

**Department of Agriculture
Ministry of Agriculture and Forests
The Kingdom of Bhutan**

**DATA COLLECTION SURVEY
ON
STRATEGIC AGRICULTURAL WATER SUPPLY
AND MANAGEMENT
IN SOUTHERN BHUTAN**

**FINAL REPORT
(APPENDIX)**

OCTOBER 2012

**Japan International Cooperation Agency (JICA)
SANYU CONSULTANTS INC.**

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Appendix A: Inventory of Irrigation System

A-1: Sarpang Dzongkhag

A-2: Samtse Dzongkhag

A-3: Samdrup Jongkhar Dzongkhag

A-1: Sarpang Dzongkhag

List of target irrigation structure in Sarpang Dzongkhag

Target: Command area is more than 5ha and Beneficiaries are more than 10.

Gewog	No.	No. ¹⁾ (in the original list)	Name of the Channel ¹⁾	Water Source		Location ¹⁾	Length Approx ¹⁾ (Km)	Command Area ¹⁾		Beneficiary ¹⁾ (HH)	Year of Construction ¹⁾	WUA ¹⁾	Funding Source ¹⁾	Present Status		Accessibility ²⁾			Remarks	
				Name ¹⁾	Water availability ²⁾ P: Permanent S: Seasonal			(Ac)	(ha)					Status ¹⁾³⁾	Reason of non-functional ¹⁾³⁾	Distance from beneficiary area to road (km)	Time to get to road (min)	Transportation way (Local bus, on foot etc)		
Bhur	B-1	297	Puchar Kulo	Aipowali	S	Juphrey	5.00	135.00	54.63	26	1968	No		Functional		0.0	0	-		
	B-2	296	Beech Kulo	Aipowali	S	Juphrey	5.00	125.00	50.59	26	1968	No		Functional (Non-Functional)	(Intake was washed away by Flood)	0.0	0	-		
	B-3	286		Paitakhola	S	Ghalleygoan	5.00	90.00	36.42	29		No		Functional		0.0	0	-		
	B-4	291		Limbo kulo	S	Roadline	3.50	80.00	32.38	40		No		Functional		0.0	0	-		
	B-5	292		Monger Kulo	S	Mongergoan	3.50	65.90	26.67	30		No		Functional		0.0	0	-		
	B-6	295		Siran Kulo	Aipowali	P	Juphrey	5.50	40.00	16.19	14	1968	No		Functional		0.0	0	-	
	B-7	299		Barasut Kulo	Shitakhari	S	Jaruwa/Dechenpelri	4.50	36.00	14.57	21	1986	No		Functional		0.0	0	-	
	B-8	298		Siran Kulo	Shitakhari	S	Jaruwa/Dechenpelri	4.00	35.00	14.16	19	1986	No		Functional		0.0	0	-	
	B-11	300		Puchar Kulo	Shitakhari	S	Jaruwa/Dechenpelri	3.00	20.00	8.09	13		No		Functional (Non-Functional)	(Intake was washed away by Flood)	0.0	0	-	
	Subtotal							39.00	626.90	253.70	218									
	Chuzagang	C-1	130	Phunsum Chuyour (low level)	Takali	P	Dawathang	5.41	700.00	283.28	350	1984	YES	Community	Functional		0.0	0	-	
C-2		129	Samdruk Chuyour (high level)	Takali	P	Dawathang	7.51	300.00	121.41	70	1984	YES	Project	Functional		0.0	0	-		
C-3		131	Karbitang	Sherabcholing	P	Karbitang	0.36	200.00	80.94	150	2010	No	RGOB	Functional		0.0	0	-		
C-4		128	Sherab choling	Kaikhola	P	Chasikher	2.00	150.00	60.70	25	1984	No	RGOB	Non-Function	No need to use because irrigation water is being supplied by Samdrup Chuyour (C-2)	0.0	0	-		
C-5		127	Masinkhola	Masini khola	S	Chasikher	1.00	50.00	20.23	10		No	Community	Functional		0.0	0	-		
Subtotal							16.28	1,400.00	566.57	605										
Dekiling	Dek-1	136	Hilley Khola Iri.channel	Hilley Khola	S	Chokorling	3.00	506.55	205.00	36		No	Community	Functional		0.0	0	-		
	Dek-2	146	Yangchenphu Iri.Channel	Yangchu	S	Yangchenphu	3.00	90.00	36.42	33		No	Community	Functional		0.0	0	-		
	Dek-3	143	Dekiling Iri.channel	Leo khola	S	Dekiling Derbitang	3.00	72.53	29.35	42	2003	No	ECR-ADP	Functional (Non functional)	(Land Slide)	0.0	0	-		
	Dek-4	135	Bichkhola Iri.channel	Bich Khola	S	Bichpani	2.00	70.00	28.33	43		No	Community	Functional		0.0	0	-		
	Dek-5	145	Yangchenphu Iri.Channel	Phendey Chu	P	Yangchenphu	5.00	55.00	22.26	30		No	Community	Non Functional (Functional)		0.0	0	-		
	Dek-6	133	Norbuthang Iri.Channel	Phendeychu	S	Gawathang	2.50	35.00	14.16	24	1984	No	Community	Functional		0.0	0	-		
	Dek-7	139	Ratey Khola Channel	Ratey Khola	P	Ratepani	3.00	30.00	12.14	16	2003	No	ECR-ADP	Functional (Non functional)	(Land Slide)	0.5	15	On foot		
	Dek-8	132	Gawathang Iri.channel	Yangchu	S	Gawathang	1.50	25.00	10.12	14	1984	No	Community	Functional		0.0	0	-		
	Dek-10	144	Phendey Chu Channel	Teen Bhadey	S	Trashiling	1.50	23.00	9.31	10		No	Community	Non Functional	Intake was washed away by Flood	0.0	0	-		
	Dek-11	134	Ratey Iri.Channel	Ratey Khola	P	Ratey	5.00	21.50	8.70	100		No	Community	Non Functional	Land Slide & Flood	0.0	0	-		
	Dek-12	137	Dhokhola Iri.Channel	Dhokhola	P	Dhokhola	2.00	21.00	8.50	24	2004	No	ECR-ADP	Functional		0.0	0	-		
	Dek-13	138	Dhokhola Iri.Channel	Dhokhola	P	Dhokhola	2.00	18.00	7.28	16	1985	No	Community	Functional		0.0	0	-		
	Subtotal							33.50	967.58	391.57	388									
Dovan	Dov-1	100	-	-	P	Thulokhola	2.50	30.00	12.14	18	2009	No	RGOB	Functional			2days	On foot		
	Dov-4	86	-	Girigang	P	Betchkhola	1.00	14.00	5.67	10	Not known	No	Community	Functional			3days	On foot		
Subtotal							3.50	44.00	17.81	28										
Gelephu	G-1	226	Sonamgatshel & Raptening Irrigation channel	Mouchu	P	Sonamgatshel & Raptening	2.00	212.82	86.13	85	1995	No	RGoB	Functional		0.0	0	-		
	G-2	227	Passangchu Irrigation Channel	Passangchu	P	Lower Pelritang	2.50	79.40	32.13	21	1960	No	RGoB	Functional		0.0	0	-		
	G-3	229	Dhulachu Irrigation Channel II	Dhulachu	S	Lower Pelritang	1.50	61.85	25.03	23	1970	No	RGoB	Functional		0.0	0	-		
	G-4	228	Dhulachu Irrigation Channel I	Dhulachu	S	Upper Pelritang	1.50	56.65	22.93	19	1970	No	RGoB	Functional		0.0	0	-		
	G-5	233	Tarulay Irrigation channel	Tarulaychu	S	Dzomlingthang	2.00	50.39	20.39	25	1978	No	RGoB	Functional		0.0	0	-		
Subtotal							9.50	461.11	186.61	173										
Hilley	H-1	3	Gurung Khola Kulo 3	Gurung Khola	S	Hilley	1.50	37.19	15.05	15	1970	No	Community	Functional		0.5	20	On foot		
	H-2	38	Hadzari Kulo	Kali Khola	P	Khopitar	2.00	21.95	8.88	10		No	Community	Functional		5.0	120	On foot		
Subtotal							3.50	59.14	23.93	25										
Jigmecholing	J-1	175	Baghari	Baghari Kholsa	P	Daragaon	1.50	105.00	42.49	12	1920	No	Community	Functional		1.0	20	On foot		
	J-2	184	Pamtey Kulo	Pamtey Kholsa	P	Saundaley	1.00	90.00	36.42	25	1940	No	Community	Functional		1.0	15	On foot		
	J-3	185	Dharey Kulo	Dharey Kholsa	P	Saundaley	0.50	50.00	20.23	12	1914	No	Community	Functional		1.0	15	On foot		
	J-4	168	Jante Kulo(3)	Jantey Kholsa	P	Daragaon	2.50	30.00	12.14	21	1920	No	Community	Functional		1.0	15	On foot		
	J-5	217	Gumti Kulo	Gumti kholsa	P	Sampagang	1.00	30.00	12.14	15	1935	No	Community	Functional		1.0	30	On foot		
	J-6	224	Dawa Kulo	Dawa Kholsa	P	Sampagang	1.00	30.00	12.14	10	1935	No	Community	Functional		1.0	30	On foot		
	J-10	225	Nado kulo	Nado kholsa	P	Samkhara	2.50	25.00	10.12	10	1935	No	Community	Functional		1.0	20	On foot		
	J-15	172	Sepai Kulo	Sepai Kholsa	S	Daragaon	0.20	22.80	9.23	11	1920	No	Community	Functional		1.0	15	On foot		
	J-16	166	Jante Kulo(1)	Jantey Kholsa	P	Daragaon	3.50	21.00	8.50	12	1920	No	Community	Functional		0.5	15	On foot		
	J-23	148	Tharokulo	Tharo Kholsa	P	Gongdara	3.00	19.50	7.89	13	1955	No	Community	Functional			2days	On foot		
	J-24	165	Hiti kulo	Hiti kholsa	P	Daragaon	1.50	18.00	7.28	12	1920	No	Community	Functional		1.0	30	On foot		
	Subtotal							18.20	441.30	178.59	153									

List of target irrigation structure in Sarpang Dzongkhag

Target: Command area is more than 5ha and Beneficiaries are more than 10.

Gewog	No.	No. ¹⁾ (in the original list)	Name of the Channel ¹⁾	Water Source		Location ¹⁾	Length Approx ¹⁾ (Km)	Command Area ¹⁾		Beneficiary ¹⁾ (HH)	Year of Construction ¹⁾	WUA ¹⁾	Funding Source ¹⁾	Present Status		Accessibility ²⁾			Remarks	
				Name ¹⁾	Water availability ²⁾ P: Permanent S: Seasonal			(Ac)	(ha)					Status ¹⁾³⁾	Reason of non-functional ¹⁾³⁾	Distance from beneficiary area to road (km)	Time to get to road (min)	Transportation way (Local bus, on foot etc)		
Sengye	Sen-1	240	Baral kulo	Sisty khola	P	Sisty A	4.00	59.05	23.90	24	1940	No	Community	Functional		0.0	0	-		
	Sen-2	239	Mazan kulo	Sisty khola	P	Sisty A	6.00	46.95	19.00	25	1946	No	Community	Functional (Non functional)	(Under repairing)	0.0	0	-		
	Sen-3	234	Upper Senghe Kulo	Senghe khola	P	Hatikhuar	1.00	36.10	14.61	20		No	Community	Functional		0.5	20	On foot		
	Sen-4	236	Koigaon kulo	Tungkhola	P	Koigaon	2.50	35.50	14.37	18		No	Community	Functional		0.0	0	-		
	Sen-5	238	Rumdali kulo	Sisty khola	P	Sisty B	3.00	22.05	8.92	14	1973	No	Community	Functional		0.3	10	On foot		
Subtotal							16.50	199.65	80.80	101										
Sershong	Ser-1	266	Lothuen irrigation channel	Taklaichhu	P	Lothuen	6.25	145.55	58.90	84	1976	YES	GIADP	Functional		0.5	20	On foot		
	Ser-2	264	Norbuling irrigation channel	Norbuling chhu	S	Norbuling	3.00	96.40	39.01	53	1976	No	ECR-ADP	Functional		0.5	20	On foot		
	Ser-3	263	Pemaling irri. channel	Norbulingchhu	S	Pemaling	2.50	95.00	38.45	40	1970s	No	ECR-ADP	Functional		1.0	40	On foot		
	Ser-4	259	Pangkhar irrigation channel	Chheojygang chhu	S	Pangkhar	2.50	52.00	21.04	16	2009	No	ASSP	Functional		0.5	20	On foot		
	Ser-6	265	Norbuling irr. channel	Norbulingchhu	S	Norbuling	1.50	52.00	21.04	16	1976	No	ASSP	Non-Functional (Functional)		0.5	20	On foot		
	Ser-7	257	Barshong irrigation channel	Barthang	S	Barshong	2.00	48.00	19.43	22	1970s	No	ASSP	Functional		0.5	20	On foot		
	Ser-8	267	Kingaling irr. channel	Norbulingchhu	S	Kingaling	1.50	45.00	18.21	22	1984	No	RGOB	Non-functional	-	1.0	60	On foot		
	Ser-9	258	Pangkhar irrigation channel	Mathangchu	S	Pangkhar	2.00	40.00	16.19	16	1978	No	GIADP	Non-functional	Land slide	0.5	20	On foot		
	Ser-12	255	Barshong irrigation channel (1)	Barshongchu	S	Barshong	3.00	25.00	10.12	14	1970s	No	ECR-ADP	Functional		0.5	20	On foot		
	Ser-13	256	Barshong irrigation channel (2)	Barthang chhuu	S	Barshong	1.00	20.00	8.09	14	1970s	No	ECR-ADP	Functional		0.5	20	On foot		
	Ser-15	253	Sershong irrigation channel	Barshongchu	S	Sershong	2.00	15.00	6.07	12	1977	No	GIADP	Non-functional	-	0.5	20	On foot		
	Subtotal							27.25	633.95	256.55	309									
	Shompangkha	Sho-1	112	Daoray kholo	Doray khola	S	Kuencholing	2.00	132.00	53.42	93		No	Community	Non-functional	River bed dropping	0.0	0	-	
		Sho-3	108	Lower Norbugang kholo	Tharokhola	S	Darjaythang	1.00	85.00	34.40	12		No	Community	Non-functional (Functional)		0.0	0	-	
		Sho-4	105	Kafley kholo	Kafley khola	S	Darjaythang	2.50	50.00	20.23	24		No	Community	Functional		0.0	0	-	
Sho-7		114	Jaidhan Kholo	Jaidhan kholo	S	Pakhay	2.00	22.33	9.04	12		No	Community	Functional (Non-Functional)	(Land slide)	0.0	0	-		
Subtotal							7.50	289.33	117.09	141										
Tarithang	T-1	305	Yoezergang-Singi Khola Lower Irrigation Canal	Singi Khola	P	Yoezergang	1.50	26.00	10.52	14	1980	No	RGoB	Functional		1.5	30	On foot		
Subtotal							1.50	26.00	10.52	14										
Umling	U-1	282	Rejuk Serchu Irrigation channel	Serchu	P	Rejuk	2.00	85.00	34.40	27		No		Functional		1.0	20	On foot		
	U-2	280	Dangling Irrigation channel Lower	Langar chu	S	Dangling	3.50	82.00	33.18	36	1997	No	RGOB	Non-Functional (Functional)		0.5	10	On foot		
	U-4	276	Dungmin Irrigation channel Upper	Langar chu	S	Dungmin	1.00	70.00	28.33	26	1997	No	RGOB	Functional		0.5	10	Tiller		
	U-5	285	Tashithang Karchu Irrigation channel	Karchu	S	Tashithang	7.00	64.00	25.90	21	1997	No	RGOB	Functional (Non-Functional)	Land slide	0.5	10	Tiller		
	U-6	277	Dungmin Irrigation channel Lower	Langar chu	S	Dungmin	1.00	52.00	21.04	16		No		Functional		0.5	10	Tiller		
	U-7	283	Chubarthang Seekhu Irrigation channel	Serchu	S	Chubarthang	2.00	47.00	19.02	14	1997	No	RGOB	Functional		0.5	10	Tiller		
	U-8	284	Thongjazor Karchu Irrigation channel	Karchu	S	Thongjazor	4.00	44.00	17.81	17	1997	No	RGOB	Non-Functional	-	0.5	10	On foot		
	U-9	274	Lingar Dap Irrigation channel	Taklai chu	P	Lingar	3.00	40.00	16.19	15	2005-2006	No	RGOB	Functional		1.0	20	On foot		
	U-10	272	Gadhen Irrigation channel Lower	Taklai chu	P	Gadhan	1.00	38.00	15.38	48		No		Functional		0.5	10	Tiller		
	U-11	281	Rujuk Karchu Irrigation channel	Karchu	S	Rejuk	1.00	31.00	12.55	27	1997	No	RGOB	Non-Functional (Functional)		0.5	10	On foot		
	U-12	279	Dangling Irrigation channel Upper	Langar chu	S	Dangling	3.00	24.00	9.71	32	1997	No		Non-Functional (Functional)		0.5	10	Tiller		
	U-14	278	Panharey Irrigation channel	Langar chu	S	Dangling	1.00	17.00	6.88	15		No		Non-Functional (Functional)		0.5	10	Tiller		
	Subtotal							29.50	594.00	240.39	294									

1) Posted from inventory "Compiled Irrigation information 2010" obtained from DAO Sarpang.

2) Identified through field survey and interview

3) Status in () is Identified through field survey.

Gewog: Bhur

No.	No. ¹⁾ (in the original list)	Gewog ¹⁾	Name of the Channel ¹⁾	Water Source		Location ¹⁾	Length Approx ¹⁾ (Km)	Command Area ¹⁾		Beneficiary ¹⁾ (HH)	Year of Construction ¹⁾	WUA ¹⁾	Funding Source ¹⁾	Present Status		Accessibility ²⁾			Remarks
				Name ¹⁾	Water availability ²⁾ P: Permanent S: Seasonal			(Ac)	(ha)					Status ¹⁽³⁾	Reason of non-functional ²⁽³⁾	Distance from beneficiary area to road (km)	Time to get to road (min)	Transportation way (Local bus, on foot etc)	
B-1	297	Bhur	Puchar Kulo	Aipowali	S	Juphrey	5.00	135.00	54.63	26	1968	No		Functional		0.0	0	-	
B-2	296	Bhur	Beech Kulo	Aipowali	S	Juphrey	5.00	125.00	50.59	26	1968	No		Functional (Non-Functional)	(Intake was washed away by Flood)	0.0	0	-	
B-3	286	Bhur	Ghalley kulo	Paithakhola	S	Ghalleygoan	5.00	90.00	36.42	29		No		Functional		0.0	0	-	
B-4	291	Bhur	Limbo kulo	Paithakhola	S	Roadline	3.50	80.00	32.38	40		No		Functional		0.0	0	-	
B-5	292	Bhur	Monger Kulo	Paithakhola	S	Mongergoan	3.50	65.90	26.67	30		No		Functional		0.0	0	-	
B-6	295	Bhur	Siran Kulo	Aipowali	P	Juphrey	5.50	40.00	16.19	14	1968	No		Functional		0.0	0	-	
B-7	299	Bhur	Barasau Kulo	Shitakhari	S	Jaruwa/Dechenpelri	4.50	36.00	14.57	21	1986	No		Functional		0.0	0	-	
B-8	298	Bhur	Siran Kulo	Shitakhari	S	Jaruwa/Dechenpelri	4.00	35.00	14.16	19	1986	No		Functional		0.0	0	-	
B-9	290	Bhur	Bista Kulo	Bhurkhola	P	Lower Kholatar	2.00	35.00	14.16	7	1965	No		Non-Functional	Land slide	0.0	0	-	
B-10	289	Bhur	Kholatar kulo	Kopcheykhola	S	kholatar	1.50	25.00	10.12	7	1960	No		Functional		0.0	0	-	
B-11	300	Bhur	Puchar Kulo	Shitakhari	S	Jaruwa/Dechenpelri	3.00	20.00	8.09	13		No		Functional (Non-Functional)	(Intake was washed away by Flood)	0.0	0	-	
B-12	287	Bhur	Kopchey Kulo	Kopcheykhola	S	Kopchey	1.50	10.00	4.05	5	1964	No		Functional		0.0	0	-	
B-13	293	Bhur	Ganteygairi Kulo	Ganteygairi	S	Dungkarling	2.00	5.00	2.02	1		No		Functional		0.0	0	-	
B-14	294	Bhur	Devithan Kulo	Devikholechey	S	Opposite BCPS	1.00	2.60	1.05	1		No		Functional		0.0	0	-	
B-15	288	Bhur	Gareyrey Kulo	Saskholchey	S	Dumidara	1.50	2.00	0.81	1	1978	No		Functional		1.0	15	On foot	

A-1-3

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2) Identified through field survey and interview

3) Status in () is identified through field survey.

: Target for field survey

*Aipowali; Upstream-Permanent, Downstream-Seasonal

Gewog: Chuzagang

No.	No. ¹⁾ (in the original list)	Gewog ¹⁾	Name of the Channel ¹⁾	Water Source		Location ¹⁾	Length Approx ¹⁾ (Km)	Command Area ¹⁾		Beneficiary ¹⁾ (HH)	Year of Construction ¹⁾	WUA ¹⁾	Funding Source ¹⁾	Present Status		Accessibility ²⁾			Remarks
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C-1	130	Chuzagang	Phunsum Chuyour (low level)	Takali	P	Dawathang	5.41	700.00	283.28	350	1984	YES	Community	Functional		0.0	0	-	
C-2	129	Chuzagang	Samdrup Chuyour (high level)	Takali	P	Dawathang	7.51	300.00	121.41	70	1984	YES	Project	Functional		0.0	0	-	
C-3	131	Chuzagang	Karbitang	Sherabcholing	P	Karbitang	0.36	200.00	80.94	150	2010	No	RGOB	Functional		0.0	0	-	
C-4	128	Chuzagang	Sherab choling	Kalikhola	P	Chasikher	2.00	150.00	60.70	25	1984	No	RGOB	Non-Function	No need to use because irrigation water is being supplied by Samdrup Chuyour (C-2)	0.0	0	-	
C-5	127	Chuzagang	Masinikhola	Masini khola	S	Chasikher	1.00	50.00	20.23	10		No	Community	Functional		0.0	0	-	

1) Posted from inventory "Compiled Irrigation information 2010" obtained from DAO Sarpang.

2) Identified through field survey and interview

3) Status in () is Identified through field survey.

: Target for field survey

Gewog: Dekiling

No.	No. ¹⁾ (in the original list)	Gewog ¹⁾	Name of the Channel ¹⁾	Water Source		Location ¹⁾	Length Approx ¹⁾ (Km)	Command Area ¹⁾		Beneficiary ¹⁾ (HH)	Year of Construction ¹⁾	WUA ¹⁾	Funding Source ¹⁾	Present Status		Accessibility ²⁾			Remarks
				Name ¹⁾	Water availability ²⁾ P: Permanent S: Seasonal			(Ac)	(ha)					Status ¹⁾³⁾	Reason of non-functional ²⁾³⁾	Distance from beneficiary area to road (km)	Time to get to road (min)	Transportation way (Local bus, on foot etc)	
Dek-1	136	Dekiling	Hilley Khola Irri.channel	Hilley Khola	S	Chokorling	3.00	506.55	205.00	36		No	Community	Functional		0.0	0	-	
Dek-2	146	Dekiling	Yangchenphu Irri.Channel	Yangchu	S	Yangchenphu	3.00	90.00	36.42	33		No	Community	Functional		0.0	0	-	
Dek-3	143	Dekiling	Dekiling Irri.channel	Leo khola	S	Dekiling Derbithang	3.00	72.53	29.35	42	2003	No	ECR-ADP	Functional (Non functional)	(Land Slide)	0.0	0	-	
Dek-4	135	Dekiling	Bichkhola Irri.channel	Bich Khola	S	Bichpani	2.00	70.00	28.33	43		No	Community	Functional		0.0	0	-	
Dek-5	145	Dekiling	Yangchuenphu Irri.Channel	Phendey Chu	P	Yangchenphu	5.00	55.00	22.26	30		No	Community	Non Functional (Functional)		0.0	0	-	
Dek-6	133	Dekiling	Norbuthang Irri.Channel	Phendeychu	S	Gawaithang	2.50	35.00	14.16	24	1984	No	Community	Functional		0.0	0	-	
Dek-7	139	Dekiling	Ratey Khola Channel	Ratey Khola	P	Ratepani	3.00	30.00	12.14	16	2003	No	ECR-ADP	Functional (Non functional)	(Land Slide)	0.5	15	On foot	
Dek-8	132	Dekiling	Gawaithang Irri.channel	Yangchu	S	Gawaithang	1.50	25.00	10.12	14	1984	No	Community	Functional		0.0	0	-	
Dek-9	140	Dekiling	Dolungang Irri.channel	Bich Khola	S	Dolungang	3.00	25.00	10.12	5		No	Community	Functional		0.0	0	-	
Dek-10	144	Dekiling	Phendey Chu Channel	Teen Bhadey	S	Trashiling	1.50	23.00	9.31	10		No	Community	Non Functional	Intake was washed away by Flood	0.0	0	-	
Dek-11	134	Dekiling	Ratey Irri.Channel	Ratey Khola	P	Ratey	5.00	21.50	8.70	100		No	Community	Non Functional	Land Slide & Flood	0.0	0	-	
Dek-12	137	Dekiling	Dholkhola Irri.Channel	Dholkhola	P	Dholkhola	2.00	21.00	8.50	24	2004	No	ECR-ADP	Functional		0.0	0	-	
Dek-13	138	Dekiling	Dhokhola Irri.Channel	Dhokhola	P	Dhokhola	2.00	18.00	7.28	16	1985	No	Community	Functional		0.0	0	-	
Dek-14	142	Dekiling	Trashiling Irri.channel	-	S	Trashiling	1.00	13.50	5.46	8	2003	No	ECR-ADP	Functional		0.0	0	-	
Dek-15	141	Dekiling	Dolpani Irri.Channel	Kharey Chhu	S	Dolpani	1.00	10.00	4.05	6		No	Community	Functional		0.0	0	-	

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2) Identified through field survey and interview

3) Status in () is Identified through field survey.

Target for field survey

*Phendey chu; Upstream-Permanent, Downstream-Seasonal

*ECR-ADP; Easter Central Rural - Agricultural Development Project (Funded by Dutch NGO)

Gewog: Dovan

No.	No. ¹⁾ (in the original list)	Gewog ¹⁾	Name of the Channel ¹⁾	Water Source		Location ¹⁾	Length Approx ¹⁾ (Km)	Command Area ¹⁾		Beneficiary ¹⁾ (HH)	Year of Construction ¹⁾	WUA ¹⁾	Funding Source ¹⁾	Present Status		Accessibility ²⁾			Remarks
				Name ¹⁾	Water availability ²⁾ P: Permanent S: Seasonal			(Ac)	(ha)					Status ^{1,3)}	Reason of non-functional ^{2,3)}	Distance from beneficiary area to road (km)	Time to get to road (min)	Transportation way (Local bus, on foot etc)	
Dov-1	100	Dovan	-	-	P	Thrulokhola	2.50	30.00	12.14	18	2009	No	RGOB	Functional			2days	On foot	
Dov-2	101	Dovan	-	-	P	Batraikhola	2.00	15.00	6.07	9	2009	No	RGOB	Functional			2days	On foot	
Dov-3	94	Dovan	-	-		-	0.50	15.00	6.07	5	Not known	No	Community	Functional					
Dov-4	86	Dovan	-	Girigahg	P	Betchkhola	1.00	14.00	5.67	10	Not known	No	Community	Functional			3days	On foot	
Dov-5	75	Dovan	-	Moukhola		Dovan	5.00	11.00	4.45	14	Not known	No	Community	Functional			3days	On foot	
Dov-6	99	Dovan	-	Daphkhol	P	Gorikhet	1.50	11.00	4.45	14	Not known	No	Community	Functional			2days	On foot	
Dov-7	103	Dovan	-	Moukhola	P	gotasukhet	2.00	10.00	4.05	6	2009	No	RGOB	Functional			3days	On foot	
Dov-8	95	Dovan	-	Muokhola	P	Gungring	1.50	10.00	4.05	5	Not known	No	Community	Functional			3days	On foot	
Dov-9	87	Dovan	-	Betchkhola	P	-	0.30	9.00	3.64	5	Not known	No	Community	Functional			3days	On foot	
Dov-10	76	Dovan	-	Teskhola	P	Teskhila	5.00	8.00	3.24	5	Not known	No	Community	Functional			3days	On foot	
Dov-11	102	Dovan	-	Lowermobin	S	kahuley	2.00	6.00	2.43	6	Not known	No	Community	Functional			2days	On foot	
Dov-12	104	Dovan	-	Bararikhola	S	Dahgrakhet	1.00	6.00	2.43	5	Not known	No	-	Functional			2days	On foot	
Dov-13	77	Dovan	-	-		-	1.00	5.00	2.02	5	Not known	No	Community	Functional					
Dov-14	79	Dovan	-	-		-	1.00	4.00	1.62	7	Not known	No	Community	Functional					
Dov-15	80	Dovan	-	-		-	0.50	4.00	1.62	6	Not known	No	Community	Functional					
Dov-16	83	Dovan	-	Phaydi	P	Phaydey	2.00	3.50	1.42	4	2007	No	Community	Functional			4days	On foot	
Dov-17	85	Dovan	-	-		Torkey-B	2.00	3.50	1.42	2	2007	No	Community	Functional					
Dov-18	78	Dovan	-	-		-	1.00	3.00	1.21	4	Not known	No	Community	Functional					
Dov-19	88	Dovan	-	Pulgikhola	P	Sasbotey	2.50	3.00	1.21	3	Not known	No	Community	Non-Functional (Functional)			3days	On foot	
Dov-20	81	Dovan	-	Balukhola	P	-	0.50	2.50	1.01	2	Not known	No	Community	Functional			3days	On foot	
Dov-21	92	Dovan	-	-		-	1.00	2.50	1.01	1	Not known	No	Community	Functional					
Dov-22	96	Dovan	-	Pankeykhola	P	-	1.00	2.50	1.01	1	Not known	No	Community	Functional			3days	On foot	
Dov-23	84	Dovan	-	Torkeykho		Torkey	2.50	2.00	0.81	6	2007	No	Community	Functional					
Dov-24	90	Dovan	-	Alikhalcha	P	Bagri	1.50	2.00	0.81	2	Not known	No	Community	Functional			2days	On foot	
Dov-25	91	Dovan	-	Tusraikhola	P	Ramitey	1.50	2.00	0.81	2	Not known	No	Community	Functional			3days	On foot	
Dov-26	97	Dovan	-	Moukhola		-	0.50	2.00	0.81	2	Not known	No	Community	Functional					
Dov-27	93	Dovan	-	-		-	0.50	1.50	0.61	3	Not known	No	Community	Functional					
Dov-28	82	Dovan	-	Teskhola		-	0.50	1.50	0.61	1	Not known	No	Community	Functional					
Dov-29	89	Dovan	-	Balkhari		Bagri	0.50	1.00	0.40	1	Not known	No	Community	Functional					
Dov-30	98	Dovan	-	Moukhola		-	0.50	1.00	0.40	1	Not known	No	Community	Functional					

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3) Status in () is Identified through field survey.

: Target for field survey

*Location of Dov-3,5,13,14,15,17,18,21,23,26,27,28,29,30 could not be identified due to shortage of information.

*The area of some command area is much less than actual. According to the farmers, when an officer asked them the situation related to agriculture to create this list they considered the purpose of interview was to collect tax according to the area of farmland. So they reported the area of farmland less than actual.

Gewog: Gelephu

No.	No. ¹⁾ (in the original list)	Gewog ¹⁾	Name of the Channel ¹⁾	Water Source		Location ¹⁾	Length Approx ¹⁾ (Km)	Command Area ¹⁾		Beneficiary ¹⁾ (HH)	Year of Construction ¹⁾	WUA ¹⁾	Funding Source ¹⁾	Present Status		Accessibility ²⁾			Remarks
				Name ¹⁾	Water availability ²⁾ P: Permanent S: Seasonal			(Ac)	(ha)					Status ¹⁽³⁾	Reason of non-functional ²⁽³⁾	Distance from beneficiary area to road (km)	Time to get to road (min)	Transportation way (Local bus, on foot etc)	
G-1	226	Gelephu	Sonamgatshel & Raptentling Irrigation channel	Mouchu	P	Sonamgatshel & Raptentling	2.00	212.82	86.13	85	1995	No	RGoB	Functional		0.0	0	-	
G-2	227	Gelephu	Passangchu Irrigation Channel	Passangchu	P	Lower Pelrithang	2.50	79.40	32.13	21	1960	No	RGoB	Functional		0.0	0	-	
G-3	229	Gelephu	Dhulachu Irrigation Channel II	Dhulachu	S	Lower Pelrithang	1.50	61.85	25.03	23	1970	No	RGoB	Functional		0.0	0	-	
G-4	228	Gelephu	Dhulachu Irrigation Channel I	Dhulachu	S	Upper Pelrithang	1.50	56.65	22.93	19	1970	No	RGoB	Functional		0.0	0	-	
G-5	233	Gelephu	Tarulay Irrigation channel	Tarulaychu	S	Dzomlingthang	2.00	50.39	20.39	25	1978	No	RGoB	Functional		0.0	0	-	
G-6	230	Gelephu	Pokhreldara Irrigation channel I	Dhulachu	S	Pokhreldara	1.00	7.63	3.09	3	1970	No	Community	Functional		0.0	0	-	
G-7	232	Gelephu	Pokhreldara Irrigation channel III	Dhulachu	S	Pokhreldara	0.50	6.35	2.57	3	1970	No	Community	Functional		0.0	0	-	
G-8	231	Gelephu	Pokhreldara Irrigation channel II	Dhulachu	S	Pokhreldara	0.50	3.60	1.46	3	1970	No	Community	Functional		0.0	0	-	

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3) Status in () is Identified through field survey.

: Target for field survey

Gewog: Hilley

No.	No. ¹⁾ (in the original list)	Gewog ¹⁾	Name of the Channel ¹⁾	Water Source		Location ¹⁾	Length Approx ¹⁾ (Km)	Command Area ¹⁾		Beneficiary ¹⁾ (HH)	Year of Construction ¹⁾	WUA ¹⁾	Funding Source ¹⁾	Present Status		Accessibility ²⁾			Remarks
				Name ¹⁾	Water availability ²⁾ P: Permanent S: Seasonal			(Ac)	(ha)					Status ¹⁾³⁾	Reason of non-functional ²⁾	Distance from beneficiary area to road (km)	Time to get to road (min)	Transportation way (Local bus, on foot etc)	
H-1	3	Hilley	Gurung Khola Kulo 3	Gurung Khola	S	Hilley	1.50	37.19	15.05	15	1970	No	Community	Functional		0.5	20	On foot	
H-2	38	Hilley	Hadzari Kulo	Kali Khola	P	Khopitar	2.00	21.95	8.88	10		No	Community	Functional		5.0	120	On foot	
H-3	55	Hilley	Rudrey Kholshay Kulo	Rudrey Kholsha	S	Laring	0.30	17.67	7.15	6		No	Community	Functional		2.0	50	On foot	
H-4	8	Hilley	Gurung Khola Kulo 1	Gurung Khola	S	Hilley	1.70	17.49	7.08	7		No	Community	Non-functional	Land Slide	0.5	20	Bus	
H-5	1	Hilley	Gurung Khola Kulo 1	Gurung Khola	S	Hilley	1.50	17.16	6.94	8	1980	No	Community	Non-functional	Land Slide	0.5	20	Bus	
H-6	2	Hilley	Gurung Khola Kulo 2	Gurung Khola	S	Hilley	1.00	16.23	6.57	7	1970	No	Community	Functional		0.5	20	Bus	
H-7	42	Hilley	Mithun Kulo	Laring Khola	P	Mithun	1.50	12.63	5.11	9		No	Community	Functional		1.0	30	On foot	
H-8	4	Hilley	Chuwan Khola Kulo 1	Chuwan Kholshay	S	Hilley	1.00	9.44	3.82	10		No	Community	Functional		0.6	20	On foot	
H-9	17	Hilley	Leo Khola Kulo	Leo Khola	S	Changay	4.00	9.38	3.80	8		No	Community	Functional		16.0	480	On foot	
H-10	6	Hilley	Chuwan Khola Kulo 3	Chuwan Kholshay	S	Hilley	0.70	8.55	3.46	3		No	Community	Functional		0.6	30	On foot	
H-11	62	Hilley	Birkuna Khola Kulo	Birkuna Kulo	S	Kagatey	0.60	7.17	2.90	4		No	Community	Functional		2.0	60	On foot	
H-12	43	Hilley	Muga Kulo 1	Sano Kholsha	S	Muga	2.00	6.30	2.55	3		No	Community	Functional		7.0	180	On foot	
H-13	9	Hilley	Gurung Khola Kulo 2	Gurung Khola	S	Hilley	0.50	6.15	2.49	2		No	Community	Functional		0.5	30	Bus	
H-14	30	Hilley	Khanew Kholshay Kulo	Khaney Kholshay	S	Gangatey	0.15	5.90	2.39	1		No	Community	Functional		18.0	540	On foot	
H-15	72	Hilley	Khar Kholsha Kulo	Khar Khola	S	Kharpani	0.50	5.78	2.34	3		No	Community	Functional		14.0	420	On foot	
H-16	57	Hilley	Sheti Khola Kulo	Sheti Kulo	S	Chargarey	2.00	5.39	2.18	7		No	Community	Functional		2.0	50	On foot	
H-17	7	Hilley	Hilley Khola Kulo	Hilley Khola	S	Hilley	1.00	5.27	2.13	6		No	Community	Functional		0.5	30	On foot	
H-18	41	Hilley	Odaley Kulo	Laring Khola	P	Mithun	0.50	4.55	1.84	6		No	Community	Functional		4.0	120	On foot	
H-19	11	Hilley	Hilley Khola Kulo	Hilley Khola	S	Hilley	0.20	4.50	1.82	1		No	Community	Functional		0.6	30	On foot	
H-20	53	Hilley	Orarey Kholshay Kulo 1	Orarey Kholshay	S	Laring	0.80	4.40	1.78	4		No	Community	Functional		2.0	180	On foot	
H-21	50	Hilley	Devithan Kulo	Devithani Kholshay	S	Laring	0.30	4.23	1.71	4		No	Community	Functional		3.0	210	On foot	
H-22	23	Hilley	Devi Kholsha Kulo 2	Devi Kholsha	S	Gangatey	0.50	4.13	1.67	1		No	Community	Functional		17.0	540	On foot	
H-23	66	Hilley	Ratey Kholshay Kulo	Ratey Kholshay	S	Kalikhola	1.00	3.70	1.50	7		No	Community	Functional		16.0	420	On foot	
H-24	25	Hilley	Alanchi Kholshay Kulo 1	Alanchi Kholshay	S	Gangatey	0.70	3.36	1.36	1		No	Community	Functional		17.0	540	On foot	
H-25	61	Hilley	Sheti Khola Kulo	Sheti Khola	S	Ajingharey	2.00	3.25	1.32	6		No	Community	Functional		2.0	120	On foot	
H-26	20	Hilley	Gangatey Kkolshey Kulo 2	Gangatey Kholshay	S	Gangatey	0.50	3.20	1.30	1		No	Community	Functional		16.0	480	On foot	

Gewog: Hilley

No.	No. ¹⁾ (in the original list)	Gewog ¹⁾	Name of the Channel ¹⁾	Water Source		Location ¹⁾	Length Approx ¹⁾ (Km)	Command Area ¹⁾		Beneficiary ¹⁾ (HH)	Year of Construction ¹⁾	WUA ¹⁾	Funding Source ¹⁾	Present Status		Accessibility ²⁾			Remarks
				Name ¹⁾	Water availability ²⁾ P: Permanent S: Seasonal			(Ac)	(ha)					Status ¹⁾³⁾	Reason of non-functional ²⁾	Distance from beneficiary area to road (km)	Time to get to road (min)	Transportation way (Local bus, on foot etc)	
H-27	48	Hilley	Muga Khola Kulo	Muga Khola	S	Harew Muga	0.30	3.10	1.25	5		No	Community	Functional		2.0	60	On foot	
H-28	40	Hilley	Gandhey Kulo	Gandhey Khola	S	Gandhey	1.00	2.98	1.21	4		No	Community	Functional		3.0	90	On foot	
H-29	51	Hilley	Kalikhop Kulo	Kali Kholshey	S	Laring	0.90	2.90	1.17	3		No	Community	Functional		6.0	120	On foot	
H-30	18	Hilley	Devi Kholshey Kulo	Devi Kholshey	S	Changay	0.60	2.85	1.15	4		No	Community	Functional		16.0	480	On foot	
H-31	33	Hilley	Bisty Khola Kulo 1	Bisty Khola	S	Bisty	1.00	2.76	1.12	3		No	Community	Functional		3.0	180	On foot	
H-32	68	Hilley	Kabrey Kholsha Kulo	Kabrey Kholsha	S	Kalikhola	1.00	2.71	1.10	4		No	Community	Functional		6.0	180	On foot	
H-33	67	Hilley	Kali Khola Kulo	Kali Khola	S	Kalikhola	1.00	2.63	1.06	2		No	Community	Functional		6.0	180	On foot	
H-34	32	Hilley	Tshun Kholshey Kulo	Bisty Khola	S	Bisty	0.30	2.50	1.01	3		No	Community	Functional		4.0	60	On foot	
H-35	35	Hilley	Bisty Khola Kulo 3	Bisty Khola	S	Bisty	0.50	2.50	1.01			No	Community	Functional		4.0	60	On foot	
H-36	60	Hilley	Sheti Khola	Sheti Khola	S	Laring	0.30	2.48	1.00	2		No	Community	Functional		3.0	90	On foot	
H-37	26	Hilley	Alanchi Kholshey Kulo 2	Alanchi Kholshey	S	Gangatey	1.00	2.40	0.97	1		No	Community	Functional		16.0	480	On foot	
H-38	71	Hilley	Phokphokey Kulo	Leo Khola	S	Phokphokey	0.50	2.18	0.88	3		No	Community	Functional		17.0	480	On foot	
H-39	34	Hilley	Bisty Khola Kulo 2	Bisty Khola	S	Bisty	0.50	2.00	0.81	3		No	Community	Functional		3.0	60	On foot	
H-40	24	Hilley	Devi Kholsha Kulo 3	Devi Kholsha	S	Gangatey	0.60	2.00	0.81	2		No	Community	Functional		16.0	480	On foot	
H-41	47	Hilley	Aegpani Kulo	Harew Khola	S	Harew Muga	0.10	2.00	0.81	2		No	Community	Functional		2.0	60	On foot	
H-42	31	Hilley	Devi Kholsha Kulo	Devi Kholsha	S	Gangatey	0.20	2.00	0.81	1		No	Community	Functional		16.0	480	On foot	
H-43	44	Hilley	Muga Kulo 2	Sano Kholsha	S	Muga	0.06	2.00	0.81	1		No	Community	Functional		6.0	120	On foot	
H-44	70	Hilley	Ratey Kholsha Seer Kulo	Ratey Kholshey	S	Rateypani	0.10	1.88	0.76	3		No	Community	Functional		7.0	180	On foot	
H-45	14	Hilley	Belkhola Kulo	Bekhola Kholsha	S	Belkhola	5.00	1.65	0.67	1		No	Community	Functional		10.0	360	On foot	
H-46	56	Hilley	Guya Kholshey Kulo	Guya Kholshey	S	Laring	0.10	1.65	0.67	1		No	Community	Functional		3.0	60	On foot	
H-47	13	Hilley	Dangrey Kulo	Dangrey Kholshey	S	Belkhola	2.00	1.50	0.61	4		No	Community	Functional		16.0	480	On foot	
H-48	12	Hilley	Thotney Kulo	Thotney Khola	S	Philing	1.00	1.50	0.61	3		No	Community	Functional		16.0	480	On foot	
H-49	63	Hilley	Jogidara Kholshey Kulo	Jogidara Kulo	S	Jogidara	0.25	1.48	0.60	1		No	Community	Functional		0.6	20	Bus	
H-50	27	Hilley	Shim Dhap Kulo	Shim Dhap Kholshey	S	Gangatey	0.50	1.25	0.51	1		No	Community	Functional		16.0	480	On foot	
H-51	36	Hilley	Bisty Khola Kulo 4	Bisty Khola	S	Bisty	0.30	1.25	0.51	1		No	Community	Functional		3.0	60	On foot	
H-52	37	Hilley	Bisty Khola Kulo 5	Bisty Khola	S	Bisty	0.40	1.25	0.51	1		No	Community	Functional		3.0	60	On foot	

Gewog: Hilley

No.	No. ¹⁾ (in the original list)	Gewog ¹⁾	Name of the Channel ¹⁾	Water Source		Location ¹⁾	Length Approx ¹⁾ (Km)	Command Area ¹⁾		Beneficiary ¹⁾ (HH)	Year of Construction ¹⁾	WUA ¹⁾	Funding Source ¹⁾	Present Status		Accessibility ²⁾			Remarks
				Name ¹⁾	Water availability ²⁾ P: Permanent S: Seasonal			(Ac)	(ha)					Status ¹⁾³⁾	Reason of non-functional ²⁾	Distance from beneficiary area to road (km)	Time to get to road (min)	Transportation way (Local bus, on foot etc)	
H-53	19	Hilley	Gangatey Kkolshey Kulo 1	Gangatey Kholshhey	S	Gangatey	0.80	1.22	0.49	1		No	Community	Functional		16.0	480	On foot	
H-54	46	Hilley	Monitar Kulo	Moni Kholsha	S	Jainshing Dara	0.05	1.20	0.49	5		No	Community	Functional		2.0	25	On foot	
H-55	65	Hilley	Kharey Khola Kulo	Kharey Khola	S	Kalikhola	1.00	1.20	0.49	2		No	Community	Functional		6.0	90	On foot	
H-56	15	Hilley	Sherishey Kholsha Kulo	Sherishey Kholsha	S	Belkhola	1.00	1.20	0.49	1		No	Community	Functional		16.0	480	On foot	
H-57	16	Hilley	Alley Kholshhey Kulo	Alley Kholshhey	S	Belkhola	1.00	1.20	0.49	1		No	Community	Functional		15.0	480	On foot	
H-58	22	Hilley	Devi Kholsha Kulo 1	Devi Kholsha	S	Gangatey	0.15	1.20	0.49	1		No	Community	Functional		16.0	480	On foot	
H-59	29	Hilley	Tiwari Kholshhey Kulo 2	Tiwari Kholshhey	S	Gangatey	0.10	1.20	0.49	1		No	Community	Functional		16.0	480	On foot	
H-60	52	Hilley	Dodrey Kholshhey Kulo	Dodrey Kholshhey	S	Laring	0.20	1.13	0.46	2		No	Community	Functional		4.0	90	On foot	
H-61	64	Hilley	Jogidara Kholshhey Kulo	Jogidara Kulo	S	Jogidara	0.25	1.10	0.45	1		No	Community	Functional		0.6	20	Bus	
H-62	73	Hilley	Kholsha Kulo	Kholsha	S	Pankha Barey	0.50	1.09	0.44	1		No	Community	Functional		18.0	540	On foot	
H-63	39	Hilley	Kali Khola Kulo	Kalikhola	S	Khopitar	0.35	1.05	0.42	3		No	Community	Functional		7.0	180	On foot	
H-64	10	Hilley	Kamidara Khola Kulo	Gurung Khola	S	Kamidara	0.50	1.00	0.40	2		No	Community	Functional		2.0	20	Bus	
H-65	49	Hilley	Harew Kholsha Kulo	Harew Kholsha	S	Harew Muga		1.00	0.40	1		No	Community	Functional		2.0	60	On foot	
H-66	74	Hilley	Deo Khola Kulo	Deo Khola	S	Kharpani	0.50	0.96	0.39	1		No	Community	Functional		16.0	420	On foot	
H-67	59	Hilley	Kharey Kholshhey 2	Kharey Kholshhey	S	Laring	0.20	0.90	0.36	1		No	Community	Functional		3.0	60	On foot	
H-68	5	Hilley	Chuwan Khola Kulo 2	Chuwan Kholshhey	S	Hilley	0.60	0.84	0.34	1		No	Community	Functional		0.6	30	On foot	
H-69	58	Hilley	Kharey Kholshhey Kulo 1	Kharey Kholshhey	S	Chargarey	0.20	0.80	0.32	3		No	Community	Functional		2.0	50	On foot	
H-70	28	Hilley	Tiwari Kholshhey Kulo 1	Tiwari Kholshhey	S	Gangatey	0.10	0.80	0.32	1		No	Community	Functional		16.0	480	On foot	
H-71	21	Hilley	Gangatey Kkolshey Kulo 3	Gangatey Kholshhey	S	Gangatey	0.30	0.60	0.24	1		No	Community	Functional		16.0	480	On foot	
H-72	69	Hilley	Biplatey Kholshhey Kulo	Biplatey Kholshhey	S	Kalikhola	0.50	0.60	0.24	1		No	Community	Functional		6.0	60	On foot	
H-73	45	Hilley	Muga Kulo 3	Sano Kholsha	S	Muga	0.10	0.45	0.18	1		No	Community	Functional		8.0	180	On foot	
H-74	54	Hilley	Orarey Kholshay Kulo 2	Orarey Kholshay	S	Laring	0.50			4		No	Community	Functional		2.0	90	On foot	

A-1-10

1) Posted from inventory "Compiled Irrigation information 2010" obtained from DAO Sarpang.

2) Identified through field survey and interview

3) Status in () is Identified through field survey.

 : Target for field survey

Gewog: Jigmecholing

No.	No. ¹⁾ (in the original list)	Gewog ¹⁾	Name of the Channel ¹⁾	Water Source		Location ¹⁾	Length Approx ¹⁾ (Km)	Command Area ¹⁾		Beneficiary ¹⁾ (HH)	Year of Construction ¹⁾	WUA ¹⁾	Funding Source ¹⁾	Present Status		Accessibility ²⁾			Remarks
				Name ¹⁾	Water availability ²⁾ P: Permanent S: Seasonal			(Ac)	(ha)					Status ¹⁾³⁾	Reason of non-functional ²⁾³⁾	Distance from beneficiary area to road (km)	Time to get to road (min)	Transportation way (Local bus, on foot etc)	
J-1	175	Jigmecholing	Basghari	Basghari Kholsa	P	Daragaon	1.50	105.00	42.49	12	1920	No	Community	Functional		1.0	20	On foot	
J-2	184	Jigmecholing	Panitey Kuloo	Panitey Kholsa	P	Saundaley	1.00	90.00	36.42	25	1940	No	Community	Functional		1.0	15	On foot	
J-3	185	Jigmecholing	Dharey Kuloo	Dharey Kholsa	P	Saundaley	0.50	50.00	20.23	12	1914	No	Community	Functional		1.0	15	On foot	
J-4	168	Jigmecholing	Jante Kuloo(3)	Jantey Kholsa	P	Daragaon	2.50	30.00	12.14	21	1920	No	Community	Functional		1.0	15	On foot	
J-5	217	Jigmecholing	Gumti Kuloo	Gumti kholsa	P	Sampagang	1.00	30.00	12.14	15	1935	No	Community	Functional		1.0	30	On foot	
J-6	224	Jigmecholing	Dawa Kuloo	Dawa Khola	P	Samapagang	1.00	30.00	12.14	10	1935	No	Community	Functional		1.0	30	On foot	
J-7	180	Jigmecholing	Dharey kuloo	Dharey Khola	P	Saundaley	1.00	30.00	12.14	8	1950	No	Community	Functional		1.0	20	On foot	
J-8	213	Jigmecholing	Jantey Kuloo	Jantey Kholsa	P	Bichgoan B	0.03	26.68	10.80	7	1935	No	Community	Functional		1.0	30	On foot	
J-9	173	Jigmecholing	Shenay Kuloo	Shenay Khola	P	Daragaon	2.00	25.00	10.12	40	1920	No	Community	Functional					
J-10	225	Jigmecholing	Nado kuloo	Nado kholsa	P	Samkhara	2.50	25.00	10.12	10	1935	No	Community	Functional		1.0	20	On foot	
J-11	163	Jigmecholing	Janteykuloo	Jantey Kholsa	P	Daragaon	3.50	25.00	10.12	9	1920	No	Community	Functional		1.0	20	On foot	
J-12	177	Jigmecholing	Lower Dharey kuloo	Darey Kholsa	P	Sirangaon	1.00	25.00	10.12	7	1920	No	Community	Functional		1.0	20	On foot	
J-13	179	Jigmecholing	Sherpai kuloo (1)	Shenay Khola	P	Saundaley	1.00	25.00	10.12	7	1950	No	Community	Functional		1.0	20	On foot	
J-14	218	Jigmecholing	Devithane Kuloo	Devi Kholsa	P	Sampagang	1.00	24.00	9.71	8	1935	No	Community	Functional		1.0	20	On foot	
J-15	172	Jigmecholing	Sepai Kuloo	Sepai Khola	S	Daragaon	0.20	22.80	9.23	11	1920	No	Community	Functional		1.0	15	On foot	
J-16	166	Jigmecholing	Jante Kuloo(1)	Jantey Kholsa	P	Daragaon	3.50	21.00	8.50	12	1920	No	Community	Functional		0.5	15	On foot	
J-17	176	Jigmecholing	Upper Dharey kuloo	Darey Kholsa	P	Sirangaon	1.50	20.00	8.09	9	1920	No	Community	Functional		1.0	15	On foot	
J-18	159	Jigmecholing	Bhaipani Kuloo	Bhaipani Khola	P	Gonggoan	4.00	20.00	8.09	8	1980	No	Community	Functional			2days	On foot	
J-19	156	Jigmecholing	Moabir kuloo	Kamirey Kholsa	P	Dungay	2.00	20.00	8.09	6	1950	No	Community	Functional			3days	On foot	
J-20	186	Jigmecholing	Adhikari Kuloo	Adhikari Kholsa	S	Saundaley	0.60	20.00	8.09	5	1916	No	Community	Functional		0.5	15	On foot	
J-21	183	Jigmecholing	Devithani Kuloo	Devi Kholsa	S	Saundaley	3.00	20.00	8.09	4	1940	No	Community	Functional		0.5	15	On foot	
J-22	223	Jigmecholing	Thain Kuloo	Thain Kholsa	P	Sampagang	5.00	20.00	8.09	4	1935	No	Community	Functional		1.0	20	On foot	
J-23	148	Jigmecholing	Tharokuloo	Tharo Khola	P	Gongdara	3.00	19.50	7.89	13	1955	No	Community	Functional			2days	On foot	
J-24	165	Jigmecholing	Hiti kuloo	Hitikholsa	P	Daragaon	1.50	18.00	7.28	12	1920	No	Community	Functional		1.0	30	On foot	
J-25	193	Jigmecholing	Budhaykuloo 1	Budhay Khola	P	Bichgaon A	1.00	18.00	7.28	5	1931	No	Community	Functional		1.0	20	On foot	
J-26	189	Jigmecholing	Silseley Kuloo 3	Silsiley Kholsa	P	Bichgoan A	0.09	16.40	6.64	7	1931	No	Community	Functional		0.5	10	On foot	
J-27	167	Jigmecholing	Jante Kuloo (2)	Jantey Kholsa	P	Daragaon	1.50	15.00	6.07	6	1920	No	Community	Functional		0.5	10	On foot	
J-28	178	Jigmecholing	Devithani Kuloo	Devi Kholsa	P	Sirangaon	1.00	15.00	6.07	5	1920	No	Community	Functional		0.5	10	On foot	
J-29	181	Jigmecholing	Bhuth kuloo	Bhuth Khola	P	Saundaley	1.00	15.00	6.07	4	1950	No	Community	Functional		0.5	10	On foot	
J-30	220	Jigmecholing	Beteni kulo	Beteni Chu	P	Beteni	3.00	15.00	6.07	3	1935	No	Community	Functional		1.0	15	On foot	

Gewog: Jigmecholing

No.	No. ¹⁾ (in the original list)	Gewog ¹⁾	Name of the Channel ¹⁾	Water Source		Location ¹⁾	Length Approx ¹⁾ (Km)	Command Area ¹⁾		Beneficiary ¹⁾ (HH)	Year of Construction ¹⁾	WUA ¹⁾	Funding Source ¹⁾	Present Status		Accessibility ²⁾			Remarks
				Name ¹⁾	Water availability ²⁾ P: Permanent S: Seasonal			(Ac)	(ha)					Status ¹⁾³⁾	Reason of non-functional ²⁾³⁾	Distance from beneficiary area to road (km)	Time to get to road (min)	Transportation way (Local bus, on foot etc)	
J-31	222	Jigmecholing	Sumser Kuloo	Sumser Kholsa	S	Samapagang	1.00	14.00	5.67	8	1935	No	Community	Functional		1.0	15	On foot	
J-32	199	Jigmecholing	Devithane Kuloo 2	Devi Kholsa	P	Bichgaon A	0.80	14.00	5.67	5	1931	No	Community	Functional		1.0	20	On foot	
J-33	215	Jigmecholing	Basey Kuloo	Basghari Kholsa	S	Sampagang	1.00	14.00	5.67	5	1935	No	Community	Functional		1.0	30	On foot	
J-34	221	Jigmecholing	Siran Beteni Kuloo	Beteni Chu	P	Sampagang	1.00	12.00	4.86	4	1935	No	Community	Functional		1.0	20	On foot	
J-35	188	Jigmecholing	Silsiley Kuloo 2	Silsiley Kholsa	P	Bichgoan A	0.25	12.00	4.86	3	1931	No	Community	Functional		1.0	20	On foot	
J-36	212	Jigmecholing	Jantey Kuloo	Jantey Kholsa	P	Bichgoan B	0.01	12.00	4.86	3	1935	No	Community	Functional		1.0	20	On foot	
J-37	216	Jigmecholing	Talo Key Kuloo	Talo key Kholsa	S	Sampagang	0.20	12.00	4.86	3	1935	No	Community	Functional		0.5	15	On foot	
J-38	170	Jigmecholing	Pairey Kuloo	Pairey Kholsa	S	Daragaon	1.00	11.00	4.45	2	1920	No	Community	Functional		1.0	30	On foot	
J-39	203	Jigmecholing	Dangray Kuloo	Dangray Khola	P	Bichgoan B	0.04	10.68	4.32	1	1935	No	Community	Functional		1.0	15	On foot	
J-40	161	Jigmecholing	Majua kuloo	Majua Khola	P	Bhirgaon	6.00	10.00	4.05	11	1970	No	Community	Functional			2days	On foot	
J-41	149	Jigmecholing	Devi Kuloo	Devi Khola	P	Gongdara	3.00	10.00	4.05	7	1960	No	Community	Functional			2days	On foot	
J-42	152	Jigmecholing	Kamirey Kuloo	Kamirey Kholsa	P	Dungay	2.00	10.00	4.05	5	1965	No	Community	Functional			2days	On foot	
J-43	182	Jigmecholing	Sherpai kuloo (2)	Sherpai Khola	P	Saundaley	0.50	10.00	4.05	3	1950	No	Community	Functional		1.0	20	On foot	
J-44	195	Jigmecholing	Budhaykuloo 3	Budhay Khola	P	Bichgaon A	0.03	10.00	4.05	2	1931	No	Community	Functional		1.0	20	On foot	
J-45	219	Jigmecholing	Upper Beteni kulo	Beteni Chu	P	Beteni	1.50	10.00	4.05	2	1935	No	Community	Functional		0.5	15	On foot	
J-46	169	Jigmecholing	Tshagay Kuloo	Tshagay Kholsa	S	Daragaon	1.00	9.50	3.84	3	1920	No	Community	Functional		0.5	15	On foot	
J-47	151	Jigmecholing	Budh Kuloo	Budh Khola	P	Mongergaon	3.00	9.00	3.64	3	1960	No	Community	Functional			2days	On foot	
J-48	191	Jigmecholing	Sherpey Kuloo 1	Sherpai Khola	P	Bichgoan A	0.20	9.00	3.64	3	1931	No	Community	Functional		1.0	20	On foot	
J-49	150	Jigmecholing	Thulo Kuloo	Thulo Kholsa	P	Gongdara	2.50	8.00	3.24	6	1960	No	Community	Functional			2days	On foot	
J-50	174	Jigmecholing	Siran Kulo	Siran Kholsa	P	Daragaon	0.20	8.00	3.24	5	1920	No	Community	Functional			2days	On foot	
J-51	158	Jigmecholing	Devi kuloo	Devi Khola	P	-do-	0.50	8.00	3.24	4	1963	No	Community	Functional			2days	On foot	
J-52	157	Jigmecholing	Bijuley Kuloo	Bijuley Kholsa	P	Kholatar	6.00	8.00	3.24	2	1961	No	Community	Functional			2days	On foot	
J-53	153	Jigmecholing	Devi Kuloo	Devi Khola	P	Dungay	1.50	7.00	2.83	6	1950	No	Community	Functional			3days	On foot	
J-54	198	Jigmecholing	Devithane Kuloo 1	Devi Kholsa	P	Bichgaon A	0.30	7.00	2.83	4	1931	No	Community	Functional		1.0	20	On foot	
J-55	197	Jigmecholing	Mulpani Kuloo	Mulpani	P	Bichgaon A	0.02	7.00	2.83	3	1931	No	Community	Functional		1.0	20	On foot	
J-56	164	Jigmecholing	Hiti Kuloo	Hiti Kholsa	P	Daragaon	0.30	6.50	2.63	4	1920	No	Community	Functional		1.0	20	On foot	
J-57	160	Jigmecholing	Ragakate Kuloo	Ranga Khola	P	Gonggoan	5.00	6.00	2.43	6	1960	No	Community	Functional			2days	On foot	
J-58	147	Jigmecholing	Rongpani Kuloo	Rong chhu	P	Reti	3.00	6.00	2.43	5	1965	No	Community	Functional			3days	On foot	
J-59	162	Jigmecholing	Tharo kuloo	Tharo Kholsa	P	Ashiney	3.00	6.00	2.43	2	1965	No	Community	Functional			2days	On foot	
J-60	196	Jigmecholing	Darey Kuloo	Darey Kholsa	P	Bichgaon A	0.50	6.00	2.43	2	1931	No	Community	Functional		1.0	20	On foot	

A-1-12

Gewog: Jigmecholing

No.	No. ¹⁾ (in the original list)	Gewog ¹⁾	Name of the Channel ¹⁾	Water Source		Location ¹⁾	Length Approx ¹⁾ (Km)	Command Area ¹⁾		Beneficiary ¹⁾ (HH)	Year of Construction ¹⁾	WUA ¹⁾	Funding Source ¹⁾	Present Status		Accessibility ²⁾			Remarks
				Name ¹⁾	Water availability ²⁾ P: Permanent S: Seasonal			(Ac)	(ha)					Status ¹⁾³⁾	Reason of non-functional ²⁾³⁾	Distance from beneficiary area to road (km)	Time to get to road (min)	Transportation way (Local bus, on foot etc)	
J-61	190	Jigmecholing	Silsley Kuloo 4	Silsley Kholsa	P	Bichgoan A	0.03	5.05	2.04	2	1931	No	Community	Functional		1.0	20	On foot	
J-62	154	Jigmecholing	Dare Kuloo	Dolleyal	P	Dungay	2.00	5.00	2.02	4	1965	No	Community	Functional			2days	On foot	
J-63	171	Jigmecholing	Dhungay Kuloo	Dhungay Khola	S	Daragaon	0.05	5.00	2.02	1	1920	No	Community	Functional		1.0	20	On foot	
J-64	206	Jigmecholing	Bazaar Kuloo	Bazaar Khola	P	Bichgoan B	0.01	5.00	2.02	1	1935	No	Community	Functional		1.0	20	On foot	
J-65	192	Jigmecholing	Sherpey Kuloo 2	Sherpai Khola	P	Bichgoan A	0.05	4.05	1.64	1	1931	No	Community	Functional		1.0	20	On foot	
J-66	155	Jigmecholing	Dare Kuloo	Mul pani	P	Dungay	1.00	4.00	1.62	4	1950	No	Community	Functional			2days	On foot	
J-67	200	Jigmecholing	Hiti Kuloo	Hiti Kholsa	P	Bichgoan B	0.01	4.00	1.62	1	1935	No	Community	Functional		0.5	15	On foot	
J-68	201	Jigmecholing	Hiti Kuloo	Hiti Kholsa	P	Bichgoan B	0.03	4.00	1.62	1	1935	No	Community	Functional		0.5	15	On foot	
J-69	202	Jigmecholing	Dangray Kuloo	Dangray Khola	P	Bichgoan B	3.00	4.00	1.62	1	1935	No	Community	Functional		0.5	15	On foot	
J-70	205	Jigmecholing	Bazaar Kuloo	Bazaar Khola	P	Bichgoan B	0.02	4.00	1.62	1	1935	No	Community	Functional		1.0	20	On foot	
J-71	214	Jigmecholing	FCB Kuloo	FCB Khola	S	Bichgoan B	0.01	4.00	1.62	1	1935	No	Community	Functional		0.5	15	On foot	
J-72	194	Jigmecholing	Budhaykuloo 2	Budhay Khola	P	Bichgoan A	0.02	3.00	1.21	2	1931	No	Community	Functional		0.5	10	On foot	
J-73	211	Jigmecholing	Jantey Kuloo	Jantey Kholsa	P	Bichgoan B	0.01	3.00	1.21	2	1935	No	Community	Functional		0.5	10	On foot	
J-74	187	Jigmecholing	Silsley Kuloo 1	Silsley Kholsa	P	Bichgoan A	0.03	3.00	1.21	1	1931	No	Community	Functional		0.5	15	On foot	
J-75	204	Jigmecholing	Dangray Kuloo	Dangray Khola	P	Bichgoan B	0.02	3.00	1.21	1	1935	No	Community	Functional		0.5	15	On foot	
J-76	208	Jigmecholing	Daganey Kuloo	Daganey Khola	P	Bichgoan B	0.02	3.00	1.21	1	1935	No	Community	Functional		0.5	10	On foot	
J-77	209	Jigmecholing	Daganey Kuloo	Daganey Khola	P	Bichgoan B	0.02	3.00	1.21	1	1935	No	Community	Functional					
J-78	210	Jigmecholing	Kashinath Kuloo	Kamirey Kholsa	S	Bichgoan B	0.03	3.00	1.21	1	1935	No	Community	Functional		0.5	15	On foot	
J-79	207	Jigmecholing	Bazaar Kuloo	Bazaar Khola	P	Bichgoan B	0.02	2.00		1	1935	No	Community	Functional		0.5	15	On foot	

1) Posted from inventory "Compiled Irrigation information 2010" obtained from DAO Sarpang.

2) Identified through field survey and interview

3) Status in () is Identified through field survey.

 : Target for field survey

*J-9 and J-16 are the same irrigation system

*J-76 and J-77 are the same irrigation system

*Location of J-23 is too far and it was difficult to conduct field survey.

Gewog: Sengye

No.	No. ¹⁾ (in the original list)	Gewog ¹⁾	Name of the Channel ¹⁾	Water Source		Location ¹⁾	Length Approx ¹⁾ (Km)	Command Area ¹⁾		Beneficiary ¹⁾ (HH)	Year of Construction ¹⁾	WUA ¹⁾	Funding Source ¹⁾	Present Status		Accessibility ²⁾			Remarks
				Name ¹⁾	Water availability ²⁾ P: Permanent S: Seasonal			(Ac)	(ha)					Status ¹⁾³⁾	Reason of non-functional ²⁾³⁾	Distance from beneficiary area to road (km)	Time to get to road (min)	Transportation way (Local bus, on foot etc)	
Sen-1	240	Sengye	Baral kulo	Sisty khola	P	Sisty A	4.00	59.05	23.90	24	1940	No	Community	Functional		0.0	0	-	
Sen-2	239	Sengye	Mazan kulo	Sisty khola	P	Sisty A	6.00	46.95	19.00	25	1946	No	Community	Functional (Non functional)	(Under repairing)	0.0	0	-	
Sen-3	234	Sengye	Upper Senghe Kulo	Senghe khola	P	Hatikhuar	1.00	36.10	14.61	20		No	Community	Functional		0.5	20	On foot	
Sen-4	236	Sengye	Koigaon kulo	Tungkhola	P	Koigaon	2.50	35.50	14.37	18		No	Community	Functional		0.0	0	-	
Sen-5	238	Sengye	Rumdali kulo	Sisty khola	P	Sisty B	3.00	22.05	8.92	14	1973	No	Community	Functional		0.3	10	On foot	
Sen-6	235	Sengye	Lower Senghe kulo	Senghe kola	P	Hatikhuar	1.00	15.12	6.12	9		No	Community	Functional		0.5	20	On foot	
Sen-7	250	Sengye	Mirgay kulo	Mirgay Kholsi	S	Thoemba	0.30	7.10	2.87	6		No	Community	Functional		0.3	10	On foot	
Sen-8	243	Sengye	Ringalung kulo	Sisty khola	P	Khopan	1.00	4.58	1.85	4	1971	No	Community	Functional		0.5	30	On foot	
Sen-9	244	Sengye	Bhalu Khola kulo	Bhalu Kholsi	S	Khopan	0.50	4.20	1.70	3	1971	No	Community	Functional		1.0	60	On foot	
Sen-10	246	Sengye	Sahajbotay Channel	Karbari river	S	Labarbotey	1.00	3.69	1.49	2	1945	No	Community	Functional		0.5	30	On foot	
Sen-11	248	Sengye	Simsarey kulo	Karbari khola	S	Labarbotey	0.50	2.12	0.86	1	1945	No	Community	Functional		0.5	30	On foot	
Sen-12	251	Sengye	Panthak kulo	Kuapani kholsi	S	Balatung	0.50	2.00	0.81	2	1976	No	Community	Functional		0.5	30	On foot	
Sen-13	242	Sengye	Prasadey kulo	D.B.Kholsi	S	Sisty B	0.20	1.50	0.61	1	1970	No	Community	Functional		0.6	40	On foot	
Sen-14	247	Sengye	Lungali kulo	Sisty khola	P	Khopan	0.30	1.50	0.61	1	1960	No	Community	Functional		0.8	50	On foot	
Sen-15	237	Sengye	Dhara Kholsi kulo	Dhara Kholsi	S	Koigaon	0.30	1.45	0.59	1	1970	No	Community	Functional		0.3	10	On foot	
Sen-16	249	Sengye	Kabra Botey kulo	Kabra Botey kholsi	S	Kopchey	0.30	1.00	0.40	1	1958	No	Community	Functional		0.1	5	On foot	
Sen-17	241	Sengye	Debithaney kulo	Debithaney Kholsi	S	Sisty A	0.15	0.74	0.30	1	1970	No	Community	Functional		0.0	0	-	
Sen-18	245	Sengye	Deosali kulo	Sisty khola	P	Deosali Khopan	0.30	0.58	0.23	2	1975	No	Community	Functional		0.2	5	On foot	

A-1-14

1) Posted from inventory "Compiled Irrigation information 2010" obtained from DAO Sarpang.

2) Identified through field survey and interview

3) Status in () is Identified through field survey.

Target for field survey

Gewog: Sershong

No.	No. ¹⁾ (in the original list)	Gewog ¹⁾	Name of the Channel ¹⁾	Water Source		Location ¹⁾	Length Approx ¹⁾ (Km)	Command Area ¹⁾		Beneficiary ¹⁾ (HH)	Year of Construction ¹⁾	WUA ¹⁾	Funding Source ¹⁾	Present Status		Accessibility ²⁾			Remarks
				Name ¹⁾	Water availability ²⁾ P: Permanent S: Seasonal			(Ac)	(ha)					Status ^{1,3)}	Reason of non-functional ^{2,3)}	Distance from beneficiary area to road (km)	Time to get to road (min)	Transportation way (Local bus, on foot etc)	
Ser-1	266	Sershong	Lothuen irrigation channel	Taklaichhu	P	Lothuen	6.25	145.55	58.90	84	1976	YES	GIADP	Functional		0.5	20	On foot	
Ser-2	264	Sershong	Norbuling irrigation channel	Norbuling chhu	S	Norbuling	3.00	96.40	39.01	53	1976	No	ECR-ADP	Functional		0.5	20	On foot	
Ser-3	263	Sershong	Pemaling irri. channel	Norbulingchhu	S	Pemaling	2.50	95.00	38.45	40	1970s	No	ECR-ADP	Functional		1.0	40	On foot	
Ser-4	259	Sershong	Pangkhar irrigation channel	Chheojaygang chhu	S	Pangkhar	2.50	52.00	21.04	16	2009	No	ASSP	Functional		0.5	20	On foot	
Ser-5	260	Sershong	Pangkhar irrigation channel	Norbulingchhu	S	Pangkhar	4.50	52.00	21.04	16	1976	No	ECR-ADP	Non-functional					
Ser-6	265	Sershong	Norbuling irr. channel	Norbulingchhu	S	Norbuling	1.50	52.00	21.04	16	1976	No	ASSP	Non-Functional (Functional)		0.5	20	On foot	
Ser-7	257	Sershong	Barshong irrigation channel	Barthang	S	Barshong	2.00	48.00	19.43	22	1970s	No	ASSP	Functional		0.5	20	On foot	
Ser-8	267	Sershong	Kingaling irr. channel	Norbulingchhu	S	Kingaling	1.50	45.00	18.21	22	1984	No	RGOB	Non-functional	-	1.0	60	On foot	
Ser-9	258	Sershong	Pangkhar irrigation channel	Mathangchu	S	Pangkhar	2.00	40.00	16.19	16	1978	No	GIADP	Non-functional	Land slide	0.5	20	On foot	
Ser-10	269	Sershong	Tashiphu irri. channel	Tshipuchhu	S	Tashiphu	1.00	35.00	14.16	8	2009	No	ASSP	Functional		0.5	20	On foot	
Ser-11	268	Sershong	Kingaling irr. channel	Kingalingchhu	S	Kingaling	0.50	30.00	12.14	8	1984	No		Non-functional	Land slide	1.0	30	On foot	
Ser-12	255	Sershong	Barshong irrigation channel (1)	Barshongchu	S	Barshong	3.00	25.00	10.12	14	1970s	No	ECR-ADP	Functional		0.5	20	On foot	
Ser-13	256	Sershong	Barshong irrigation channel (2)	Barthang chhuu	S	Barshong	1.00	20.00	8.09	14	1970s	No	ECR-ADP	Functional		0.5	20	On foot	
Ser-14	261	Sershong	Kapong irr. channel	Above Kapong	S	Kapong	0.60	20.00	8.09	5	1984	No	-	Functional		0.5	20	On foot	
Ser-15	253	Sershong	Sershong irrigation channel	Barshongchu	S	Sershong	2.00	15.00	6.07	12	1977	No	GIADP	Non-functional	-	0.5	20	On foot	
Ser-16	252	Sershong	Sershong irrigation channel (1)	Barshongchu	S	Sershong	1.50	10.00	4.05	10	1976	No	GIADP	Non-functional	Completely abandoned	-	-	-	
Ser-17	262	Sershong	Pemaling irr. channel	Above Kapong	S	Pemaling	0.50	8.00	3.24	2	1980	No	-	Non-Functional (Functional)		0.5	20	On foot	
Ser-18	270	Sershong	Expansion canal of Lothuen irr. canal	Tashiphu, Norbuling			0.30-0.60	12 Nos. irrigation delivery point starting from Tashiphu to Norbuling/Pemaling											

A-1-15

1) Posted from inventory "Compiled Irrigation information 2010" obtained from DAO Sarpang.

2) Identified through field survey and interview

3) Status in () is Identified through field survey.

: Target for field survey

*Ser-4 and Ser-5 are the same irrigation system

Gewog: Shompangkha

No.	No. ¹⁾ (in the original list)	Gewog ¹⁾	Name of the Channel ¹⁾	Water Source		Location ¹⁾	Length Approx ¹⁾ (Km)	Command Area ¹⁾		Beneficiary ¹⁾ (HH)	Year of Construction ¹⁾	WUA ¹⁾	Funding Source ¹⁾	Present Status		Accessibility ²⁾			Remarks
				Name ¹⁾	Water availability ²⁾ P: Permanent S: Seasonal			(Ac)	(ha)					Status ¹³⁾	Reason of non-functional ²⁾	Distance from beneficiary area to road (km)	Time to get to road (min)	Transportation way (Local bus, on foot etc)	
Sho-1	112	Shompangkha	Daoray kholo	Doray khola	S	Kuencholing	2.00	132.00	53.42	93		No	Community	Non-functional	River bed dropping	0.0	0	-	
Sho-2	120	Shompangkha	kamichu kholo	Kamikhola	S	Sarpangtar	1.50	103.00	41.68	9		No	Community	Functional		0.0	0	-	
Sho-3	108	Shompangkha	Lower Norbugang kholo	Tharokhola	S	Darjaythang	1.00	85.00	34.40	12		No	Community	Non-functional (Functional)		0.0	0	-	
Sho-4	105	Shompangkha	Kafley kholo	Kafley khola	S	Darjaythang	2.50	50.00	20.23	24		No	Community	Functional		0.0	0	-	
Sho-5	109	Shompangkha	Kopchey kholo	Khopchey khola	S	Norbugang	1.50	30.00	12.14	9		No	Community	Functional		0.0	0	-	
Sho-6	107	Shompangkha	Kharkhola kholo	Tharokhola	S	Darjaythang	2.00	25.00	10.12	9		No	Community	Non-functional	Intake was washed away by Flood	0.0	0	-	
Sho-7	114	Shompangkha	Jaidhan Kholo	Jaidhan kholo	S	Pakhay	2.00	22.33	9.04	12		No	Community	Functional (Non-Functional)	(Land slide)	0.0	0	-	
Sho-8	106	Shompangkha	Jaisey kholo	Jaisey kholchey	S	Darjaythang		20.00	8.09	9		No	Community	Functional		0.0	0	-	
Sho-9	111	Shompangkha	lower Akhow kholo	Akhow khola	S	Norbugang	1.00	15.00	6.07	9		No	Community	Functional		0.0	0	-	
Sho-10	110	Shompangkha	upper Akhow kholo	Akhow khola	S	Sarpangtar	1.00	10.00	4.05	4		No	Community	Non-functional	-	0.0	0	-	
Sho-11	116	Shompangkha	Kamikhola Shir kholo	kamikhola	S	Pakhay	0.50	9.93	4.02	3		No	Community	Functional		0.0	0	-	
Sho-12	117	Shompangkha	Devithan kholo	Devithanay khola	S	Chaar	1.89	7.60	3.08	5		No	Community	Functional		3.0	60	On foot	
Sho-13	113	Shompangkha	Dharapakha kholo	Dharapakha kholchey	S	Kuencholing	0.10	4.00	1.62	2		No	Community	Functional		0.0	0	-	
Sho-14	121	Shompangkha	Chawnawtey kholo	kamikhola	S	Sarpangtar	1.00	3.98	1.61	1		No	Community	Non-functional	-	0.0	0	-	
Sho-15	115	Shompangkha	Bhawni kholo	Bhawni khola	S	Pakhay	1.00	3.40	1.38	3		No	Community	Functional		0.0	0	-	
Sho-16	118	Shompangkha	Phanphaney kholo	Phanphaney khola	S	Chaar	0.03	1.50	0.61	1		No	Community	Functional		3.0	60	On foot	
Sho-17	122	Shompangkha	Botabari kholo	Kharey pakhay kholo	S	Khareypakhay	0.10	1.50	0.61	1		No	Community	Functional		0.0	0	-	
Sho-18	124	Shompangkha	Chamling kholo	chamling kholchey	S	Pakhay	0.20	1.50	0.61	1		No	Community	Functional		0.0	0	-	
Sho-19	119	Shompangkha	checheney kholo	checheney kholchey	S	Chaar	0.06	1.40	0.57	1		No	Community	Functional		3.0	60	On foot	
Sho-20	123	Shompangkha	lhampathi kholo	lhampathi kholchey	S	Pakhay	0.50	1.00	0.40	1		No	Community	Functional		0.0	0	-	
Sho-21	125	Shompangkha	Phathikhari kholo	pathikhari kholchey	S	Pakhay	0.10	0.70	0.28	1		No	Community	Non-functional	-	0.0	0	-	
Sho-22	126	Shompangkha	Bharakholo	Bharakholchey	S	Pakhay	0.03	0.60	0.24	1		No	Community	Non-functional	-	0.0	0	-	

A-1-16

1) Posted from inventory "Compiled Irrigation information 2010" obtained from DAO Sarpang.

2) Identified through field survey and interview

3) Status in () is Identified through field survey.

Target for field survey

Gewog: Tarithang

No.	No. ¹⁾ (in the original list)	Gewog ¹⁾	Name of the Channel ¹⁾	Water Source		Location ¹⁾	Length Approx ¹⁾ (Km)	Command Area ¹⁾		Beneficiary ¹⁾ (HH)	Year of Construction ¹⁾	WUA ¹⁾	Funding Source ¹⁾	Present Status		Accessibility ²⁾			Remarks
				Name ¹⁾	Water availability ²⁾ P: Permanent S: Seasonal			(Ac)	(ha)					Status ^{1,3)}	Reason of non-functional ²⁾	Distance from beneficiary area to road (km)	Time to get to road (min)	Transportation way (Local bus, on foot etc)	
T-1	305	Tarithang	Yoezergang-Singi Khola Lower Irrigation Canal	Singi Khola	P	Yoezergang	1.50	26.00	10.52	14	1980	No	RGoB	Functional		1.5	30	On foot	
T-2	302	Tarithang	Tashichhiling Lower Irrigation Canal	Singi Khola	P	Tashichhiling	1.50	23.00	9.31	7	1980	No	RGoB	Functional		1.5	30	On foot	
T-3	303	Tarithang	Tashichhiling-Singi Khola Lower Irrigation Canal	Singi Khola	P	Tashichhiling	1.00	14.00	5.67	4	1980	No	RGoB	Functional		1.5	30	On foot	
T-4	301	Tarithang	Tashichhiling-Singi Khola Upper Irrigation Canal		S	Tashichhiling	2.50	13.00	5.26	8	1980	No	RGoB	Functional		1.0	20	On foot	
T-5	304	Tarithang	Yoezergang-Singi Khola Upper Irrigation Canal	Singi Khola	P	Yoezergang	1.00	13.00	5.26	7	1980	No	RGoB	Functional		2.0	40	On foot	

1) Posted from inventory "Compiled Irrigation information 2010" obtained from DAO Sarpang.

2) Identified through field survey and interview

3) Status in () is Identified through field survey.

: Target for field survey

*The study team made interview for Gewog officer to obtain information regarding representative irrigation systems and made this list because no irrigation system lists were available. Due to this reason, this list does not cover all the irrigation systems in Tarithang Gewog.

Gewog: Umling

No.	No. ¹⁾ (in the original list)	Gewog ¹⁾	Name of the Channel ¹⁾	Water Source		Location ¹⁾	Length Approx ¹⁾ (Km)	Command Area ¹⁾		Beneficiary ¹⁾ (HH)	Year of Construction ¹⁾	WUA ¹⁾	Funding Source ¹⁾	Present Status		Accessibility ²⁾			Remarks
				Name ¹⁾	Water availability ²⁾ P: Permanent S: Seasonal			(Ac)	(ha)					Status ¹⁾³⁾	Reason of non-functional ²⁾³⁾	Distance from beneficiary area to road (km)	Time to get to road (min)	Transportation way (Local bus, on foot etc)	
U-1	282	Umling	Rejuk Serchu Irrigation channel	Serchu	P	Rejuk	2.00	85.00	34.40	27		No		Functional		1.0	20	On foot	
U-2	280	Umling	Dangling Irrigation channel Lower	Langar chu	S	Dangling	3.50	82.00	33.18	36	1997	No	RGOB	Non-Functional (Functional)		0.5	10	On foot	
U-3	271	Umling	Gadhen Irrigation channel Upper	Taklai chu	P	Gadhan	2.00	75.00	30.35	6	1997	No	RGOB	Non-Functional (Functional)		1.0	20	Tiller	
U-4	276	Umling	Dungmin Irrigation channel Upper	Langar chu	S	Dungmin	1.00	70.00	28.33	26	1997	No	RGOB	Functional		0.5	10	Tiller	
U-5	285	Umling	Tashithang Karchu Irrigation channel	Karchu	S	Tashithang	7.00	64.00	25.90	21	1997	No	RGOB	Functional (Non-Functional)	Land slide	0.5	10	Tiller	
U-6	277	Umling	Dungmin Irrigation channel Lower	Langar chu	S	Dungmin	1.00	52.00	21.04	16		No		Functional		0.5	10	Tiller	
U-7	283	Umling	Chubarthang Seelchu Irrigation channel	Serchu	S	Chubarthang	2.00	47.00	19.02	14	1997	No	RGOB	Functional		0.5	10	Tiller	
U-8	284	Umling	Thongjazor Karchu Irrigation channel	Karchu	S	Thonjazor	4.00	44.00	17.81	17	1997	No	RGOB	Non-Functional	-	0.5	10	On foot	
U-9	274	Umling	Lingar Dap Irrigation channel	Taklai chu	P	Lingar	3.00	40.00	16.19	15	2005-2006	No	RGOB	Functional		1.0	20	On foot	
U-10	272	Umling	Gadhen Irrigation channel Lower	Taklai chu	P	Gadhan	1.00	38.00	15.38	48		No		Functional		0.5	10	Tiller	
U-11	281	Umling	Rijuk Karchu Irrigation channel	Karchu	S	Rejuk	1.00	31.00	12.55	27	1997	No	RGOB	Non-Functional (Functional)		0.5	10	On foot	
U-12	279	Umling	Dangling Irrigation channel Upper	Langar chu	S	Dangling	3.00	24.00	9.71	32	1997	No		Non-Functional (Functional)		0.5	10	Tiller	
U-13	275	Umling	Lingar-Taklai Irrigation channel	Taklai chu		Lingar	4.00	20.00	8.09	2		No		Non-Functional					
U-14	278	Umling	Pantharey Irrigation channel	Langar chu	S	Dangling	1.00	17.00	6.88	15		No		Non-Functional (Functional)		0.5	10	Tiller	
U-15	273	Umling	Meechi Irrigation channel	Taklai chu		Gadhan	4.00	15.00	6.07			No		Functional					

A-1-18

1) Posted from inventory "Compiled Irrigation information 2010" obtained from DAO Sarpang.

2) Identified through field survey and interview

3) Status in () is Identified through field survey.

: Target for field survey

*U-9 and U-13 are the same irrigation system

*U-15 is for Indians beyond the border.

A-2: Samtse Dzongkhag

List of irrigation structure in Samtse Dzongkhag

Gewog	No.	Name of the irrigation channel	Location	Length (Km)	Beneficiary (HH)	Command area		WUA	Year of construction	Funding source	Present status
						(Acre)	(ha)				
Bangra	1	Khopi	Khopi	1.50	20	31.00	12.55	Yes	2005-2006	RGoB	Functional
Biru	2	Katarey Channel	Katarey	0.90	76	210.00	84.98	No	2005-2006	RGoB	Functional
	3	Hatikharka A	Hatikharka	0.60	40	46.17	18.68	No	2009-2010	RGoB	Functional
	4	Khopi irrigation	Biru	0.70	20	29.13	11.79	No	2009-2010	RGoB	Functional
	5	Kharasay Khola	Biru	3.00	55	90.00	36.42	No	2008-2009	RGoB	Functional
	6	Chisopani	Chisopani	1.50	25	30.00	12.14	No	2010-2011	RGoB	Functional
	7	Hatikharka B	Hatikharka B	1.70	38	46.17	18.68	No	2010-2011	RGoB	Functional
Chargharay	8	Lengthey	Lengthey	2.00	30	89.00	36.02	No	2006-2007	RGoB	Non functional
Chengmari	9	Dipojora A	Dipujora A	0.99	32	45.00	18.21	No	2003-2004	RGoB	Functional
	10	Dipujora B	Dipujora B	0.91	33	65.00	26.30	No	2005-2006	RGoB	Functional
Dorokha	11	Dogap	Dogap	5.00	47	80.00	32.37	No	2004-2005	RGoB	Functional
Dungtoe	12	Thulu	Thulu Dungtoe	1.00	18	23.00	9.31	No	2004-2005	RGoB	Functional
Namgaye Chholing	13	Namgaye Chholing	Namgaye Chholing	5.00	68	60.00	24.28	No	2006-2007	RGoB	Functional
Samtse	14	Kalikhola	Gombadara	3.00	39	85.00	34.40	No	2003-2004	RGoB	Functional
	15	Mechitar	Mechitar	0.81	91	300.00	121.40	Yes*	2005-2006	RGoB	Functional
	16	Lamitar	Lamitar	1.20	23	150.00	60.70	Yes*	2009-2010	FAO	Functional
	17	Sangla	Sangla	3.00	24	13.75	5.56	Yes*	2008-2009	RGoB	Functional
	18	Cholicop	Cholicop	2.20	28	100.00	40.47	Yes*	2009-2010	FAO	Functional
Sipsu	19	Penjorling	Sipsu Khola	4.00	66	140.00	56.66	Yes	2003-2004	KRII Plan III	Functional
	20	Sanyanasi	Lower Balbotey	0.50	92	200.00	80.94	Yes	2004-2005	RGoB	Functional
	21	Gangatey-hangay	Hangay	7.00	150	352.00	142.45	Yes	2009-10	RGoB	Functional
	22	Lapchey -Kothigoan	Kotigoan	4.50	69	40.05	16.21	Yes	2009-10	RGoB	Functional
	23	Bayasi Irrigation channel	Sipsu Khola	3.00	61	45.00	18.21	Yes	2010-2011	RGoB	Functional
Tading	24	Jenchu	Jenchu	2.50	6	32.00	12.95	No	2003-2004	RGoB	Functional
Tendru	25	Pakpay	Pakpay	1.50	56	60.50	24.48	Yes	2008-2009	RGoB	Functional
	26	Kuchintar	Kuchintar	2.50	38	104.00	42.09	No	2005-2006	RGoB	Functional
	27	Tendrutar channel	Tendrutar	2.00	25	65.00	26.30	No	2006-2007	RGoB	Functional
Ugyentse	28	Thakuri Dara	Thakuri Kholsi	1.00	20	50.00	20.23	No	2004-2005	RGoB	Functional
Yoeseltse	29	Lamitar	Lamitar	2.00	32	136.00	55.04	No	2003-2004	RGoB	Functional
	30	Kuchidiana	Kuchudiana	15.00	256	659.00	266.68	No	2004-2005	RGoB	Functional
	31	Kuchidina irrigation channel	Kuchidina	3.74	52	206.73	83.66	No	2009-2010	ASSP	Functional
	32	Kuchidina Irrigation channel	Lower Kuchidiana	3.70	52	206.73	83.66	No	2010-2011	RGoB	Functional

A-3: Samdrup Jongkhar Dzongkhag

List of irrigation structure in Samdrup Jongkhar Dzongkhag

Gewog	No.	No. (in the original list)	Name of the Channel	Water Source		Location	Length Approx (Km)	Command Area		Beneficiary (HH)	Year of Construction	WUA	Funding Source	Present Status		Accessibility			Remarks
				Name	Water availability P: Permanent S:Seasonal			(Ac)	(ha)					Status	Reason of non-functional	Distance from beneficiary area to road (km)	Time to get to road (min)	Transportation way (Local bus, on foot etc)	
Deothang			Rekhey	Degrin	Rekhey	1.50	35	14.16	50		Yes	RGoB	Functional						
Gomdar			Khoyar	Toka rayri	Khoyar	1.56	25	10.12	40	1985-86	No	RGoB	Functional						Cemented
			Mokhoma	Sangsingri	Mokhama	9.00	9	3.64	23		No	RGoB	Functional						Cemented
			Geriwong			0.85	3	1.21	14		No	RGoB	Non functional						Cemented
Langchenphu			Golanti/Borla Kulo	Borla Khola	Golanti	3.00	40	16.19	18		No	RGoB	Non functional						
			Angrakhola	Angra khola	Lanchenphug	3.00	219	88.63	54		No	RGoB	Non functional						
			Khawrong	Lebayoli	Kawrong	3.00	21	8.50	18		No	RGoB	Non functional						
Lauri			Gonoong	Sershong ri	Zangthi	10.00	16	6.48	30		No	RGoB	Non functional						Earthen/ lined canal
			Sershong	Sershong ri	Zangthi	3.00	34	13.76	35		No	RGoB	Functional						Earthen/ lined canal
			Tashiphu	Sershong ri	Zangthi	6.00	20	8.09	13		No	RGoB	Non functional						Earthen/ lined canal
Martshala			Kakpadung	Tekree	Kakpadung	2.00	70	28.33	20	2009-2010	No	RGoB	Functional						Newly constructed
			Chortenwoong	Rechanglu	Martshala	1.00	15	6.07	16		No	RGoB	Functional						Cemented
			Galingkhar	Wangphuri	Wangphu	9.00	10	4.05	12		No	RGoB	Functional						Cemented
			Kakpadung	Brangsari	Kakpadung	1.62	35	14.16	15	2001-02	No	RGoB	Functional						Pipe
Orong			Kangkharwoong	Zalamuri	Martshala	3.00	10	4.05	8		No	RGoB	Functional						Cemented
			Yongdor	Dogonaree	Tershari	0.15	2	0.81	1		No	RGoB	Non functional						Private Channel,
			Brongshingko	Dogonaree	Tershari	0.14	2	0.81	1		No	RGoB	Non functional						Private Channel,
			Namthapha	Namthapharee	Suzung Melum	0.20	5	2.02	3		No	RGoB	Non functional						Private Channel,
			Mencheri	Dongsoree/ Bodori	Mencheri	0.67	3	1.21	1		No	RGoB	Non functional						Private Channel,
			Mencheri	Jatshoree	Mencheri	0.26	8	3.24	7		No	RGoB	Non functional						
			Malang	Remungsing- dangshingree	Malang	0.35	8	3.24	7		No	RGoB	Functional						
Pemathang			Orong	Ngadonaree	Mentshang/ Durtshen	3.14	110	44.52	47	2000-01	No	RGoB	Non functional						
			Liphu	Liphuree	Liphu/Remung	0.62	2	0.81	4		No	RGoB	Non functional						
			Tarulay	Wangphuri	Nainital	3.96	98	39.66	70		No	RGoB	Functional						Earthen/ lined canal
Phuntshothang			Warong Khola	Warong ri	Dalim	1.38	140	56.66	49		No	RGoB	Functional						Earthen/ lined canal
			Dumpha Shilingay	Diglai Chu	Shilingey	3.28	130	52.61	65		No	RGoB	Functional						Earthen/ lined canal
			Prasai Khola	Baranadhi Khola	Prasai	1.44	66	26.71	18		No	RGoB	Non functional						Earthen/ lined canal
			Khataythang	Baranadhi Khola	Khataythang	1.72	32	12.95	16		No	RGoB	Non functional						Earthen/ lined canal
			Khataythang	Masaney khola	Khataythang	0.30	8	3.24	3		No	RGoB	Functional						Earthen/ lined canal
			Thapa holi	Thapa holi	Khataythang	1.00	7	2.83	7		No	RGoB	Functional						Earthen/ lined canal
			Woongdaza	Masaney khola	Woongdaza	1.00	10	4.05	8		No	RGoB	Functional						Earthen/ lined canal
			Khameythang	Baranadhi Khola	Khameythang	4.50	131	53.01	70		No	RGoB	Functional						Earthen/ lined canal
			Khameythang	Baranadhi Khola	Khameythang	4.00	35	14.16	23		No	RGoB	Functional						Earthen/ lined canal
			Khameythang	Sukhey khola	Khameythang	0.60	7	2.83	3		No	RGoB	Functional						Earthen/ lined canal
			Khameythang	Sukhey khola	Khameythang	0.30	4	1.62	4		No	RGoB	Functional						Earthen/ lined canal
			Gairitar	Warong Khola	Gairitar	4.00	60	24.28	30		No	RGoB	Non functional						Earthen/ lined canal
			Tshangchutham	Baranadhi Khola	Tshangchutham	1.00	30	12.14	21		No	RGoB	Non functional						Earthen/ lined canal
			Tekree	Tekree khola	Jagkartala	3.00	10	4.05	3		No	RGoB	Non functional						Earthen/ lined canal
Wangphu			SamdrupChoeling	Daap khola	SamdrupChoeling	1.00	60	24.28	30		No	RGoB	Functional						Earthen/ lined canal
			Belamcherang			1.50	30	12.14	27		No	RGoB	Functional						Earthen/ lined canal
Serthi			Yorong ri	Yorong ri	Pangthang	1.50	15	6.07	20		No	RGoB	Non functional						Earthen/ lined canal
			Barkalanang	Tashi ri	Barkhalangna	4.00	35	14.16	52		No	RGoB	Non functional						Earthen/ lined canal

A-3-1

*All contents are posted from irrigation list obtained from DAO Samdrup Jongkhar

█ Listed one after screening by JICA STUDY TEAM

Appendix B: Registers of Irrigation System Targetted for Field Survey in Sarpang Dzongkhag

B-1: Bhur Gewog

B-2: Chuzagang Gewog

B-3: Dekling Gewog

B-4: Dovan Gewog

B-5: Gelephu Gewog

B-6: Hilley Gewog

B-7: Jimecholing Gewog

B-8: Sengye Gewog

B-9: Sershong Gewog

B-10: Shompangkha Gewog

B-11: Tarithang Gewog

B-12: Umling Gewog

B-1: Bhur Gewog

No.	B-1	(No. in the original list)	297	Date of survey: 2012/4/11			
Intake system	Name		Puchar Kulo				
	Dzongkhag		Sarpang				
	Gewog		Bhur				
	Latitude		26 ° 54 ' 53.8 " N				
	Longitude		90 ° 26 ' 47.0 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		-				
	Construction cost*	Material	Covered by Government	Beneficiaries	Donor		
		Workforce	Covered by Government	Beneficiaries	Donor		
	Latest rehabilitated year		2011 (Material is covered by RGoB)				
	Length of Canal		5.0 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
	Function*		Functional		Non Functional		
Problems		*Next rainy season is the first time to use rehabilitated intake.					
Water source	Name		Aipowali				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
Temperature		-					
Command Area	Name		Juphrey				
	Area		135.00 acre	(54.63 ha)			
	Number of house holds		26				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		WUA (Privately organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by Government Beneficiaries				
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize, Bean, Vegetable				
		Dry season	-				
	Fertilizer	-					
Manure		Cow dung, Chicken dung					
Soil Condition	Thickness of surface soil		15cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.3				
Days of drying up water with 15cm depth in paddy field		5days					
Remarks		- This WUA covers 3 irrigation systems, Puchar Kulo(B-1), Beech Kulo(B-2) and Siran Kulo (B-6). - If someone does not join the annual maintenance work, he/she should pay 150BTN/day for WUA.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/11



Picture-2: Situation of Canal

Date:2012/4/11



Picture-3: Situation of command area

Date:2012/4/11



No.	B-2	(No. in the original list)	296	Date of survey: 2012/4/11			
Intake system	Name		Beech Kulo				
	Dzongkhag		Sarpang				
	Gewog		Bhur				
	Latitude		26 ° 55 ' 4.9 " N				
	Longitude		90 ° 26 ' 52.5 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1980's				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		5.0 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
	Function*		Functional	Non Functional			
Problems		From 1987 intake system does not work, only canal system works.					
Water source	Name		Aipowali				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
Temperature		-					
Command Area	Name		Juphrey				
	Area		125.00 acre	(50.59 ha)			
	Number of house holds		26				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		WUA (Privately organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by Government Beneficiaries				
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize, Bean, Vegetable				
		Dry season	Maize, Bean				
	Fertilizer		Little urine for bean				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		5cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.6				
Days of drying up water with 15cm depth in paddy field		3days					
Remarks		- This WUA covers 3 irrigation systems, Puchar Kulo(B-1), Beech Kulo(B-2) and Siran Kulo (B-6). - If someone does not join the annual maintenance work, he/she should pay 150BTN/day for WUA.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/11



Picture-2: Situation of Canal

Date:2012/4/11



Picture-3: Situation of command area

Date:2012/4/11



No.	B-3	(No. in the original list)	286	Date of survey: 2012/4/10			
Intake system	Name		Ghalley kulo				
	Dzongkhag		Sarpang				
	Gewog		Bhur				
	Latitude		26 ° 55 ' 28.9 " N				
	Longitude		90 ° 25 ' 48.3 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		-				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		2010				
	Length of Canal		5.0 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems		Rehabilitation work has been needed every year due to the damage by flood.					
Water source	Name		Paithakhola				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
Temperature		-					
Command Area	Name		Ghalleygoan				
	Area		90.00 acre	(36.42 ha)			
	Number of house holds		29				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		WUA (Privately organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize, Millet				
		Dry season	Maize				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		25cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.0				
Days of drying up water with 15cm depth in paddy field		2-3days					
Remarks		- This WUA covers 3 irrigation systems, Ghalley Kulo(B-3), Limbo Kulo(B-4) and Monger Kulo (B-5). - End of rainy season, water guard operates 3 irrigation systems and supply water in turn. - Farmers using this irrigation system provide 15kg/HH to water guard.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/10



Picture-2: Situation of Canal

Date:2012/4/10



Picture-3: Situation of command area

Date:2012/4/10



No.	B-4	(No. in the original list)	291				
Intake system	Name		Limbo kulo				
	Dzongkhag		Sarpang				
	Gewog		Bhur				
	Latitude		26 ° 55 ' 30.1 " N				
	Longitude		90 ° 25 ' 47.0 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		-				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		2010				
	Length of Canal		3.5 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
Function*		Functional	Non Functional				
Problems		Rehabilitation work has been needed every year due to the damage by flood.					
Water source	Name		Paithakhola				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
Temperature		-					

		Date of survey: 2012/4/10			
Command Area	Name	Roadline			
	Area	80.00 acre	(32.38 ha)		
	Number of house holds	40			
	Distance to road	0.0 km			
	Time to get to road	0 min			
	Transportation way to road	-			
Operation and Management*	Organization	WUA (Privately organized)			
	Activity	Annual maintenance, Employing water guard			
	Budget	Covered by	Government	Beneficiaries	
	Water use fee	-			
Cropping	Variety	Rainy season	Paddy, Maize, Millet		
		Dry season	Maize		
	Fertilizer	-			
	Manure	Cow dung			
Soil Condition	Thickness of surface soil	13cm			
	Structure of surface soil	Gravel	Sandy	Silt	Clay
	pH	6.0			
Remarks	Days of drying up water with 15cm depth in paddy field	2-3days			
	- This WUA covers 3 irrigation systems, Ghalley Kulo(B-3), Limbo Kulo(B-4) and Monger Kulo (B-5). - End of rainy season, water guard operates 3 irrigation systems and supply water in turn. - Farmers using this irrigation system provide 15kg/HH to water guard.				

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/10



Picture-2: Situation of Canal

Date:2012/4/10



Picture-3: Situation of command area

Date:2012/4/10



No.	B-5	(No. in the original list)	292	Date of survey: 2012/4/10			
Intake system	Name		Monger Kulo				
	Dzongkhag		Sarpang				
	Gewog		Bhur				
	Latitude		26 ° 55 ' 30.6 " N				
	Longitude		90 ° 25 ' 44.2 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		-				
	Construction cost*	Material	Covered by Government	Beneficiaries	Donor		
		Workforce	Covered by Government	Beneficiaries	Donor		
	Latest rehabilitated year		2011				
	Length of Canal		3.5 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
	Function*		Functional	Non Functional			
Problems		Intake system does not work properly because gabion wall guiding water to the canal was damaged by flood.					
Water source	Name		Paithakhola				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
Temperature		-					
Command Area	Name		Mongergoan				
	Area		65.90 acre	(26.67 ha)			
	Number of house holds		30				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		WUA (Privately organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by Government	Beneficiaries			
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize, Millet				
		Dry season	Maize				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		10cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.4				
Days of drying up water with 15cm depth in paddy field		2-3days					
Remarks		- This WUA covers 3 irrigation systems, Ghalley Kulo(B-3), Limbo Kulo(B-4) and Monger Kulo (B-5). - End of rainy season, water guard operates 3 irrigation systems and supply water in turn. - Farmers using this irrigation system provide 15kg/HH to water guard.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/10



Picture-2: Situation of Canal

Date:2012/4/10



Picture-3: Situation of command area

Date:2012/4/10



No.	B-6	(No. in the original list)	295	Date of survey: 2012/4/11			
Intake system	Name		Siran Kulo				
	Dzongkhag		Sarpang				
	Gewog		Bhur				
	Latitude		26 ° 55 ' 24.0 " N				
	Longitude		90 ° 26 ' 57.5 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		-				
	Construction cost*	Material	Covered by Government	Beneficiaries	Donor		
		Workforce	Covered by Government	Beneficiaries	Donor		
	Latest rehabilitated year		2012 (Material is covered by RGoB)				
	Length of Canal		5.5 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
Function*		Functional		Non Functional			
Problems		*Next rainy season is the first time to use rehabilitated intake.					
Water source	Name		Aipowali				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.018m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	7.8				
		EC	15.52 ms/m				
Temperature		20.2 °C					
Command Area	Name		Juphrey				
	Area		40.00 acre	(16.19 ha)			
	Number of house holds		14				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		WUA (Privately organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by Government Beneficiaries				
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	Maize, Bean, Vegetable				
	Fertilizer		-				
Manure		Cow dung					
Soil Condition	Thickness of surface soil		5cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.6				
Days of drying up water with 15cm depth in paddy field		7days					
Remarks		- This WUA covers 3 irrigation systems, Puchar Kulo(B-1), Beech Kulo(B-2) and Siran Kulo (B-6). - If someone does not join the annual maintenance work, he/she should pay 150BTN/day for WUA.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/11



Picture-2: Situation of Canal

Date:2012/4/11



Picture-3: Situation of command area

Date:2012/4/11



No.	B-7	(No. in the original list)	299	Date of survey: 2012/4/11			
Intake system	Name		Barasau Kulo				
	Dzongkhag		Sarpang				
	Gewog		Bhur				
	Latitude		26 ° 55 ' 9.4 " N				
	Longitude		90 ° 27 ' 40.9 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1987				
	Construction cost*	Material	Covered by Government		Beneficiaries	Donor	
		Workforce	Covered by Government		Beneficiaries	Donor	
	Latest rehabilitated year		2010				
	Length of Canal		4.5 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems							
Water source	Name		Shitakhari				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
Temperature		-					
Command Area	Name		Jaruwa/Dechenpelri				
	Area		36.00 acre	(14.57 ha)			
	Number of house holds		21				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by Government Beneficiaries				
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	-				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		10cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.2				
Days of drying up water with 15cm depth in paddy field		1days					
Remarks							

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

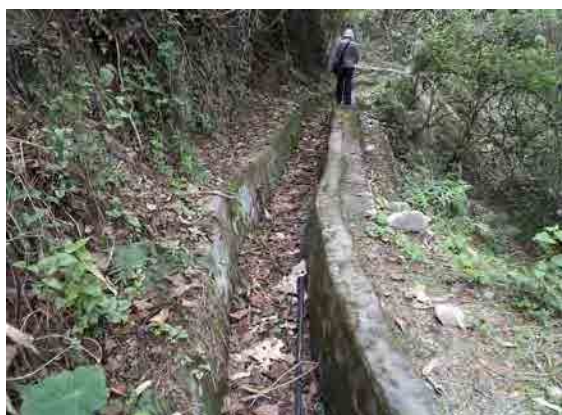
Picture-1: Situation of intake facility

Date:2012/4/11



Picture-2: Situation of Canal

Date:2012/4/11



Picture-3: Situation of command area

Date:2012/4/11



No.	B-8	(No. in the original list)	298	Date of survey: 2012/4/11			
Intake system	Name		Siran Kulo				
	Dzongkhag		Sarpang				
	Gewog		Bhur				
	Latitude		26 ° 55 ' 25.8 " N				
	Longitude		90 ° 27 ' 30.6 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1987				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		1997				
	Length of Canal		4.0 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
	Function*		Functional	Non Functional			
Problems		Rehabilitation work has been needed every year due to the damage by flood.					
Water source	Name		Shitakhari				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
Temperature		-					
Command Area	Name		Jaruwa/Dechenpelri				
	Area		35.00 acre	(14.16 ha)			
	Number of house holds		19				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize, Vegetable				
		Dry season	-				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		17cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		5.8				
Days of drying up water with 15cm depth in paddy field		3days					
Remarks							

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/11



Picture-2: Situation of Canal

Date:2012/4/11



Picture-3: Situation of command area

Date:2012/4/11



No.	B-11	(No. in the original list)	300				
Intake system	Name		Puchar Kulo				
	Dzongkhag		Sarpang				
	Gewog		Bhur				
	Latitude		26 ° 55 ' 7.3 " N				
	Longitude		90 ° 27 ' 43.3 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1987				
	Construction cost*	Material	Covered by Government		Beneficiaries	Donor	
		Workforce	Covered by Government		Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		3.0 km				
	Structure of Canal		Concrete (Wet masonry)		Earth	Pipe	
	Function*		Functional		Non Functional		
Problems		Intake can not take any water even in rainy season because river bed dropped by flood. Irrigation system has not worked this 2years.					
Water source	Name		Shitakhari				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
EC		-					
Temperature		-					

		Date of survey: 2012/4/11	
Command Area	Name	Jaruwa/Dechenpelri	
	Area	20.00 acre	(8.09 ha)
	Number of house holds	13	
	Distance to road	0.0 km	
	Time to get to road	0 min	
	Transportation way to road	-	
Operation and Management*	Organization	-	
	Activity	-	
	Budget	Covered by Government Beneficiaries	
	Water use fee	-	
Cropping	Variety	Rainy season	Paddy, Maize
		Dry season	Maize
	Fertilizer	-	
	Manure	Cow dung	
Soil Condition	Thickness of surface soil	5cm	
	Structure of surface soil	Gravel	Sandy Silt Clay
	pH	6.5	
Remarks	Days of drying up water with 15cm depth in paddy field	10min	

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/11



Picture-2: Situation of Canal

Date:2012/4/11



Picture-3: Situation of command area

Date:2012/4/11



B-2: Chuzagang Gewog

No.	C-1	(No. in the original list)	130	Date of survey: 2012/3/31			
Intake system	Name		Phunsum Chuyour (low level)				
	Dzongkhag		Sarpang				
	Gewog		Chuzagang				
	Latitude		26 ° 52 ' 51.1 " N				
	Longitude		90 ° 33 ' 56.4 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1984				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		5.4 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
	Function*		Functional		Non Functional		
Problems		Rehabilitation work has been needed every year due to the damage by flood.					
Water source	Name		Takali				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH					
		EC					
Temperature							
Command Area	Name		Dawathang				
	Area		700.00 acre	(283.28 ha)			
	Number of house holds		350				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		WUA (Officially organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by Government Beneficiaries				
	Water use fee		100BTN/HH/Year				
Cropping	Variety	Rainy season	Paddy				
		Dry season	Maize				
	Fertilizer		-				
Manure		Cow dung					
Soil Condition	Thickness of surface soil		20cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.5				
Days of drying up water with 15cm depth in paddy field		7days					
Remarks		<ul style="list-style-type: none"> - New intake with permanent structure made by concrete is planned. - If someone does not join the annual maintenance work, he/she should pay 100BTN/day for WUA. - Basically the cost for maintenance of structure is covered by RGoB but in case of emergency rehabilitation, WUA makes expense from collected water use fee. 					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/3/31



Picture-2: Situation of Canal

Date:2012/1/21



Picture-3: Situation of command area

Date:2012/3/31



No.	C-2	(No. in the original list)	129	Date of survey: 2012/3/31			
Intake system	Name		Samdrup Chuyour (high level)				
	Dzongkhag		Sarpang				
	Gewog		Chuzagang				
	Latitude		26 ° 53 ' 39.6 " N				
	Longitude		90 ° 34 ' 55.3 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		-				
	Construction cost*	Material	Covered by Government	Beneficiaries	Donor		
		Workforce	Covered by Government	Beneficiaries	Donor		
	Latest rehabilitated year		2010 (Rehabilitated by RGoB)				
	Length of Canal		7.5 km				
	Structure of Canal		Concrete	(Wet masonry)	Earth	Pipe	
	Function*		Functional	Non Functional			
Problems		Intake has been washed away by flood every year. Sometimes river bank supporting canal is damaged by flood.					
Water source	Name		Takali				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH					
EC							
Temperature							
Command Area	Name		Dawathang				
	Area		300.00 acre	(121.41 ha)			
	Number of house holds		70				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		WUA (Officially organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by Government			Beneficiaries	
	Water use fee		100BTN/HH/Year				
Cropping	Variety	Rainy season	Paddy, Maize				
		Dry season	Maize				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		15cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.3				
	Days of drying up water with 15cm depth in paddy field		7days				
Remarks	- New intake with permanent structure made by concrete is planned.						
	- If someone does not join the annual maintenance work, he/she should pay 100BTN/day for WUA.						
	- Basically the cost for maintenance of structure is covered by RGoB but in case of emergency rehabilitation, WUA makes expense from collected water use fee.						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/1/21



Picture-2: Situation of Canal

Date:2012/1/21



Picture-3: Situation of command area

Date:2012/3/31

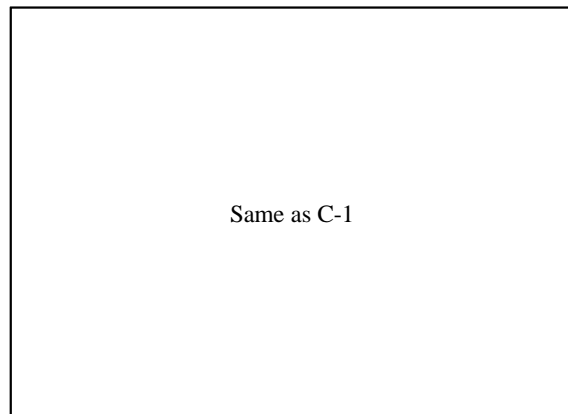


No.	C-3	(No. in the original list)	131	Date of survey: 2012/3/31			
Intake system	Name		Karbithang				
	Dzongkhag		Sarpang				
	Gewog		Chuzagang				
	Latitude		° ' " N				
	Longitude		° ' " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*						
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year						
	Length of Canal		0.4 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems							
Water source	Name		Sherabcholing				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH					
		EC					
Temperature							
Command Area	Name		Karbithang				
	Area		200.00 acre	(80.94 ha)			
	Number of house holds		150				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		WUA (Officially organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by Government Beneficiaries				
	Water use fee		100BTN/HH/Year				
Cropping	Variety	Rainy season	Paddy, Maize, Millet, Ginger, Mustard				
		Dry season	-				
	Fertilizer	Urine, Herbicide					
Manure	Cow dung						
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt Clay		
	pH		6.0				
Days of drying up water with 15cm depth in paddy field		14days					
Remarks		-In present condition, Canal of Phunsum Chuyour (low level) (C-1) is connected to this canal and irrigation water is supplied through these canals. - If someone does not join the annual maintenance work, he/she should pay 100BTN/day for WUA. - Basically the cost for maintenance of structure is covered by RGoB but in case of emergency rehabilitation, WUA makes expense from collected water use fee.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

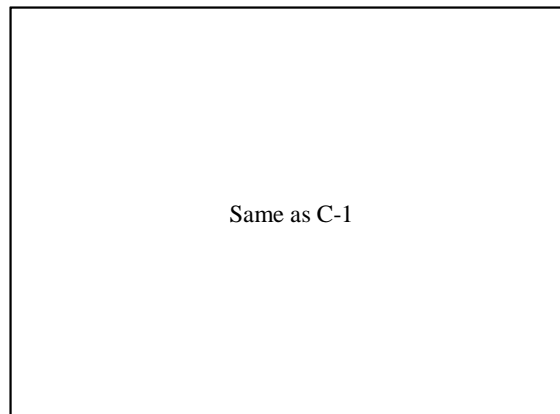
Picture-1: Situation of intake facility

Date:



Picture-2: Situation of Canal

Date:



Picture-3: Situation of command area

Date:2012/3/31

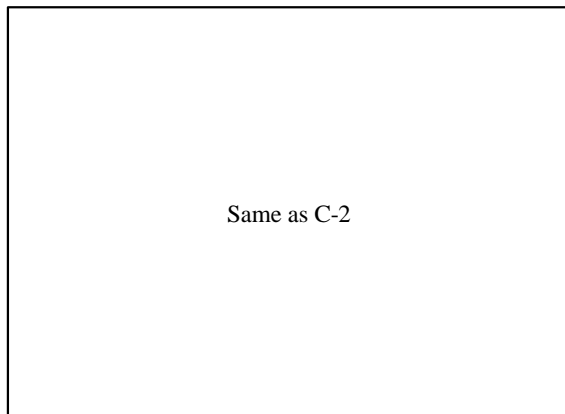


No.	C-4	(No. in the original list)	128	Date of survey: 2012/3/31			
Intake system	Name		Sherab choling				
	Dzongkhag		Sarpang				
	Gewog		Chuzagang				
	Latitude		° ' " N				
	Longitude		° ' " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*						
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year						
	Length of Canal		2.0 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems							
Water source	Name		Kalikhola				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH					
		EC					
Temperature							
Command Area	Name		Chasikher				
	Area		150.00 acre	(60.70 ha)			
	Number of house holds		25				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		WUA (Officially organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by Government Beneficiaries				
	Water use fee		100BTN/HH/Year				
Cropping	Variety	Rainy season	Paddy, Maize, Millet				
		Dry season	Maize				
	Fertilizer		-				
Manure		Cow dung					
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt Clay		
	pH		6.6				
Days of drying up water with 15cm depth in paddy field		6-7days					
Remarks		-In present condition, canal of Samdrup Chuyour (high level) (No.C-2) is connected to this canal and irrigation water is supplied through these canals. Due to this situation, original intake facility is not needed to use. - If someone does not join the annual maintenance work, he/she should pay 100BTN/day for WUA. - Basically the cost for maintenance of structure is covered by RGoB but in case of emergency rehabilitation, WUA makes expense from collected water use fee.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

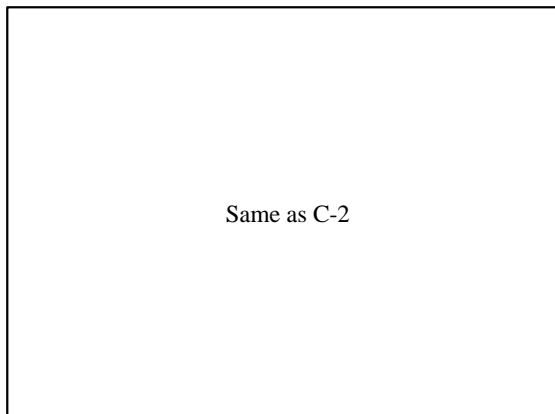
Picture-1: Situation of intake facility

Date:



Picture-2: Situation of Canal

Date:



Picture-3: Situation of command area

Date:2012/3/31



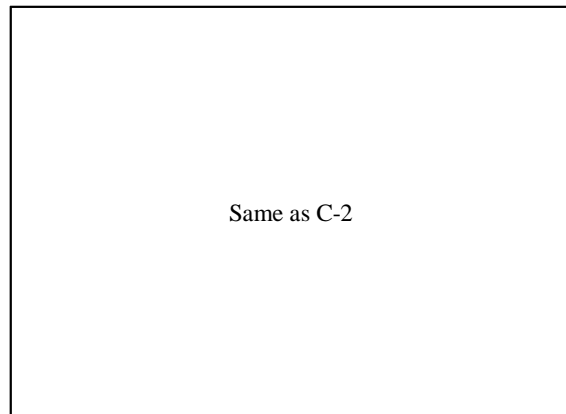
No.	C-5	(No. in the original list)	127
Intake system	Name		Masinikhola
	Dzongkhag		Sarpang
	Gewog		Chuzagang
	Latitude		° ' " N
	Longitude		° ' " E
	Type of intake facility		Concrete Gabion Rock Earth Wood
	Constructed year*		
	Construction cost*	Material	Covered by Government Beneficiaries Donor
		Workforce	Covered by Government Beneficiaries Donor
	Latest rehabilitated year		
	Length of Canal		1.0 km
	Structure of Canal		Concrete (Wet masonry) Earth Pipe
Function*		Functional Non Functional	
Problems			
Water source	Name		Masini khola
	Water source		River Spring Well
	Water discharge	Rainy season	Nil Available (m ³ /s)
		Dry season	Nil Available (m ³ /s)
	Water taken by intake	Rainy season	Enough Not enough
		Dry season	Enough Not enough
	Quality in dry season	pH	
EC			
Temperature			

		Date of survey: 2012/3/31	
Command Area	Name		Chasikher
	Area		50.00 acre (20.23 ha)
	Number of house holds		10
	Distance to road		0.0 km
	Time to get to road		0 min
	Transportation way to road		-
Operation and Management*	Organization		WUA (Officially organized)
	Activity		Annual maintenance, Employing water guard
	Budget		Covered by Government Beneficiaries
	Water use fee		100BTN/HH/Year
Cropping	Variety	Rainy season	Paddy
		Dry season	Ginger, Sunflower
	Fertilizer		-
	Manure		Cow dung
Soil Condition	Thickness of surface soil		More than 30cm
	Structure of surface soil		Gravel Sandy Silt Clay
	pH		6.2
Days of drying up water with 15cm depth in paddy field		6-7days	
Remarks		<p>-In present condition, canal of Samdrup Chuyour (high level) (C-2) is connected to this canal and irrigation water is supplied through these canals.</p> <p>-Farmers sometimes have taken water from Masini Khola but at present they don't take any water from this river.</p> <p>- If someone does not join the annual maintenance work, he/she should pay 100BTN/day for WUA.</p> <p>- Basically the cost for maintenance of structure is covered by RGoB but in case of emergency rehabilitation, WUA makes expense from collected water use fee.</p>	

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

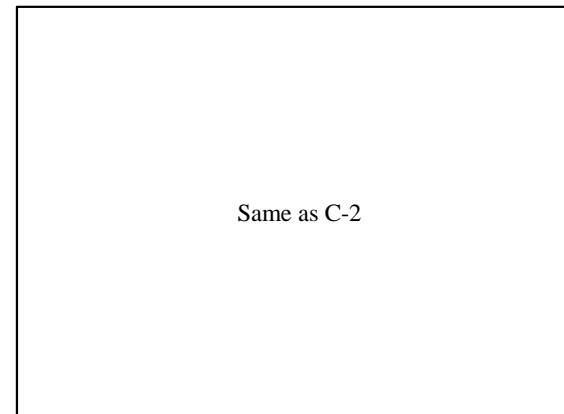
Picture-1: Situation of intake facility

Date:



Picture-2: Situation of Canal

Date:



Picture-3: Situation of command area

Date:2012/3/31



B-3: Dekling Gewog

No.	Dek-1	(No. in the original list)	136	Date of survey: 2012/4/9			
Intake system	Name		Hilley Khola Irri.channel				
	Dzongkhag		Sarpang				
	Gewog		Dekling				
	Latitude		26 ° 55 ' 14.4 " N				
	Longitude		90 ° 21 ' 19.6 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1970's				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		2011 (Material is covered by RGoB)				
	Length of Canal		3.0 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
	Function*		Functional	Non Functional			
Problems		Rehabilitation work has been needed every year due to the damage by flood.					
Water source	Name		Hilley Khola				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
Temperature		-					
Command Area	Name		Chokorling				
	Area		506.55 acre	(205.00 ha)			
	Number of house holds		36				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize				
		Dry season	-				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		10cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.0				
	Days of drying up water with 15cm depth in paddy field		2hr				
Remarks		- Canal connects to Bichkhola Irri.channel (Dek-4). Therefore command area is the same as Bichkhola Irri.channel.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/9



Picture-2: Situation of Canal

Date:2012/4/9



Picture-3: Situation of command area

Date:2012/4/9



No.	Dek-2	(No. in the original list)	146	Date of survey: 2012/4/5			
Intake system	Name		Yangchenphu Irri.Channel				
	Dzongkhag		Sarpang				
	Gewog		Dekling				
	Latitude		26 ° 53 ' 12.5 " N				
	Longitude		90 ° 18 ' 1.6 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		-				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		2009				
	Length of Canal		3.0 km				
	Structure of Canal		Concrete	(Wet masonry)	Earth	Pipe	
	Function*		Functional	Non Functional			
Problems							
Water source	Name		Yangchu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
Temperature		-					
Command Area	Name		Yangchenphu				
	Area		90.00 acre	(36.42 ha)			
	Number of house holds		33				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		WUA (Privately organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by Government Beneficiaries				
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize, Bean				
		Dry season	Ginger				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		13cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.8				
Days of drying up water with 15cm depth in paddy field		2days					
Remarks		-WUA was organized 7 or 8 years ago. -No water use fee has been collected. -WUA collects expense when it is needed, for example for repairing work. -Salary of water guard is paid by paddy. -This WUA covers Yangchuenphu Irri.Channel (Dek-5) (water source is Phendey Chu) too.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/5



Picture-2: Situation of Canal

Date:2012/4/5



Picture-3: Situation of command area

Date:2012/4/5



No.	Dek-3	(No. in the original list)	143	Date of survey: 2012/4/5					
Intake system	Name	Dekiling Irri.channel			Command Area	Name	Dekiling Derbithang		
	Dzongkhag	Sarpang				Area	72.53 acre	(29.35 ha)	
	Gewog	Dekling				Number of house holds	42		
	Latitude	26 °	53 '	35.2 " N		Distance to road	0.0 km		
	Longitude	90 °	19 '	51.5 " E		Time to get to road	0 min		
	Type of intake facility	Concrete	Gabion	Rock		Earth	Wood	-	
	Constructed year*	1956				Transportation way to road	-		
	Construction cost*	Material	Covered by	Government		Beneficiaries	Donor	-	
		Workforce	Covered by	Government		Beneficiaries	Donor	-	
	Latest rehabilitated year	2003 (Material is covered by donor)				Organization	-		
	Length of Canal	3.0 km				Activity	-		
	Structure of Canal	Concrete	(Wet masonry)	Earth		Pipe	Budget	Covered by Government Beneficiaries	
	Function*	Functional		Non Functional		Water use fee	-		
Problems	Intake facility and canal is not working due to serious damage by land slide.			Cropping	Variety	Rainy season	-		
Water source	Name	Leo Khola			Dry season	-			
	Water source	River	Spring	Well	Fertilizer	-			
	Water discharge	Rainy season	Nil	Available	(m ³ /s)	Manure	-		
		Dry season	Nil	Available	(m ³ /s)	Soil Condition	Thickness of surface soil	More than 30cm	
	Water taken by intake	Rainy season	Enough	Not enough	Structure of surface soil		Gravel	Sandy	Silt
		Dry season	Enough	Not enough	pH	-			
	Quality in dry season	pH	-			Days of drying up water with 15cm depth in paddy field	-		
		EC	-			Remarks	-Although this land has quite a good condition for cultivation but no cultivation is done even in rainy season from 2006 due to no irrigation water and damage by wild animals.		
		Temperature	-				-Farm land is dilapidated.		

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/5



Picture-2: Situation of Canal

Date:2012/4/5



Picture-3: Situation of command area

Date:2012/4/5



No.	Dek-4	(No. in the original list)	135	Date of survey: 2012/4/9			
Intake system	Name		Bichkhola Irri.channel				
	Dzongkhag		Sarpang				
	Gewog		Dekling				
	Latitude		26 ° 55 ' 1.0 " N				
	Longitude		90 ° 21 ' 26.5 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1968				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		2011				
	Length of Canal		2.0 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems		Rehabilitation work has been needed every year due to the damage by flood.					
Water source	Name		Bich Khola				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
Temperature		-					
Command Area	Name		Bichpani				
	Area		70.00 acre	(28.33 ha)			
	Number of house holds		43				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize				
		Dry season	-				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		10cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.0				
Days of drying up water with 15cm depth in paddy field		2hr					
Remarks		- If it is not rain, river become dry within 1day. So sometimes in rainy season water is supplied from Hilley Khola through canal of Hilley Khola Irri.channel (Dek-1).					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/9



Picture-2: Situation of Canal

Date:2012/4/9



Picture-3: Situation of command area

Date:2012/4/9



No.	Dek-5	(No. in the original list)	145	Date of survey: 2012/4/5			
Intake system	Name		Yangchuenphu Irri.Channel				
	Dzongkhag		Sarpang				
	Gewog		Dekling				
	Latitude		26 ° 53 ' 11.1 " N				
	Longitude		90 ° 18 ' 24.2 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		-				
	Construction cost*	Material	Covered by Government	Beneficiaries	Donor		
		Workforce	Covered by Government	Beneficiaries	Donor		
	Latest rehabilitated year		2010 (Material is covered by RGoB)				
	Length of Canal		5.0 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems		Rehabilitation work has been needed every year due to the damage by flood.					
Water source	Name		Phendey Chu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.01m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	8.0				
		EC	27.00 ms/m				
Temperature							
Command Area	Name		Yangchenphu				
	Area		55.00 acre	(22.26 ha)			
	Number of house holds		30				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		WUA (Privately organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by Government Beneficiaries				
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize, Millet				
		Dry season	Ginger				
	Fertilizer		Little urine for Maize				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		5cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.6				
Days of drying up water with 15cm depth in paddy field		1days					
Remarks		-WUA was organized 7 or 8 years ago. -No water use fee has been collected. -WUA collects expense when it is needed, for example for repairing work. -Salary of water guard is paid by paddy. -This WUA covers Yangchuenphu Irri.Channel (Dek-2) (water source is Yangchu) too.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/5



Picture-2: Situation of Canal

Date:2012/4/5



Picture-3: Situation of command area

Date:2012/4/5



No.	Dek-6	(No. in the original list)	133	Date of survey: 2012/4/5			
Intake system	Name		Norbuthang Irri.Channel				
	Dzongkhag		Sarpang				
	Gewog		Dekling				
	Latitude		26 ° 52 ' 37.0 " N				
	Longitude		90 ° 18 ' 45.1 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1984				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		2011 (Material is covered by RGoB)				
	Length of Canal		2.5 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems		Rehabilitation work has been needed every year due to the damage by flood.					
Water source	Name		Phendey Chu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
		Temperature	-				
Command Area	Name		Gawaithang				
	Area		35.00 acre	(14.16 ha)			
	Number of house holds		24				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		WUA (Privately organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by Government Beneficiaries				
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize, Millet				
		Dry season	Ginger				
	Fertilizer		Little urine for Maize				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		5cm				
	Structure of surface soil		Gravel	Sandy	Silt Clay		
	pH		6.6				
Days of drying up water with 15cm depth in paddy field		1days					
Remarks		-WUA was organized 7 or 8 years ago. -No water use fee has been collected. -WUA collects expense when it is needed, for example for repairing work. -Salary of water guard is paid by paddy. -Farmers say that pipe with diameter 225mm is not suitable because it is difficult to change its formation according to the topographic condition.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/5



Picture-2: Situation of Canal

Date:2012/4/5



Picture-3: Situation of command area

Date:2012/4/5



No.	Dek-7	(No. in the original list)	139	Date of survey: 2012/4/9			
Intake system	Name		Ratey Khola Channel				
	Dzongkhag		Sarpang				
	Gewog		Dekling				
	Latitude		26 ° 56 ' 31.5 " N				
	Longitude		90 ° 22 ' 1.6 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		-				
	Construction cost*	Material	Covered by Government	Beneficiaries	Donor		
		Workforce	Covered by Government	Beneficiaries	Donor		
	Latest rehabilitated year		2007 (Material is covered by Donor)				
	Length of Canal		3.0 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems		In 2004, land slide happened at intake point. After that land slide happened every year and finally covered all the intake facility.					
Water source	Name		Ratey Khola				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.808m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	8.4				
		EC	22.70 ms/m				
		Temperature	19.0 °C				
Command Area	Name		Ratepani				
	Area		30.00 acre	(12.14 ha)			
	Number of house holds		16				
	Distance to road		0.5 km				
	Time to get to road		15 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		-				
	Budget		Covered by Government	Beneficiaries			
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	Maize				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		5cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.0				
Days of drying up water with 15cm depth in paddy field		1days					
Remarks		- When intake facility was working, farmers made double cropping of paddy. - If intake facility is rehabilitated, farmers would like to do double cropping again.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/9



Picture-2: Situation of Canal

Date:2012/4/9



Picture-3: Situation of command area

Date:2012/4/9



No.	Dek-8	(No. in the original list)	132	Date of survey: 2012/4/5			
Intake system	Name		Gawaithang Irri.channel				
	Dzongkhag		Sarpang				
	Gewog		Dekling				
	Latitude		26 ° 52 ' 27.1 " N				
	Longitude		90 ° 18 ' 20.5 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		-				
	Construction cost*	Material	Covered by Government	Beneficiaries	Donor		
		Workforce	Covered by Government	Beneficiaries	Donor		
	Latest rehabilitated year		2011 (Material is covered by RGoB)				
	Length of Canal		1.5 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems		Since intake facility has no discharge control structure, it takes water more than needed in rainy season.					
Water source	Name		Yangchu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
Temperature		-					
Command Area	Name		Gawaithang				
	Area		25.00 acre	(10.12 ha)			
	Number of house holds		14				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		WUA (Privately organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by Government Beneficiaries				
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize, Millet				
		Dry season	Ginger				
	Fertilizer		Urine (little for Maize)				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		5cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.6				
Days of drying up water with 15cm depth in paddy field		1days					
Remarks		-WUA was organized 7 or 8 years ago. -No water use fee has been collected. -WUA collects expense when it is needed, for example for repairing work. -Salary of water guard is paid by paddy.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/5



Picture-2: Situation of Canal

Date:2012/4/5



Picture-3: Situation of command area

Date:2012/4/5



No.	Dek-10	(No. in the original list)	144	Date of survey: 2012/4/5			
Intake system	Name		Phendey Chu Channel				
	Dzongkhag		Sarpang				
	Gewog		Dekling				
	Latitude		26 ° 52 ' 25.7 " N				
	Longitude		90 ° 19 ' 7.9 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1970'S				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		1.5 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems		Gabion wall settled at the intake point for rising up water surface to guide water to the canal was washed away by flood in 2006. It is impossible to take water without wall because elevation of canal bottom is higher than					
Water source	Name		Teen Bhadey				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
Temperature		-					
Command Area	Name		Trashingling				
	Area		23.00 acre	(9.31 ha)			
	Number of house holds		10				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		-				
	Activity		-				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	-				
		Dry season	-				
	Fertilizer		-				
	Manure		-				
Soil Condition	Thickness of surface soil		-				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		-				
Days of drying up water with 15cm depth in paddy field		-					
Remarks		-Although this land has good soil condition for cultivation but no cultivation is done even in rainy season due to no irrigation water and damage by wild animals. -Farm land is dilapidated.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/5



Picture-2: Situation of Canal

Date:2012/4/5



Picture-3: Situation of command area

Date:2012/4/5



No.	Dek-11	(No. in the original list)	134	Date of survey: 2012/4/9	
Intake system	Name		Ratey Irri.Channel		
	Dzongkhag		Sarpang		
	Gewog		Dekling		
	Latitude		26 ° 56 ' 37.4 " N		
	Longitude		90 ° 21 ' 44.8 " E		
	Type of intake facility		Concrete Gabion Rock Earth Wood		
	Constructed year*		1970's		
	Construction cost*	Material	Covered by Government Beneficiaries Donor		
		Workforce	Covered by Government Beneficiaries Donor		
	Latest rehabilitated year		2009		
	Length of Canal		5.0 km		
	Structure of Canal		Concrete (Wet masonry) Earth Pipe		
Function*		Functional Non Functional			
Problems		Intake worked only 9 months after construction. In 2009 pipe structure is installed but intake has not been able to take any water even in rainy season because elevation of intake is higher than that of river bed.			
Water source	Name		Ratey Khola		
	Water source		River Spring Well		
	Water discharge	Rainy season	Nil Available (m ³ /s)		
		Dry season	Nil Available (0.808m ³ /s)		
	Water taken by intake	Rainy season	Enough Not enough		
		Dry season	Enough Not enough		
	Quality in dry season	pH	8.3		
		EC	21.00 ms/m		
Temperature		18.2 °C			
Command Area	Name		Ratey		
	Area		21.50 acre (8.70 ha)		
	Number of house holds		100		
	Distance to road		0.0 km		
	Time to get to road		0 min		
	Transportation way to road		-		
Operation and Management*	Organization		-		
	Activity		-		
	Budget		Covered by Government Beneficiaries		
	Water use fee		-		
Cropping	Variety	Rainy season	Paddy, Maize, Millet, Vegetable		
		Dry season	Maize, Millet		
	Fertilizer		-		
	Manure		Cow dung		
Soil Condition	Thickness of surface soil		5cm		
	Structure of surface soil		Gravel Sandy Silt Clay		
	pH		6.6		
Days of drying up water with 15cm depth in paddy field		1days			
Remarks					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/9



Picture-2: Situation of Canal

Date:2012/4/9



Picture-3: Situation of command area

Date:2012/4/9



No.	Dek-12	(No. in the original list)	137	Date of survey: 2012/4/9			
Intake system	Name		Dholkhola Irri.Channel				
	Dzongkhag		Sarpang				
	Gewog		Dekling				
	Latitude		26 ° 54 ' 55.5 " N				
	Longitude		90 ° 21 ' 12.4 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1968				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		2011				
	Length of Canal		2.0 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
	Function*		Functional	Non Functional			
Problems		Rehabilitation work has been needed every year due to the damage by flood.					
Water source	Name		Dholkhola				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.486m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	8.6				
		EC	51.70 ms/m				
Temperature		20.6 °C					
Command Area	Name		Dholkhola				
	Area		21.00 acre	(8.50 ha)			
	Number of house holds		24				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		WUA (Privately organized)				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	Maize				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		18cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.5				
Days of drying up water with 15cm depth in paddy field		7days					
Remarks		<ul style="list-style-type: none"> - Once farmers tried double cropping of paddy but wild elephants made serious damage. So they gave up to continue double cropping. - Farmers say that if someone makes fence around farm land to prevent elephants go inside they would like to do double cropping again. - If someone does not attend the annual maintenance work, he/she should pay 150BTN/day for WUA. - If someone would like to be a member of WUA, he/she has to pay 10,000BTN for WUA. - During dry season, water is supplied from Dholkhola but in rainy season from Hillel Khola and Bich Khola because canal is settled across these 2 rivers and can take water at the crossing point. 					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/9



Picture-2: Situation of Canal

Date:2012/4/9



Picture-3: Situation of command area

Date:2012/4/9



No.	Dek-13	(No. in the original list)	138	Date of survey: 2012/4/9			
Intake system	Name		Dhokhola Irri.Channel				
	Dzongkhag		Sarpang				
	Gewog		Dekling				
	Latitude		26 ° 54 ' 40.7 " N				
	Longitude		90 ° 21 ' 24.4 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1980's				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		2007				
	Length of Canal		2.0 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
Function*		Functional	Non Functional				
Problems		Rehabilitation work has been needed every year due to the damage by flood.					
Water source	Name		Dhokhola				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.255m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	8.6				
		EC	48.30 ms/m				
Temperature		20.7 °C					
Command Area	Name		Dhokhola				
	Area		18.00 acre	(7.28 ha)			
	Number of house holds		16				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		WUA (Privately organized)				
	Activity		Annual maintenance				
	Budget		Covered by Government Beneficiaries				
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	Maize				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		18cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.5				
Days of drying up water with 15cm depth in paddy field		7days					
Remarks		<ul style="list-style-type: none"> - Once farmers tried double cropping of paddy but wild elephants made serious damage. So they gave up to continue double cropping. - Farmers say that if someone makes fence around farm land to prevent elephants go inside they would like to do double cropping again. - If someone does not attend the annual maintenance work, he/she should pay 150BTN/day for WUA. - If someone would like to be a member of WUA, he/she has to pay 10,000BTN for WUA. - During dry season, water is supplied from Dhokhola but in rainy season from Hillely Khola and Bich Khola because canal is settled across these 2 rivers and can take water at the crossing point. 					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/9



Picture-2: Situation of Canal

Date:2012/4/9



Picture-3: Situation of command area

Date:2012/4/9



B-4: Dovan Gewog

No.	Dov-1	(No. in the original list)	100	Date of survey: 2012/4/13						
Intake system	Name	-			Command Area	Name	Thrulokhola			
	Dzongkhag	Sarpang				Area	30.00 acre	(12.14 ha)		
	Gewog	Dovan				Number of house holds	18			
	Latitude	27 °	1 '	39.2 " N		Distance to road	-			
	Longitude	90 °	23 '	18.8 " E		Time to get to road	2days			
	Type of intake facility	Concrete	Gabion	Rock		Transportation way to road	On foot			
	Constructed year*	1920				Operation and Management*	Organization	-		
	Construction cost*	Material	Covered by	Government			Beneficiaries	Donor	Annual Maintenance	
		Workforce	Covered by	Government			Beneficiaries	Donor	Covered by Government Beneficiaries	
	Latest rehabilitated year	-				Water use fee	-			
	Length of Canal	2.5 km				Cropping	Variety	Rainy season	Paddy, Maize, Buckwheat, Potato	
	Structure of Canal	Concrete (Wet masonry)	Earth	Pipe				Dry season	-	
	Function*	Functional	Non Functional				Fertilizer	-		
Problems	Intake can not take water properly because there are no structure.			Manure	Dow dung					
Water source	Name	-			Soil Condition	Thickness of surface soil	More than 30cm			
	Water source	River	Spring	Well		Structure of surface soil	Gravel	Sandy	Silt	Clay
	Water discharge	Rainy season	Nil	Available		(m ³ /s)	pH	6.9		
		Dry season	Nil	Available	(0.002m ³ /s)	Days of drying up water with 15cm depth in paddy field				
	Water taken by intake	Rainy season	Enough	Not enough	Remarks	-According to the result of field survey, Name of irrigation system is "Dhap khola kulo" , of water source is "Dhap khola" and of command area is "Mao gaon-A", area of command area is 25 acre and number of HH is 9.				
		Dry season	Enough	Not enough						
	Quality in dry season	pH	7.3							
EC		3.10 ms/m								
Temperature		14.5 °C								

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/13



Picture-2: Situation of Canal

Date:2012/4/13



Picture-3: Situation of command area

Date:2012/4/13



No.	Dov-2	(No. in the original list)	101	Date of survey: 2012/4/13								
Intake system	Name	-			Command Area	Name	Batraikhola					
	Dzongkhag	Sarpang				Area	15.00 acre	(6.07 ha)				
	Gewog	Dovan				Number of house holds	9					
	Latitude	27 °	1 '	53.7 " N		Distance to road	-					
	Longitude	90 °	23 '	18.5 " E		Time to get to road	2days					
	Type of intake facility	Concrete	Gabion	Rock		Earth	Wood	Transportation way to road	On foot			
	Constructed year*	1920				Operation and Management*	Organization	-				
	Construction cost*	Material	Covered by	Government			Beneficiaries	Donor	Activity	Annual Maintenance		
		Workforce	Covered by	Government			Beneficiaries	Donor	Budget	Covered by	Government	Beneficiaries
	Latest rehabilitated year	2009					Water use fee	-				
	Length of Canal	2.0 km				Cropping	Variety	Rainy season	Paddy, Maize, Potato			
	Structure of Canal	Concrete (Wet masonry)	Earth	Pipe			Dry season	Vegetable				
	Function*	Functional	Non Functional				Fertilizer	-				
Problems	Intake can not take water properly because there are no structure.			Manure	Cow dung							
Water source	Name	-			Soil Condition	Thickness of surface soil	More than 30cm					
	Water source	River	Spring	Well		Structure of surface soil	Gravel	Sandy	Silt	Clay		
	Water discharge	Rainy season	Nil	Available		(m ³ /s)	pH	6.8				
		Dry season	Nil	Available	(0.010m ³ /s)	Days of drying up water with 15cm depth in paddy field						
	Water taken by intake	Rainy season	Enough	Not enough	Remarks	-According to the result of field survey, Name of irrigation system is "Dhad khola kulo", of water source is "Dhad khola" and of command area is "Bhattra village-Mao gaon lower", and command area is 130 acre and number of HH is 35.						
		Dry season	Enough	Not enough								
	Quality in dry season	pH	7.5									
EC		3.50 ms/m										
Temperature		15.3 °C										

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/13



Picture-2: Situation of Canal

Date:2012/4/13



Picture-3: Situation of command area

Date:2012/4/13



No.	Dov-4	(No. in the original list)	86	Date of survey: 2012/4/14						
Intake system	Name	-			Command Area	Name	Betchkhola			
	Dzongkhag	Sarpang				Area	14.00 acre	(5.67 ha)		
	Gewog	Dovan				Number of house holds	10			
	Latitude	27 °	3 '	27.2 " N		Distance to road	-			
	Longitude	90 °	18 '	46.1 " E		Time to get to road	3days			
	Type of intake facility	Concrete	Gabion	Rock		Earth	Wood	Transportation way to road	On foot	
	Constructed year*	1935				Operation and Management*	Organization	-		
	Construction cost*	Material	Covered by	Government			Beneficiaries	Donor	Activity	Annual Maintenance
		Workforce	Covered by	Government			Beneficiaries	Donor	Budget	Covered by Government Beneficiaries
	Latest rehabilitated year	-					Water use fee	-		
	Length of Canal	1.0 km				Cropping	Variety	Rainy season	Paddy, Maize, Bean	
	Structure of Canal	Concrete (Wet masonry)	Earth	Pipe				Dry season	Maize, Potato, Buckwheat,	
	Function*	Functional	Non Functional				Fertilizer	-		
Problems	After flood, there are a lot of sedimentation at the intake point.			Manure	Cow dung					
Water source	Name	Girigahg			Soil Condition	Thickness of surface soil	More than 30cm			
	Water source	River	Spring	Well		Structure of surface soil	Gravel	Sandy	Silt	Clay
	Water discharge	Rainy season	Nil	Available		(m ³ /s)	pH	6.7		
		Dry season	Nil	Available	(0.579m ³ /s)	Days of drying up water with 15cm depth in paddy field				
	Water taken by intake	Rainy season	Enough	Not enough	Remarks	-According to the result of field survey, Name of irrigation system is "Gairigaon kulo" , of water source is "Beech khola" and of command area is "Beech khola village".				
		Dry season	Enough	Not enough						
	Quality in dry season	pH	7.8							
EC		6.70 ms/m								
Temperature		15.5 °C								

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/14



Picture-2: Situation of Canal

Date:2012/4/14



Picture-3: Situation of command area

Date:2012/4/14



B-5: Gelephu Gewog

No.	G-1	(No. in the original list)	226	Date of survey: 2012/3/30			
Intake system	Name		Sonamgatshel & Raptenling Irrigation channel				
	Dzongkhag		Sarpang				
	Gewog		Gelephu				
	Latitude		26 ° 53 ' 21.0 " N				
	Longitude		90 ° 30 ' 28.0 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		-				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		2.0 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems		Rehabilitation work for earth canal guiding water to intake has been needed every year due to damage by flood. If the formation of main stream of Mau river changes by flood, sometimes it becomes difficult to take water.					
Water source	Name		Mouchu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(1.082m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH					
EC							
Temperature							
Command Area	Name		Sonamgatshel & Raptenling				
	Area		212.82 acre	(86.13 ha)			
	Number of house holds		85				
	Distance to road		0.0 km				
	Time to get to road		0 min				
Transportation way to road		-					
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	Maize, Buckwheat, Millet				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		22cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.4				
Days of drying up water with 15cm depth in paddy field							
Remarks	-About 75% of water taken by intake facility is mainly utilized for fish pond. -Water taken by intake is enough for paddy cropping even in dry season. -Farmers don't want to do paddy cropping in dry season because cattle from India go into the farmland and make damage. -Farmers say if someone make fence around the paddy field they will do paddy cropping even in dry season.						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/3/30



Picture-2: Situation of Canal

Date:2012/3/30



Picture-3: Situation of command area

Date:2012/3/30



No.	G-2	(No. in the original list)	227	Date of survey: 2012/3/30	
Intake system	Name		Passangchu Irrigation Channel		
	Dzongkhag		Sarpang		
	Gewog		Gelephu		
	Latitude		26 ° 55 ' 20.2 " N		
	Longitude		90 ° 29 ' 40.9 " E		
	Type of intake facility		Concrete Gabion Rock Earth Wood		
	Constructed year*		-		
	Construction cost*	Material	Covered by Government Beneficiaries Donor		
		Workforce	Covered by Government Beneficiaries Donor		
	Latest rehabilitated year		-		
	Length of Canal		2.5 km		
	Structure of Canal		Concrete (Wet masonry) Earth Pipe		
Function*		Functional Non Functional			
Problems		Intake facility can not take water properly because its elevation is higher than the river bed. Pipe has been damaged every year by flood.			
Water source	Name		Passangchu		
	Water source		River Spring Well		
	Water discharge	Rainy season	Nil Available (m ³ /s)		
		Dry season	Nil Available (m ³ /s)		
	Water taken by intake	Rainy season	Enough Not enough		
		Dry season	Enough Not enough		
	Quality in dry season	pH			
EC					
Temperature					
Command Area	Name		Lower Pelrithang		
	Area		79.40 acre (32.13 ha)		
	Number of house holds		21		
	Distance to road		0.0 km		
	Time to get to road		0 min		
	Transportation way to road		-		
Operation and Management*	Organization		-		
	Activity		Annual Maintenance		
	Budget		Covered by Government Beneficiaries		
	Water use fee		-		
Cropping	Variety	Rainy season	Paddy		
		Dry season	Maize		
	Fertilizer		Herbicide		
	Manure		Cow dung		
Soil Condition	Thickness of surface soil		20cm		
	Structure of surface soil		Gravel Sandy Silt Clay		
	pH		6.4		
Days of drying up water with 15cm depth in paddy field		7days			
Remarks		-There are two intake structure, one is for irrigation and another is for drinking water. -Drinking water is distributed to military facility.			

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/3/30



Picture-2: Situation of Canal

Date:2012/3/30



Picture-3: Situation of command area

Date:2012/3/30



No.	G-3	(No. in the original list)	229	Date of survey: 2012/3/30			
Intake system	Name		Dhulachu Irrigation Channel II				
	Dzongkhag		Sarpang				
	Gewog		Gelephu				
	Latitude		26 ° 54 ' 24.0 " N				
	Longitude		90 ° 29 ' 17.0 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		-				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		1.5 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
	Function*		Functional	Non Functional			
Problems		Intake facility can not take water properly because last year water guiding wall collapsed by flood.					
Water source	Name		Dhulachu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
EC		-					
Temperature		-					
Command Area	Name		Lower Pelrithang				
	Area		61.85 acre	(25.03 ha)			
	Number of house holds		23				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		-				
	Activity		Annual Maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	Maize				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		10cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.3				
Remarks	Days of drying up water with 15cm depth in paddy field						
	-Almost all farmers are doing only rain fed cultivation.						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/3/30



Picture-2: Situation of Canal

Date:2012/3/30



Picture-3: Situation of command area

Date:2012/3/30



No.	G-4	(No. in the original list)	228	Date of survey: 2012/3/30			
Intake system	Name		Dhulachu Irrigation Channel I				
	Dzongkhag		Sarpang				
	Gewog		Gelephu				
	Latitude		26 ° 54 ' 26.0 " N				
	Longitude		90 ° 29 ' 8.0 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		-				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		1.5 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
Function*		Functional	Non Functional				
Problems		Intake facility can not take water properly because elevation of canal bottom is 1.5m higher than river bed. Along the canal, there happens a lot of leaking.					
Water source	Name		Dhulachu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
EC		-					
Temperature		-					
Command Area	Name		Upper Pelrithang				
	Area		56.65 acre	(22.93 ha)			
	Number of house holds		19				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize				
		Dry season	Maize, Millet				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		10cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.5				
Days of drying up water with 15cm depth in paddy field		7days					
Remarks		-Only half of beneficiaries can use irrigation water. -Instead of earth canal, concrete canal is under construction. -Last year, Agricultural extension officer provided paddy seed well grown under rain fed condition and gained good productivity.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/3/30



Picture-2: Situation of Canal

Date:2012/3/30



Picture-3: Situation of command area

Date:2012/3/30

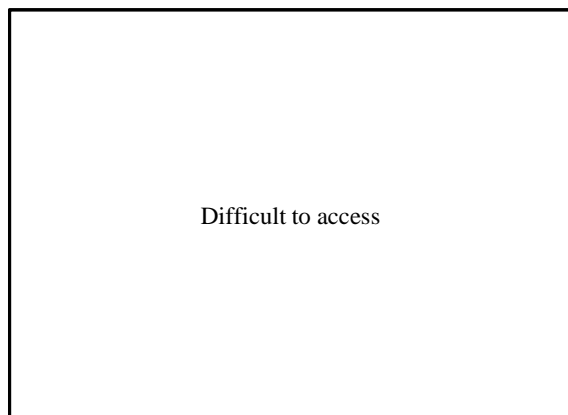


No.	G-5	(No. in the original list)	233	Date of survey: 2012/3/30			
Intake system	Name		Tarulay Irrigation channel				
	Dzongkhag		Sarpang				
	Gewog		Gelephu				
	Latitude		° ' " N				
	Longitude		° ' " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1978				
	Construction cost*	Material	Covered by Government		Beneficiaries	Donor	
		Workforce	Covered by Government		Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		2.0 km				
	Structure of Canal		Concrete (Wet masonry)		Earth	Pipe	
	Function*		Functional		Non Functional		
Problems		Intake facility doesn't work properly.					
Water source	Name		Tarulaychu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
Temperature		-					
Command Area	Name		Dzomlingthang				
	Area		50.39 acre	(20.39 ha)			
	Number of house holds		25				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		-				
	Activity		-				
	Budget		Covered by Government Beneficiaries				
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Bean				
		Dry season	Maize, Millet, Mustard, Buckwheat				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		15cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.1				
Remarks	Days of drying up water with 15cm depth in paddy field		7days				
	- Only 2 HH crop paddy and the others do not do any cultivation due to damage of wild animals and lack of irrigation water.						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

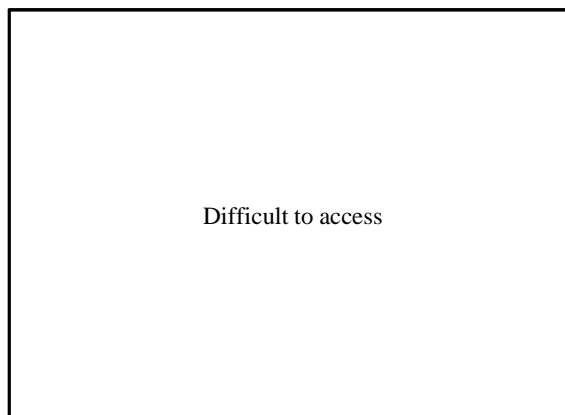
Picture-1: Situation of intake facility

Date:



Picture-2: Situation of Canal

Date:



Picture-3: Situation of command area

Date:2012/3/30



B-6: Hilley Gewog

No.	H-1	(No. in the original list)	3	Date of survey: 2012/3/29			
Intake system	Name		Gurung Khola Kulo 3				
	Dzongkhag		Sarpang				
	Gewog		Hilley				
	Latitude		26 ° 52 ' 14.7 " N				
	Longitude		90 ° 15 ' 21.7 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1970				
	Construction cost*	Material	Covered by Government		Beneficiaries	Donor	
		Workforce	Covered by Government		Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		1.5 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems		Intake facility can not take water properly due to no structure.					
Water source	Name		Gurung Khola				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
EC		-					
Temperature		-					
Command Area	Name		Hilley				
	Area		37.19 acre	(15.05 ha)			
	Number of house holds		15				
	Distance to road		0.5 km				
	Time to get to road		20 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by Government		Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	Maize				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		-				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		-				
Remarks	Days of drying up water with 15cm depth in paddy field		3-7days				
	- Near command are, there is spring. But elevation of spring is low so farmers would like to install water pump to use this water for irrigation.						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/3/29



Picture-2: Situation of Canal

Date:2012/3/29



Picture-3: Situation of command area

Date:2012/3/29



No.	H-2	(No. in the original list)	38	Date of survey: 2012/4/13			
Intake system	Name		Hadzari Kulo				
	Dzongkhag		Sarpang				
	Gewog		Hilley				
	Latitude		26 ° 55 ' 8.0 " N				
	Longitude		90 ° 13 ' 54.9 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1970's				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		2011				
	Length of Canal		2.0 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
Function*		Functional	Non Functional				
Problems		Intake can take enough water properly but canal can not provide enough water to beneficiary area because a lot of leaking happens along the earth canal.					
Water source	Name		Kali Khola				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.090m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	8.5				
		EC	23.70 ms/m				
Temperature		19.0 °C					
Command Area	Name		Khopitar				
	Area		21.95 acre	(8.88 ha)			
	Number of house holds		10				
	Distance to road		5.0 km				
	Time to get to road		120 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	Maize				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.4				
Days of drying up water with 15cm depth in paddy field		2hours					
Remarks		- Road connecting village and main road will be constructed next year.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/13



Picture-2: Situation of Canal

Date:2012/4/13



Picture-3: Situation of command area

Date:2012/4/13



No.	H-8	(No. in the original list)	4	Date of survey: 2012/3/29			
Intake system	Name		Chuwan Khola Kulo 1				
	Dzongkhag		Sarpang				
	Gewog		Hilley				
	Latitude		26 ° 51 ' 59.1 " N				
	Longitude		90 ° 14 ' 39.3 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		-				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		1.0 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
Function*		Functional	Non Functional				
Problems							
Water source	Name		Chuwan Kholshey				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
Temperature		-					
Command Area	Name		Hilley				
	Area		9.44 acre	(3.82 ha)			
	Number of house holds		10				
	Distance to road		0.6 km				
	Time to get to road		20 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	Maize				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil						
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH						
Days of drying up water with 15cm depth in paddy field		3-7days					
Remarks							

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/3/29



Picture-2: Situation of Canal

Date:2012/3/29



Picture-3: Situation of command area

Date:2012/3/29



B-7: Jimecholing Gewog

No.	J-1	(No. in the original list)	175	Date of survey: 2012/4/10			
Intake system	Name		Basghari				
	Dzongkhag		Sarpang				
	Gewog		Jimecholing				
	Latitude		26 ° 59 ' 55.0 " N				
	Longitude		90 ° 33 ' 14.4 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1920				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		1.5 km				
	Structure of Canal		Concrete	(Wet masonry)	Earth	Pipe	
	Function*		Functional	Non Functional			
Problems		There are much canal erosion.					
Water source	Name		Basghari Kholsa				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.010m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	8.5				
		EC	5.80 ms/m				
Temperature		15.4 °C					
Command Area	Name		Daragaon				
	Area		105.00 acre	(42.49 ha)			
	Number of house holds		12				
	Distance to road		1.0 km				
	Time to get to road		20 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		WUA (Privately organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by Government				
	Water use fee		Beneficiaries				
Cropping	Variety	Rainy season	Paddy, Maize				
		Dry season	Maize, Millet, Vegetable				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.7				
Remarks	Days of drying up water with 15cm depth in paddy field						
	- Farmers using this irrigation system provide paddy to water guard.						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/10



Picture-2: Situation of Canal

Date:2012/4/10



Picture-3: Situation of command area

Date:2012/4/10



No.	J-2	(No. in the original list)	184	Date of survey: 2012/4/9			
Intake system	Name		Panitey Kuloo				
	Dzongkhag		Sarpang				
	Gewog		Jimecholing				
	Latitude		27 ° 0 ' 4.4 " N				
	Longitude		90 ° 34 ' 8.1 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1940				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		1.0 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems		Intake can not take water properly because there are no structure.					
Water source	Name		Panitey Kholsa				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.002m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	7.7				
		EC	1.90 ms/m				
Temperature		14.4 °C					
Command Area	Name		Saundaley				
	Area		90.00 acre	(36.42 ha)			
	Number of house holds		25				
	Distance to road		1.0 km				
	Time to get to road		15 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		WUA (Privately organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by Government Beneficiaries				
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize				
		Dry season	Buckwheat, Millet, Vegetable				
	Fertilizer						
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.7				
Remarks	Days of drying up water with 15cm depth in paddy field						
	- Farmers using this irrigation system provide paddy to water guard.						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/9



Picture-2: Situation of Canal

Date:2012/4/9



Picture-3: Situation of command area

Date:2012/4/9



No.	J-3	(No. in the original list)	185	Date of survey: 2012/4/9			
Intake system	Name		Dharey Kuloo				
	Dzongkhag		Sarpang				
	Gewog		Jimecholing				
	Latitude		27 ° 0 ' 24.6 " N				
	Longitude		90 ° 33 ' 46.0 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1914				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		0.5 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems		Intake can not take water properly because there are no structure.					
Water source	Name		Dharey Kholsa				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.002m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	7.7				
EC		2.10 ms/m					
Temperature		15.6 °C					
Command Area	Name		Saundaley				
	Area		50.00 acre	(20.23 ha)			
	Number of house holds		12				
	Distance to road		1.0 km				
	Time to get to road		15 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		WUA (Privately organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by Government Beneficiaries				
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Millet, Mustard, Buckwhkeat				
		Dry season	Vegetable				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.8				
Days of drying up water with 15cm depth in paddy field							
Remarks		- Farmers using this irrigation system provide paddy to water guard.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/9



Picture-2: Situation of Canal

Date:2012/4/9



Picture-3: Situation of command area

Date:2012/4/9



No.	J-4	(No. in the original list)	168	Date of survey: 2012/4/10			
Intake system	Name		Jante Kuloo(3)				
	Dzongkhag		Sarpang				
	Gewog		Jimecholing				
	Latitude		27 ° 0 ' 12.5 " N				
	Longitude		90 ° 32 ' 54.4 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1920				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		2.5 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems							
Water source	Name		Jantey Kholsa				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.010m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	7.5				
		EC	7.30 ms/m				
Temperature		16.2 °C					
Command Area	Name		Daragaon				
	Area		30.00 acre	(12.14 ha)			
	Number of house holds		21				
	Distance to road		1.0 km				
	Time to get to road		15 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize				
		Dry season	Maize, Potato, Bean				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.6				
Days of drying up water with 15cm depth in paddy field							
Remarks							

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/10



Picture-2: Situation of Canal

Date:2012/4/10



Picture-3: Situation of command area

Date:2012/4/10



No.	J-5	(No. in the original list)	217	Date of survey: 2012/4/10			
Intake system	Name		Gumti Kuloo				
	Dzongkhag		Sarpang				
	Gewog		Jimecholing				
	Latitude		27 ° 0 ' 56.0 " N				
	Longitude		90 ° 36 ' 10.0 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1935				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		1.0 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
Function*		Functional	Non Functional				
Problems		There are a lot of leaking from canal.					
Water source	Name		Gumti kholsa				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.013m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	8.0				
		EC	5.40 ms/m				
Temperature		14.8 °C					
Command Area	Name		Sampagang				
	Area		30.00 acre	(12.14 ha)			
	Number of house holds		15				
	Distance to road		1.0 km				
	Time to get to road		30 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize, Beans				
		Dry season	Maize, Mustard, Potato				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.7				
Remarks	Days of drying up water with 15cm depth in paddy field						
	-According to the result of field survey, Name of Water source is "Betini." - Crops are damaged by wild animals.						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/10



Picture-2: Situation of Canal

Date:2012/4/10



Picture-3: Situation of command area

Date:2012/4/10



No.	J-6	(No. in the original list)	224	Date of survey: 2012/4/10			
Intake system	Name		Dawa Kuloo				
	Dzongkhag		Sarpang				
	Gewog		Jimecholing				
	Latitude		27 ° 0 ' 51.2 " N				
	Longitude		90 ° 36 ' 2.1 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1935				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		1.0 km				
	Structure of Canal		Concrete	(Wet masonry)	Earth	Pipe	
	Function*		Functional	Non Functional			
Problems		There are a lot of leaking from canal.					
Water source	Name		Dawa Khola				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.030m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	8.0				
		EC	5.40 ms/m				
Temperature		14.8 °C					
Command Area	Name		Samapagang				
	Area		30.00 acre	(12.14 ha)			
	Number of house holds		10				
	Distance to road		1.0 km				
	Time to get to road		30 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize				
		Dry season	Maize, Bean, Potato				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.9				
Remarks	Days of drying up water with 15cm depth in paddy field						
	-According to the result of field survey, Name of Water source is "Betini."						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/10



Picture-2: Situation of Canal

Date:2012/4/10



Picture-3: Situation of command area

Date:2012/4/10



No.	J-10	(No. in the original list)	225	Date of survey: 2012/4/10			
Intake system	Name		Nado kuloo				
	Dzongkhag		Sarpang				
	Gewog		Jimecholing				
	Latitude		27 ° 0 ' 50.6 " N				
	Longitude		90 ° 35 ' 58.0 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1935				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		2.5 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
Function*		Functional	Non Functional				
Problems							
Water source	Name		Nado kholsa				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.030 m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	8.0				
		EC	5.40 ms/m				
Temperature		14.8 °C					
Command Area	Name		Samkhara				
	Area		25.00 acre	(10.12 ha)			
	Number of house holds		10				
	Distance to road		1.0 km				
	Time to get to road		20 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize, Bean				
		Dry season	Maize, Mustard, Potato				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.9				
Remarks	Days of drying up water with 15cm depth in paddy field						
	-According to the result of field survey, Name of Water source is "Betini."						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/10



Picture-2: Situation of Canal

Date:2012/4/10



Picture-3: Situation of command area

Date:2012/4/10



No.	J-15	(No. in the original list)	172	Date of survey: 2012/4/10			
Intake system	Name		Sepai Kuloo				
	Dzongkhag		Sarpang				
	Gewog		Jimecholing				
	Latitude		27 ° 0 ' 44.3 " N				
	Longitude		90 ° 33 ' 7.5 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1920				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		2009				
	Length of Canal		0.2 km				
	Structure of Canal		Concrete	(Wet masonry)	Earth	Pipe	
	Function*		Functional	Non Functional			
Problems							
Water source	Name		Sepai Khola				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
EC		-					
Temperature		-					
Command Area	Name		Daragaon				
	Area		22.80 acre	(9.23 ha)			
	Number of house holds		11				
	Distance to road		1.0 km				
	Time to get to road		15 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		WUA (Privately organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by Government Beneficiaries				
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize				
		Dry season	Maize, Millet, Potato				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.6				
Remarks	Days of drying up water with 15cm depth in paddy field						
	-According to the result of field survey, number of HH is 17.						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/10



Picture-2: Situation of Canal

Date:2012/4/10



Picture-3: Situation of command area

Date:2012/4/10



No.	J-16	(No. in the original list)	166	Date of survey: 2012/4/10			
Intake system	Name		Jante Kuloo(1)				
	Dzongkhag		Sarpang				
	Gewog		Jimecholing				
	Latitude		26 ° 59 ' 55.0 " N				
	Longitude		90 ° 33 ' 14.4 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1920				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		3.5 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems		There are much canal erosion and land slide along canal.					
Water source	Name		Jantey Kholsa				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.010m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	8.5				
EC		5.80 ms/m					
Temperature		15.4 °C					
Command Area	Name		Daragaon				
	Area		21.00 acre	(8.50 ha)			
	Number of house holds		12				
	Distance to road		0.5 km				
	Time to get to road		15 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		WUA (Privately organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize, Potato				
		Dry season	Chilly, Bean,				
	Fertilizer	-					
Manure		Cow dung					
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.9				
Days of drying up water with 15cm depth in paddy field							
Remarks		- Intake facility is an temporary structure at road side.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/10



Picture-2: Situation of Canal

Date:2012/4/10



Picture-3: Situation of command area

Date:2012/4/10



No.	J-24	(No. in the original list)	165	Date of survey: 2012/4/10			
Intake system	Name		Hiti kuloo				
	Dzongkhag		Sarpang				
	Gewog		Jimecholing				
	Latitude		27 ° 0 ' 49.9 " N				
	Longitude		90 ° 32 ' 49.9 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1920				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		1.5 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems							
Water source	Name		Hitikholsa				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.002m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	6.7				
EC		6.40 ms/m					
Temperature		18.3 °C					
Command Area	Name		Daragaon				
	Area		18.00 acre	(7.28 ha)			
	Number of house holds		12				
	Distance to road		1.0 km				
	Time to get to road		30 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		WUA (Privately organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize				
		Dry season	Maize, Potato				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Sil	Clay	
	pH		6.8				
Days of drying up water with 15cm depth in paddy field							
Remarks							

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/10



Picture-2: Situation of Canal

Date:2012/4/10

Picture-3: Situation of command area

Date:2012/4/10



B-8: Sengye Gewog

No.	Sen-1	(No. in the original list)	240	Date of survey: 2010/4/2					
Intake system	Name	Baral kulo			Command Area	Name	Sisty A		
	Dzongkhag	Sarpang				Area	59.05 acre	(23.90 ha)	
	Gewog	Sengye				Number of house holds	24		
	Latitude	26 °	51 '	59.4 " N		Distance to road	0.0 km		
	Longitude	90 °	12 '	46.5 " E		Time to get to road	0 min		
	Type of intake facility	Concrete	Gabion	Rock		Earth	Wood	-	
	Constructed year*	-				Transportation way to road	-		
	Construction cost*	Material	Covered by	Government		Beneficiaries	Donor	WUA (Privately organized)	
		Workforce	Covered by	Government		Beneficiaries	Donor	Annual maintenance, Employing water guard	
	Latest rehabilitated year	-				Budget	Covered by Government		Beneficiaries
	Length of Canal	4.0 km				Water use fee	150BTN/HH or paddy		
	Structure of Canal	Concrete (Wet masonry)		Earth		Pipe	-		
	Function*	Functional		Non Functional		-			
Problems	Rehabilitation work has been needed every year due to the damage by flood.					Cropping			
Water source	Name	Sisty khola			Soil Condition	Thickness of surface soil	18cm		
	Water source	River	Spring	Well		Structure of surface soil	Gravel	Sandy	Silt
	Water discharge	Rainy season	Nil	Available	(m ³ /s)	pH	5.5		
		Dry season	Nil	Available	(0.468m ³ /s)	Days of drying up water with 15cm depth in paddy field	2-5days		
	Water taken by intake	Rainy season	Enough	Not enough	Remarks	-Water amount of river is enough even in dry season and once farmers tried paddy cropping in dry season. But harvesting season was just the beginning of rainy season and damage of paddy was so serious. Therefore farmers gave up to make paddy in dry season. -Instead of paddy, farmers farm fish in dry season. -Farmers say that if they can obtain another type of paddy which can be harvested before rainy season, they will make paddy in dry season.			
		Dry season	Enough	Not enough					
	Quality in dry season	pH	8.2						
		EC	44.10 ms/m						
		Temperature	23.5 °C						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2010/4/2



Picture-2: Situation of Canal

Date:2010/4/2



Picture-3: Situation of command area

Date:2010/4/2



No.	Sen-2	(No. in the original list)	239	Date of survey: 2010/4/2			
Intake system	Name		Mazan kulo				
	Dzongkhag		Sarpang				
	Gewog		Sengye				
	Latitude		26 ° 52 ' 0.4 " N				
	Longitude		90 ° 12 ' 37.5 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		-				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		Under rehabilitation				
	Length of Canal		6.0 km				
	Structure of Canal		Concrete	(Wet masonry)	Earth	Pipe	
	Function*		Functional	Non Functional			
Problems		Canal is under rehabilitation.					
Water source	Name		Sisty khola				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.468m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	8.2				
EC		44.10 ms/m					
Temperature		23.5 °C					
Command Area	Name		Sisty A				
	Area		46.95 acre	(19.00 ha)			
	Number of house holds		25				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		WUA (Privately organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by Government Beneficiaries				
	Water use fee		150BTN/HH or crop				
Cropping	Variety	Rainy season	Paddy, Maize, Millet				
		Dry season	Wheat, Vegetable				
	Fertilizer		-				
Manure		Cow dung					
Soil Condition	Thickness of surface soil		18cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		5.5				
Days of drying up water with 15cm depth in paddy field		2-5days					
Remarks		<p>-Water amount of river is enough even in dry season and once farmers tried paddy cropping in dry season. But harvesting season was just the beginning of rainy season and damage of paddy was so serious. Therefore farmers gave up to make paddy in dry season.</p> <p>-Instead of paddy, farmers farm fish in dry season.</p> <p>-Farmers say that if they can obtain another type of paddy which can be harvested before rainy season, they will make paddy in dry season.</p>					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2010/4/2



Picture-2: Situation of Canal

Date:2010/4/2



Picture-3: Situation of command area

Date:2010/4/2



No.	Sen-3	(No. in the original list)	234	Date of survey: 2010/4/2	
Intake system	Name		Upper Senghe Kulo		
	Dzongkhag		Sarpang		
	Gewog		Sengye		
	Latitude		26 ° 49 ' 26.6 " N		
	Longitude		90 ° 11 ' 9.3 " E		
	Type of intake facility		Concrete Gabion Rock Earth Wood		
	Constructed year*		-		
	Construction cost*	Material	Covered by Government	Beneficiaries Donor	
		Workforce	Covered by Government	Beneficiaries Donor	
	Latest rehabilitated year		2011 (Material is covered by RGoB)		
	Length of Canal		1.0 km		
	Structure of Canal		Concrete (Wet masonry) Earth Pipe		
	Function*		Functional Non Functional		
Problems					
Water source	Name		Senghe khola		
	Water source		River Spring Well		
	Water discharge	Rainy season	Nil	Available (m ³ /s)	
		Dry season	Nil	Available (0.002m ³ /s)	
	Water taken by intake	Rainy season	Enough		Not enough
		Dry season	Enough		Not enough
	Quality in dry season	pH	7.3		
		EC	10.67 ms/m		
Temperature		23.4 °C			
Command Area	Name		Hatikhuar		
	Area		36.10 acre (14.61 ha)		
	Number of house holds		20		
	Distance to road		0.5 km		
	Time to get to road		20 min		
	Transportation way to road		On foot		
Operation and Management*	Organization		-		
	Activity		Annual maintenance		
	Budget		Covered by Government Beneficiaries		
	Water use fee		-		
Cropping	Variety	Rainy season	Paddy, Bean, Millet		
		Dry season	Maize		
	Fertilizer		-		
	Manure		Cow dung		
Soil Condition	Thickness of surface soil		More than 30cm		
	Structure of surface soil		Gravel Sandy Silt Clay		
	pH		5.6		
Days of drying up water with 15cm depth in paddy field		1 days			
Remarks					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2010/4/2



Picture-2: Situation of Canal

Date:2010/4/2



Picture-3: Situation of command area

Date:2010/4/2



No.	Sen-4	(No. in the original list)	236	Date of survey: 2010/4/2			
Intake system	Name		Koigaon kulo				
	Dzongkhag		Sarpang				
	Gewog		Sengye				
	Latitude		26 ° 49 ' 56.3 " N				
	Longitude		90 ° 11 ' 15.5 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		-				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		2011 (Material is covered by RGoB)				
	Length of Canal		2.5 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
	Function*		Functional Non Functional				
Problems		Rehabilitation work has been needed every year due to the damage by flood. Water amount taken by intake is not stable even in rainy season.					
Water source	Name		Tungkholo				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.003m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	7.6				
		EC	10.65 ms/m				
Temperature		24.7 °C					
Command Area	Name		Koigaon				
	Area		35.50 acre	(14.37 ha)			
	Number of house holds		18				
	Distance to road		0.0 km				
	Time to get to road		0 min				
	Transportation way to road		-				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Millet, Foxtail, Maize				
		Dry season	Maize				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.0				
	Days of drying up water with 15cm depth in paddy field		1days				
Remarks							

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2010/4/2



Picture-2: Situation of Canal

Date:2010/4/2



Picture-3: Situation of command area

Date:2010/4/2



No.	Sen-5	(No. in the original list)	238	Date of survey: 2010/4/2			
Intake system	Name		Rumdali kulo				
	Dzongkhag		Sarpang				
	Gewog		Sengye				
	Latitude		26 ° 52 ' 4.6 " N				
	Longitude		90 ° 12 ' 37.8 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		-				
	Construction cost*	Material	Covered by Government		Beneficiaries	Donor	
		Workforce	Covered by Government		Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		3.0 km				
	Structure of Canal		Concrete (Wet masonry)		Earth	Pipe	
	Function*		Functional		Non Functional		
Problems		Rehabilitation work has been needed every year due to the damage by flood. Some part of canal collapses due to land slide.					
Water source	Name		Sisty khola				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.468m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	8.2				
EC		44.10 ms/m					
Temperature		23.5 °C					
Command Area	Name		Sisty B				
	Area		22.05 acre	(8.92 ha)			
	Number of house holds		14				
	Distance to road		0.3 km				
	Time to get to road		10 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		WUA (Privately organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by Government			Beneficiaries	
	Water use fee		150BTN/HH or crop				
Cropping	Variety	Rainy season	Paddy, Maize, Millet				
		Dry season	Wheat, Vegetable				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		18cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		5.5				
Days of drying up water with 15cm depth in paddy field		2-5days					
Remarks		<p>-Water amount of river is enough even in dry season and once farmers tried paddy cropping in dry season. But harvesting season was just the beginning of rainy season and damage of paddy was so serious. Therefore farmers gave up to make paddy in dry season.</p> <p>-Instead of paddy, farmers farm fish in dry season.</p> <p>-Farmers say that if they can obtain another type of paddy which can be harvested before rainy season, they will make paddy in dry season.</p>					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2010/4/2



Picture-2: Situation of Canal

Date:2010/4/2



Picture-3: Situation of command area

Date:2010/4/2



B-9: Sershong Gewog

No.	Ser-1	(No. in the original list)	266	Date of survey: 2012/4/6			
Intake system	Name		Lothuen irrigation channel				
	Dzongkhag		Sarpang				
	Gewog		Sershong				
	Latitude		26 ° 53 ' 39.4 " N				
	Longitude		90 ° 34 ' 55.9 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1986				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		2011-2012 (on going)				
	Length of Canal		6.3 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
	Function*		Functional		Non Functional		
Problems		Rehabilitation work has been needed every year due to the damage by flood. Sometimes river bank supporting canal is damaged by flood. There are a lot of leaking from canal.					
Water source	Name		Taklaichhu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(3.390 m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	7.3				
EC		32.00 ms/m					
Temperature		20.5 °C					
Command Area	Name		Lothuen				
	Area		145.55 acre	(58.90 ha)			
	Number of house holds		84				
	Distance to road		0.5 km				
	Time to get to road		20 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		WUA (Officially organized)				
	Activity		Annual maintenance, Employing water guard				
	Budget		Covered by Government Beneficiaries				
	Water use fee		100BTN/HH/Year				
Cropping	Variety	Rainy season	Paddy				
		Dry season	Maize				
	Fertilizer		-				
Manure		Cow dung					
Soil Condition	Thickness of surface soil		15cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH						
Days of drying up water with 15cm depth in paddy field							
Remarks		-According to the result of field survey, Name of Water source is "Barshong chu."					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/6



Picture-2: Situation of Canal

Date:2012/4/6



Picture-3: Situation of command area

Date:2012/4/6



No.	Ser-2	(No. in the original list)	264	Date of survey: 2012/4/5			
Intake system	Name		Norbuling irrigation channel				
	Dzongkhag		Sarpang				
	Gewog		Sershong				
	Latitude		26 ° 53 ' 44.7 " N				
	Longitude		90 ° 32 ' 37.1 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1976				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		3.0 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
	Function*		Functional		Non Functional		
Problems		Rehabilitation work has been needed every year due to the damage by flood.					
Water source	Name		Norbuling chhu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
EC		-					
Temperature		-					
Command Area	Name		Norbuling				
	Area		96.40 acre	(39.01 ha)			
	Number of house holds		53				
	Distance to road		0.5 km				
	Time to get to road		20 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	Maize				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		20cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		5.9				
Days of drying up water with 15cm depth in paddy field		-					
Remarks		-					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/5



Picture-2: Situation of Canal

Date:2012/4/5



Picture-3: Situation of command area

Date:2012/4/5



No.	Ser-3	(No. in the original list)	263	Date of survey: 2012/4/5			
Intake system	Name		Pemaling irri. Channel				
	Dzongkhag		Sarpang				
	Gewog		Sershong				
	Latitude		26 ° 53 ' 59.0 " N				
	Longitude		90 ° 32 ' 44.5 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1976				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		2.5 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
	Function*		Functional	Non Functional			
Problems		Rehabilitation work has been needed every year due to the damage by flood.					
Water source	Name		Norbulingchhu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
EC		-					
Temperature		-					
Command Area	Name		Pemaling				
	Area		95.00 acre	(38.45 ha)			
	Number of house holds		40				
	Distance to road		1.0 km				
	Time to get to road		40 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	Maize				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		5.6				
Days of drying up water with 15cm depth in paddy field		-					
Remarks		-					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/5



Picture-2: Situation of Canal

Date:2012/4/5



Picture-3: Situation of command area

Date:2012/4/5



No.	Ser-4	(No. in the original list)	259	Date of survey: 2012/4/5						
Intake system	Name	Pangkhar irrigation channel			Command Area	Name	Pangkhar			
	Dzongkhag	Sarpang				Area	52.00 acre	(21.04 ha)		
	Gewog	Sershong				Number of house holds	16			
	Latitude	26 °	54 '	10.0 " N		Distance to road	0.5 km			
	Longitude	90 °	32 '	49.0 " E		Time to get to road	20 min			
	Type of intake facility	Concrete	Gabion	(Rock) (Earth)		Wood	Transportation way to road	On foot		
	Constructed year*	1976				Operation and Management*	Organization	-		
	Construction cost*	Material	Covered by	Government			Beneficiaries	Donor	Annual maintenance	
		Workforce	Covered by	Government			Beneficiaries	Donor	Covered by Government Beneficiaries	
	Latest rehabilitated year	2009					Water use fee	-		
	Length of Canal	2.5 km				Cropping	Variety	Rainy season	Paddy	
	Structure of Canal	(Concrete)	(Wet masonry)	(Earth)			Pipe	Fertilizer	-	
	Function*	(Functional)	(Non Functional)				Manure	Cow dung		
Problems	Rehabilitation work has been needed every year due to the damage by flood. There are a lot of leaking from canal.			Soil Condition	Thickness of surface soil	20cm				
Water source	Name	Chheojaygang chhu			Structure of surface soil	(Gravel)	Sandy Silt (Clay)			
	Water source	(River)	Spring		Well	pH	6.6			
	Water discharge	Rainy season	Nil		(Available)	(m ³ /s)	Days of drying up water with 15cm depth in paddy field			
		Dry season	(Nil)		Available	(m ³ /s)				
	Water taken by intake	Rainy season	(Enough)	Not enough		Remarks				
Dry season		Enough	(Not enough)							
Quality in dry season	pH	-								
	EC	-								
	Temperature	-								

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/5



Picture-2: Situation of Canal

Date:2012/4/5



Picture-3: Situation of command area

Date:2012/4/5



No.	Ser-6	(No. in the original list)	265	Date of survey: 2012/4/5			
Intake system	Name		Norbuling irr. Channel				
	Dzongkhag		Sarpang				
	Gewog		Sershong				
	Latitude		26 ° 53 ' 37.5 " N				
	Longitude		90 ° 32 ' 29.8 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1976				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		2011				
	Length of Canal		1.5 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
	Function*		Functional	Non Functional			
Problems		At intake point, stream is not stable even in rainy season.					
Water source	Name		Norbulingchhu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
EC		-					
Temperature		-					
Command Area	Name		Norbuling				
	Area		52.00 acre	(21.04 ha)			
	Number of house holds		16				
	Distance to road		0.5 km				
	Time to get to road		20 min				
Transportation way to road		On foot					
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	-				
		Dry season	-				
	Fertilizer		-				
	Manure		-				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.1				
Days of drying up water with 15cm depth in paddy field							
Remarks		- From 2002, farmers have not done any cultivation due to the water shortage.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/5



Picture-2: Situation of Canal

Date:2012/4/5



Picture-3: Situation of command area

Date:2012/4/5



No.	Ser-7	(No. in the original list)	257	Date of survey: 2012/4/7			
Intake system	Name		Barshong irrigation channel				
	Dzongkhag		Sarpang				
	Gewog		Sershong				
	Latitude		26 ° 55 ' 11.5 " N				
	Longitude		90 ° 31 ' 16.5 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1970				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		2.0 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems							
Water source	Name		Barthang				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
Temperature		-					
Command Area	Name		Barshong				
	Area		48.00 acre	(19.43 ha)			
	Number of house holds		22				
	Distance to road		0.5 km				
	Time to get to road		20 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	-				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.2				
Days of drying up water with 15cm depth in paddy field							
Remarks		-According to the result of field survey, Name of Water source is "Barshong chu."					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility
Date:2012/4/7

Picture-2: Situation of Canal
Date:2012/4/7



Picture-3: Situation of command area
Date:2012/4/7



No.	Ser-8	(No. in the original list)	267	Date of survey: 2012/4/6			
Intake system	Name		Kingaling irr. Channel				
	Dzongkhag		Sarpang				
	Gewog		Sershong				
	Latitude		26 ° 58 ' 44.6 " N				
	Longitude		90 ° 32 ' 38.2 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1976				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		1.5 km				
	Structure of Canal		Concrete	(Wet masonry)	Earth	Pipe	
Function*		Functional		Non Functional			
Problems		There are much canal erosion and land slide along the canal. Canal is totally abandoned.					
Water source	Name		Norbulingchhu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
Temperature		-					
Command Area	Name		Kingaling				
	Area		45.00 acre	(18.21 ha)			
	Number of house holds		22				
	Distance to road		1.0 km				
	Time to get to road		60 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		-				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	-				
		Dry season	-				
	Fertilizer		-				
	Manure		-				
Soil Condition	Thickness of surface soil		30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.5				
	Days of drying up water with 15cm depth in paddy field						
Remarks		- Only 2 acre is cultivated for rice using temporary water source.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/6



Picture-2: Situation of Canal

Date:2012/4/6



Picture-3: Situation of command area

Date:2012/4/6



No.	Ser-9	(No. in the original list)	258	Date of survey: 2012/4/5			
Intake system	Name		Pangkhar irrigation channel				
	Dzongkhag		Sarpang				
	Gewog		Sershong				
	Latitude		26 ° 54 ' 19.8 " N				
	Longitude		90 ° 32 ' 19.9 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1978				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		2009				
	Length of Canal		2.0 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems		Rehabilitation work has been needed every year due to the damage by flood. There are a lot of leaking from canal.					
Water source	Name		Mathangchu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
EC		-					
Temperature		-					
Command Area	Name		Pangkhar				
	Area		40.00 acre	(16.19 ha)			
	Number of house holds		16				
	Distance to road		0.5 km				
	Time to get to road		20 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	Maize, Millet, Ginger, Vegetables				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.2				
Remarks	Days of drying up water with 15cm depth in paddy field						
	-According to the result of field survey, Name of Water source is "Masaney Khola."						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/5



Picture-2: Situation of Canal

Date:2012/4/5



Picture-3: Situation of command area

Date:2012/4/5



No.	Ser-12	(No. in the original list)	255	Date of survey: 2012/4/7			
Intake system	Name		Barshong irrigation channel (1)				
	Dzongkhag		Sarpang				
	Gewog		Sershong				
	Latitude		26 ° 54 ' 45.7 " N				
	Longitude		90 ° 31 ' 56.4 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1970's				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		2009				
	Length of Canal		3.0 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems		Rehabilitation work has been needed every year due to the damage by flood. There are a lot of leaking from canal.					
Water source	Name		Barshongchu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
EC		-					
Temperature		-					
Command Area	Name		Barshong				
	Area		25.00 acre	(10.12 ha)			
	Number of house holds		14				
	Distance to road		0.5 km				
	Time to get to road		20 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	-				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.6				
Remarks	Days of drying up water with 15cm depth in paddy field						
	-According to the result of field survey, Name of Water source is "Masaney Khola."						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/7



Picture-2: Situation of Canal

Date:2012/4/7



Picture-3: Situation of command area

Date:2012/4/7



No.	Ser-13	(No. in the original list)	256	Date of survey: 2012/4/7			
Intake system	Name		Barshong irrigation channel (2)				
	Dzongkhag		Sarpang				
	Gewog		Sershong				
	Latitude		26 ° 54 ' 41.1 " N				
	Longitude		90 ° 31 ' 48.1 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1970's				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		2009				
	Length of Canal		1.0 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
	Function*		Functional	Non Functional			
Problems		Rehabilitation work has been needed every year due to the damage by flood. There are a lot of leaking from canal.					
Water source	Name		Barthang chhuu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
Temperature		-					
Command Area	Name		Barshong				
	Area		20.00 acre	(8.09 ha)			
	Number of house holds		14				
	Distance to road		0.5 km				
	Time to get to road		20 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	-				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.8				
Remarks	Days of drying up water with 15cm depth in paddy field						
	-According to the result of field survey, Name of Water source is "Masaney Khola."						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/7



Picture-2: Situation of Canal

Date:2012/4/7



Picture-3: Situation of command area

Date:2012/4/7



No.	Ser-15	(No. in the original list)	253	Date of survey: 2012/4/8			
Intake system	Name		Sershong irrigation channel				
	Dzongkhag		Sarpang				
	Gewog		Sershong				
	Latitude		26 ° 56 ' 15.7 " N				
	Longitude		90 ° 31 ' 5.4 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1977				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		2.0 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
	Function*		Functional		Non Functional		
Problems							
Water source	Name		Barshongchu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
Temperature		-					
Command Area	Name		Sershong				
	Area		15.00 acre	(6.07 ha)			
	Number of house holds		12				
	Distance to road		0.5 km				
	Time to get to road		20 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		-				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	-				
		Dry season	-				
	Fertilizer		-				
	Manure		-				
Soil Condition	Thickness of surface soil		10cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.6				
Remarks	Days of drying up water with 15cm depth in paddy field						
	- Beneficiary area is covered by grass, bush and trees. - Farmers abandoned cultivation because water does not stay in the land due to high permeability.						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/8



Picture-2: Situation of Canal

Date:2012/4/8



Picture-3: Situation of command area

Date:2012/4/8



B-10: Shompangkha Gewog

No.	Sho-1	(No. in the original list)	112
	Daoray khola		
Name	Sarpang		
Dzongkhag	Shompangkha		
Gewog	26° 52' 46.2" N		
Latitude	90° 18' 10.8" E		
Longitude	Concrete		
Type of intake facility	Gabion		
Constructed year*	Rock		
Construction Material	Earth		
Workforce	Wood		
Latest rehabilitated year	1955		
Intake system	Covered by	Government	
	Beneficiaries	Donor	
Length of Canal	Covered by	Government	
	Beneficiaries	Donor	
Structure of Canal	Concrete (Wet masonry)	Earth	
	Function*	Pipe	
Problems	Functional		
	Non Functional		
Due to the erosion of river bed, water level have become lower and in 2006 water level became lower than that of canal. Therefore from 2007, intake has not been able to take any water.			
Water source	Doray khola		
	River	Spring	
Water discharge	Well		
	Nil	Available (m ³ /s)	
Water taken by intake	Nil	Available (m ³ /s)	
	Enough	Not enough	
Quality in dry season	Enough		
	Not enough		
	-		
pH			
EC			
Temperature			

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility
Date:2012/4/3



Picture-2: Situation of Canal
Date:2012/4/3



Picture-3: Situation of command area
Date:2012/4/3



		Date of survey: 2012/4/3	
Command Area	Name	Kuencholing	
	Area	132.00 acre	(53.42 ha)
	Number of house holds	93	
	Distance to road	0.0 km	
	Time to get to road	0 min	
Operation and Management*	Transportation way to road	-	
	Organization	-	
	Activity	-	
	Budget	Covered by Government	
	Water use fee	Beneficiaries	
Cropping	Variety	Rainy season	Paddy, Bean
	Fertilizer	Dry season	Maize, Ginger, Millet
	Manure	Little urine for Maize)	
	Thickness of surface soil	Cow dung, Compost	
	Structure of surface soil	25cm	Gravel
Soil Condition	pH	Silt	
	Days of drying up water with 15cm depth in paddy field	Clay	
Remarks	5.8		2-4days
	-Cultivation in all the command area depend on the rain fed.		

No.	Sho-3	(No. in the original list)	108
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Name		Lower Norbugang kholo		
Dzongkhag	Sarpang			
Gewog	Shomppangkha			
Latitude	26°	51'	14.5"	N
Longitude	90°	17'	53.3"	E
Type of intake facility	Concrete	Gabion	Rock	Earth Wood
Constructed year*	1960			
Construction cost*	Material	Covered by Government	Beneficiaries	Donor
	Workforce	Covered by Government	Beneficiaries	Donor
Latest rehabilitated year	2011 (Material is covered by RGoB)			
Length of Canal	1.0 km			
Structure of Canal	Concrete	Wet masonry	Earth	Pipe
Function*	Functional	Non Functional		
Problems	Next rainy season is the first time to use newly constructed intake.			
Name		Tharokhola		
Water source		River	Spring	Well
Water source	Water discharge	Nil	Available	(m ³ /s)
	Water taken by intake	Nil	Available	(m ³ /s)
	Quality in dry season	Enough	Enough	Not enough
	Quality in rainy season	Enough	Enough	Not enough
pH		-		
EC		-		
Temperature		-		

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1 : Situation of intake facility
Date:2012/4/3



Picture-2: Situation of Canal
Date:2012/4/3



Picture-3: Situation of command area
Date:2012/4/3



Name		Darjaythang	
Area	85.00 acre	(34.40 ha)	
Number of house holds	12		
Distance to road	0.0 km		
Time to get to road	0 min		
Transportation way to road	-		
Organization	-		
Activity	Annual maintenance		
Budget	Covered by Government	Beneficiaries	Beneficiaries
Water use fee	-		
Variety	Rainy season	Paddy	
	Dry season	Fodder	
Fertilizer	-		
Manure	Cow dung, Compost		
Thickness of surface soil	15cm		
Structure of surface soil	Gravel	Sandy	Silt Clay
pH	5.8		
Days of drying up water with 15cm depth in paddy field	7 days		
Remarks	<p>-Elevation of land located at the right side of canal is higher than that of canal so water can not be supplied through present canal structure.</p> <p>-This area has been seriously damaged by wild elephant coming from India/</p> <p>-Farmers would like to change the variety of cultivation from paddy to fodder because elephants don't eat fodder.</p>		

No.	Sho-4	(No. in the original list)	105
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Name		Kafley khola	
Dzongkhag	Sarpang		
Gewog	Shomppangkha		
Latitude	26°	52'	6.6" N
Longitude	90°	18'	38.2" E
Type of intake facility	Concrete	Gabion	Rock
Constructed year*	-		
Construction cost*	Material	Covered by Government	Beneficiaries
	Workforce	Covered by Government	Beneficiaries
Latest rehabilitated year	2010 (Material is covered by RGoB)		
Length of Canal	2.5 km		
Structure of Canal	Concrete (Wet masonry)	Earth	Pipe
Function*	Functional	Non Functional	
Problems	Rehabilitation work has been needed every year due to the damage by flood.		
Name		Kafley khola	
Water source	River	Spring	Well
Water discharge	Rainy season	Nil	Available (m ³ /s)
	Dry season	Nil	Available (m ³ /s)
Water taken by intake	Rainy season	Enough	Not enough
	Dry season	Enough	Not enough
Quality in dry season	pH	-	
	EC	-	
	Temperature	-	

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1 : Situation of intake facility
Date:2012/4/3



Picture-2: Situation of Canal
Date:2012/4/3



Picture-3: Situation of command area
Date:2012/4/3



Name		Darjaythang	
Command Area	Area	50.00 acre	(20.23 ha)
Operation and Management*	Number of house holds	24	
	Distance to road	0.0 km	
Cropping	Time to get to road	0 min	
	Transportation way to road	-	
Soil Condition	Organization	-	
	Activity	Annual maintenance	
Remarks	Budget	Covered by Government	
	Water use fee	-	
Variety	Rainy season	Paddy	
	Dry season	Ginger	
Fertilizer	Manure	Cow dung	
	Thickness of surface soil	20cm	
Structure of surface soil	Gravel	Sandy	Silt
	pH	6.4	
Days of drying up water with 15cm depth in paddy field	1-1.5days		
	- Farmers requested Gewog office to consolidate intake. -Main cash crop is bitter nut.		

No.	Sho-7	(No. in the original list)	114
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Name				Jaidhan Kholo			
Dzongkhag				Sarpang			
Gewog				Shomppangkha			
Latitude				26°	52'	54.3"	N
Longitude				90°	17'	47.0"	E
Type of intake facility				Concrete	Gabion	Rock	Earth Wood
Constructed year*				1958			
Intake system	Construction Material			Covered by Government Beneficiaries Donor			
	Workforce			Covered by Government Beneficiaries Donor			
Latest rehabilitated year							
Length of Canal							
Structure of Canal				Concrete (Wet masonry) Earth Pipe			
Function*				Functional Non Functional			
Problems							
Due to the land slide canal has not worked for 3 years.							
Name				Jaidhan kholo			
Water source				River Spring Well			
Water source	Water discharge			Nil (Available) (m ³ /s)			
	Water taken by intake			Nil (Available) (m ³ /s)			
	Quality in dry season			Enough (Not enough)			
	pH			Enough (Not enough)			
EC			-				
Temperature			-				

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1 : Situation of intake facility
Date:2012/4/3



Picture-2: Situation of Canal
Date:2012/4/3



Picture-3: Situation of command area
Date:2012/4/3



Name		Pakhay	
Area		22.33 acre	(9.04 ha)
Number of house holds		12	
Distance to road		0.0 km	
Time to get to road		0 min	
Transportation way to road		-	
Organization		-	
Activity		-	
Budget		Covered by Government Beneficiaries	
Water use fee		-	
Cropping	Variety		Paddy, Bean, Millet
	Dry season		-
Fertilizer		-	
Manure		Cow dung	
Thickness of surface soil		15cm	
Structure of surface soil		Gravel	Sandy Silt Clay
pH		6.5	
Days of drying up water with 15cm depth in paddy field		2 days	
Remarks			
- Farmers requested Gewog office rehabilitation of intake. - In present condition cultivation of all the command area depend on the rain fed.			

B-11: Tarithang Gewog

No.	T-1	(No. in the original list)	305
Intake system	Name		Yoezergang-Singi Khola Lower Irrigation Canal
	Dzongkhag		Sarpang
	Gewog		Tarithang
	Latitude		26 ° 49 ' 33.9 " N
	Longitude		90 ° 33 ' 42.2 " E
	Type of intake facility		Concrete Gabion <u>Rock</u> <u>Earth</u> Wood
	Constructed year*		1980
	Construction cost*	Material	Covered by <u>Government</u> <u>Beneficiaries</u> Donor
		Workforce	Covered by Government <u>Beneficiaries</u> Donor
	Latest rehabilitated year		2009
	Length of Canal		1.5 km
	Structure of Canal		<u>Concrete</u> <u>Wet masonry</u> <u>Earth</u> Pipe
	Function*		<u>Functional</u> Non Functional
Problems		Due to the sedimentation, intake can not take water properly. There are a lot of leaking from canal.	
Water source	Name		Singi Khola
	Water source		River <u>Spring</u> Well
	Water discharge	Rainy season	Nil <u>Available</u> (m ³ /s)
		Dry season	Nil <u>Available</u> (0.028 m ³ /s)
	Water taken by intake	Rainy season	<u>Enough</u> <u>Not enough</u>
		Dry season	Enough <u>Not enough</u>
	Quality in dry season	pH	7.7
EC		4.80 ms/m	
Temperature		25.0 °C	

Date of survey: 2012/4/3

Command Area	Name		Yoezergang	
	Area		26.00 acre	(10.52 ha)
	Number of house holds		14	
	Distance to road		1.5 km	
	Time to get to road		30 min	
	Transportation way to road		On foot	
Operation and Management*	Organization		-	
	Activity		Annual maintenance	
	Budget		Covered by Government <u>Beneficiaries</u>	
	Water use fee		-	
Cropping	Variety	Rainy season	Paddy	
		Dry season	-	
	Fertilizer		-	
	Manure		Cow dung	
Soil Condition	Thickness of surface soil		More than 30cm	
	Structure of surface soil		Gravel	<u>Sandy</u> Silt <u>Clay</u>
	pH		6.6	
Days of drying up water with 15cm depth in paddy field				
Remarks				

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/3



Picture-2: Situation of Canal

Date:2012/4/3

Picture-3: Situation of command area

Date:2012/4/3

No.	T-2	(No. in the original list)	302	Date of survey: 2012/4/3			
Intake system	Name		Tashichhiling Lower Irrigation Canal				
	Dzongkhag		Sarpang				
	Gewog		Tarithang				
	Latitude		26 ° 49 ' 30.0 " N				
	Longitude		90 ° 33 ' 29.3 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1980				
	Construction cost*	Material	Covered by Government		Beneficiaries	Donor	
		Workforce	Covered by Government		Beneficiaries	Donor	
	Latest rehabilitated year		2008				
	Length of Canal		1.5 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
	Function*		Functional		Non Functional		
Problems		Due to the sedimentation, intake can not take water properly. There are a lot of leaking from canal.					
Water source	Name		Singi Khola				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.042m ³ /s)		
	Water taken by intake	Rainy season	Enough		Not enough		
		Dry season	Enough		Not enough		
	Quality in dry season	pH	7.9				
		EC	5.30 ms/m				
Temperature		25.3 °C					
Command Area	Name		Tashichhiling				
	Area		23.00 acre	(9.31 ha)			
	Number of house holds		7				
	Distance to road		1.5 km				
	Time to get to road		30 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by Government Beneficiaries				
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	-				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		5.8				
Days of drying up water with 15cm depth in paddy field							
	Remarks						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/3



Picture-2: Situation of Canal

Date:2012/4/3



Picture-3: Situation of command area

Date:2012/4/3

No.	T-4	(No. in the original list)	301	Date of survey: 2012/4/3			
Intake system	Name		Tashichhiling-Singi Khola Upper Irrigation Canal				
	Dzongkhag		Sarpang				
	Gewog		Tarithang				
	Latitude		26 ° 49 ' 43.9 " N				
	Longitude		90 ° 33 ' 37.4 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1980				
	Construction cost*	Material	Covered by Government		Beneficiaries	Donor	
		Workforce	Covered by Government		Beneficiaries	Donor	
	Latest rehabilitated year		2008				
	Length of Canal		2.5 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
	Function*		Functional		Non Functional		
Problems		Due to the sedimentation, intake can not take water properly.					
Water source	Name						
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
EC		-					
Temperature		-					
Command Area	Name		Tashichhiling				
	Area		13.00 acre	(5.26 ha)			
	Number of house holds		8				
	Distance to road		1.0 km				
	Time to get to road		20 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by Government	Beneficiaries			
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	Maize				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		6.2				
Remarks	Days of drying up water with 15cm depth in paddy field						
	-Not all wet land is cultivated. -Land commission officer confirmed that all the wet land will be cultivated from next year.						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/3



Picture-2: Situation of Canal

Date:2012/4/3



Picture-3: Situation of command area

Date:2012/4/3



B-12: Umling Gewog

No.	U-1	(No. in the original list)	282	Date of survey: 2012/3/31			
Intake system	Name		Rejuk Serchu Irrigation channel				
	Dzongkhag		Sarpang				
	Gewog		Umling				
	Latitude		26 ° 50 ' 14.0 " N				
	Longitude		90 ° 33 ' 17.5 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		2005				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		2008				
	Length of Canal		2.0 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems							
Water source	Name		Serchu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.033m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	8.4				
		EC	2.30 ms/m				
Temperature		25.7 °C					
Command Area	Name		Rejuk				
	Area		85.00 acre	(34.40 ha)			
	Number of house holds		27				
	Distance to road		1.0 km				
	Time to get to road		20 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Bean				
		Dry season	-				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH						
Days of drying up water with 15cm depth in paddy field							
Remarks							

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/3/31



Picture-2: Situation of Canal

Date:2012/3/31



Picture-3: Situation of command area

Date:2012/3/31



No.	U-2	(No. in the original list)	280	Date of survey: 2012/4/1			
Intake system	Name		Dangling Irrigation channel Lower				
	Dzongkhag		Sarpang				
	Gewog		Umling				
	Latitude		26 °	51 ' 11.6 "	N		
	Longitude		90 °	34 ' 5.3 "	E		
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1997				
	Construction cost*	Material	Covered by		Government	Beneficiaries	Donor
		Workforce	Covered by		Government	Beneficiaries	Donor
	Latest rehabilitated year		2010				
	Length of Canal		3.5 km				
	Structure of Canal		Concrete (Wet masonry)		Earth	Pipe	
	Function*		Functional		Non Functional		
	Problems		Rehabilitation work has been needed every year due to the damage by flood.				
Water source	Name		Langar chu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
EC		-					
Temperature		-					
Command Area	Name		Dangling				
	Area		82.00 acre	(33.18 ha)			
	Number of house holds		36				
	Distance to road		0.5 km				
	Time to get to road		10 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by Government			Beneficiaries	
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	-				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 60cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH						
Days of drying up water with 15cm depth in paddy field							
Remarks							

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/1



Picture-2: Situation of Canal

Date:2012/4/1



Picture-3: Situation of command area

Date:2012/4/1



No.	U-4	(No. in the original list)	276	Date of survey: 2012/3/31			
Intake system	Name		Dungmin Irrigation channel Upper				
	Dzongkhag		Sarpang				
	Gewog		Umling				
	Latitude		26 ° 51 ' 5.6 " N				
	Longitude		90 ° 33 ' 38.7 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1997				
	Construction cost*	Material	Covered by Government Beneficiaries Donor				
		Workforce	Covered by Government Beneficiaries Donor				
	Latest rehabilitated year		-				
	Length of Canal		1.0 km				
	Structure of Canal		Concrete (Wet masonry)		Earth	Pipe	
	Function*		Functional		Non Functional		
Problems							
Water source	Name		Langar chu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
		EC	-				
Temperature		-					
Command Area	Name		Dungmin				
	Area		70.00 acre	(28.33 ha)			
	Number of house holds		26				
	Distance to road		0.5 km				
	Time to get to road		10 min				
	Transportation way to road		Tiller				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by Government Beneficiaries				
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	-				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH						
Days of drying up water with 15cm depth in paddy field							
Remarks		-According to the result of field survey, Command area is 54 acre and Number of HH is 27.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/3/31



Picture-2: Situation of Canal

Date:2012/3/31



Picture-3: Situation of command area

Date:2012/3/31



No.	U-5	(No. in the original list)	285	Date of survey: 2012/4/1			
Intake system	Name		Tashithang Karchu Irrigation channel				
	Dzongkhag		Sarpang				
	Gewog		Umling				
	Latitude		26 ° 50 ' 39.1 " N				
	Longitude		90 ° 34 ' 54.3 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1997				
	Construction cost*	Material	Covered by Government Beneficiaries Donor				
		Workforce	Covered by Government Beneficiaries Donor				
	Latest rehabilitated year		-				
	Length of Canal		7.0 km				
	Structure of Canal		Concrete (Wet masonry)		Earth	Pipe	
	Function*		Functional		Non Functional		
Problems		There are much land slide along the canal.					
Water source	Name		Karchu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
EC		-					
Temperature		-					
Command Area	Name		Tashithang				
	Area		64.00 acre	(25.90 ha)			
	Number of house holds		21				
	Distance to road		0.5 km				
	Time to get to road		10 min				
	Transportation way to road		Tiller				
Operation and Management*	Organization		-				
	Activity		-				
	Budget		Covered by Government Beneficiaries				
	Water use fee		-				
Cropping	Variety	Rainy season	-				
		Dry season	-				
	Fertilizer		-				
	Manure		-				
Soil Condition	Thickness of surface soil		30cm				
	Structure of surface soil		Gravel	Sandy	Silt Clay		
	pH		-				
Days of drying up water with 15cm depth in paddy field		-					
Remarks		-According to the result of field survey, Number of HH is 17.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/1



Picture-2: Situation of Canal

Date:2012/4/1



Picture-3: Situation of command area

Date:2012/4/1



No.	U-6	(No. in the original list)	277	Date of survey: 2012/4/1			
Intake system	Name		Dungmin Irrigation channel Lower				
	Dzongkhag		Sarpang				
	Gewog		Umling				
	Latitude		26 ° 51 ' 0.3 " N				
	Longitude		90 ° 33 ' 27.4 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1980				
	Construction cost*	Material	Covered by Government Beneficiaries Donor				
		Workforce	Covered by Government Beneficiaries Donor				
	Latest rehabilitated year		-				
	Length of Canal		1.0 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems		There are a lot of sedimentation inside of canal.					
Water source	Name		Langar chu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
EC		-					
Temperature		-					
Command Area	Name		Dungmin				
	Area		52.00 acre	(21.04 ha)			
	Number of house holds		16				
	Distance to road		0.5 km				
	Time to get to road		10 min				
	Transportation way to road		Tiller				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by Government Beneficiaries				
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	-				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		5cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH						
Days of drying up water with 15cm depth in paddy field							
Remarks		-According to the result of field survey, Command area is 60 acre and Number of HH is 30.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/1



Picture-2: Situation of Canal

Date:2012/4/1



Picture-3: Situation of command area

Date:2012/4/1



No.	U-7	(No. in the original list)	283	Date of survey: 2012/4/1			
Intake system	Name		Chubarthang Seelchu Irrigation channel				
	Dzongkhag		Sarpang				
	Gewog		Umling				
	Latitude		26 ° 50 ' 42.5 " N				
	Longitude		90 ° 34 ' 1.4 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1997				
	Construction cost*	Material	Covered by Government		Beneficiaries	Donor	
		Workforce	Covered by Government		Beneficiaries	Donor	
	Latest rehabilitated year		2011				
	Length of Canal		2.0 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems							
Water source	Name		Serchu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
EC		-					
Temperature		-					
Command Area	Name		Chubarthang				
	Area		47.00 acre	(19.02 ha)			
	Number of house holds		14				
	Distance to road		0.5 km				
	Time to get to road		10 min				
	Transportation way to road		Tiller				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by Government	Beneficiaries			
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy, Maize				
		Dry season	Maize, Millet, Vegetable				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH						
Remarks	Days of drying up water with 15cm depth in paddy field						
	-According to the result of field survey, Name of Water source is "Seel Chu" and number of HH is 8.						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:

Picture-2: Situation of Canal

Date:2012/4/1



Picture-3: Situation of command area

Date:2012/4/1



No.	U-8	(No. in the original list)	284	Date of survey: 2012/4/1	
Intake system	Name		Thongjazor Karchu Irrigation channel		
	Dzongkhag		Sarpang		
	Gewog		Umling		
	Latitude		26 ° 50 ' 39.1 " N		
	Longitude		90 ° 34 ' 54.3 " E		
	Type of intake facility		Concrete Gabion <u>Rock</u> <u>Earth</u> Wood		
	Constructed year*		1997		
	Construction cost*	Material	Covered by <u>Government</u> <u>Beneficiaries</u> Donor		
		Workforce	Covered by Government <u>Beneficiaries</u> Donor		
	Latest rehabilitated year		2004		
	Length of Canal		4.0 km		
	Structure of Canal		Concrete (Wet masonry) <u>Earth</u> Pipe		
	Function*		Functional <u>Non Functional</u>		
Problems		There are much land slide along the canal.			
Water source	Name		Karchu		
	Water source		<u>River</u> Spring Well		
	Water discharge	Rainy season	Nil <u>Available</u> (m ³ /s)		
		Dry season	<u>Nil</u> Available (m ³ /s)		
	Water taken by intake	Rainy season	Enough <u>Not enough</u>		
		Dry season	Enough <u>Not enough</u>		
	Quality in dry season	pH	-		
EC		-			
Temperature		-			
Command Area	Name		Thonjazor		
	Area		44.00 acre (17.81 ha)		
	Number of house holds		17		
	Distance to road		0.5 km		
	Time to get to road		10 min		
	Transportation way to road		On foot		
Operation and Management*	Organization		-		
	Activity		-		
	Budget		Covered by Government Beneficiaries		
	Water use fee		-		
Cropping	Variety	Rainy season	-		
		Dry season	-		
	Fertilizer		-		
	Manure		-		
Soil Condition	Thickness of surface soil		30cm		
	Structure of surface soil		Gravel Sandy Silt <u>Clay</u>		
	pH				
Remarks	Days of drying up water with 15cm depth in paddy field				
	-According to the result of feld survey, Command area is 137 acre and Number of HH is 19. - Due to the water shortage, farmers abandoned cultivation.				

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/1



Picture-2: Situation of Canal

Date:2012/4/1



Picture-3: Situation of command area

Date:

No.	U-9	(No. in the original list)	274	Date of survey: 2012/3/30	
Intake system	Name		Lingar Dap Irrigation channel		
	Dzongkhag		Sarpang		
	Gewog		Umling		
	Latitude		26 ° 51 ' 43.8 " N		
	Longitude		90 ° 32 ' 37.5 " E		
	Type of intake facility		Concrete Gabion <u>Rock</u> <u>Earth</u> Wood		
	Constructed year*		2005-2006		
	Construction cost*	Material	Covered by <u>Government</u> <u>Beneficiaries</u> Donor		
		Workforce	Covered by Government <u>Beneficiaries</u> Donor		
	Latest rehabilitated year		-		
	Length of Canal		3.0 km		
	Structure of Canal		Concrete (Wet masonry) <u>Earth</u> Pipe		
	Function*		<u>Functional</u> Non Functional		
Problems		There are a lot of sedimentation inside of canal.			
Water source	Name		Taklai chu		
	Water source		<u>River</u> Spring Well		
	Water discharge	Rainy season	Nil <u>Available</u> (m ³ /s)		
		Dry season	Nil <u>Available</u> (0.044m ³ /s)		
	Water taken by intake	Rainy season	<u>Enough</u> Not enough		
		Dry season	Enough <u>Not enough</u>		
	Quality in dry season	pH	8.0		
		EC	27.00 ms/m		
Temperature		24.3 °C			
Command Area	Name		Lingar		
	Area		40.00 acre (16.19 ha)		
	Number of house holds		15		
	Distance to road		1.0 km		
	Time to get to road		20 min		
	Transportation way to road		On foot		
Operation and Management*	Organization		-		
	Activity		Annual maintenance		
	Budget		Covered by Government <u>Beneficiaries</u>		
	Water use fee		-		
Cropping	Variety	Rainy season	Paddy, Maize		
		Dry season	-		
	Fertilizer		-		
	Manure		Compost		
Soil Condition	Thickness of surface soil		More than 30cm		
	Structure of surface soil		Gravel <u>Sandy</u> <u>Silt</u> Clay		
	pH				
Remarks	Days of drying up water with 15cm depth in paddy field				
	-According to the result of field survey, Command area is 204 acre and Number of HH is 26. - High potential area for paddy even in dry season. - In addition to water from river, spring water is available in dry season.				

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/3/30



Picture-2: Situation of Canal

Date:2012/3/30



Picture-3: Situation of command area

Date:2012/3/30



No.	U-10	(No. in the original list)	272	Date of survey: 2012/3/30			
Intake system	Name		Gadhen Irrigation channel Lower				
	Dzongkhag		Sarpang				
	Gewog		Umling				
	Latitude		26 ° 50 ' 46.1 " N				
	Longitude		90 ° 32 ' 4.5 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		2008				
	Construction cost*	Material	Covered by Government		Beneficiaries	Donor	
		Workforce	Covered by Government		Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		1.0 km				
	Structure of Canal		Concrete	Wet masonry	Earth	Pipe	
	Function*		Functional	Non Functional			
Problems		There are much leaking from the canal.					
Water source	Name		Taklai chu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(0.025m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	8.8				
		EC	20.00 ms/m				
Temperature		26.6 °C					
Command Area	Name		Gadhan				
	Area		38.00 acre	(15.38 ha)			
	Number of house holds		48				
	Distance to road		0.5 km				
	Time to get to road		10 min				
	Transportation way to road		Tiller				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by Government				
	Water use fee		Beneficiaries				
Cropping	Variety	Rainy season	Paddy				
		Dry season	-				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH						
Remarks	Days of drying up water with 15cm depth in paddy field						
	-According to the result of field survey, Name of Water source is "Lalai Chu", command area is 300 acre and number of HH is 76.						

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/3/30



Picture-2: Situation of Canal

Date:2012/3/30



Picture-3: Situation of command area

Date:2012/3/30



No.	U-11	(No. in the original list)	281	Date of survey: 2012/3/31			
Intake system	Name		Rijuk Karchu Irrigation channel				
	Dzongkhag		Sarpang				
	Gewog		Umling				
	Latitude		26 ° 49 ' 52.0 " N				
	Longitude		90 ° 32 ' 48.2 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1997				
	Construction cost*	Material	Covered by	Government	Beneficiaries	Donor	
		Workforce	Covered by	Government	Beneficiaries	Donor	
	Latest rehabilitated year		2012				
	Length of Canal		1.0 km				
	Structure of Canal		Concrete (Wet masonry)	Earth	Pipe		
	Function*		Functional	Non Functional			
Problems		There are a lot of sedimentation inside of canal.					
Water source	Name		Karchu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
EC		-					
Temperature		-					
Command Area	Name		Rejuk				
	Area		31.00 acre	(12.55 ha)			
	Number of house holds		27				
	Distance to road		0.5 km				
	Time to get to road		10 min				
	Transportation way to road		On foot				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by	Government	Beneficiaries		
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	-				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH						
Days of drying up water with 15cm depth in paddy field							
Remarks		-According to the result of field survey, Number of HH is 23.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/3/31



Picture-2: Situation of Canal

Date:2012/3/31



Picture-3: Situation of command area

Date:2012/3/31



No.	U-12	(No. in the original list)	279	Date of survey: 2012/4/1			
Intake system	Name		Dangling Irrigation channel Upper				
	Dzongkhag		Sarpang				
	Gewog		Umling				
	Latitude		26 ° 51 ' 15.2 " N				
	Longitude		90 ° 34 ' 20.3 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1997				
	Construction cost*	Material	Covered by Government Beneficiaries Donor				
		Workforce	Covered by Government Beneficiaries Donor				
	Latest rehabilitated year		2011				
	Length of Canal		3.0 km				
	Structure of Canal		Concrete	(Wet masonry)	Earth	Pipe	
	Function*		Functional	Non Functional			
Problems		There are some land slide along the canal.					
Water source	Name		Langar chu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
EC		-					
Temperature		-					
Command Area	Name		Dangling				
	Area		24.00 acre	(9.71 ha)			
	Number of house holds		32				
	Distance to road		0.5 km				
	Time to get to road		10 min				
	Transportation way to road		Tiller				
Operation and Management*	Organization		-				
	Activity		Annual maintenance				
	Budget		Covered by Government Beneficiaries				
	Water use fee		-				
Cropping	Variety	Rainy season	Paddy				
		Dry season	-				
	Fertilizer		-				
	Manure		Cow dung				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH						
Days of drying up water with 15cm depth in paddy field							
Remarks							

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/1



Picture-2: Situation of Canal

Date:2012/4/1



Picture-3: Situation of command area

Date:2012/4/1



No.	U-14	(No. in the original list)	278	Date of survey: 2012/4/2			
Intake system	Name		Pantharey Irrigation channel				
	Dzongkhag		Sarpang				
	Gewog		Umling				
	Latitude		26 ° 51 ' 31.8 " N				
	Longitude		90 ° 35 ' 46.2 " E				
	Type of intake facility		Concrete	Gabion	Rock	Earth	Wood
	Constructed year*		1980				
	Construction cost*	Material	Covered by Government		Beneficiaries	Donor	
		Workforce	Covered by Government		Beneficiaries	Donor	
	Latest rehabilitated year		-				
	Length of Canal		1.0 km				
	Structure of Canal		Concrete (Wet masonry)		Earth	Pipe	
	Function*		Functional		Non Functional		
Problems		There are much land slide along the canal.					
Water source	Name		Langar chu				
	Water source		River	Spring	Well		
	Water discharge	Rainy season	Nil	Available	(m ³ /s)		
		Dry season	Nil	Available	(m ³ /s)		
	Water taken by intake	Rainy season	Enough	Not enough			
		Dry season	Enough	Not enough			
	Quality in dry season	pH	-				
EC		-					
Temperature		-					
Command Area	Name		Dangling				
	Area		17.00 acre	(6.88 ha)			
	Number of house holds		15				
	Distance to road		0.5 km				
	Time to get to road		10 min				
	Transportation way to road		Tiller				
Operation and Management*	Organization		-				
	Activity		-				
	Budget		Covered by Government Beneficiaries				
	Water use fee		-				
Cropping	Variety	Rainy season	-				
		Dry season	-				
	Fertilizer		-				
	Manure		-				
Soil Condition	Thickness of surface soil		More than 30cm				
	Structure of surface soil		Gravel	Sandy	Silt	Clay	
	pH		-				
Days of drying up water with 15cm depth in paddy field		-					
Remarks		-According to the result of field survey, Name of Water source is "Seel Chu." - Farmers abandoned cultivation due to damage by wild animals.					

*If present condition identified through field survey is different from that mentioned in inventory, contents are replaced to actual.

Picture-1: Situation of intake facility

Date:2012/4/2



Picture-2: Situation of Canal

Date:2012/4/2



Picture-3: Situation of command area

Date:2012/4/2

