

Digo Jal Bikas Basin-wide Socio-Economic Survey

Nepal, 2018

FOR SUPERVISOR/ENUMERATOR, please read and ask for informed consent:

Greetings! My name is _____, and I am working for the International Water Management Institute (IWMI) and Digo Jal Bikas Project partners including Duke University in North Carolina, USA and Kathmandu University, Nepal. We are conducting a research to understand the agricultural and water use practices and issues faced by people in your village and we would really value your perspective. We want to know some things about your household and related issues – specifically about (1) Household-level socio-economic status; (2) livelihood patterns including migration/remittances/credit situation; (3) various assets ownership situation; (4) land holding, and cropping patterns; (5) water sources and water use in various sectors; (6) details on irrigation water use; and (7) local institutions and governance structures. Interviews will be conducted with approximately 3500 households from selected communities in different parts of Karnali, Mahakali and Mohana basins. Your household has been selected to participate. If you decide to participate in this study, you will complete a 45 minutes interview with a trained interviewer. Your participation in the study is completely voluntary. You may choose not to answer any question and you can stop your participation at any time. All information you provide will be kept confidential, that is, your name or other identification will not be associated with your answers to the questions. If you have any questions or concerns about our study, please contact Dr. Ram Bastakoti (9813735993) or Ms Emma Karki (9808765995).

Do you agree to participate in the interview? [1] Yes [2] No (end of interview)

SECTION 1: IDENTIFICATION (fill in before interview)

Household number:

101.Date:	d	d	m	m	y	y	y	y	102.Name of Interviewer:					
103.Start Time:	____: ____ AM / PM				104.End Time:				____: ____ AM / PM					
105.District:					106.VDC/Municipality:				Latitude:					
107.Village:					108.Ward Number:				Longitude:					
109.Name of Respondent:						110.Sex:		M/F	111.Age:			112.Relationship with Household Head:		
113.Name of Household Head:						114: Sex		M/F	115: Age			116.Caste/Ethnicity		

Caste/Ethnicity	Relationship code	
1. Brahmin	1. Self	5. Son-in-law
2. Chettri	2. Son	6. Spouse
3. Hill Janjati	3. Daughter	7. Others
4. Terai Janjati	4. Daughter in law	
5. Hill Dalit		
6. Terai Dalit		
7. Madheshi		
8. Other Madheshi		
9. Others		

SECTION 2: HOUSEHOLD ROSTER

201. Details of household members, including those who have migrated but continue to have financial links with the household

(Do not fill Marital Status, Education and Occupation for household members under the age of 3.)

S No.	Member Name	Sex	Age	Relationship to Household head	Marital Status	Education	Occupation
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

Sex	Relationship to Household Head		Marital Status	Educational Status	Occupation	
01. Male 02. Female	01. Self 02. Spouse 03. Son 04. Daughter 05. Grand Child	06. Father/mother 07. Brother/sister 08. Daughter in law 09. Son in law 10. Other (specify)	01. Single 02. Married 03. Separated 04. Divorced 05. Widowed	01. Illiterate (can't read/write) 02. Just literate (can read/write) 03. Grade 1 to 5 04. Grade 6 to 10 05. SLC Completed 06. Intermediate 07. University 08. Other (specify)	01. Agriculture/Livestock/Fisheries 02. Wage labour (agriculture) 03. Wage labour (non-agricultural) 04. Business 05. Seasonal migration (outside Nepal) 06. Foreign employment 07. Salaried job (inside Nepal)	08. Unemployed 09. Household work 10. Student 11. Old age/unable to work/disabled 12. Other (specify) _____ _____

Note: A 'household' is defined as all members eating (if kitchen is separate then consider as separate household) and living together under one roof for at least 6 months in the year. Please probe for members that are living away from the house for more than 6 months but still receive money from or send money to members living in the house regularly. They are a part of the household as well. Single person households are to be included.

202. Do any family members have a form of physical or mental disability that limits their participation to household, farm work or reduces their socialisation?

1. Yes 2. No 3. Don't know

203. If yes, is this affecting any of the following? (Select all that apply)

1. Access to water, including time to fetch water, quantity of water collected.	4. Out-migration
2. Farming activities such as type of livestock kept, type of crops grown, area of crop grown, etc.	5. Need for cash to cover health related expenses
3. Participation to grassroots organization	6. Other (Specify)_____

SECTION 3: LAND HOLDING AND TENURE CHARACTERISTICS

301. Do you own any land? 1. Yes 2. No
 302. Do you cultivate any crop? 1. Yes 2. No If no for both 301 and 302 go to 304
 303. Please provide following details about the land you own and/or cultivate at present.

Land parcel #	Area Unit (Katha, Bigha, Ropani, Ana)	Area	Ownership (1 = Own; 2 = Rented-in; 3 = Rented-out)	If rented, Rent (1=share cropping; 2=fixed rent; 3=Others)	Sources of irrigation (1= River/streams, 2 = STW, 3 = DTW, 4 = Pond, 5 = Canal, 6 = Un-irrigated)

304. Have you bought or sold land in the last 10 years? 1. Yes 2. No
 If yes, please fill the table below.

Land bought in last 10 years							Land sold in last 10 years										
A. Area bought	Area unit (bigha/kattha/ ropani)	B. When bought Month/year	C. Sold to		D. Reason for purchase	E. Purchase price per unit	F. Who decided to buy?		A. Area sold	Area unit (bigha/kattha/ropani)	B. When sold Month/year	C. Sold to		D. Reason for sale	E. Selling price per unit	F. Who decided to sell?	
			1. Local Person	2. Family Member			3. Someone outside village	1. Male				2. Female	3. Both			Age	1. Local Person

SECTION 4: LIVING STANDARDS AND ASSET OWNERSHIP

401. How much residential (house) land do you own? _____ Kathha/Ropani/Bigha (Specify)

402. Type of house construction

402a. Wall Construction

1. Cement bonded bricks/stones and concrete 2. Mud-bonded bricks/stones 3. Wood and tree branches 4. Others

402b. Roof Type

1. Concrete 2. Galvanized sheet 3. Tile/slate 4. Straw/thatch 5. Other

403. Does the household have a toilet of its own?

1. Yes 2. No

404. If there is toilet, please specify type.

1. Simple latrine and pit 2. Improved or composting latrine with pit 3. Flush toilet

405. What cook stove does your household mainly use for cooking?

1. LPG/cooking gas stove 2. Biogas stove 3. Solar cooker 4. Three-stone stove or open fire 5. Other

403b. What types of fuel(s) or energy source(s) does this household use for cooking?

1. Alcohol/ethanol	4. Coal/lignite	7. Crop residues/grass/straw/shrubs
2. Gasoline/diesel	5. Charcoal	8. Animal dung/waste
3. Kerosene/paraffin	6. Wood	95. Others

406 Do you have electricity?

1. Yes 2. No

407. What are the main source of lighting in your household?

1. Electricity	5. Biogas lamp	9. Wood;
2. Solar lantern	6. Gasoline (including Kerosene/paraffin) lamp	10. Crop residues/grass/straw/shrubs
3. Flashlight, torch or lantern (battery/rechargeable)	7. Oil lamp	11. Animal dung/waste
4. Candle	8. Charcoal	96. Other

408. Livestock Ownership

Asset type (livestock)	# of units owned	Has this number changed in the last 5 years?	If changed, why?	Who mostly takes care?		Have you sold animal/products last year?	If yes, who sold?	Where do you sell?	Reason for selling	What was the value of the sale of these livestock?	Who decides over use of income?	
				1. Male 2. Female 3. Both	Age						1. Yes 2. No	1. Male 2. Female 3. Both
a. Cows		1. Increased, 2. Decreased 3. No change										
b. Buffaloes												
c. Goats												
d. Pigs												
e. Poultry												
f. Sheep												
g. Horse/donkey												
h. Others												

409. Consumer goods and property Ownership

Asset type (consumer goods and property)	No of units owned	Who owns 1. Male 2. Female 3. Both	Age of the owner	Is there any outstanding debt on this asset?
a. Motorbike				
b. Fridge				
c. TV/Radio				
d. Cell phone				
e. Sewing Machine				
f. Bicycles				
g. Rice cookers				
h. Others				

410. Does the household have a tap of its own?

1. Yes 2. No

411. Please provide the details for sources of drinking water (*List all sources*)

S No.	Source (1. Tap; 2. Hand pump; 3. Pond; 4. River; 5. Spring; 6. Dug well; 7. Tube well ; 8. Self-owned tank/reservoir; 9. Public tank/reservoir; 10. Pipe unattached to tap; 95. Others (_____)	Is water available throughout year	If not, specify the month[s] when water is not available	Walking time from house (minutes) (For Doti: two way distance)	Who usually collects?		Does the person who collect have to wait? If yes, how long?	Why?
		1. Yes 2. No			1. Male; 2. Female; 3. Both	Age	1. Yes 2. No	

412. Source of water for other purposes

Purpose	Source (1. Tap; 2. Hand pump; 3. Pond; 4. River; 5. Spring; 6. Dug well; 7. Tube well ; 8. Self-owned tank/reservoir; 9. Public tank/reservoir; 10. Pipe unattached to tap; 95. Others (_____)											No. of months water is available	Walking time from house (minutes)	Who usually collects?		
	1	2	3	4	5	6	7	8	9	10	11			1. Male; 2. Female; 3. Both	Age	
Livestock																
Homestead vegetable gardening																
Sanitation																
Washing																
Religious use																
Other use (specify)																

SECTION 5. NATURAL RESOURCES THEIR USES AND INVOLVEMENT IN MANAGEMENT

Natural Resources	For water, specify which resource	Household use for private consumption	Household use for income generating	Quality of resource	Has the <i>quantity</i> of the resource changed in the last 5 years?	Has the <i>quality</i> of the resource changed in the last 5 years?	When does use occur? (specify which months)	Even if used for home consumption only, what is the approximate total market value of resource obtained? _____ Rupees
	1. Groundwater 2. River/stream 3. Spring; 4. Tank/reservoir/pond	1. Yes 2. No 99. No Answer	1. Yes 2. No 99. No Answer	1. Excellent 2. Good 3. Fair 4. Below Average 98. Not sure 99. No Answer	1. Changed for worse 2. Stayed the same 3. Changed for better	1. Changed for worse 2. Stayed the same 3. Changed for better		98. Not sure 99. No Answer
Water resources								
Aquaculture (Fish farm)								
Wild fish								
Agriculture/irrigation								
Livestock								
Religious ceremonies			X					
Forest Resources								
Firewood	X							
Timber	X							
Raw Materials (construction or industry)	X							
Fodder/Grazing for Livestock	X							
Medicinal/Food Products	X							
Religious ceremonies	X							
Other	X							
Biodiversity								
Wildlife	X	X	X					
Environment/ecosystem	X	X	X					

502. Are there any local groups/committees involved in natural resources management activities, for example, forest, water or agriculture?

1. Yes (>>503) 2. No (>>505)

503. Are you or any others from your household involved in those groups?

1. Yes (>>1503) 2. No (>>505)

504. Provide following details about the groups you or any others from family involved in.

Particulars	Group 1	Group 2	Group 3	Group 4
Name of user/Management Group				
Year of formation				
When did you become member of this group?				
Who is the member (1=Male, 2 = Female, 3 = Both)				
Age				
If meetings are held, who in your household usually attends meeting of this group? (1=Male, 2 = Female, 3 = Both)				
Age				
Does a member of your household hold a specific position in this group? (Yes/No/ I don't know)				
If yes, which position?				

505. Are you and any from your household involved in any other groups/committees active e.g. women's group, savings group, mothers group)? If yes provide details:

Particulars	Group 1	Group 2	Group 3	Group 4
Name of user/Management Group				
Year of formation				
When did you become member of this group?				
Who is the member (1=Male, 2 = Female, 3 = Both)				
Age				
If meetings are held, who in your household usually attends meeting of this group? (1=Male, 2 = Female, 3 = Both)				
Age				
Does a member of your household hold a specific position in this group? (Yes/No/ I don't know)				
If yes, which position?				

SECTION 6: SOURCE OF IRRIGATION, OWNERSHIP AND USE OF IRRIGATION ASSETS AND AGRICULTURAL EQUIPMENTS

601 What are the sources of irrigation?

Source	Do you irrigate from this source?	Do you pump from this source?	If pumping	If groundwater pumping, specify
	1. Yes 2. No	1. Yes 2. No	1. Private 2. Community 3. Government	1. Shallow tube well 2. Deep tube well 3. Both
River/streams				
Spring				
Canal				
Pond				
Rainfed				
Groundwater				

602. Have you ever installed a tube well in your field?

1. Yes, STW

2. Yes, DTW

3. Yes, Both

4. No

603. Do you use or own any of the irrigation assets?

1. Yes 2. No, if No skip to Q 605

604. If yes, please provide following details on rental/ownership of irrigation assets:

Irrigation assets	Owned equipment				604d Rented from same seller throughout year or multiple sellers? State number of sellers	Rented equipment			
	Number of units owned	Do you rent it to others?	Rented out unit of payment (e.g. cash, share of harvest)	Rate received per unit		Who asks and negotiates with seller?		Rented unit of payment	Rate paid per unit
		1. Yes 2. No				1. Male 2. Female 3. Both	Age		
a. Electric pump set									
b. Diesel pump set									
c. Solar pump set									
a. Others									

605 Do you use any other agricultural equipment?

1. Yes 2. No, if No skip to Section 7.

606 If yes, please provide following details on rental/ownership of other agricultural equipment:

Agricultural equipment	606a Owned equipment		606b Rented equipment		
	Number of units owned	Are any rented to others	Do you rent the equipment from others (please tick)	Who asks the owner to rent?	
1. Yes 2. No		1. Male 2. Female 3. Both		Age	
Thresher					
2-wheel tractor					
4-wheel tractor					
Pick-up Truck					
Micro-irrigation technology (drip system)					
Micro-irrigation technology (sprinkler)					
Other (Oxen ploughs/equipment)					

SECTION 7: DETAILS OF CROP PRODUCTION DURING LAST YEAR

701. Details on cultivation of major crops during monsoon.

Crops	Area	1. Own land, 2. Rented-in land	Type of irrigation (1. Tube well, 2. Canal, 3. Pond, 4. River/streams, 5. Others, 6. Un-irrigated)	Irrigation techniques (1. Flooded, 2. Basin, 3. Furrow, 4. Drip irrigation, 5. Sprinkler, 6. Others (specify))	Production (Kg/Qtl)	Total sale (Kg/Qtl)	Rate (Rs/Kg)

702. Details on cultivation of major crops during winter.

Crops	Area	1. Own land, 2. Rented-in land	Type of irrigation (1. Tube well, 2. Canal, 3. Pond, 4. River/streams, 5. Others, 6. Un-irrigated)	Irrigation techniques (1. Flooded, 2. Basin, 3. Furrow, 4. Drip irrigation, 5. Sprinkler, 6. Others (specify))	Production (Kg/Qtl)	Total sale (Kg/Qtl)	Rate (Rs/Kg)

701. Details on cultivation of major crops during summer.

Crops	Area	1. Own land, 2. Rented-in land	Type of irrigation (1. Tube well, 2. Canal, 3. Pond, 4. River/streams, 5. Others, 6. Un-irrigated)	Irrigation techniques (1. Flooded, 2. Basin, 3. Furrow, 4. Drip irrigation, 5. Sprinkler, 6. Others (specify))	Production (Kg/Qtl)	Total sale (Kg/Qtl)	Rate (Rs/Kg)

SECTION 8: SUPPORT SERVICES [TRAINING ND CREDIT]

801. How many agricultural trainings have you or other household members attended in the last year? _____ who attended (Male/Female/Both) **Age**

802. How many times have you or other household members met an extension officer in the last year? _____ who attended (Male/Female/Both) **Age**

803. In case of tenant farmers: Has landlord visited in the last year?
 1. Yes (>>1204) 2. No (>>806)

804. How many times in the last year did the landlord visit? _____

805. Did the landlord provide any advice about farming practices?
 1. Yes 2. No

806. Have you or anyone else in your household taken a loan in the last year or do you have any outstanding loans?

1. Yes

2. No (>>GO TO SECTION 9)

807. Debt and loans (unpaid)

Source of Loan	Loan amount taken at beginning	Total value of debt to be repaid	Rate of interest	Purpose of loan	Who decided on taking the loan?		In whose name is the loan taken?	
					1. Male 2. Female 3. Both	Age	1. Male 2. Female 3. Both	Age
A. Loan taken from trader as advance payment for crops								
B. Loan taken for irrigation structure (eg. for a tubewell)								
C. Other private lender (eg. Landlord)								
D. Family Member								
E. Bank								
F. Micro-credit bank								
G. Saving groups								

SECTION 9: INCOME AND EXPENSES

901. What is the total value of income generated by household members over the past 12 months from the following activities?

Check box if applicable	Income Type	Amount (Rs)	Decision to use this income		Check box if applicable	Income Type	Amount (Rs)	Decision to use this income	
			Who (code below)	Age				Who (code below)	Age
1 <input type="checkbox"/>	Wage income (from skilled salaried income)				6 <input type="checkbox"/>	Micro-enterprise/Business			
2 <input type="checkbox"/>	Crop product sales				7 <input type="checkbox"/>	Pension/Cash transfers from government schemes			
3 <input type="checkbox"/>	Livestock Sales				8 <input type="checkbox"/>	Remittances from migrants			
4 <input type="checkbox"/>	Rental income from house, land or commercial estate				9 <input type="checkbox"/>	Gifts from neighbors/friends/relatives			
5 <input type="checkbox"/>	Rental income from agricultural assets (animals, tractor, thresher, other machinery)				10 <input type="checkbox"/>	Others: please state			

Code: 1. Self 2. Spouse 3. Household head 4. Other male member of the household 5. Other female member of the household

902. If income from labor sources in last year, provide details.

Member involved in labor work	Gender 1. Male 2. Female 3. Both	Age	Agricultural Labour: On other's farm				Factory Labour				Other off-farm labour				
			A. Daily wages	B. Total number of months	C. Approx. number of days worked per month	D. Approx. annual income	A. Daily wages	B. Total number of months	C. Approx. number of days worked per month	D. Approx. annual income	A. Type of labour (please state) _____	B. Daily wages	C. Total number of months	D. Approx. number of days worked per month	E. Approx. annual income

903 Are any household members working outside of this village as permanent or seasonal migrants?

1. Yes 2. No

904. Details of migrant members, if any.

Migrant member	Gender (1. Male, 2. Female, 3. Both)	Age	Type of migration 1. Permanent 2. Seasonal	Duration of migration (in months)	Location of the migrant	Purpose of migration	Educational status of migrant	Daily Wage /Salary (NPRs)

Code for purpose of migration 1. Agricultural labour 2. Unskilled factory work 3. Unskilled construction work	4. Other unskilled 5. Skilled work (e.g. plumber, electrician, mason) 6. Small business	7. Military/Police service 8. Security guard 9. Others _____
--	---	--

905. Remittances received from migrant members

How often your household receives remittances? (Monthly, every six months, every year)	In whose name is the remittance generally sent in?		Who generally decides over the use of the cash remittances?		How were remittances to this household spent during the last year? [Rank from most to least]
	1. Male; 2. Female; 3. Both	Age	1. Male; 2. Female; 3. Both	Age	
					Consumption expenses
					Housing expenses
					Health expenses
					Children's education
					Pay off debt
					Buy land
					Buy or build a house
					Buy or expand a business
					Buy agricultural land
					Buy agricultural tools and/or equipment
					Buy livestock
					Buy a consumer durable
					Savings
					Buy agricultural inputs
					Other

906. In the last year, did your household spend on any of the following?

If respondent cannot recall only then list from options below: 1 Less than Rs 1000 2 Rs. 1000 - 5000	S.No.	Expense	Amount spent
	1	Household appliances or durable goods (such as mobile phone, TV, radio, fan etc.)	
	2	Agricultural equipment (e.g. tractor)	
	3	Irrigation (pumps, tubewells)	

3	Rs. 5000 – 10,000	4	Purchasing animals	
4	Rs. 10,000 – 20,000	5	House maintenance/improvement	
5	Rs 20,000-50,000	6	Wedding/saving for wedding	
6	50,000 – 1 lakh	7	Healthcare/medical	
7	More than 1 lakh	8	Clothing and jewellery	
		9	Food items	
		10	Education (School fees, Tuition)	
		11	Fuel	
		12	Agricultural Inputs (Labor inc. draught animal, fertilizers, pesticides, seeds)	
		13	Flight tickets	
		14	Funeral	
		15	Others	
			Total annual expenses	

907. How much the household saved in the last year? Provide details if any saving.

Savings in	Amount saved last year (NPRs)
Commercial Bank	
Finance Company	
Community Savings Groups	
Others (<i>Specify</i>)	

SECTION 10: SHOCKS AND ADAPTATION STRATEGIES

1001. Has your household experienced any of the following shocks in the last 5 years? 1. Yes 2. No		If yes, number of times shock was experienced in the last 5 years	1002. How severe was the impact for your household? 1. Mild 2. Moderate 3. Severe	1003. Response to shock (More than one answer is possible. Note in order of importance) [Insert code]	1004. Did the shock result in loss of income? 1. Yes 2. No
Shock	Y/N				
i.	Drought (Amount of rain during growing season was significant below normal or deviated from expected period)				
ii.	Untimely rains (Rain arrived too early or too late, affecting sowing, planting or harvest operations)				
iii.	Irregular weather				
iv.	Hailstorm				
v.	Flood (Heavy rains causing flooding situation in the fields)				
vi.	Animal disease				
vii.	Serious pest damage to crops				
viii.	Market shock (e.g. collapse in prices)				
ix.	Any others (please specify) _____				

Code for 1003

Response to Shock	Code
Did Nothing	1
Left land fallow	2
Sold part of land	3
Leased out part of land	4
Sold livestock (cows, buffalos)	5
Provided supplemental irrigation	6
Changed cropping pattern	7
Followed improved crop production practices	8

Response to Shock	Code
Borrowed money from relatives/others	9
Drew down savings	10
Reduced food consumption	11
Shifted to non-farm employment	12
Reduction in education level of the children	13
Out migration to cities	14
Use of pesticides	15
Any other, namely:	16

1005. Did you receive any sort of assistance in response to dealing with the shocks mentioned above?

1. Yes (>>1006) 2. No (>>SECTION 11)

1006. If yes, who provided the assistance?

Organization/Person	Type of assistance provided	When did you receive this assistance?
	1. Cash (amount) 2. Food 3. Advice 4. Others	1. Immediately after disaster event 2. Within a week 3. Within a month; 4. Within 6 months 5. After a year
a. Government support		
Central government agency (DADO, DOI, DWIDP, etc)		
DDC		
VDC		
b. Relief agency / NGO		
c. Saving group		
d. Community/Social group		
e. Others in community (family/neighbours/friends/leader etc)		
f. Landlord		
g. Extended family outside the village		
h. Others (specify)		
i. Don't know		

Thank you for your time. We appreciate all your replies. Do you have any general comments about this study and the questionnaire? Have we missed anything important in this survey that would help us better understand your work?

INTERVIEWER: Please record any interesting anecdotal information you may have received during this interview below

SECTION 11: Only for Enumerators

1. Was the person who answered the questions irritated or nervous during the interview?

1. Yes 2. No

2. How would you rate the overall quality of the interview?

1. Good 2. Fair 3. Poor

3. How many people were listening when you conducted this interview with the respondent?

- a. Other family members: _____ b. Non-family members: _____ c. None

---THE END---