
	Yes			
	No			
9.6	Have you atte	nded any he	ealth and hygiene education organized in the zona	ι?
	Yes		(when, where)	
	No		(why)	
9.7	Will you atten	d in health	and hygiene education, if organized in your zona	?
	Yes			
	No			
10. Ye	our Development	Need		
10.1	What is your j	priority nee	ed in your life ?	
	Econ	omic need	·	

Health of family Education of children Housing Water supply for domestic use

Water supply for agriculture

10.2 How would you satisfy the above need on your own ?

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10.3 What would you do with the time saved, when an improved water system is installed and less time is required for water collection (only for women)?

Income generation	
Care for children	
Household work	
Nothing	
Others	

Questionnaire for Zona Leader

Municipality	
Zona	
Informant	
Date	

A Local Administration

A-1 Organization of the Zonal Administration

Name of Post	Name of Person	Years in Position and How Appointed	Major Activities

A-2 Payment for the above Members

Do the Zonal Administration members receive any payment (salary) for their services ?

1

a. Yes b. No

If yes, how much do they receive ?

A-3 Number of lugar _____ number

- B Basic Data and Indicators
- B-1 Number of households ______ B-2 Total population ______ Male _____ Female

	B-3	No. of female h	eaded-house	holds		
	B-4	Population mov	rement			
		Migrat	ion out of zon	ia	persons	
		Migrat	ion out of cou	intry	persons	
è	B-5	Percentage of (religion Cl	nristian		
			O	thers		
	B -6	Totat land area	· · · ·		km2	
		Crop land area			_	
		Others			-	
	С	Agriculture, Liv	estock and F	ishery		
	C-1	Average size o	f land holding	by a household		ha
		No. of farmers	with own land	ł		
		No. of tenant fa	armers (farme	ers without land but	borrowing land)	
		No. of farm lab	orers (who ha	as no land)		
	C-2	Main crop in th	e village			-
5 .	C-3	Second Crop in	n the village			-
	C-4	Average annua	at household j	production of food o	props	
		Maize				
		Banana		Others		
	C-5	Is there any co	onsiderable pr	roduction of the foll	owing items in and aro	und yo
		zona ? (circle	one or more	, if any)		
		a. fish	b. poultry	c. wood	d. natural stone	
		e. bricks	f. honey	g. charcoal	h. any other ()
	C-6	Average no. of	livestock in a			
		Cattle for beef		_ Cattle for m	ilk	
				_ Goat		
		Horse				
- -		Sheep		Chicken		
Ľ			i			
Ţ		Sheep	 	Chicken		
Ľ		Sheep		Chicken		
		Sheep		Chicken		
		Sheep		Chicken		•

D Employment and Income

D-1	Please indicate every kind of economic activity found in your village.				
	(circle one or more, if any)				
	a. food processing	b. slaughtering			
	c. dairy products	d. bakery			
	e. beverage	f. textiles			
	g. basket making	h. rope making			
	i. wood processing	j. tanning			
	k. furniture making	I. laborer for construction			
	m.others				
D-2	Available Manpower (Plea	se mention the number and sex)			
	Doctor	Nurse			
	Pharmacist	Midwife			
	Teacher, male	Teacher, female			
	Carpenter	Blacksmith			
	Mason	Mechanic			
D-3	Number of people in you	ir zona who work as seasonal laborers away from			
	home outside Zona				
	Number of people in you	ir zona who work as seasonal laborers away from			
	home outside the country				
D-4	Most important source of	income for the families			
D-5	Monthly average family in	come			
E	Location and Public/ Soci	al Services			
E-1	Distance on foot to the ne	earest main road			
	a. zero	b. Less than 30 minutes			
	c. 30 to 60 minutes	d. more than 1 hour			
E-2	Is your Zona served by regular passenger transport services ? (circle one)				
	a. No				
	b. Yes: all year round, mo	b. Yes: all year round, more than once a week			
	c. Yes: all year round, les	c. Yes: all year round, less than once a week			
	d. Yes: but seasonal serv	ices			
E-3	Is telephone service avai	lable in the Zona? a. Yes b. No			

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	E-4	Nearest health facilities	
		a. Sanitation agency	
		b. Health center	
		c. Others ()	
<u>ک</u>		d. Traditional healer	persons
	E-5	School (circle one)	
		a number of s	schools are available in zona
		b. School is available out	tside zona
		(How far is the school	? km)
		c. School is not available	
		If school is available, ple	ase mention the number of school children.
		Primary (1-6 yea	ars) Secondary (7-10 years) Others
		Male	
		Female	
		How / by whom is the s	chool maintained ?
. 	E-6	Community hygiene / sa	anitation
		Is there a fixed place to with the garbage throw	throw garbage in the zona ? If so, what do you do In there ?
	E-7	Public utilities	
		Electricity	a. Electrified
			b. Not Electrified
			c. Partially Electrified
		Post Office	units
		Commercial Bank	units
		Cooperative societies	units
1.		Shops	units
	÷.	Others (units
	E-8	Public information	
		Television	units
		Radio	units
	• •		
			4

- E-9 Source of Drinking Water (circle one or more, if any)
 a. Public faucet (source of water ______) b. Truck supply
 c. House Connection d. Dugwell e. Spring f. Pond
 g. Stream/River h. others ______
 E-10 System of opearation / maintenance of the drinking water facility
- E-11Source of Fuel
(circle one or more, if any)a. Fuelwoodb. Animal dung cakec. Kerosened. Others

E-12 Main Diseases

Diseases	No. of Patient per	Diseases	No. of Patient per
	year		year
a. Diarrhea		d. Eye Diseases	
b. Cold	·····	e. Typhoid	
c. Skin Diseases		f. Others	

E-13 Toilet availability

Number of househol	units		
Number of househol	units		
Toilet at school	a. Yes	b. No	

E-14 Community Organizations

Name	Starting Year	Members	Activities
			· · ·

E-15 Priority community development needs

	Questionnaire for	· · · · · · · · · · · · · · · · · · ·
<u></u>	School Teacher	

Date of Interview Starting Time Finishing Time

Name of School/Zona		
Name of Informant		
Sex	<u></u>	
Age		
Years in Position	<u></u>	
Education	None	
	1~6 years	
	7~10 years	
	Other	

1. Basic data

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Number of classes				
Number of sessions				
Number of teachers				
Number of students	Grade 1	1		
	Grade 2	1		
	Grade 3	1		
	Grade 4	1		
	Grade 5	1		
	Grade 6	1		
Food provision				
Teaching materials				
Cost of education for parents				

2. Health and nutrition

2.1 What do you see as the major health related problems among school children? And why?

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2.2 Any seasonal variations for the diseases occurrence?

_____ 3. Water supply at school 3.1 If there is no water facility at school, where do you get water for your school ? How much (amount) for what purposes ? What problems do you face with the water supply at your school? _____ _____ 3.2 How much do you pay for the water at your school? _____esc/liter 3.3 What is the major problem concerning water supply at your school? 4 Hygiene 4.1 Does your school have toilets ? If so, what type, where ? Separate toilets for teachers? 4.2 Do you use the toilet ? How about school children ? 4.3 What is the condition ? Who cleans it ? How ? $\mathbf{2}$

4.4 Is the health/hygiene education given at your school ? If so, how is it organized ? Who teaches the health/hygiene education ?

3

4.5 What is your general observation of school children as regards to their hygiene behavior?

5. Gender issues

5.1 Do you observe any differences between boy children and girl children in regards to their enrollment, attendance, performance at school?

5.2 Do girl children learn different subjects from those of boys ?

[Questionnaire for	
	Sanitation Agent	

 Date of Interview

 Starting Time

 Finishing Time

Name of Zona Name of Informant an Sex Age	d position	
Years in Position		
Education	None	
	1~ 6 years	
	7~10 years	
	Other	

1. Your work

1.1 What services are provided at the sanitation agency?

1.2 What are your major responsibilities?

1.3 Do you teach the people about the importance of safe drinking water and sanitation? Do you organize health and hygiene education for the people? Are they for both men and women?

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	1.4 Do you teach them how to make and use ORS ?			
3	1.5 Do you face any problems in carrying out your work ? (As you are man/woman)			
	1.6 Do people use the sanitation agency ?			
	1.7 If not, why, and what do they do when they are sick ?			
	2. Major diseases			
	2.1 Five major diseases for adults			
	(Especially water borne diseases such as diarrhoea, parasite, typhoid, dysente skin disease, eye disease, cold, malaria, etc)			
	2.2 Five major diseases for children under 5			
	2.3 Any seasonal variations for the diseases occurrence ?			
	2.4 Any male/female differences ?			
	2.5 What do you see as the major health needs of the people ?			
:				

3. Sanitation / Hygiene

3.1 What are the general habits of people in terms of sanitation and hygiene (such as solid waste and excreta disposal, personal hygiene)?

3

3.2 How do you rate the level of sanitation and hygiene knowledge of the people ?

 Questionnaire for
Questionnane for
Water Vendor

Name of zona		_	
Name of Informant			
Sex			
Age			
Age Years in Position	<u> </u>		
Education	None		
	1~6 years		
	7~10 years		
	Other		

1. Your work

1.1 What are your major responsibilities as a water vendor?

Collection of fee	
Maintenance/repair	·
Cleaning	
Water quality control	. <u></u>
Others	(specify)

1.2 How did you become a water vendor?

1.3 Is there a water committee ?

Yes No

1.4 Did you receive any training for maintenance/repair?

Yes _____ By whom _____ No _____

	Yes, my own			
	Yes, provided	ł by Camara		
	No, but made	e available if needed		
	Not available	o		
1.6 Hav	e you actually	y done any repair wor	k since you became the water vendor ?	
	Yes	<u> </u>		
	No			
1.7 If n	ot, who repair	·s ?		
	Camara			
	Others	(specify)		
1.8 Do	you receive an	y remuneration ?		
	Yes		How much	
	No			
2. Wate	er supply			
2.1 Ho	w is the water	supplied to the peopl	le ?	
2.1 Ho		r supplied to the peopl rectly (without tank)	e?	
2.1 Ho	By truck dir			
2.1 Ho	By truck dir By public fa	rectly (without tank)		
2.1 Ho	By truck dir By public fa	rectly (without tank) sucet with tank and tr		
	By truck dir By public fa By public fa Others	rectly (without tank) sucet with tank and tr	ruck	
	By truck dir By public fa By public fa Others	rectly (without tank) nucet with tank and tr nucet with borehole	ruck	
	By truck dir By public fa By public fa Others w often is the	rectly (without tank) nucet with tank and tr nucet with borehole water supplied to the	ruck	
	By truck din By public fa By public fa Others w often is the Not fixed Once a wee	rectly (without tank) nucet with tank and tr nucet with borehole water supplied to the	ruck	
	By truck din By public fa By public fa Others w often is the Not fixed Once a wee	rectly (without tank) nucet with tank and tr nucet with borehole water supplied to the k once a week	ruck	
	By truck din By public fa By public fa Others w often is the Not fixed Once a week More than o	rectly (without tank) nucet with tank and tr nucet with borehole water supplied to the k once a week	ruck	
	By truck din By public fa By public fa Others w often is the Not fixed Once a week More than o Less than o	rectly (without tank) nucet with tank and tr nucet with borehole water supplied to the k once a week	ruck	
	By truck din By public fa By public fa Others w often is the Not fixed Once a week More than o Less than o	rectly (without tank) nucet with tank and tr nucet with borehole water supplied to the k once a week	ruck	2

2.3 Is the water sufficient to satisfy the needs of all the people?

Yes _____ No _____

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2.4 How much is the water sold (price per liter)?

2.5 How much water (amount in liter) on average do people collect each time ?

2.6 Do people use the sanitation/laundry facilities ? (If such facilities are available at the public faucet)

3

Yes _____ No ____

Group Interview (Male/Female Separate)

Date of Interview Starting Time Finishing Time ____

<u> </u>		
cipants		
10's	20's	30's
40's	50's	Above
None		
l∼6 years		
7~10 years		
Others		
	10's 40's None 1~6 years 7~10 years	10's 20's 40's 50's None

1. Domestic Water

1.1 Where do you take water for domestic use ?

	Dry Season	Rainy season
River		
Pond / Lake		
Spring / gallery		
Dug well	-	
Buy from public faucet		
Buy from truck directly		
Others		<u> </u>

1.2 How long does it take to get there?

Dry season	hours
Rainy season	hours

1.3 Have you always been taking water from there ? If not, where ?

Yes _____ No ____ (specify where)

1.4 How much water do you collect every day ?

_____ liters

L

1.5 How much time do you spend each day for collection of water?

	Dry season	Rainy season
Less than one hours	·	
1~3 hours		4 - participante, inter inger announder
More		_ _

1.6 How much do you pay for the water ?

_____ per liter

1.7 If not paying, why?

Do not have money	
Not collected	
Other	(specify)

1.8 Are you satisfied with the present water supply system ?

Yes ____ No

1.9 If not, why?

Yes

1.10 What is the best way to solve the problems you mentioned above ?

• install new water supply system in the village

• repair the existing water supply system in the village

No

increase the water supply by water lorry

• others (specify what)

1.11 If there is an improved water supply system available in the zona, do you prefer to use it to what you have now (such as tank lorry, etc)

1.12	If yes, a	ire you willing	to contribute	to the oper	ation and mai	ntenance of the	9
sys	tem by th	e community ?					
	Yes		No				
1 10	11711	h	21.1.16.0		the of the wet	مر میں م	
1.13	tem ?	ı be able to prov	ade land for th	ie construct	tion of the wate	ուջանելն	-
sys	Yes		No _				
	108	<u> </u>					
1.14	Are you	willing to form	a water users	committee	?		
	Yes		No				
1.15	(If yes)						
1.15.1	What sh	ould be the com	mittee do ?				
		Collection of v	vater fee				
		Repair / main	tenance				
		Maintenance	of water sourc	e	_		٢
		Cleanliness of	f facility		<u> </u>		
		Others		-	_ (specify wha	t)	
				• • •	•		
1.15.2	Are you	willing to be a r	nember of the	committee	?		
		Yes No	·				
		NU					
1.15.3	If no, wł	NV 9					
		No time					
			ponsibility of a	zona commi	ssion		
		Others (speci			•••		
1.16	If not	willing to form	n a users com	mittee, wł	y not willing	to form a user	rs 🐌
co	mmittee ?			Ч.,	a di sas		
		Should be do	ne by a single j	person such	n as care taker	· · ·	· · ·
		Should be do	ne by zona con	nmission			
		Should be do	ne by camara			· · · · ·	
		Others (speci	fy why)				
					· ·	:.	
			1	·			3
	•	· · ·	· · ·				-
· ·							

1.17 Are you willing to assume the responsibility of repair / maintenance, if you have the necessary skills and knowledge ?

	Yes		-	No						
1.18	If not, w	vhy ?								
		No tim	e							
		Should	be done	by zona	ı comm	ission				
		Should	be done	e by cam	ara					
		Others	(specify	·)						
2. Sa	nitation a	and Hygi	ene		·					
2.1 Do	people in	i your zo:	na have	a toilet '	?					
	Yes _		(what	type, wl	here)					
	No									
2.2 If 1	not, do you	u face an	y inconv	venience	?					
	Yes	<u> </u>	_							
	No		_							
	Others	;			(spe	ecify)				
2.3 Do	people w	ash han	ds after	using to	ilet and	l before	prep	aring a	nd eati	ng meals ?
	Yes		_							
	No									
2.4 W	hat do you	u use to s	wash you	ur hands	s?					
	Water	only								
	Mud									
	Ash	•								

(what)

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Soap Bleech

Others

2.5 Do children wash hands after using toilet and before preparing and eating meals ?

Yes _____ No _____

2.6 How often do people take a bath?

Everyday	
Once a week	
Less	
Never	

2.7 How often do your children take a bath?

Everyday	
Once a week	<u> </u>
Less	`
Never	

2.8 How often do people wash clothes?

Everyday	
Once a week	<u> </u>
Less	<u> </u>
Never	

2.9 How do people dispose of solid wastes ? (Plastic, can, papers, fresh garbage, etc)

Bury in the yard	<u> </u>
Burn in the yard	
Dump anywhere	
Make compost	
Others	(what)

2.10 How do people clean your house and yard?

Sweep only With water Others

_____ (specify)

1

	2.11	Where do people raise livestock ? Indoors ? Outdoors ?			
		Indoors			
		Outdoors			
	2.12	How is livestock excreta disposed of ?			
		Left where it is			
		Bury in the ground			
		Dump it in a selected place			
		Make compost			
		Others			
	2.13	How do you ensure that the drinking water is safe ?			
		Use chlorine			
		Use bleech			
		Boil			
		Nothing			
_		Others (what)			
ŧ.	2.14	How do you wash the water container ?			
		With water			
		With soap			
		Others (specify)			
	2.15	How do you dispose of the waste water from washing dishes/clothes ?			
		Anywhere			
		Use it for kitchen garden			
		Others (specify)			
	2.16	Did any one of your family have diarrhoea during the last six months ?			
		Yes No			
	2.17	If yes, what did you do ?			
		Sought professional advice			
		Gave ORS			
		Others (specify)			
	÷			1	
			6	·	
			U		
			•		

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2.18	Do you know the cause of diarrh	oca ?
	Yes	
	No	
2.19	What do you have to do to preve	nt diarrhoea ?
	Drink safe water	
	Wash hands	
	Use toilet	
	Keep the community cle	ean
	Others	
2.20	Are you doing any of the above ?	
	Yes	
	No	
2.21	If not, why ?	
	No money to built toile	t
	No garbage bin exists	
		camara, sanitation agency
	Others	
2.22	What is a more important purpo	ose for using water ?
	Drinking / cooking / dis	-
	Personal hygiene	
	Laundry	
	Agriculture / kitchen g	arden
2	Your Development Need	
	Is there a zona commission ?	
3.1	Yes	
3.1	100	
3.1	No	

3.3 Are there any people's organization in your zona ?

Construction group	
Women's group	<u> </u>
Funeral group	
Others	(specify)

3.4 Any community activities commonly organized in your zona ?

Festival	
Community meeting	
Others	<u> </u>

3.5 What is your priority need in your life?

Economic need	<u> </u>
Health of family	
Education of children	<u></u>
Housing	<u></u>
Water supply for domestic use	. <u> </u>
Water supply for agriculture	

3.6 How would you satisfy the above need yourself?

3.7 What would you do with the time saved when an improved water system is installed and less time is required for water collection ? (only for women)

Income generation	<u> </u>
Care for children	<u> </u>
Household work	
Nothing	
Others	