

ANNEX 12 Questionnaire Answers (IDD/IDSD)

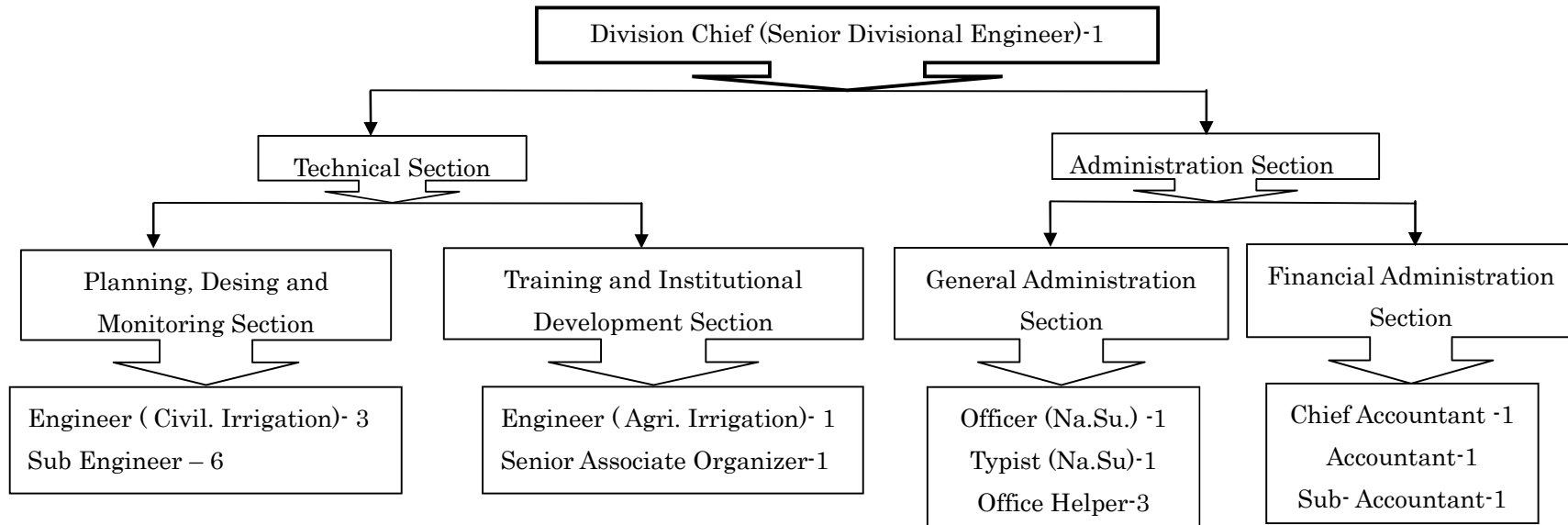
21 August 2016

Questionnaire

1. Name of District under the jurisdiction
Irrigation Development Division, Jhapa

2. Organization

(1) Organization chart of IDD, Jhapa:



(2) Staffing of IDDO/IDSDO

Please show staff numbers with job title for each unit/section shown in the above organization chart.

➤ Shown in the organization chart.

(3) Budget of IDDO of this fiscal year

a. Total Budget	24,32,80,000.00	Rs.
b. Administrative Budget	68,40,000.00	Rs.
c. Project Budget	23,64,40,000.00	Rs.

Note: a = b + c

3. District-wise Situation of Irrigation

(1) Total Command area under the IDDO : 16500 ha

(2) Irrigated area under the IDDO:

Monsoon season: 16500 ha

Winter: 8425 ha

Spring: 11400 ha

(3) Major Crops by Season:

Monsoon: Paddy, Pulses

Winter: Wheat, Maize, Potato, Pulses, Mustard, Vegetables.

Spring: Maize, Paddy, Vegetables

(4) List of All Irrigation Systems (IS) under administration of IDDO or IDSDO Please add rows if there are more than 10.

S/N	Name of IS	#1 Water Sources	#2 System Type	#3 Management Type	Command Area (ha)	Irrigated Area (ha)			#4 Facility Condition	#5 Status	#6 Name of Programme	<u>WUA</u> No. of Households
						Monsoon	Winter	Spring				
1	MawaKhola Dhunge Paini ISP, Damak-5 Jhapa	1	g	f	200	200	137	91	3	1	MIP	253
2	Sadhutar Nete Sisne ISP, Khudunabari-1,2, Jhapa	1	G	F	355	355	245	160	3	1	MIP	500
3	Hadiya Dama Rajpaina ISP, Budhabare 1,6	1	G	F	220	220	143	100	3	1	CMIASP-AF	250
4	Bhuteni Khola ISP, Goldhap 4,5,7,8	1	G	F	629	629	470	300	3	1	CMIASP-AF	750
5	Manspur ISP, Ghailadubba	1	G	F	205	205	135	80	1	3	MIP	
6	Gauria ISP, Juropani	1	G	F	190	190	100	70	1	3	MIP	297
7	Kaptan Janasamuha Paini, Shantinagar	1	G	F	220	220	168	85	1	3	MIP	
8	Kapilmuni Paini ISP, Sanischare	1	G	F	245	245	183	110	1	3	MIP	
9	Siddhikhola ISP, Bahundangi	1	G	F	1700	1700	1275	800	1	3	MIP	1515
10	Janjagriti ISP, Shantinagar	1	G	F	415	415	307	174	1	3	MIP	
11	Kishne Khola Bandh ISP, Gauradaha, 3,5,8,9	1	G	F	948	948	730	370	3	1	MIP	970

12	Parikalpana Non Conventional Irrigation Technology Project (NITP), Shantinagar-6	1,3	G	F	28				1	3	NITP	
13	Paurakhi NITP, Shantinagar	1,3	G	F	20				1	3	NITP	
14	Sunmai NITP, Shantinagar	1,3	G	F	20				1	3	NITP	
15	Sirjansil NITP, Shantinagar	1,3	G	F	20				1	3	NITP	40
16	Dipeni NITP, Damak	1,3	G	F	10				1	3	NITP	17
17	Tamakot NITP, Shantinagar	1,3	G	F	30				1	3	NITP	26
18	Aashirbad NITP, Shantinagar	1,3	G	F	24				1	3	NITP	25
19	Tallo Kishne ISP, Gauriganj, Jhapa	1	G	F	1500	1500	975	600	3	1	MIP	700

#1 1.Perennial river, 2. Seasonal river, 3. Dam/reservoir 4. Groundwater

#2 g. Gravity, p. Pumping, o. Other(Specify, e.g. sprinkler, drip)

#3 a. Agency-managed, j. Jointly-managed, f. Farmer-managed

#4 1.Maintenance and repair are done and functioning properly,2. Warning signs (flaws) are found but functioning, 3. Partly malfunctioning, 4. Dilapidated and malfunctioning in whole, 5. Partly disabled.

#5 1.Under rehabilitation, 2.Under WUA strengthening, 3.Under operation, 4.Other (specify)

#6 1.IWRMP / IWRMP-AF, 2.CMIASP / CMIASP-AF, 3.MIP, 4.NITP 5.Other (Specify)

(5) Problems / Challenges of Irrigation Systems

Please describe the problems or challenges and possible solutions of respective irrigation systems listed the above (3), if any, as concisely as possible.

Add Please add rows if there are more than 10.

S/N	Name of the Irrigation System	Description
1	Siddhi Khola Irrigation Sub Project, Bahundangi	Major Problem : Fragile and loose soil, weak geology leading to frequent landslide Possible Solution: Protection Works, Bio Engineering
2		
3		
4		
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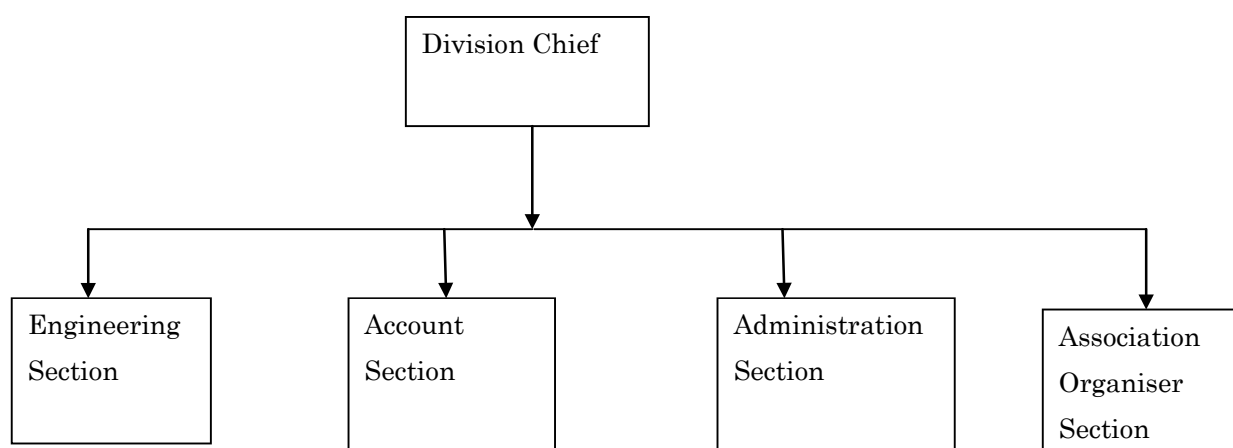
Questionnaire**Office name: Irrigation Development Division, Morang**

The Questionnaire has been filled up as under.

1. Name of District under the jurisdiction: Morang

2. Organization: Irrigation Development Division, Morang, Biratnagar

(1) Organization chart of IDDO/IDSDO



2) Staffing of IDDO/IDSDO

Engineering Section: Engineering Design and Drawing Works Field Works, Office Works Supervision and Monitoring.

Account Section: Account Works of Office

Administration Section: Administration Works of Office.

Association Organiser Section: Social Works, Formulation and Registration of Water User group, Training Works

3) Budget of IDDO/IDSDO of this fiscal year

a. Total Budget (FMIS)	13,50,000.00	Rs.
b. Administrative Budget	-	Rs.
c. Project Budget	13,50,000.00	Rs.

Note) a = b + c

3. District-wise Situation of Irrigation

(1) Total Command area under the IDDO or IDSDO:

Under ISP Program :7730 Ha

Under SISP Program: 2890 Ha

Under MIP Program: 1338 Ha

Under NITP Program : 20 Ha

Under CMIASP Program: 375 Ha

Therefore, Total Command Area = 12353 Ha

(2) Irrigated area under the IDDO or IDSDO:

Monsoon season: 12353 ha

Winter: 7412 ha (about 60%)

Spring: 4941 ha (about 40%)

(3) Major Crops by Season

Monsoon: Paddy

Winter: Wheat , Maize , Potato, Vegetables, Pulse

Spring: Early Paddy, Maize

(4) List of All Irrigation Systems (IS) under administration of IDDO or IDSDO Please add rows if there are more than 10.

S/N	Name of IS	#1 Water Sources	#2 System Type	#3 Management Type	Command Area (ha)	Irrigated Area (ha)			#4 Facility Condition	#5 Status	#6 Name of Programme	WUA No. of Households	Remarks	
						Mon-soon	Winter	Spring						
1	Bihibare Paini ISP, Pathari Sanischare 9, 15	Pathari River	P	FM	300	300	180	120	3	2	FMIS	250		
2	Bansbari ISP, Keroun	Kalikoshi	P	FM					3	2				
3	Sana Sichain Janabikash Paini ISP, Letang -3	Sichang River	P	FM					3	2				
4	Budgi khola Sirkulo ISP, Yangshila -8	Budhikhola	P	FM					3	2				
5	Trinath ISP, Bahuni-1	Dhaiti River	P	FM	215	215	129	86	3	2			155	
6	Kali koshi ISP, Keraun	Kalikoshi	P	FM	135	135	81	54	3	2				
7	Keshliya Majhigaoun IAP, Dangihat	Keshliya River	P	AM	288	288	173	115	5	1	CMIASP-AF	266	Under Construction	
8	Bhaluwa ISP, Bayarban	Bhaluwa River	P	AM	312	312	187	125	5	1			345	Under Construction
9	Nunsari Rachana Kalidaha ISP, Tandi (80 ha)	Nunsari River	P	AM	80	80	48	32	5	1	MIP		Under Construction	
10	Keshliya Bandh ISP, Kaseni (248 ha)	Keshliya River	P	AM	248	248	149	99	5	1				Under Construction
11	Singhdevi ISP, Jate-3 (120 ha)	Teli River	P	AM	120	120	72	48	5	1				Under Construction

12	Pachpaina ISP, Darwesa-6 (322 ha)	Geuriya River	P	AM	322	322	193	129	5	1			Under Construction
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#1 1.Perennial river, 2. Seasonal river, 3. Dam/reservoir 4. Groundwater

#2 g. Gravity, p. Pumping, o. Other(Specify, e.g. sprinkler, drip)

#3 a. Agency-managed, j. Jointly-managed, f. Farmer-managed

#4 1.Maintenance and repair are done and functioning properly,2. Warning signs (flaws) are found but functioning, 3. Partly malfunctioning,
4. Dilapidated and malfunctioning in whole, 5. Partly disabled.

#5 1.Under rehabilitation, 2.Under WUA strengthening, 3.Under operation, 4.Other (specify)

#6 1.IWRMP / IWRMP-AF, 2.CMIASP / CMIASP-AF, 3.MIP, 4.NITP 5.Other (Specify)

(5) Problems / Challenges of Irrigation Systems

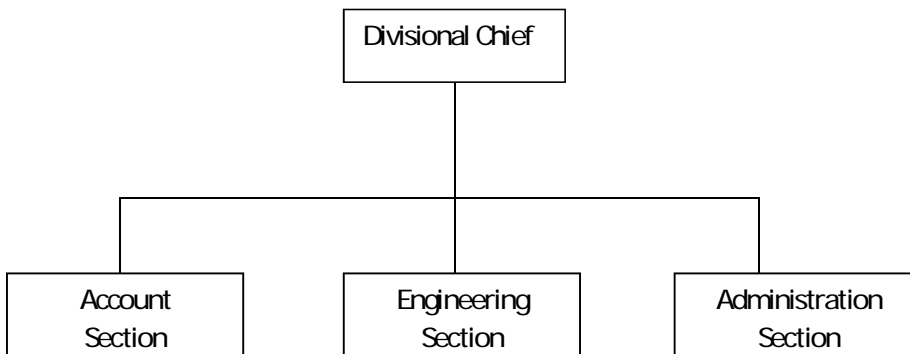
S/N	Name of the Irrigation System	Description
1	Bihibare Paini ISP, Pathari Sanischare 9, 15	Problem: Seepage Losses due to damaged Lining, Damaged Steel gates at Intake Remedy: 600m RCC both side Lining plus 100m One side Lining is required. New Steel gate (2 Nos.) is also required
2	Bansbari ISP, Keroun	Problem: Seepage Losses Remedy: RCC Lining
3	Sana Sichain Janabikash Paini ISP, Letang -3	Problem: Slope Erosion , Floods, Landslides and Damage of Canal Remedy: Masonry Wall and Slope Protection works are required.
4	Budgi khola Sirkulo ISP, Yangshila -8	Problem: Floods , Landslides Remedy: River Bank Protection Works like Spurs, Revetments
5	Trinath ISP, Bahuni-1	Problem: Lack of Permanent Diversion Structure, Seepage Remedy: Headworks , Canal Lining and canal related structures are proposed.
6	Kali koshi ISP, Keraun	Problem: Seepage Losses Remedy: RCC Lining
7	Keshliya Majhigaoun IAP, Dangihat	Status: Headworks, Canal and Canal related structures are under construction.
8	Bhaluwa ISP, Bayarban	Status: Headworks, Canal and Canal related structures are under construction.
9	Nunsari Rachana Kalidaha ISP, Tandi (80 ha)	Status: Headworks, Canal and Canal related structures are under construction.
10	Keshliya Bandh ISP, Kaseni (248 ha)	Status: Headworks, Canal and Canal related structures are under construction.
11	Singhdevi ISP, Jate-3 (120 ha)	Status: Headworks, Canal and Canal related structures are under construction.
12	Pachpaini ISP, Darwesa-6 (322 ha)	Status: Headworks, Canal and Canal related structures are under construction.

1) Name of District under the Jurisdiction:

Sunsari

2) Organization

i) Organization chart of IDDO/IDSDO



ii) Staffing

Divisional Engineer: 1 nos

Engineer :4 nos

Sub-Engineer: 1 nos

Senior Accountant : 1 nos

Nayab Subba: 2 nos

Driver : 1 nos

Office Helper: 4 nos

iii) Budget of IDDO/IDSDO of this fiscal year

a.Total Budget	3,74,00,000.00
b.Administrative Budget	57,00,000.00
c.Project Budget	3,17,00,000.00

3) District wise Situation of Irrigation

1) Total Command area under the IDDO: 7252 Ha

2) Irrigated area under the IDDO or IDSDO:

Monsoon season: 5500 ha

Winter Season: 3500 ha

Spring Season: 1750 ha

3) Major Crops by Season:

Monsoon season: Rice, Jute

Winter Season: Wheat, Potato

Spring Season: Rice, Sugarcane

4)List Of All Irrigation System (IS) under administration of IDDO or IDSDO

S. N	Name of Irrigation system	Water resources	System type	Management type	Command Area (Ha)	Irrigated Area (ha)			Facility condition	Status	Name of programme	WUA No. of Household
						Monsoon	Winter	Spring				
1	Tengra Khola (Karnel Bandh) I.P.	Perennial	Gravity	Farmer Managed	400	300	200	100	Maintenance and repair are done and functioning properly	Under Operation		
2	Dumraha I.P.	Perennial	Gravity	Farmer Managed	440	300	210	110	partly malfunctioning	Under WUA Strenghtening		
3	Kajara I.P.	Perennial	Gravity	Farmer Managed	250	127	102	67	Warning sign are found but functioning	Under WUA Strenghtening		
4	Galfariya I.P.	Perennial	Gravity	Farmer Managed	180	120	90	45	partly malfunctioning	Damaged		
5	Kharsala I.P	Perennial	Gravity	Farmer Managed	200	160	100	50	Warning sign are found but functioning	Under WUA Strenghtening		
6	Budhi	Perennial	Gravity	Farmer	310	210	120	60	Warning sign	Under		

	Paterawa I.P			Managed					are found but functioning	WUA Strenghtening		
7	Bauka I.P.	Perennial	Gravity	Farmer Managed	125	85	60	35	Maintenance and repair are done and functioning properly	Under WUA Strenghtening		
8	Madhuban I.P.	Perennial	Gravity	Farmer Managed	200	160	100	40	Maintenance and repair are done and functioning properly	Under WUA Strenghtening		
9	Tengra Tengri Bhab I.P.	Perennial	Gravity	Farmer Managed	110	80	60	40	Warning sign are found but function	Under WUA Strenghtening		
10	Paschim Kushaha I.P.	Perennial	Gravity	Farmer Managed	475	300	200	100	Maintenance and repair are done and functioning properly	Under WUA Strenghtening		
11	Sera I.P.	Perennial	Gravity	Farmer Managed	400	220	110	55	Maintenance and repair are done and functioning properly	Under WUA Strenghtening		
12	Geruwa Khola I.P.	Perennial	Gravity	Farmer Managed	421	220	110	55	Partly disabled	Damaged		
13	Tengra Khola (Shere Bandh) I.P.	Perennial	Gravity	Farmer Managed	266	190	139	70	Maintenance and repair are done and functioning properly	Under WUA Strenghtening		

14	Sunsari Khola I.P.	Perennial	Gravity	Farmer Managed	300	220	150	75	Partly disabled	Damaged		
15	Birendra Hakraha I.P.	Perennial	Gravity	Farmer Managed	200	150	100	50	partly malfunctioning	Under WUA Strenghtening		
16	Sukumari I.P.	Perennial	Gravity	Farmer Managed	170	120	69	40	Maintenance and repair are done and functioning properly	Under WUA Strenghtening		
17	Khetikhola I.P.	Perennial	Gravity	Farmer Managed	475	300	150	120	Partly disabled	Damaged		
18	Sehara-Seuti Khola I.P.	Perennial	Gravity	Farmer Managed	400	220	180	90	Warning sign are found but function	Under WUA Strenghtening		
19	Dattakichcha I.P.	Perennial	Gravity	Farmer Managed	200	150	100	50	Partly disabled	Damaged		
20	Bharaul I.P	Perennial	Gravity	Farmer Managed	400	300	150	78	Warning sign are found but function	Under Rehab	MIP	
21	Panbari I.P	Perennial	Gravity	Farmer Managed	300	200	100	50	Warning sign are found but function	Under Rehab	MIP	
22	Tengra I.P	Perennial	Gravity	Farmer Managed	235	130	76	36	Warning sign are found but function	Under Rehab	MIP	
23	Haripur,I.P	Perennial	Gravity	Farmer Managed	600	480	260	120	Warning sign are found but function	Under Rehab	MIP	
24	Bishnupadaka IP	Seasonal	Gravity	Farmer Managed	20	15	8	4	Warning sign are found but	Under Rehab	NIT P	

									function			
25	Turke IP	Perennial	Gravity	Farmer Managed	18	12	6	3	Warning sign are found but function	Under Rehab	NIT P	
26	Saune Khola Ip	Perennial	Gravity	Farmer Managed	14	10	5	4	Warning sign are found but function	Under Rehab	NIT P	
27	Gahane Pokhari IP	Seasonal	Gravity	Farmer Managed	12	8	5	4	Warning sign are found but function	Under Rehab	NIT P	

5) Problem/ Challenges of Irrigation Systems:

S.N	Name Of Irrigation Project	Description
1	Tengra Khola (Karnel Bandh) I.P.	Problem of Seepage
2	Dumraha I.P.	Problem Of Maintenance.
3	Kajara I.P.	Damage Of canal.
4	Galfariya I.P.	Fully Damaged By Koshi Flood.
5	Kharsala I.P	Minor Problem
6	Budhi Paterawa I.P	D/S protection .required Damage.
7	Bauka I.P.	
8	Madhuban I.P.	Problem of water Logging.
9	Tengra Tengri Bhab I.P.	
10	Paschim Kushaha I.P.	Lining extend
11	Sera I.P.	
12	Geruwa Khola I.P.	Headwork Damaged –Reconstruction Required.

13	Tengra Khola (Shere Bandh) I.P.	
14	Sunsari Khola I.P.	Pond Level To Be Raised.
15	Birendra Hakraha I.P.	
16	Sukumari I.P.	
17	Khetikhola I.P.	Major Rehabilitation.
18	Sehara-Seuti Khola I.P.	Rehabilitation Required
19	Dattakichcha I.P.	H/W Damaged Reconstruction.
20	Bharaul I.P	
21	Panbari I.P	
22	Tengra I.P	
23	Haripur, I.P	
24	Bishnupadaka IP	
25	Turke IP	
26	Saune Khola Ip	
27	Gahane Pokhari IP	

1. Name of District under the jurisdiction

Mahottari District

2. Organization

(1) Organization chart of IDDO/IDSDO

S/N	Post	Class	No.
1	Division Chief	Gazetted II	1
2	Engineer	Gazetted III	2
3	Account Officer	Gazetted III	1
4	Sub- Engineer	Non-Gazetted I	4
5	Nayab Subba	Non-Gazetted I	1
6	Senior A.O	Non-Gazetted I	1
7	Sub-Accountant	Non-Gazetted II	1
8	Typist	According to speed	1
9	Supporting Staff/Chaukidar/Swiper	Non-Class	3
	Total		15

Out of above there are some additional staff also.

1	Engineer	Gazetted III	2
2	Light Vehicle Driver	Non-Class	2

(2) Staffing of IDDO/IDSDO

Please show staff numbers with job title for each unit/section shown in the above organization chart.

S/N	Post	Class	Job	No
1	Division Chief	Gazetted II	Engineering	1
2	Engineer	Gazetted III	Engineering	2
3	Account Officer	Gazetted III	Account	1
4	Sub- Engineer	Non-Gazetted I	Engineering	4
5	Nayab Subba	Non-Gazetted I	Administration	1
6	Senior A.O	Non-Gazetted I	Engineering/WUA Institutional Development work	1
7	Sub-Accountant	Non-Gazetted II	Account	1
8	Typist	According to speed	Computer typing /Report preparation	1
9	Supporting Staff/Chaukidar/Swiper	Non-Class	To Assist office's other staffs, cleaning office rooms etc.	3
	Total			15

Additional staff

1	Engineer	Gazetted III	Engineering	2
2	Light Vehicle Driver	Non-Class	Driving	2

(3) Budget of IDDO/IDSDO of this fiscal year

a. Total Budget	Rs.94428000.00
b. Administrative Budget	Rs.5298000.00
c. Project Budget	Rs.89130000.00

3. District-wise Situation of Irrigation

(1) Total Command area under the IDDO or IDSDO: 11445 ha. (Including on going projects)

(2) Irrigated area under the IDDO or IDSDO: 5985 ha.

Monsoon seasons: 5600 ha.

Winter: 2300 ha.

Spring: 850 ha.

(3) Major Crops by Seasons

Monsoon: Monsoon paddy

Winter: Wheat, Oil seed, Winter potato, sugarcane

Spring: Spring vegetables, Maize

(4) List of All Irrigation Systems (IS) under administration of IDDO or IDSDO. Please add rows if there are more than 10.

S/N	Name of IS	#1 Water Sources	#2 System Type	#3 Management Type	Command Area (ha)	Irrigated Area (ha)			#4 Facility Condition	#5 Status	#6 Name of programme	WUA No. of Households
						Monsoon	Winter	Spring				
1	Marha IP	1	g	f	400				4	Defunt	ISP	500
2	Bighi IP	1	g	f	2000				3	3	ISP	6000
3	Ladakwa IP	1	g	f	300				4	Defunt	ISP	975
4	Kutumeshwori IP	1	g	f	200				2	3	ISP	222
5	Rupani IP	1	g	f	195				4	Defunt	ISP	500
6	Jhijha Gulariya IP	1	g	f	210				4	Defunt	ISP	3000
7	Shirkhola IP	1	g	f	105				3	3	SISP	435
8	Pasijawa IP	1	g	f	500				2	3	SISP	716
9	Kantawa ISP	1	g	f	750				2	3	CM IASP	3083
10	Geruka ISP	1	g	f	380				1	3	CM IASP	1800
11	Akusi khola IP	1	g	f	550				1	3	CM IASP	700
12	Dudhmati ISP	1	g	f	200				On Going	1	CM IASP -AF	940
13	Bhurhi ISP	1	g	f	310				On Going	1	CM IASP -AF	600
14	Pachain IP	1	g	f	500				4	Defunt	MIP	688
15	Bighi IP	1	g	f	2000				On Going	1	MIP	5000
16	Rato IP	1	g	f	200				On Going	1	MIP	1200
17	Auksi IP, Hatisarwa	1	g	f	1500				On Going	1	MIP	450
18	Rupani IP	1	g	f	530				On Going	1	MIP	300
19	Anarban IP	1	g	f	200				On Going	1	MIP	510
20	Banke IP	1	g	f	410				On Going	1	MIP	1200

(5) Problems / Challenges of Irrigation Systems

Please describe the problems or challenges and possible solutions of respective irrigation systems listed the above (3), if any, as concisely as possible.

Add please and rows if there are more than 10.

S/N	Name of the Irrigation System	Description
1	Marha IP	Problem: In this system there is side Intake . This time river bed degraded & flowing in opposite bank. Solution : Need Diversion Structure across the river.
2	Bighi IP	Problem: No proper maintenance, less no of regulating structure, canal silted up, Farmers are not able to maintain them selves. Solution: Require additional regulating structures, there must be maintenance budget yearly.
3	Ladakwa IP	Problem: Headworks damaged due high flood. Solution: Need New Headworks.
4	Kutum eshwori IP	
5	Rupani IP	Problem: Spring Source presently silted up almost no flow. Solution: Up stream of Headwork need desilting so the spring holes regenerate flows. Headwork also should be repaired.
6	Jhijha Gulariya IP	Problem: Headwork partially damaged, spring source silted up, D/S of Headworks require escape structure. Solution: Sources should be reopened by removing silt & necessary structure should be maintained.
7	Shirkhola IP	Problem: Side Intake no enough water can be diverted towards canal, sandy & gravel mixed canal bed high loses. Solution: Need Diversion Structure, Canal lining.
8	Pasijawa IP	Problem: Farmers themselves are not able to maintain Properly. Solution: External resources require to irrigate year round.
9	Kantawa ISP	Problem: Farmers themselves are not able to maintain Properly. Solution: External resources require to irrigate year round.
10	Geruka ISP	Problem: Farmers themselves are not able to maintain Properly. Solution: External resources require to irrigate year round.
11	Akusi khola IP	Problem: Farmers themselves are not able to maintain Properly. This Year flood damaged D/S guide bund also. Solution: External resources require to irrigate year round. Guide bund and protection works should be completed at any cost immediately after rainy season.

21 August 2016

Questionnaire

Irrigation Development Division Office

Sarlahi.

The purpose of this questionnaire is to collect information of irrigation systems under irrigation development division offices (IDDOs) and irrigation development sub-division offices (IDSDOs). That is because Japan International Cooperation Agency (JICA) is going to formulate a technical cooperation project on operation and maintenance of irrigation systems. Please answer as many questions as possible. JICA will appreciate your answering this questionnaire very much.

NOTE: If you have questions concerning the following questions below, please feel free to inquire them to Irrigation Management Division, Department of Irrigation, Jawalakhel, Lalitpur, Nepal.

1. Name of District under the jurisdiction : Sarlahi
2. Organization : Irrigation Development Division, Sarlahi Malangwa

(1) Staffing of IDDO

Please show staff numbers with job title for each unit/section shown in the above organization chart.

S.N.	Name	Designation	Contact Number
1	Manoranjan Kumar Singh	Senior division engineer	
2	Radheshyam Prasad	Engineer	
3	Bindeshwar Pandit	Engineer	
4	Ghanshyam Kuwar	Engineer	
5	Chandrakishor Prasad shah	Engineer	
6	Madhu Mijar	Account officer	
7	Balram Amatya	Na.Su.	
8	Lakshman Thakur	S.A.O.	
9	Birendra Chaudhary	Typist	
10	Bijyendra Kumar Karna	Sub Engineer	
11	Sanjeev Kumar Yadav	Sub Engineer	

12	Triloki Kumar Bhramhan	Peon	
13	Bikau Dhobi	Peon	

(2) Budget of IDDO of this fiscal year : 073/74

a. Total Budget	Rs.
b. Administrative Budget	Rs.
c. Project Budget	Rs.

Note) $a = b + c$

3. District-wise Situation of Irrigation

(1) Total Command area under the IDDO

Total : 11632 ha.

(2) Irrigated area under the IDDO:

Monsoon season: 9656 ha

Winter season : 6145 ha

Spring season : 3085 ha

(3) Major Crops by Season

Monsoon : Paddy, Sugarcane

Winter : Wheat, Potato, Vegetables

Spring : different kinds of lentils, Early Paddy

(4) List of All Irrigation Systems (IS) under administration of IDDO Please add rows if there are more than 10.

S/N	Name of IS	#1 Water Sources	#2 System Type	#3 Management Type	Command Area (ha)	Irrigated Area (ha)			#4 Facility Condition	#5 Status	#6 Name of Programme	<u>WUA</u> No. of Households
						Monsoon	Winter	Spring				
1	Sudama Irrigation Project	Perennial river	Gravity	Farmer managed	1631	1100	800	500	Partly malfunctioning,	Under rehabilitation	ISP	2320
2	Haripurwa Irrigation Project	Perennial river	Gravity	Farmer managed	595	595	350	100	Partly malfunctioning,	Under Operation	ISP	450
3	Pharadhwa Irrigation Project	Perennial river	Gravity	Farmer managed	300	300	200	50	Partly malfunctioning,	Under Operation	ISP	350
4	Bhaktipur Irrigation Project	Perennial river	Gravity	Farmer managed	200	200	100	50	Partly malfunctioning,	Under Operation	ISP	159
5	Kisanpur Irrigation Project	Perennial river	Gravity	Farmer managed	330	330	200	70	Partly malfunctioning,	Under Operation	ISP	316
6	Jingadwa Irrigation Project	Perennial river	Gravity	Farmer managed	376	376	100	0	Partly disabled	Under Operation	ISP	224
7	Parsa Irrigation Project	Perennial river	Gravity	Farmer managed	685	685	500	300	Warning signs (flaws) are found but functioning	Under Operation	SISP	750
8	Patharkot Irrigation Project	Perennial river	Gravity	Farmer managed	521	400	200	50	Partly disabled	Under Operation	SISP	536
9	Bagdah Irrigation Project	Perennial river	Gravity	Farmer managed	250	0	0	0	Partly disabled	Under Operation	SISP	530
10	Laukhat Irrigation Project	Perennial river	Gravity	Farmer	375	375	200	50	Warning signs (flaws) are	Under	SISP	600

		river		managed					found but functioning	Operation		
11	Miyakhor Irrigation Project	Perennial river	Gravity	Farmer managed	100	100	70	30	Partly malfunctioning,	Under Operation	SISP	110
12	Laxmipur Irrigation Project	Perennial river	Gravity	Farmer managed	70	0	0	0	Dilapidated and malfunctioning in whole	Under Operation	SISP	70
13	Jhim Irrigation Project A	Perennial river	Gravity	Farmer managed	270	270	70	0	Partly malfunctioning,	Under rehabilitation	MIP	450
14	Pakka Badh Irrigation Project	Perennial river	Gravity	Farmer managed	526	526	300	150	Warning signs (flaws) are found but functioning	Under Operation	MIP	368
15	Geruka Irrigation Project	Perennial river	Gravity	Farmer managed	387	250	150	50	Maintenance and repair are done and functioning properly	Under rehabilitation	MIP	650
16	Khokana Irrigation Project	Perennial river	Gravity	Farmer managed	270	270	150	150	Maintenance and repair are done and functioning properly	Under rehabilitation	MIP	400
17	Soram Irrigation Project	Perennial river	Gravity	Farmer managed	270	200	135	100	Maintenance and repair are done and functioning properly	Under rehabilitation	MIP	750
18	Sapaha Irrigation Project	Perennial river	Gravity	Farmer managed	580	400	350	200	Maintenance and repair are done and functioning properly	Under rehabilitation	MIP	457
19	Ekadashi Irrigation Project	Perennial river	Gravity	Farmer managed	1300	900	650	400	Maintenance and repair are done and functioning properly	Under rehabilitation	MIP	2050

20	Maliniya Irrigation Project	Perennial river	Gravity	Farmer managed	390	250	190	90	Maintenance and repair are done and functioning properly	Under rehabilitation	MIP	839
21	Dumdumme Irrigation System	Seasonal river	Gravity	Farmer managed	125	125	100	25	Partly malfunctioning	Under rehabilitation	FMIS	54
22	Pakadi Irrigation System	Seasonal river	Gravity	Farmer managed	80	80	40	30	Partly malfunctioning	Under rehabilitation	FMIS	116
23	Gulariya Soti khola Irrigation System	Seasonal river	Gravity	Farmer managed	28	28	20	10	Partly malfunctioning	Under rehabilitation	FMIS	68
24	Katarwa Irrigation System	Seasonal river	Gravity	Farmer managed	100	100	50	25	Partly malfunctioning	Under rehabilitation	FMIS	139
25	Dhabar Irrigation System	Seasonal river	Gravity	Farmer managed	62	60	30	20	Partly malfunctioning	Under rehabilitation	FMIS	70
26	Khori Irrigation System	Seasonal river	Gravity	Farmer managed	32	32	15	5	Partly malfunctioning	Under rehabilitation	FMIS	40
27	Lalkhola Irrigation System	Seasonal river	Gravity	Farmer managed	30	30	15	5	Partly malfunctioning	Under rehabilitation	FMIS	25
28	Laghuwa Kabilashi Irrigation System	Seasonal river	Gravity	Farmer managed	327	327	200	100	Partly malfunctioning	Under rehabilitation	FMIS	166
29	Bagdah Pond Irrigation System	Dam/reservoir	Gravity	Farmer managed	10	10	10	5	Maintenance and repair are done and functioning properly	Under rehabilitation	FMIS	40
30	Chani Mahato Pond Irrigation System	Dam/reservoir	Gravity	Farmer managed	11	11	10	5	Maintenance and repair are done and functioning properly	Under rehabilitation	FMIS	16

									properly			
31	Gohari Pond Irrigation System	Dam/reservoir	Gravity	Farmer managed	11	11	10	5	Maintenance and repair are done and functioning properly	Under rehabilitation	FMIS	20
32	Dhale Pond Irrigation System	Dam/reservoir	Gravity	Farmer managed	10	10	10	5	Maintenance and repair are done and functioning properly	Under rehabilitation	FMIS	17
33	Bela Ramjanki Pond Irrigation System	Dam/reservoir	Gravity	Farmer managed	12	12	10	5	Maintenance and repair are done and functioning properly	Under rehabilitation	FMIS	16
34	Rajghat Pond Irrigation System	Dam/reservoir	Gravity	Farmer managed	10	10	10	5	Maintenance and repair are done and functioning properly	Under rehabilitation	FMIS	26
35	Amrit Narayan Well Tubewell Irrigation Project	Groundwater	. Pumping	Farmer managed	11	11	10	5	Maintenance and repair are done and functioning properly	Under rehabilitation	NITP	23
36	Ram Mandir Well Tubewell Irrigation Project	Groundwater	. Pumping	Farmer managed	16	16	15	10	Maintenance and repair are done and functioning properly	Under rehabilitation	NITP	25
37	Bhagyamani Well Tubewell Irrigation Project	Groundwater	. Pumping	Farmer managed	14	14	10	7	Maintenance and repair are done and functioning properly	Under rehabilitation	NITP	26
38	Dhanbarsha Well Tubewell Irrigation	Groundwater	. Pumping	Farmer managed	12	12	10	6	Maintenance and repair are done and functioning	Under rehabilitation	NITP	17

	Project								properly			
39	Tola Well Tubewell Irrigation Project	Groundwater	Pumping	Farmer managed	15	15	10	7	Maintenance and repair are done and functioning properly	Under rehabilitation	NITP	21
40	Laxmipur Kodraha Well Tubewell Irrigation Project	Groundwater	Pumping	Farmer managed	10	10	10	5	Maintenance and repair are done and functioning properly	Under rehabilitation	NITP	36
41	Hariyali Bhutal Well Tubewell Irrigation Project	Groundwater	Pumping	Farmer managed	11	11	10	5	Maintenance and repair are done and functioning properly	Under rehabilitation	NITP	16
42	Patharkot Well Tubewell Irrigation Project	Groundwater	Pumping	Farmer managed	10	0	0	0	Maintenance and repair are done and functioning properly	Under rehabilitation	NITP	19
43	Kalari Irrigation Project	Perennial river	Gravity	Farmer managed	265	200	125	100	Maintenance and repair are done and functioning properly	Under rehabilitation	CMIASP_AF	213
44	Parwanipur Irrigation Project	Perennial river	Gravity	Farmer managed	395	395	250	150	Partly malfunctioning,	Under Operation	CMIASP	742
45	Bakebaba Irrigation Project	Perennial river	Gravity	Farmer managed	269	269	200	100	Partly malfunctioning,	Under Operation	CMIASP	264

- #1 1.Perennial river, 2. Seasonal river, 3. Dam/reservoir 4. Groundwater
- #2 g. Gravity, p. Pumping, o. Other(Specify, e.g. sprinkler, drip)
- #3 a. Agency-managed, j. Jointly-managed, f. Farmer-managed
- #4 1.Maintenance and repair are done and functioning properly,2. Warning signs (flaws) are found but functioning, 3. Partly malfunctioning,
4. Dilapidated and malfunctioning in whole, 5. Partly disabled.
- #5 1.Under rehabilitation, 2.Under WUA strengthening, 3.Under operation, 4.Other (specify)
- #6 1.IWRMP / IWRMP-AF, 2.CMIASP / CMIASP-AF, 3.MIP, 4.NITP 5.Other (Specify)

(5) Problems / Challenges of Irrigation Systems

Please describe the problems or challenges and possible solutions of respective irrigation systems listed the above (3), if any, as concisely as possible.

Add Please add rows if there are more than 10.

S/N	Name of the Irrigation System	Description
1	Laxmipur Irrigation Sub Project	Headworks washout due to flood
2	Haripurwa Irrigation Project	Headworks sign to be failure
3	Jingadwa Irrigation Project	Earthen canal section te be failure
4	Parsa Irrigation Project	Headworks sign to be failure
5	Laukhat Irrigation Project	Earthen canal section te be failure
6	Miyakhor Irrigation Project	Earthen canal section te be failure
7	Pakka Badh Irrigation Project	Headworks sign to be failure

11 August 2016

Questionnaire

Irrigation Development/Sub-division Office

The purpose of this questionnaire is to collect information of irrigation systems under irrigation development division offices (IDDOs) and irrigation development sub-division offices (IDSDOs). That is because Japan International Cooperation Agency (JICA) is going to formulate a technical cooperation project on operation and maintenance of irrigation systems. Please answer as many questions as possible. JICA will appreciate your answering this questionnaire very much.

NOTE: If you have questions concerning the following questions below, please feel free to inquire them to Irrigation Management Division, Department of Irrigation, Jawalakhel, Lalitpur, Nepal.

1. Name of District under the jurisdiction

Rauthat District

2. Organization

- (1) Organization chart of IDDO/IDSDO

Government of Nepal

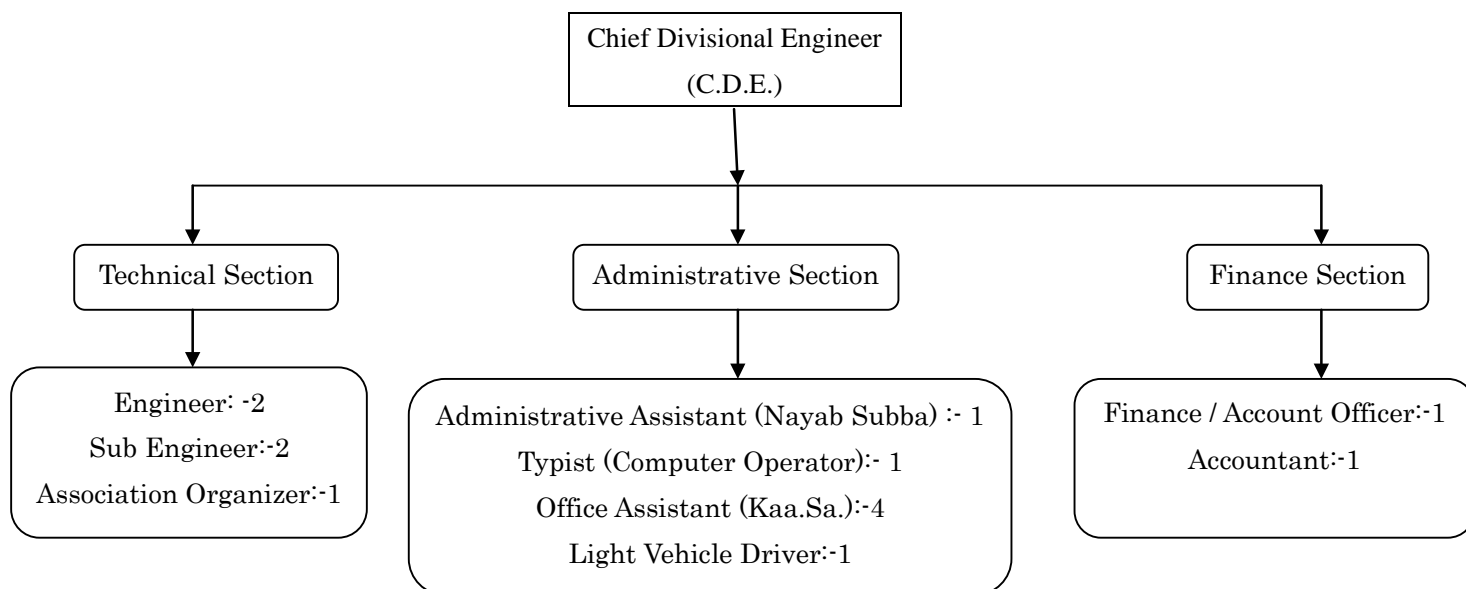
Ministry of Irrigation

Department of Irrigation

Central Regional Irrigation Directorate

Irrigation Development Division, Rauthat

Organizational Chart of IDDR



Staffing of IDDO/IDSDO

Please show staff numbers with job title for each unit/section shown in the above organization chart.

S.N.	Job Title	Staff Numbers	Section
1	Chief Divisional Engineer	1	Head of Organization
2	Engineer	2	Technical Section
3	Finance / Account Officer	1	Finance Section
4	Sub Engineer	2	Technical Section
5	Administrative Assistant (Nayab Subba)	1	Administrative Section
6	Accountant	1	Finance Section
7	Association Organizer	1	Technical Section
8	Typist (Computer Operator)	1	Administrative Section
9	Office Assistant (Kaa.Sa.)	4	Administrative Section
10	Light Vehicle Driver	1	Administrative Section

(2) Budget of IDDO/IDSDO of this fiscal year (Fiscal Year :- 2072/073)

a. Total Budget	Rs.70,796,835.67
b. Administrative Budget	Rs. 4,535,000.00
c. Project Budget	Rs.66,261,835.67

Note) a = b + c

3. District-wise Situation of Irrigation

(1) Total Command area under the IDDO or IDSDO:- 12506 Hector

(2) Irrigated area under the IDDO or IDSDO:

Monsoon season: 12506 ha

Winter: 7906 ha

Spring: 5300 ha

(3) Major Crops by Season

Monsoon: Paddy

Winter: Wheat and Vegetable (Cash Crops)

Spring: Cash Crops i.e. Sugar cane, Vegetable etc)

(4) List of All Irrigation Systems (IS) under administration of IDDO or IDSDO. Please add rows if there are more than 10.

S/N	Name of IS	#1 Water Sources	#2 System Type	#3 Management Type	Command Area (ha)	Irrigated Area (ha)			#4 Facility Condition	#5 Status	#6 Name of Programme	<u>WUA</u> No. of House holds
						Mon-Soon	Winter	Spring				
1	Jhahj Irrigation System	Seasonal River	Gravity	Farmer Managed (WUA)	4000 ha	4000	4000	4000	2	2	Jhahj Sinchai Aayojna
2	Chadi Irrigation Program	2	G	F	250	250	250	250	2	2	Chadi Irrigation Program	
3	Lohaniya Irrigation Program	2	G	F	466	466	466	466	1	2	Lohaniya Irrigation Program	
4	Kaamdehi Irr. Program	2	G	F	200	200	200	200	2	3	Kaamdehi Irr. Program	
5	Aruwa Irrigation Prog.	2	G	F	250	250	250	250	2	1	Aruwa Irrigation Prog.	
6	Hariharpur Irri. Prog.	2	G	F	250	250	250	250	2	1	Hariharpur Irri. Prog.	
7	Patharabudhram Irri. Program	2	G	F	432	432	432	432	2	2	Patharabudhram Irri. Program	
8	Simrabhabanipur Irri. Program	2	G	F	406	406	406	406	2	2	Simrabhabanipur irri. program	
9	Bhakuwa Irrigation Program	2	G	F	395	395	395	395	2	1	Bhakuwa Irrigation	

10	Aruwa irrigation Prog.	2	G	F	500	500	500	500	2	1	Aruwa Irrigation Program	
11	Lalmatiya Irrigation Program	2	G	F	200	200	200	200	2	1	Lalmatiya irrigation Program	
12	Paurai irrigation Program	2	G	F	25	25	25	25	2	1	Paurai	

#1 1.Perennial river, 2. Seasonal river, 3. Dam/reservoir 4. Groundwater

#2 g. Gravity, p. Pumping, o. Other(Specify, e.g. sprinkler, drip)

#3 a. Agency-managed, j. Jointly-managed, f. Farmer-managed

#4 1.Maintenance and repair are done and functioning properly,2. Warning signs (flaws) are found but functioning, 3. Partly malfunctioning, 4. Dilapidated and malfunctioning in whole, 5. Partly disabled.

#5 1.Under rehabilitation, 2.Under WUA strengthening, 3.Under operation, 4.Other (specify)

#6 1.IWRMP / IWRMP-AF, 2.CMIASP / CMIASP-AF, 3.MIP, 4.NITP 5.Other (Specify)

(5) Problems / Challenges of Irrigation Systems

Please describe the problems or challenges and possible solutions of respective irrigation systems listed the above (3), if any, as concisely as possible.

Add Please add rows if there are more than 10.

S/N	Name of the Irrigation System	Description
1		
2		
3		
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10		

Questionnaire

Irrigation Development/Sub-division Office

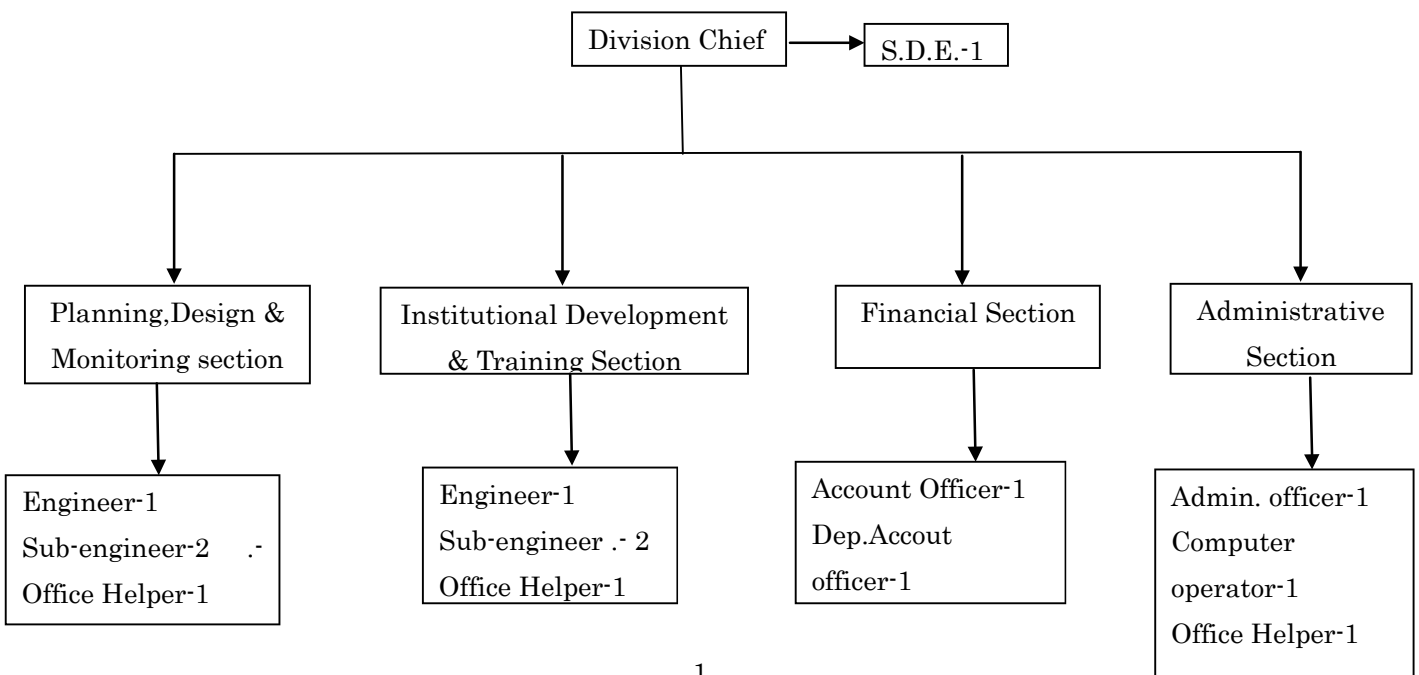
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1. Name of District under the jurisdiction

Parsa

2. Organization

(1) Organization chart of IDDO/IDSDO



(2) Staff

Please show staff numbers with job title for each unit/section shown in the above organization chart.

S.N.	Job description	Designation	Number	Remarks
1.	Division Chief	S.D.E	1	
2	Planning, Design & Monitoring	Engineer	1	
		Sub-Engineer	2	
		Office Helper	1	
3	Institutional development and Training	Engineer	1	
		Sub-Engineer	2	
		Office Helper	1	
4	Financial works	Account officer	1	
		Dep. A/c officer	1	
5	Administration	Admin. Officer	1	
		Computer Operator	1	
		Office Helper	1	
	Additional Staff			
		Technician(Agri)	1	
		A.O	1	

(3) Budget of IDDO/IDSDO of this fiscal year

a. Total Budget	136444000	Rs.
b. Administrative Budget	5284000	Rs.
c. Project Budget	131160000	Rs.

Note) a = b + c

3. District-wise Situation of Irrigation

(1) Total Command area under the IDDO : **54732 ha**

(2) Irrigated area under the IDDO ; 5638 ha

Monsoon season: 5638 ha

Winter: 4200 ha

Spring: 3000 ha

(3) Major Crops by Season

Monsoon: Paddy

Winter: Wheat, Mustard, Pulse,vegetables

Spring: Paddy, vegetables, Maize , Sugarcane

(4) List of All Irrigation Systems (IS) under administration of IDDO or IDSDO Please add rows if there are more than 10.

S/N	Name of IS	#1 Water Sources	#2 System Type	#3 Management Type	Command Area (ha)	Irrigated Area (ha)			#4 Facility Condition	#5 Status	#6 Name of Programme	<u>WUA</u> No. of Households
						Monsoon	Winter	Spring				
1	Baugi ISP	1	Gravity	J	150	150	80	50	2	Major rehab. Immediately required	ISP	250
2	Dora ISP	1	g	j	100	100	70	40	3	" "	ISP	220
3	Phanti ISP	1	g	J	260	260	240	100	3	" "	ISP	300
4	Naurangiya ISP	1	g	J	294	294	200	150	3	3	ISP	450
5	Iaxmipur ISP	1	g	J	135	135	100	50	3	3	ISP	150
6	Phokaha ISP	1	g	J	150	150	100	50	1	3	ISP	170
7	Kiyasot Bagmuhi ISP	1	g	J	350	350	250	200	1	3	SISP	250
8	Chamri ISP	1	g	J	395	395	280	175	1	3	SISP	280
9	Gulbariya ISP	1	g	J	250	250	200	150	1	3	SISP	260
10	Amuwa Khola ISP	1	g	j	135	135	100	75	1	3	SISP	175
11	Odhar Khola ISP	1	g	f	260	260	200	150	3	3	SISP	150
12	Thute Khola ISP	1	g	j	225	225	180	150	1	3	MIP	200
13	Naugachhi IS	1	g	j	774	350	300	200	1	1	MIP	320
14	Sadhuwa Khola ISP	1	g	f	202	202	150	100	1	3	CMIASP	220
15	Upper baugi ISP	1	g	f	225	225	175	150	1	3	CMIASP	250

16	Jaganaha ISP	1	g	f	213	213	175	150	1	3	CMIASP	170
17	Drip ISP	4	p	f	10	10	10	10	1	3	NITP	10

#1 1.Perennial river, 2. Seasonal river, 3. Dam/reservoir 4. Groundwater

#2 g. Gravity, p. Pumping, o. Other(Specify, e.g. sprinkler, drip)

#3 a. Agency-managed, j. Jointly-managed, f. Farmer-managed

#4 1.Maintenance and repair are done and functioning properly,2. Warning signs (flaws) are found but functioning, 3. Partly malfunctioning,
4. Dilapidated and malfunctioning in whole, 5. Partly disabled.

#5 1.Under rehabilitation, 2.Under WUA strengthening, 3.Under operation, 4.Other (specify)

#6 1.IWRMP/ IWRMP-AF, 2.CMIASP/ CMIASP-AF, 3.MIP, 4.NITP 5.Other (Specify)

(5) Problems / Challenges of Irrigation Systems

Please describe the problems or challenges and possible solutions of respective irrigation systems listed the above (3), if any, as concisely as possible.

Add Please add rows if there are more than 10.

S/N	Name of the Irrigation System	Description
1	Charakhawa ISP	Head works collapsed. New head works to be constructed
2	Ghodamasan ISP	Permanent Intake, canal lining and structures are to be constructed.
3	Amuwa khola ISP	Permanent Intake to be constructed
4	Tilabe Argana ISP	No permanent diversion structure. Head works to be constructed
5	Baugi ISP	Head work is about to collapse. New head works to be constructed.
6	Thute Khola ISP	No permanent Intake. Construction of new intake and heavy Protection works required.
7	Naugachhi ISP	Not Irrigating whole of the command area due to the lack of structures., some cross drainage works and canal lining.
8	Naurangiya ISP	Farmers operate with temporary diversion which is very tedious and unreliable. Permanent head works is needed.
9	Jamuniya ISP	No permanent diversion structures. Proper structures are needed.
10	Bhelha ISP	No permanent diversion structures. Proper structures are needed.
11	Imrity ISP	No permanent diversion structures. Proper structures are needed.
12	Jira Bhawani ISP	No permanent diversion structures. Proper structures are needed.
13	Oriya & Doga ISP	No permanent diversion structures. Proper structures are needed.
14	Bhaluwahi khola ISP	No permanent diversion structures. Proper structures are needed.
15	Sirla ISP	No permanent diversion structures. Proper structures are needed.
16	Bhata ISP	No permanent diversion structures. Proper structures are needed.

Questionnaire

Irrigation Development/Sub-division Office

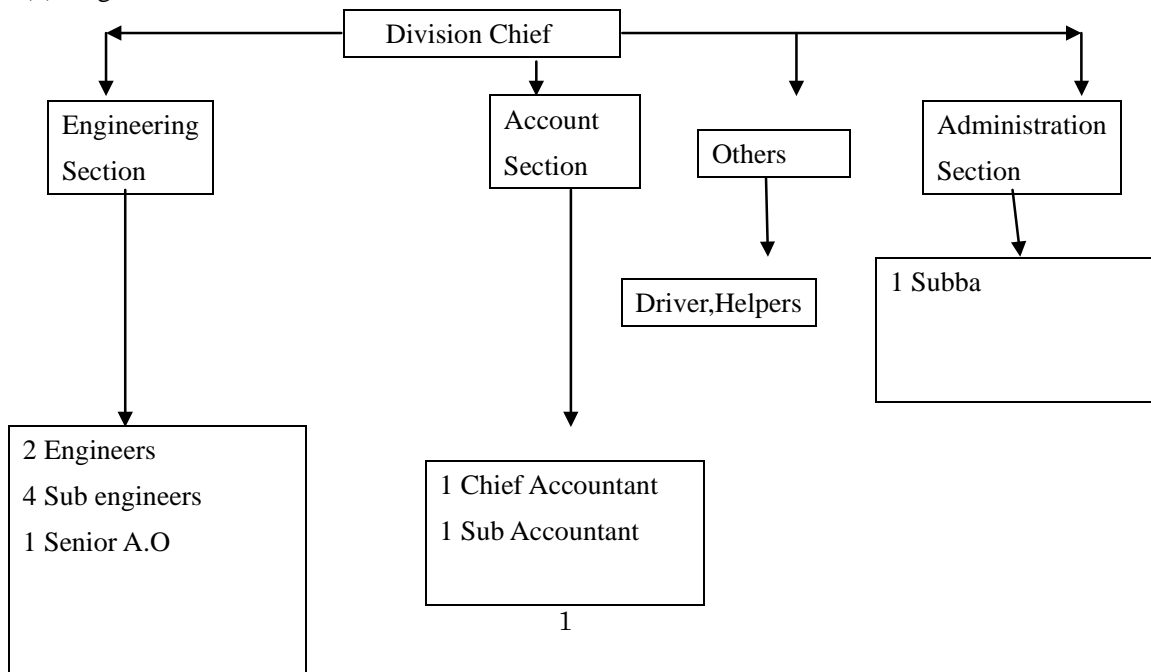
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NOTE: If you have questions concerning the following questions below, please feel free to inquire them to Irrigation Management Division, Department of Irrigation, Jawalakhel, Lalitpur, Nepal.

1. Name of District under the jurisdiction
Irrigation Development Division, Nawalparasi

2. Organization

(1) Organization chart of IDD



(2) Staffing of IDDO/IDSDO

Please show staff numbers with job title for each unit/section shown in the above organization chart.

1. One Division Chief (fulfilled)
2. Two Engineers(one fulfilled)
3. Four Sub-engineers (not fulfilled)
4. One Chief Accountant (fulfilled)
5. One Sub-Account (not fulfilled)
6. One Subba(Fulfilled)

(3) Budget of IDD of this fiscal year

a. Total Budget	13 crore	Rs.
b. Administrative Budget	55 lakh	Rs.
c. Project Budget		Rs.

Note) $a = b + c$

13 crore 55 lakh

3. District-wise Situation of Irrigation

(1) Total Command area under the IDD:66000

(2) Irrigated area under the IDDO or IDSDO:35000

Monsoon season : ha

Winter: ha

Spring: ha

(3) Major Crops by Season

Monsoon: paddy

Winter: winter paddy, wheat

Spring: vegetables, mustard etc

(4) List of All Irrigation Systems (IS) under administration of IDDO or IDSDO Please add rows if there are more than 10.

S/N	Name of IS	#1 Water Sources	#2 System Type	#3 Management Type	Command Area (ha)	Irrigated Area (ha)			#4 Facility Condition	#5 Status	#6 Name of Programme	<u>WUA</u> No. of Households
						Monsoon	Winter	Spring				
1	Tokre Irrigation Project	Devsat khola	Gravity irrigation	Farmer managed	520				Maintenance and repairing are done functioning properly	Under final stage of Rehab	Iwrmp	
2	Tmasariya Baruwa	Girwari	Gravity	Farmer managed	217				Maintenance and repair are done functioning properly	Under Operation	Iwrmp	
3	Naya Belhani	Arung khola	Gavity	Farmer managed	320	200	200	50	Complete	Complete	Iwrmp	For 120 ha should be upgraded
4	Panbhar	NA	Gavity	Farmer managed					Maintenance and repair are		Mip	

									done functioning properly			
5	Bhalayatar	NA	Gavity	Farmer managed					Maintenance and repair are done functioning		Mip	Should be upgraded
6	Baskhola	Baskhola	Gavity	Farmer managed					Maintenance and repair are done functioning properly		Mip	
7	Sikhrauli sonbarsa	kakarshot	Gavity	Farmer managed					Not functioning		Mip	Should rehab
8	Ghumaure Jhaluke	N/a	Gavity	Farmer managed					Maintenance and repair are done		Mip	
9	Daunedevi surya nagar	Local kholsi	Gavity	Farmer managed					Maintenance and repair are done		NITP	

									functioning properly			
10	Lamsal phant	boring	pumpin g	Farmer managed					New installed, functioning properly		NITP	
11	Gajendra mokhsa	lift	pumpin g	Farmer managed					functioning		NITP	
12	Tilakpur pokhari	reservoir		Farmer managed					Maintenan ce and repair are done		NITP	
13	Manari lift	lift	pumpin g	Farmer managed					Maintenan ce and repair are done		NITP	
14	Jugepani pokhari	reservoir		Farmer managed					Maintenan ce and repair are done functioning properly		NITP	
15	Bulingtar Irrigation project	Devsat khola	Gavity	Farmer managed					Maintenan ce and		Old project	Should be

									repair are done			rehabed
16												

#1 1.Perennial river, 2. Seasonal river, 3. Dam/reservoir 4. Groundwater

#2 g. Gravity, p. Pumping, o. Other(Specify, e.g. sprinkler, drip)

#3 a. Agency-managed, j. Jointly-managed, f. Farmer-managed

#4 1.Maintenance and repair are done and functioning properly,2. Warning signs (flaws) are found but functioning, 3. Partly malfunctioning,
4. Dilapidated and malfunctioning in whole, 5. Partly disabled.

#5 1.Under rehabilitation, 2.Under WUA strengthening, 3.Under operation, 4.Other (specify)

#6 1.IWRMP / IWRMP-AF, 2.CMIASP / CMIASP-AF, 3.MIP, 4.NITP 5.Other (Specify)

(5) Problems / Challenges of Irrigation Systems

Please describe the problems or challenges and possible solutions of respective irrigation systems listed the above (3), if any, as concisely as possible.

Add Please add rows if there are more than 10.

S/N	Name of the Irrigation System	Description
1	Naya belhani Irrigation system	120 Ha land has left non-irrigated, so requires 150 hundred thousand to upgrade the system.
2	Bulingtar irrigation System	Very old project,Headwork 90 % damaged,landslide along canal alignment,need of complete rehab
3	Sikhrauli sonbarsa	Not enough crest height or may b due to lowering of river bed,water canned be fed into canal durin dry seasons
4		
5		
6		
7		
8		
9		
10		

11 August 2016

Questionnaire

Irrigation Development/Sub-division Office

The purpose of this questionnaire is to collect information of irrigation systems under irrigation development division offices (IDDOs) and irrigation development sub-division offices (IDSDOs). That is because Japan International Cooperation Agency (JICA) is going to formulate a technical cooperation project on operation and maintenance of irrigation systems. Please answer as many questions as possible. JICA will appreciate your answering this questionnaire very much.

NOTE: If you have questions concerning the following questions below, please feel free to inquire them to Irrigation Management Division, Department of Irrigation, Jawalakhel, Lalitpur, Nepal.

1. Name of District under the jurisdiction

2. Organization

(1) Organization chart of IDDO/IDSDO Irrigation Development Division, Rupandehi

(2) Staffing of IDDO/IDSDO

Please show staff numbers with job title for each unit/section shown in the above organization chart.

Division Chief (SDE)	1
Engineer	2
Account Officer	1
Sub-Engineer	1
Na.Su.	1
Typiest	1
Assistant of Account	1
Driver	1
Pion	1

(3) Budget of IDDO/IDSDO of this fiscal year

a. Total Budget	Rs.225800000
b. Administrative Budget	Rs.6000000
c. Project Budget	Rs219800000.

Note) $a = b + c$

3. District-wise Situation of Irrigation

(1) Total Command area under the IDDO or IDSDO:

(2) Irrigated area under the IDDO or IDSDO:

Monsoon season: 38000 ha

Winter: 28000 ha

Spring: 14000 ha

(3)

(4) Major Crops by Season

Monsoon: Paddy, Maize

Winter: Wheat, Oilseeds/Pulses, Winter Vegetables, Potato

Spring: Vegeables

(5) List of All Irrigation Systems (IS) under administration of IDDO or IDSDO. Please add rows if there are more than 10.

S/N	Name of IS	#1 Water Sources	#2 System Type	#3 Management Type	Command Area (ha)	Irrigated Area (ha)			#4 Facility Condition	#5 Status	#6 Name of Programme	<u>WUA</u> No. of Households
						Monsoon	Winter	Spring				
1	Itiya Kulo IP	Perennial	Gravity	Jointly-managed	2500				1	1	IWRMP	8450
2	Jhim-Jhime IP	Perennial	Gravity	Jointly-managed	240				1	1	IWRMP	384
3	Chartapa IP	/Perennial	Gravity	Jointly-managed	3300				1	1	MIP	5842
4	Kanchan IP, Saljhandi	Perennial	Gravity	Jointly-managed	200				1	1	MIP	360
5	Bagahabandh IP	Perennial	Gravity	Jointly-managed	240				1	1	MIP	305
6	Rohini IP	Perennial	Gravity	Farmer-managed	1500						MIP	1900
7	Siyari Baburiya IP	Perennial	Gravity	Farmer-managed	910						MIP	600
8	Tallo Khaireni Chappar Khola IP	Perennial	Gravity	Farmer-managed	200						MIP	250
9	Kanchan Bandh IP, Suryapura	Perennial	Gravity	Farmer-managed	1510						MIP	4780
10											MIP	

- #1 1.Perennial river, 2. Seasonal river, 3. Dam/reservoir 4. Groundwater
- #2 g. Gravity, p. Pumping, o. Other(Specify, e.g. sprinkler, drip)
- #3 a. Agency-managed, j. Jointly-managed, f. Farmer-managed
- #4 1.Maintenance and repair are done and functioning properly,2. Warning signs (flaws) are found but functioning, 3. Partly malfunctioning, 4. Dilapidated and malfunctioning in whole, 5. Partly disabled.
- #5 1.Under rehabilitation, 2.Under WUA strengthening, 3.Under operation, 4.Other (specify)
- #6 1.IWRMP / IWRMP-AF, 2.CMIASP / CMIASP-AF, 3.MIP, 4.NITP 5.Other (Specify)

(6) Problems / Challenges of Irrigation Systems

Please describe the problems or challenges and possible solutions of respective irrigation systems listed the above (3), if any, as concisely as possible.

Add Please add rows if there are more than 10.

S/N	Name of the Irrigation System	Description
1		
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10		

Questionnaire

Irrigation Development/Sub-division Office

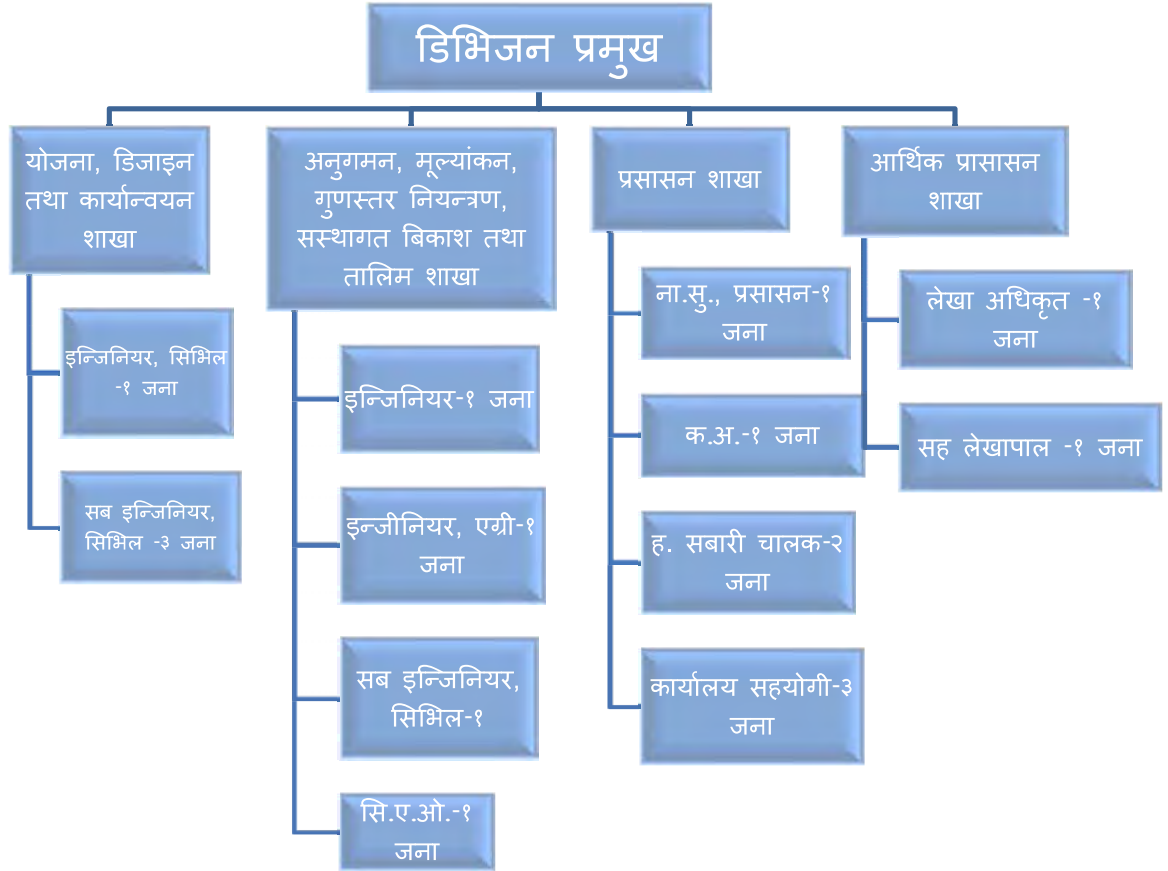
The purpose of this questionnaire is to collect information of irrigation systems under irrigation development division offices (IDDOs) and irrigation development sub-division offices (IDSDOs). That is because Japan International Cooperation Agency (JICA) is going to formulate a technical cooperation project on operation and maintenance of irrigation systems. Please answer as many questions as possible. JICA will appreciate your answering this questionnaire very much.

NOTE: If you have questions concerning the following questions below, please feel free to inquire them to Irrigation Management Division, Department of Irrigation, Jawalakhel, Lalitpur, Nepal.

1. Name of District under the jurisdiction
Kapilvastu

2. Organization

(1) Organization chart of IDDO/IDSDO



(2) Staffing of IDDO/IDSDO

Please show staff numbers with job title for each unit/section shown in the above organization chart.

SN	Post	Designation	No
1	Division Chief	Senior Divisional Engineer (Civil)	1
2	Engineer	Civil Engineer	2
3	Engineer	Agriculture Engineer	1
4	Account Officer	Account	1
5	Sub-Engineer	Civil Engineer	4
6	Assistant Section officer	Administration	1
7	Computer Operator	Administration	1
8	Senior Association Organizer	Agriculture Engineer	1
9	Accountant	Account	1
10	Light Vehicle Driver		2
11	Office Assistant		3

(3) Budget of IDDO/IDSDO of this fiscal year

a. Total Budget	Rs 212,016,000.00
b. Administrative Budget	Rs5,416,000
c. Project Budget	Rs206,600,000

Note) $a = b + c$

3. District-wise Situation of Irrigation

(1) Total Command area under the IDDO or IDSDO:

83000 Ha

(2) Irrigated area under the IDDO or IDSDO:

Monsoon season: 35150 ha

Winter: 10120 ha

Spring: 1050 ha

(3) Major Crops by Season

Monsoon: Paddy

Winter: Wheat , Pulses Potato & Oilseed

Spring: Potato , Maize &Vegetables

(4) List of All Irrigation Systems (IS) under administration of IDDO or IDSDO. Please add rows if there are more than 10.

S/N	Name of IS	#1 Water Sources	#2 System Type	#3 Management Type	Command Area (ha)	Irrigated Area (ha)			#4 Facility Condition	#5 Status	#6 Name of Programme	WUA No. of Households
						Monsoon	Winter	Spring				
1	Bhutaha IP	Bhutaha khola	g	f	715	715	270	50	4	1	3	800
2	Nagdariya IP		g	f	300	300	170	50	4	1	3	300
3	Niglihawa Belwa IP		g	f	960	960	750	250	4	1	3	1200
4	Madwan shikari khola IP	Madwan shikari khola	g	f	538	538	300	198	4	1	1	1103
5	Bharai khola IP	Bharai khola	g	f	200	200	180	100	4	1	1	160
6	Shayar Bandh IP	Surai khola	g	f	400	400	250	150	4	2	1	124
7	Galaha Bangawa IP	Sukli kothi khola	g	f	800	800	350	160	4	2	1	260
8	Gangauliya Gautariya IP	Local Spri	g	f	220	220	100	30	4	1	1	127
9	Shringihat IP	Banganga khola	g	f	2500	2500	1400	800	4	3	3	4200
10	Mahendrakot IP , Buddhabatika Na.Pa.	Gudrung khola	g	f	430	430	250	50	2	3	ILC	712
11	Beti IP, Banskhor	Beti khola	g	f	700	700	450	250	4	1	1	800

- #1 1.Perennial river, 2. Seasonal river, 3. Dam/reservoir 4. Groundwater
- #2 g. Gravity, p. Pumping, o. Other(Specify, e.g. sprinkler, drip)
- #3 a. Agency-managed, j. Jointly-managed, f. Farmer-managed
- #4 1.Maintenance and repair are done and functioning properly,2. Warning signs (flaws) are found but functioning, 3. Partly malfunctioning, 4. Dilapidated and malfunctioning in whole, 5. Partly disabled.
- #5 1.Under rehabilitation, 2.Under WUA strengthening, 3.Under operation, 4.Other (specify)
- #6 1.IWRMP / IWRMP-AF, 2.CMIASP / CMIASP-AF, 3.MIP, 4.NITP 5.Other (Specify)

(5) Problems / Challenges of Irrigation Systems

Please describe the problems or challenges and possible solutions of respective irrigation systems listed the above (3), if any, as concisely as possible.

Add Please add rows if there are more than 10.

S/N	Name of the Irrigation System	Description
1	Sayerbandh IP, Bahadurjung	Intake of Surai river is partly damaged by flood. The silt deposition at main canal makes inefficient.
2	Shringighat IP, Banganga Municipality	The weir coat of weir and glacis are damaged by flood. Heavy deposition of river bed material at main canal makes canal inefficient.
3	Mahendrakot IP, Budhabatika Municipality	The main canal section is damaged by high flood, due to which the Irrigation facilities is partially mal functioning.
4	Mudilla IP, Bedauli	The reservoir is severely encroached so capacity of the Irrigation Project is decreased.
5	Pathardeiya IP, Pathardeiya	Gates over the undersluice and Head Regulator is not functioning well . Need of Canal lining and Culverts in canal alignment.
6	Dohoni Bandh IP, Dohoni	The Head work is completely malfunctioning due to outflanking of river.
7	Surai Balapur IP, Shivaraj Municipality	The project is completely malfunctioning due to bed scouring of River. Need of Permanent Headwork ,River Training works and different canal structures.
8	Bankasawa Baluwa IP, Shivaraj Municipality	The Temporary diversion and Partly main canal made by farmers is yearly damaged by flood in surai nadi. Needs of different Irrigation structure in canal.
9	Kanchaniya nala IP, Lalpur	The project is completely malfunctioning due to bed scouring of River. Need of Permanent Headwork ,River Training works and different canal structures.
10	Siruwa IP, Jahadi	The Head work is completely malfunctioning due to outflanking of river. Need of Permanent Headwork ,River Training works and different canal structures.
11	Various lakes and ponds	Encroachment and silt deposition in Reservoir and need of rehab of canal and canal structures.
12	Various projects constructed under ILC	Need Rehabilitation of whole project

	and NISP	
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Questionnaire

Irrigation Development/Sub-division Office

The purpose of this questionnaire is to collect information of irrigation systems under irrigation development division offices (IDDOs) and irrigation development sub-division offices (IDSDOs). That is because Japan International Cooperation Agency (JICA) is going to formulate a technical cooperation project on operation and maintenance of irrigation systems. Please answer as many questions as possible. JICA will appreciate your answering this questionnaire very much.

NOTE: If you have questions concerning the following questions below, please feel free to inquire them to Irrigation Management Division, Department of Irrigation, Jawalakhel, Lalitpur, Nepal.

1. Name of District under the jurisdiction

Bardiya

2. Organization

(1) Organization chart of IDDO/IDSDO

(2) Staffing of IDDO/IDSDO

Please show staff numbers with job title for each unit/section shown in the above organization chart.

(3) Budget of IDDO/IDSDO of this fiscal year

a. Total Budget	67054000/-	Rs.
b. Administrative Budget	3759000/-	Rs.
c. Project Budget	63295000/-	Rs.

Note) $a = b + c$

3. District-wise Situation of Irrigation

(1) Total Command area under the IDDO or IDSDO: 925h

(2) Irrigated area under the IDDO or IDSDO: 925h

Monsoon season: ha

Winter: ha

Spring: ha

(3) Major Crops by Season

Monsoon:

Winter:

Spring:

(4) List of All Irrigation Systems (IS) under administration of IDDO or IDSDO Please add rows if there are more than 10.

S/N	Name of IS	#1 Water Sources	#2 System Type	#3 Management Type	Command Area (ha)	Irrigated Area (ha)			#4 Facility Condition	#5 Status	#6 Name of Programme	<u>WUA</u> No. of Households
						Monsoon	Winter	Spring				
1	Ambasa Balanti ISP project				213							296
2	Batule Kurule ISP				70							99
3	Chepang ISP				40							179
4	Ghatte Khola ISP				19							81
5	Karmala ISP				202							354
6	Kurule ISP				6							11
7	Suryapatuwa ISP				375							1385
8												
9												
10												

#1 1. Perennial river, 2. Seasonal river, 3. Dam/reservoir 4. Groundwater

#2 g. Gravity, p. Pumping, o. Other (Specify, e.g. sprinkler, drip)

#3 a. Agency-managed, j. Jointly-managed, f. Farmer-managed

#4 1. Maintenance and repair are done and functioning properly, 2. Warning signs (flaws) are found but functioning, 3. Partly malfunctioning, 4. Dilapidated and malfunctioning in whole, 5. Partly disabled.

#5 1. Under rehabilitation, 2. Under WUA strengthening, 3. Under operation, 4. Other (specify)

#6 1. IWRMP / IWRMP-AF, 2. CMIASP / CMIASP-AF, 3. MIP, 4. NITP 5. Other (Specify)

(5) Problems / Challenges of Irrigation Systems

Please describe the problems or challenges and possible solutions of respective irrigation systems listed the above (3), if any, as concisely as possible.

Add Please add rows if there are more than 10.

S/N	Name of the Irrigation System	Description
1		
2		
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ANNEX 13 Questionnaire Answers (GWID)

24 August 2016

Questionnaire

Groundwater Irrigation Division, DOI

The purpose of this questionnaire is to collect information of irrigation systems under groundwater irrigation divisions. That is because Japan International Cooperation Agency (JICA) is going to formulate a technical cooperation project on operation and maintenance of irrigation systems. Please answer as many questions as possible. JICA will appreciate your answering this questionnaire very much.

1. Name of 11 Groundwater Irrigation Division and technical staff

S/N	Name of Division	No. of Technical staff/sociologist
3	Ground Water Irrigation Development Division, Mahottari	Senior Divisional Hydrogeologist-1 Engineer-1 Hydrogeologist-1 Sub-engineer (Asst. Hydrogeologist)-1 Sociologist (AO)-x Others, if any

2. Budget of this fiscal year of Groundwater Irrigation Development Division, Mahottari

a. Total Budget	Rs.60,672,000.00
b. Administrative Budget	Rs.5,572,000.00
c. Project Budget	Rs.55,100,000.00

Note) a = b + c

3. List of Irrigation System (IS) under Groundwater Division in Terai (Please add rows if there are more than 10.)

S/N	Name of IS	Groundwater Irrigation Division	DTW or STW	No. of Tube wells	Design discharge per pump (Litre/sec)	Command Area (ha)	#1 Conjunctive use? Yes or No	Year constructed	#2 Facility Condition	#3 Management type
1	Laximiniya DTW ISP	Mahottari	DTW	9	30-50	360	No		3 & 5	FM
2	Bijalpur DTW ISP	Mahottari	DTW	3	30-40	180	No		3& 5	FM
3	Other DTW ISP (mahottari District)	Mahottari	DTW	15	25-40	600	No		3&5	FM
4	STW ISPs (mahottari District)	Mahottari	STW	3074	5-10	7685	No		1	FM
5	Different DTW ISP (Dhanusha District)	Mahottari	DTW	7	25-40	280	No		3	FM
6	STW ISPs (Dhanusha District)	Mahottari	STW	3006	5-10	7515	No		1	FM
7	STW/DW ISPs (Sindhuli District)	Mahottari	Dug well	645	4-6	1612.5	No		1	FM
8										
9										
10										

NOTE) If difficult to fill out some data, please leave them blank.

#1 1. Conjunctive use with surface water 2. Groundwater only

#2 1. Maintenance and repair are done and functioning properly, 2. Warning signs (flaws) are found but functioning, 3. Partly malfunctioning, 4. Dilapidated and malfunctioning in whole, 5. Some pumps disabled, 6. Water dried up

#3 a. Agency-managed, j. Jointly-managed, f. Farmer-managed

4. Problems of Irrigation Systems

Please describe the problems and possible solutions of respective irrigation systems listed in the above table, if any, as concisely as possible.

(Add Please add rows if there are more than 10.)

S/N	Name of the Irrigation System	Description
1	DTW ISPs (Laximinya, Pashupatinagar, Belgachhi, gaushala, Ramnagar, pashupatinagar etc.	Diesel pump should be replaced with electric pump
2	DTW ISPs (Few in laximinya, and Sripur, Papara)	Maintainence of pump and transformer etc. should be done
3		
4		
5		
6		
7		

24 August 2016

Questionnaire

Groundwater Irrigation Division, DOI

The purpose of this questionnaire is to collect information of irrigation systems under groundwater irrigation divisions. That is because Japan International Cooperation Agency (JICA) is going to formulate a technical cooperation project on operation and maintenance of irrigation systems. Please answer as many questions as possible. JICA will appreciate your answering this questionnaire very much.

1. Name of 11 Groundwater Irrigation Division and technical staff

S/N	Name of Division	No. of Technical staff/sociologist
4	Ground Water Irrigation Development Division, Sarlahi	Hydrogeologist - 1 A.Groundwater Hydrogeologist - 1 Driller - 1

2. Budget of this fiscal year of Groundwater Irrigation Division

a. Total Budget	46100000 Rs.
b. Administrative Budget	5759000 Rs.
c. Project Budget	40341000 Rs.

Note) $a = b + c$

3. List of Irrigation System (IS) under Groundwater Division in Terai (Please add rows if there are more than 10.)

S/N	Name of IS	Groundwater Irrigation Division	DTW or STW	No. of Tube wells	Design discharge per pump (Litre/sec)	Command Area (ha)	#1 Conjunctive use? Yes or No	Year constructed	#2 Facility Condition	#3 Management type
Rautahat District										
1	Bariyarpur I. S., Bariyarpur 1,3,6	Sarlahi	STW	30	14	75	2	2072/73	1	F
2	Maryadpur I. S., Maryadpur 5,7	Sarlahi	STW	15	13	37.5	2	2072/73	1	F
3	Jayanagar I. S., Jayanagar 9	Sarlahi	STW	5	12	12.5	2	2072/73	1	F
4	Madanpur I S, Madanpur 7	Sarlahi	STW	10	11	25	2	2072/73	1	F
5	Dharahari I S, Dharahari 5,8	Sarlahi	STW	10	14	25	2	2072/73	1	F
6	Kheshariya I S, Kheshariya 4	Sarlahi	STW	5	15	12.5	2	2072/73	1	F
7	Jigadwa Belbichwa I S, Jigadwa Belbichwa	Sarlahi	STW	5	12	12.5	2	2072/73	1	F
8	Pataura I S, Pataura 7,8	Sarlahi	STW	40	13	100	2	2072/73	1	F
9	Pothiyahi I S, Pothiyahi 6	Sarlahi	STW	5	11	12.5	2	2072/73	1	F
10	Hathiyahi I S, Hathiyahi 1,6	Sarlahi	STW	5	12	12.5	2	2072/73	1	F
11	Bramhapuri I S, Bramhapuri 1	Sarlahi	STW	15	13	37.5	2	2072/73	1	F
12	Shitalpur I S, Shitalpur 3	Sarlahi	STW	40	15	100	2	2072/73	1	F
13	Gogdaul I S, Gogdaul 2	Sarlahi	STW	10	14	25	2	2072/73	1	F
14	Pachrukhi I S, Pachrukhi 4	Sarlahi	STW	25	14	62.5	2	2072/73	1	F
15	Ganga Pipra IS, Ganga Pipra 6	Sarlahi	STW	5	12	12.5	2	2072/73	1	F
16	Malahi I S, Malahi 7	Sarlahi	STW	5	13	12.5	2	2072/73	1	F
17	Jethrahiya I S, Jethrahiya 1,7	Sarlahi	STW	10	11	25	2	2072/73	1	F
18	Mohammadpur I S, Mohammadpur 1,4,9	Sarlahi	STW	25	12	62.5	2	2072/73	1	F

19	Saruatha IS, Saruatha 5,7,	Sarlahi	STW	10	12	25	2	2072/73	1	F
20	Pipra Pokhariya I S, Pipra Pokhariya 3	Sarlahi	STW	5	14	12.5	2	2072/73	1	F
21	Bhasedwa I S, Bhasedwa	Sarlahi	STW	5	12	12.5	2	2072/73	1	F
22	Bagahi I S, Bagahi 4	Sarlahi	STW	5	11	12.5	2	2072/73	1	F
23	Jatahara I S, Jatahara 7,8	Sarlahi	STW	20	13	50	2	2072/73	1	F
24	Jhunkhunwa I S, Jhunkhunwa 2	Sarlahi	STW	5	15	12.5	2	2072/73	1	F
25	Mithuawa I S, Mithuawa 3,4,9	Sarlahi	STW	10	14	25	2	2072/73	1	F
26	Dharmapur I S, Dharmapur 6	Sarlahi	STW	10	11	25	2	2072/73	1	F
27	Bhalohiya I S, Bhalohiya 4	Sarlahi	STW	5	12	12.5	2	2072/73	1	F
28	Laukaha I S, Laukaha 4	Sarlahi	STW	10	13	25	2	2072/73	1	F
29	Phatuwa harsaha I S, Phatuwa harsaha 5	Sarlahi	STW	5	15	12.5	2	2072/73	1	F
30	Sanatapur Do. I S, Santapur Do. 1	Sarlahi	STW	5	14	12.5	2	2072/73	1	F
31	Kanakpur I S, Kanakpur 4,8	Sarlahi	STW	5	12	12.5	2	2072/73	1	F
32	Pipra Rajwada I S, Pipra Rajwada 4	Sarlahi	STW	10	13	25	2	2072/73	1	F
33	Judibela I. S., Judibela-1	Sarlahi	DTW	1	25	25	2	2072/73	2	F
Sarlahi District										
1	Pakadi I S, Pakadi 1,4	Sarlahi	STW	10	11	25	2	2072/73	1	F
2	Sekhauna I S, Sukhuna 7,8	Sarlahi	STW	16	12	40	2	2072/73	1	F
3	Simara IS, Simara 3	Sarlahi	STW	5	13	12.5	2	2072/73	1	F
4	Sakraul I S, Sakraul 7	Sarlahi	STW	5	14	12.5	2	2072/73	1	F
5	Sundarpur IS, Sundarpur 5	Sarlahi	STW	5	15	12.5	2	2072/73	1	F
6	Bahadurpur I S, Bahadurpur 1	Sarlahi	STW	10	15	25	2	2072/73	1	F
7	Rohuwa I S, Rohuwa 9	Sarlahi	STW	10	12	25	2	2072/73	1	F
8	Ishorpur I S, Ishorpur 9	Sarlahi	STW	25	14	62.5	2	2072/73	1	F

9	Manpur I S, Manpur	Sarlahi	STW	25	12	62.5	2	2072/73	1	F
10	Belhi I S, Belhi 7	Sarlahi	STW	10	13	25	2	2072/73	1	F
11	Sahodwa I S, Sahodwa 3	Sarlahi	STW	5	14	12.5	2	2072/73	1	F
12	Phulparasi I S, Phulparasi 4	Sarlahi	STW	5	12	12.5	2	2072/73	1	F
13	Jabdi I S, Jabdi 5	Sarlahi	STW	5	11	10	2	2072/73	1	F
14	Netragunj I S, Netragunj 1	Sarlahi	STW	4	12	12.5	2	2072/73	1	F
15	Musaili I S, Musaili 4	Sarlahi	STW	5	15	17.5	2	2072/73	1	F
16	Jamuniya I S, Jamuniya 7	Sarlahi	STW	7	14	12.5	2	2072/73	1	F
17	Motipur I S, Motipur 3	Sarlahi	STW	5	13	12.5	2	2072/73	1	F
18	Balara I S, Balara 8	Sarlahi	STW	5	12	12.5	2	2072/73	1	F
19	Kaudena I S, Kaudena 1	Sarlahi	STW	5	11	12.5	2	2072/73	1	F
20	Mahinathpur I S, Mahinathpur 6	Sarlahi	STW	5	14	12.5	2	2072/73	1	F
21	Hathioul I S, Hathioul 3	Sarlahi	STW	5	12	25	2	2072/73	1	F
22	Khoriya I S, Khoriya 5	Sarlahi	STW	5	15	12.5	2	2072/73	1	F
23	Kishanpur I S, Kishanpur	Sarlahi	STW	10	11	2.5	2	2072/73	1	F
24	Babargunj I S, Babargunj 8	Sarlahi	STW	5	13	5	2	2072/73	1	F
25	Hariwan I.S., Hariwan-9	Sarlahi	DTW	1	30	30	2	2072/73	2	F
26	Bhaktipur, Pokhariya	Sarlahi	DTW	1	25	25	2	2068/69	2	F
27	Nareshkhor, Sarlahi	Sarlahi	DTW	1	25	25	2	2068/69	3	F

NOTE) If difficult to fill out some data, please leave them blank.

#1 1. Conjunctive use with surface water 2. Groundwater only

#2 1.Maintenance and repair are done and functioning properly,2. Warning signs (flaws) are found but functioning, 3. Partly malfunctioning,4.Dilapidated and malfunctioning in whole, 5. Some pumps disabled, 6. Water dried up

#3 a. Agency-managed, j. Jointly-managed, f. Farmer-managed

4. Problems of Irrigation Systems

Please describe the problems and possible solutions of respective irrigation systems listed in the above table, if any, as concisely as possible.

(Add Please add rows if there are more than 10.)

S/N	Name of the Irrigation System	Description
Rautahat District		
1	Judibela DTW I.S., Judibela-1	
2	STW of Rautahat district	All are well maintained. There is problem of electricity. Proper electrification could be a possible solution
Sarlahi District		
1	Hariwan I.S., Hariwan-9	
2	Bhaktipur, Pokhariya	need maintenance
3	Nareshkhor, Sarlahi	need maintenance
4	STW of Sarlahi district	All are well maintained. There is problem of electricity. Proper electrification could be a possible solution

24 August 2016

Questionnaire

Groundwater Irrigation Division, DOI

The purpose of this questionnaire is to collect information of irrigation systems under groundwater irrigation divisions. That is because Japan International Cooperation Agency (JICA) is going to formulate a technical cooperation project on operation and maintenance of irrigation systems. Please answer as many questions as possible. JICA will appreciate your answering this questionnaire very much.

1. Name of 11 Groundwater Irrigation Division and technical staff

S/N	Name of Division	No. of Technical staff/sociologist
7	Ground Water Irrigation Development Division, Chitwan	Engineer-1 Hydrogeologist-1 Sub-engineer-0 Sociologist (AO)-0 Senior Mechanics-1 Assistant Hydrogeologist-1

2. Budget of this fiscal year of Groundwater Irrigation Division

a. Total Budget	51800000 Rs.
b. Administrative Budget	Rs.
c. Project Budget	Rs.

Note) $a = b + c$

3. List of Irrigation System (IS) under Groundwater Division in Terai (Please add rows if there are more than 10.)

S/N	Name of IS	Groundwater Irrigation Division	DTW or STW	No. of Tube wells	Design discharge per pump (Litre/sec)	Command Area (ha)	#1 Conjunctive use ? Yes or No	Year constructed	#2 Facility Condition	#3 Management type
1	STW IS	Chitwan	STW	430	Equal or less than 10	1075	Yes	2072/073	Functioning properly	Farmer-managed
2	DTW IS	Chitwan	DTW	6	12-35	Ongoing work	Yes	2072/073	Construction ongoing	Will be handed to farmer after the completion of construction works
3										
4										
5										

NOTE) If difficult to fill out some data, please leave them blank.

#1 1. Conjunctive use with surface water 2. Groundwater only

#2 1. Maintenance and repair are done and functioning properly, 2. Warning signs (flaws) are found but functioning, 3. Partly malfunctioning, 4. Dilapidated and malfunctioning in whole, 5. Some pumps disabled, 6. Water dried up

#3 a. Agency-managed, j. Jointly-managed, f. Farmer-managed

4. Problems of Irrigation Systems

Please describe the problems and possible solutions of respective irrigation systems listed in the above table, if any, as concisely as possible.

(Add Please add rows if there are more than 10.)

S/N	Name of the Irrigation System	Description
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24 August 2016

Questionnaire

Groundwater Irrigation Division, DOI

The purpose of this questionnaire is to collect information of irrigation systems under groundwater irrigation divisions. That is because Japan International Cooperation Agency (JICA) is going to formulate a technical cooperation project on operation and maintenance of irrigation systems. Please answer as many questions as possible. JICA will appreciate your answering this questionnaire very much.

1. Name of 11 Groundwater Irrigation Division and technical staff

S/N	Name of Division	No. of Technical staff/sociologist
9	Ground Water Irrigation Development Division, Dang	Officer-Incharge - 1 Engineer - 0 Hydrogeologist - 1 Sub-engineer - 0 Sociologist (AO) – 0 Others, if any

2. Budget of this fiscal year of Groundwater Irrigation Division

a. Total Budget	Rs. 6,67,06,000.00
b. Administrative Budget	Rs. 53,10,000.00
c. Project Budget	Rs. 6,13,50,000.00

Note) a = b + c

3. List of Irrigation System (IS) under Groundwater Division in Terai (Please add rows if there are more than 10.)

S/N	Name of IS	Groundwater Irrigation Division	DTW or STW	No. of Tube wells	Design discharge per pump (Litre/sec)	Command Area (ha)	#1 Conjunctive use ? Yes or No	Year constructed	#2 Facility Condition	#3 Management type
1	Sonpur DTW Cluster	Dang	DTW	6		245	2		3	F
2	Lalmatiya DTW Cluster	Dang	DTW	9		340	2		1	F
3	Goberdiha DTW Cluster	Dang	DTW	5		235	2		1	F
4	Satbariya Kamanpur `	Dang	DTW	1		40	2		1	F
5	Dharna DTW Cluster	Dang	DTW	12		425	2		1	F
6	Goltakuri DTW Cluster	Dang	DTW	4		120	2		3	F
7	Tarigaun DTW Cluster	Dang	DTW	11		425	2		3	F
8	Duruwa DTW	Dang	DTW	1		15	2		1	F
9	Balapur Rampur DTW	Dang	DTW	1		15	2		1	F
10	Dhanauri DTW	Dang	DTW	1		15	2		1	F
11	Dhakana Fulbari DTW	Dang	DTW	1		40	2		1	F
12	Laxipur DTW Cluster	Dang	DTW	4		90	2		1	F
13	Dhikpur DTW Cluster	Dang	DTW	1		40	2		1	F
14	Duruwa VDC STW	Dang	STW	143		378	2		1	F
15	Bela VDC STW	Dang	STW	299		781	2		1	F
16	Rajpur VDC STW	Dang	STW	305		755	2		1	F
17	Sonpur VDC STW	Dang	STW	14		35	2		1	F
18	Gangaparaspur VDC STW	Dang	STW	328		818	2		1	F
19	Gadhawa VDC STW	Dang	STW	518		1318	2		1	F
20	Chailahi VDC STW	Dang	STW	78		185	2		1	F

S/N	Name of IS	Groundwater Irrigation Division	DTW or STW	No. of Tube wells	Design discharge per pump (Litre/sec)	Command Area (ha)	#1 Conjunctive use ? Yes or No	Year constructed	#2 Facility Condition	#3 Management type
21	Satbariya VDC STW	Dang	STW	1024		2613	2		1	F
22	Dhikpur VDC STW	Dang	STW	5		12	2		1	F
23	Urahari VDC STW	Dang	STW	38		97	2		1	F
24	Hekuli VDC STW	Dang	STW	10		25	2		1	F
25	Ghorahi VDC STW	Dang	STW	10		24	2		1	F
26	Goberdiha VDC STW	Dang	STW	161		407	2		1	F
27	Pawannagar VDC STW	Dang	STW	6		15	2		1	F
28	Tulsipur Municipality	Dang	STW	13		32	2		1	F
29	Dhanauri	Dang	STW	7		17	2		1	F
30	Shreegaun	Dang	STW	5		12	2		1	F

NOTE) If difficult to fill out some data, please leave them blank.

#1 1. Conjunctive use with surface water 2. Groundwater only

#2 1.Maintenance and repair are done and functioning properly,2. Warning signs (flaws) are found but functioning, 3. Partly malfunctioning,4.Dilapidated and malfunctioning in whole, 5. Some pumps disabled, 6. Water dried up

#3 a. Agency-managed, j. Jointly-managed, f. Farmer-managed

4. Problems of Irrigation Systems

Please describe the problems and possible solutions of respective irrigation systems listed in the above table, if any, as concisely as possible.

(Add Please add rows if there are more than 10.)

S/N	Name of the Irrigation System	Description
1	Sonpur DTW Cluster	1 DTW is not in operation for a long time due to social conflict. The condition of transformer, panel board and submersible pump motor ave tol be checked
2	Goltakuri DTW Cluster	1 DTW is filled up with sand. Sand have to be removed by means of bailing and then developed by air compressor
3	Tarigaun DTW Cluster	1 DTW have reduced its yield, so the DTW has to be developed by air compressor
4		Most of all DTWs were constructed 15-20 years ago, so repair, maintenance of Distribution System, Electrification and transformer and Submersible pump motor is required for all most all DTW Irrigation Systems.
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24 August 2016

Questionnaire

Groundwater Irrigation Division, DOI

The purpose of this questionnaire is to collect information of irrigation systems under groundwater irrigation divisions. That is because Japan International Cooperation Agency (JICA) is going to formulate a technical cooperation project on operation and maintenance of irrigation systems. Please answer as many questions as possible. JICA will appreciate your answering this questionnaire very much.

1. As a responsible division of groundwater development for irrigation, please explain a vision of groundwater development in Terai in near future.

Groundwater is inevitable for expanding year-round and sustainable irrigation in Terai. It is also a reliable source for irrigation in terraces and river valleys in mid-hills. The groundwater division is developing DTWs, machine drilled and manual STWs along with dug wells irrigation systems in areas having no other reliable surface irrigation. It is also involved in construction tube well irrigation systems in command area of surface irrigation projects for conjunctive use of water for irrigation and hence providing year-round irrigation.

2. Name of 11 Groundwater Irrigation Division and technical staff

S/N	Name of Division	No. of Technical staff/sociologist
10	Ground Water Irrigation Development Division, Banke	Engineer-1 Hydrogeologist-1 Sub-engineer -1 Sociologist (AO)-1

3.

3. Budget of this fiscal year of Groundwater Irrigation Division

a. Total Budget	Rs. 69205000
b. Administrative Budget	Rs. 5805000.00
c. Project Budget	Rs. 63400000.00

Note) $a = b + c$

S. N.	Name of IS	Groundwater Division	DTW or STW	Nos of Tubewells	Design Discharge (liter/second)	Command Area (Ha)	Conjunctive use?	Year Constructed	Facility Condition	Management Type	Description
District: Banke											
1	Radhapur Sitapur	Nepalgunj, Banke	DTW	19	40	760	2	2055-2060	3	f	<p>Problems: 1. System is old which leads to electromechanical, buried pipe distribution system and submersible pumps are losing their efficiencies. 2. Suffering from power supply problems, High capacity submersible pumps are not support by voltage provided. 3. Demand charge of electricity high so that farmers can not pay by percent agriculture practice. Solution: Yearly budget should be allocated for maintenance of IS. Solar power may be alternative for power supply problem. Demand charge taken by Nepal Electricity Authority should only for industrial purpose not for IS. It should be free for agriculture purpose.</p>
2	Hirminiya, Udayapur, Piparhawa, and Bhawaniyapur	"	DTW	17	40	680	2	2054-2060	4	f	
3	Basudevpur	"	DTW	3	40	120	2	2055-57	4	f	
4	Banghusra Molhapurwa	"	DTW	10	40	400	2	2055-57	4	f	
5	Puraini	"	DTW	1	40	40	2	2056/57	4	f	
6	Mohanpur	"	DTW	1	40	40	2	2057/58	4	f	
7	Paraspur	"	DTW	1	40	40	2	2058-2060	4	f	
8	Puraini	"	DTW	2	40	80	2	2057-2060	4	f	
9	Puraina	"	DTW	2	40	80	2	2057-2061	4	f	
10	Chisapani	"	DTW	6	40	240	2	2061-2065	1	f	
11	Titahariya	"	DTW	1	40	40	2	2063-2065	3	f	<p>Problems: Electric Line charge remain since construction, Minor system maintenance. Solution: Maintenance of system and line charge process should be done</p>

S. N.	Name of IS	Groundwater Division	DTW or STW	Nos of Tubewells	Design Discharge (liter/second)	Command Area (Ha)	Conjunctive use?	Year Constructed	Facility Condition	Management Type	Description
1	Shantipur Jamuni	"	DTW	14	40	560	2	051-54	3	f	Problems: 1. System is old which leads to electromechanical and buried pipe distribution system and submersible pumps are losing their efficiencies. 2. Suffering from power supply problems, High capacity submersible pumps are not support by voltage provided. 3. Demand charge of electricity high so that farmers can not pay by percent agriculture practice. Solution: Yearly budget should be allocated for maintenance of IS. Solar power may be alternative for power supply problem. Demand charge taken by Nepal Electricity Authority should only for industrial purpose not for IS. It should be free for agriculture purpose.
3	Gulariya	"	DTW	1	40	40	2	055-56	1	f	Problem: Minor maintenance required. Voltage fluctuation of electricity. Solution: Yearly budget should be required for maintenance. Installation of stabilizer
4	Belwa	"	DTW	2	40	80	2	066-67	1	f	Problem: Minor maintenance required. Voltage fluctuation of electricity. Solution: Yearly budget should be required for maintenance. Installation of stabilizer
5	Taratal	"	DTW	5	40	200	2	067-73	1	f	Problem: Minor maintenance required. Voltage fluctuation of electricity. Solution: Yearly budget should be required for maintenance. Installation of stabilizer
6	Sanoshree	"	DTW	1	40	40	2	067-68	1	f	Problem: Minor maintenance required. Voltage fluctuation of electricity. Solution: Yearly budget should be required for maintenance. Installation of stabilizer
7	Dhodhari	"	DTW	1	40	40	2	068-69	1	f	Problem: Minor maintenance required. Voltage fluctuation of electricity. Solution: Yearly budget should be required for maintenance. Installation of stabilizer

S. N.	Name of IS	Groundwater Division	DTW or STW	Nos of Tubewells	Design Discharge (liter/second)	Command Area (Ha)	Conjunctive use?	Year Constructed	Facility Condition	Management Type	Description
8	Sanoshree Taratal	"	DTW	6	40	240	2	071-73	1	f	Problem: Minor maintenance required. Voltage fluctuation of electricity. Solution: Yearly budget should be required for maintenance. Installation of stablizer
9	Different clusters		STW	6238	6	15595	2	051-072	-	f	

District: Surkhet											
1	Different clusters		Dugwell	277	3	310	2	066-072	-	f	

24 August 2016

Questionnaire

Groundwater Irrigation Division, DOI

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1. Name of 11 Groundwater Irrigation Division and technical staff

S/N	Name of Division	No. of Technical staff/sociologist
11	Ground Water Irrigation Development Division, Kailali	Engineer Hydrogeologist - 1 Sub-engineer - 1 Sociologist (AO) - 1 Others, if any mechanical overseer

2. Budget of this fiscal year of Groundwater Irrigation Division

a. Total Budget	110000000 Rs.
b. Administrative Budget	10000000 Rs.
c. Project Budget	100000000 Rs.

Note) $a = b + c$

3. List of Irrigation System (IS) under Groundwater Division in Terai (Please add rows if there are more than 10.)

S/N	Name of IS	Groundwater Irrigation Division	DTW or STW	No. of Tube wells	Design discharge per pump (Litre/sec)	Command Area (ha)	#1 Conjunctive use? Yes or No	Year constructed	#2 Facility Condition	#3 Management type
1	Jhalari Cluster	Dhangadhi	DTW	26	30	104	No	2000	3	f
2	Daiji Cluster	„ „	DTW	6	30	240	No	2012	1	f
3	Krishnapur Cluster	„ „	DTW	8	30	320	No	2014	1	f
4	Jugeda Cluster	„ „	DTW	10	30	400	No	1998	3	f
5	Godawari Cluster	„ „	DTW	10	40	400	No		2	f
6	Sadepani Cluster	„ „	DTW	6	30	240	No	On going cluster		
7	Oter scatterd DTW system	„ „	DTW	12	30	480	No		2+3	f
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NOTE) If difficult to fill out some data, please leave them blank.

#1 1. Conjunctive use with surface water 2. Groundwater only

#2 1. Maintenance and repair are done and functioning properly, 2. Warning signs (flaws) are found but functioning, 3. Partly malfunctioning, 4. Dilapidated and malfunctioning in whole, 5. Some pumps disabled, 6. Water dried up

#3 a. Agency-managed, j. Jointly-managed, f. Farmer-managed

4. Problems of Irrigation Systems

Please describe the problems and possible solutions of respective irrigation systems listed in the above table, if any, as concisely as possible.

(Add Please add rows if there are more than 10.)

S/N	Name of the Irrigation System	Description
1	Jhalari, Daiji, Jugeda and other scattered DTW systems	Mostly the system are old and overall rehabilitation i.e. redrill, electrification, distribution system maintenance required.
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