

## PART-V

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# SURVEY QUESTIONNAIRE

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# PILOT AGRICULTURE INTEGRATED SURVEY 2019, CHITWAN

## CORE MODULE

1. ENUMERATION DETAILS									
Form Number									
1.1	Province								
1.2	District								
1.3	Local Level								
1.4	Ward Number								
1.5	Village/Tole Name								
1.6	Enumeration Area Control Number								
1.7	Agriculture Holding serial Number								
1.8	GPS code of Agriculture holding								
1.9	Holder/ entrepreneurs name							For registered only → 2.1.1	
1.10	Sex		1	Male	2	Female			
1.11	contact number								
1.12	Respondent								
1.13	Relation to Head of Agriculture Holding <input type="radio"/> Himself a Head of Holding <input type="radio"/> Manager <input type="radio"/> Employee Household <input type="radio"/> Member → 2.3.1								
Enumerator Name.....					Signature of Enumerator.....				
Date of Enumeration.....									
Supervisor Name					Signature of Supervisor.....				
.....									
Date of Supervision.....									

## SECTION 2: THE HOLDING

### PART 2.1 GENERAL INFORMATION

- 2.1.1 Place of Registration (Fill in all that apply)
- ☐ District Agriculture Office/Agriculture Knowledge Center
  - ☐ District Livestock Office/ District livestock Service Office
  - ☐ Company Registered Office
  - ☐ Local body (VDC/NP/M/RM)
  - ☐ Cottage and Small Industry Development Committee
  - ☐ Others
- 2.1.2 What is the status of the holding? Ask only for commercial agriculture holding
- ☐ Personal
  - ☐ Partnership
  - ☐ Public Limited
  - ☐ Private Limited
  - ☐ government
  - ☐ Others

### PART 2.2 CHARACTERISTICS OF THE REGISTERED HOLDING

- 2.2.1 Name of operators
- 2.2.2 What is the number of persons participating in the capital of the company?
- 2.2.3 Who is the manager of this holding / company?
- ☐ Operator own → 2.2.5
  - ☐ Manager
- 2.2.4 Name of Operator/ Manager
- 2.2.5 Contact number (preferably cell phone)
- 2.2.6 Email
- 2.2.7 Sex
- ☐ Male
  - ☐ Female
- 2.2.8 Age in completed years
- 2.2.9 Highest level of education completed
- ☐ Illiterate
  - ☐ Less than primary
  - ☐ Basic education (1 to 8 class)
  - ☐ Secondary level (9 to 12 class)
  - ☐ Upper secondary/ University education
- 2.2.10 Share of working time spent working on the holding
- ☐ Less than half ( < 40 %)
  - ☐ About half (40%-59%)
  - ☐ Most/almost all (60%-99%)
  - ☐ All (100%)
- 2.2.11 Does the Manager have another gainful activity outside of the holding? (If operator own)
- ☐ No
  - ☐ Yes

## PART 2.3: AGRICULTURAL ACTIVITY

- 2.3.1 What is the operational status of the holding? *Ask only for Individual agriculture holding*
- ☐ Single-holding household
  - ☐ Multi-holding household
  - ☐ Partnership of two or more households
- 2.3.2 Does the holding record its agricultural activity or finances on registers or logbooks?
- ☐ No, never → 2.3.4
  - ☐ Yes, only occasionally or partially
  - ☐ Yes, systematically
- 2.3.3 What information is systematically registered? *(Fill in all that apply)*
- ☐ Area cultivated/harvested
  - ☐ Crop production
  - ☐ Livestock production
  - ☐ Unit prices, amounts sold and total sales by product
  - ☐ Input quantities used (seeds, fertilizers, plant protection products, etc.)
  - ☐ Detailed quantities and prices of inputs bought
  - ☐ Workers' time
  - ☐ Workers' payment
  - ☐ Other
- 2.3.4 From an economic perspective, what is the holding's main agricultural focus for the reference period?
- ☐ Mainly crop production
  - ☐ Mainly livestock production → 2.3.6
  - ☐ Fish farming → 2.3.7
  - ☐ Bee Keeping → 2.3.8
  - ☐ Mushroom → 2.3.8
  - ☐ Floriculture → 2.3.8
  - ☐ Silkworm → 2.3.8
- 2.3.5 From an economic perspective, what is the main cropping activity?
- ☐ Production of Cereal Crops
  - ☐ Production of Pulses
  - ☐ Production of Tubers
  - ☐ Production of Oilseeds
  - ☐ Production of Cash Crops
  - ☐ Production of Spices
  - ☐ Production Vegetable crops
  - ☐ Production of Fodder grass
  - ☐ Production of Fruits → 2.3.8
- 2.3.6 From an economic perspective, what is the main livestock activity?
- ☐ Raising livestock for meat (Buffalo, sheep, goats, pigs, etc.)
  - ☐ Raising birds for meat (poultry)
  - ☐ Production of eggs
  - ☐ Production of milk → 2.3.8

- 2.3.7 From an economic perspective, what is the main fishery activity?
- ☐ nursery raising
  - ☐ Fishery for fish production
- 2.3.8 What is the main intended destination of your agricultural production?
- ☐ Producing primarily for sale (selling 90% or more)
  - ☐ Producing mainly for sale, with some own consumption (selling more than 50% and up to 90%)
  - ☐ Producing mainly for own consumption, with some sales (selling more than 10% and up to 50%)
  - ☐ Producing primarily for own consumption (selling 10% or less)

PART 2.4 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE HOUSEHOLDS OF THE HOLDER													
2.4.1 Information of the household member												Male	Female
Number of usual family member													
Absentees(outside the country)													
Absentees(with in a country)													
Serial No.	Name of the member of the household(Write the name of holder, household head and other members serially)	Sex 1 Male 2 Female	Age (Years Completed)	Relationship to Head of holding	Marital Status	Education (Only for 5 years and Older)	Did [NAME] attend school during the current/last school year? (For age 5 to 40 years) 1 Yes 2 No	Occupation (Only for 10 years and older)	Has [NAME] ever received any formal training on agriculture? (Age greater than 15 years) 1 Yes 2 No	Does [NAME] participate in decisions concerning crops and livestock (Age greater than 15 years) 1 Yes 2 No	How much time does [NAME] spend working on the holding in the reference period? 1. Less than half (<40%) 2. About half (40%-59%) 3. Most (60%-99%) 4. All (100%)	Does the [NAME] have another gainful activity outside of the holding? (Only for 10 years and older) 1 Yes 2 No → Secion 3	What is the another gainful activity of [NAME] outside the holding? (Write code)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Name of the holder												
2													
3													
4													
5													
<b>Education Code</b> 1 Illiterate 2 Less than primary 3 Basic education (1 to 8 class) 4 Secondary level (9 to 12 class) 5 Upper secondary/ University education				<b>Marital Status Code</b> 1 Never Married 2 Single Married 3 Poly Married 4 Re-Married 5 Widow/Widower 6 Divorced		<b>Relationship Code</b> 1 Household Head 2 Spouse 3 Son/Daughter-in-law 4 Daughter/Son-in-law 5 Parent 6 Sibling 7 Grandchild 8 Household Worker 9 Other			<b>Occupation Code</b> 1 Armed forces occupations 2 Managers 3 Professionals 4 Technicians and associate professionals 5 Clerical support workers 6 Service and sales workers 7 Skilled agricultural, forestry and fishery workers 8 Craft and related trades workers 9 Plant and machine operators, and assemblers 10 Unskilled worker at elementary occupations 11 Household chores 12 Student				

## SECTION 3: CROP PRODUCTION DURING THE REFERENCE PERIOD

### PART 3.1: LAND TENURE AND AREA UTILIZED

UNIT OF AREA

BIGHA 1 ROPANI 2

- 3.1.1 What is the tenure and area of the agricultural land used by the holding during the reference period?

S.N.	Types of Land Tenure	B/R	K/A	D/P
1	Owned or owner-like possession			
2	Rented based on agreed sum of Money			
3	Rented based on agreed Quantity Produced			
4	Rented based on share of Produce			
5	Rented based on exchange for Service			
6	Other rented agreement			
7	Other type of land tenure			

- 3.1.2 What was the area used for the following agricultural purposes?

S.N.	Agricultural area utilized	B/R	K/A	D/P
1	Temporary crops(outside greenhouse)			
2	Temporary crops under greenhouses			
3	Temporary fallow			
4	Temporary meadows and pastures			
5	Permanent crops			
6	Permanent Fallow			
7	Other type of area used for Agriculture			

- 3.1.3 What was the area of the holding used for other purposes than crop production?

S.N.	Area Utilized	B/R	K/A	D/P
1	Farm buildings, Kitchen gardens and backyards			
2	Forest and other wooded land			
3	Aquaculture on the holding			
4	Other land (unutilised, rocks, wetlands, etc.)			

- 3.1.4 Does this holding have agricultural lands registered under a woman's name?

Yes

No → 3.1.6

- 3.1.5 Total area under Women's name?

B/R	K/A	D/P	No. of women with land ownership

- 3.1.6 Was any agricultural land affected by disasters during the reference period?

Yes

No → 3.2.1

3.1.7 Area of agricultural land affected by disasters during the reference period.

S.N.	Type	B/R	K/A	D/P
1	Physical			
2	Chemical			

## PART 3.2: TEMPORARY CROP PRODUCTION AND DESTINATIONS

3.2.1 Did the holding grow temporary crops during the reference period, whatever the production or destination?

- ☐ Yes  
☐ No → 3.3.1

3.2.2 Provide the information about name of the temporary crop, area and production for the reference period.

Parcel No	Name of Parcel	Name of Crop	Sown/cultivated area			Crop harvested area			Quantity of production (KG)
			B/R	K/A	D/P	B/R	K/A	D/P	

3.2.3 How was the production of [CROP] compared to the same harvest of the previous year?

- ☐ Similar → 3.2.5  
☐ Greater → 3.2.5  
☐ Lower  
☐ Not applicable → 3.2.5

3.2.4 How much [CROP] was lost due to disasters was lost as compared to the previous year?

3.2.5 What were the by-products produced on the holding during the reference period [CROP]?

S.N.	Name of by- product	Quantity of Production (KG)	Quantity sold (KG)
१			
२			
३			

3.2.6 Answer the following questions about the destinations of the holding's production [CROP] during the reference period.

- ☐ Quantity of [CROP] for own use  
☐ Quantity of [CROP] sold  
☐ Quantity of [CROP] for animal feeding  
☐ Quantity of [CROP] used as pay for labour as wages  KG  
☐ Quantity of [CROP] given to service or input providers  KG

- 3.2.7 Did the holding have a stock of [CROP] stored during reference year?
- ☐ Yes (KG)
- ☐ No
- 3.2.8 Report the stock stored on the holding and off of the holding during the reference period.
- ☐ Quantity of [CROP] stored on the holding
- ☐ Quantity of [CROP] stored at a location off of the holding
- ☐ Quantity of [CROP] stored as seed
- ☐ Quantity of [CROP] lost in post-harvest handling
- ☐ Quantity of [CROP] lost due to disasters
- 3.2.9 Quantity of chemical fertilizers used on [CROP] During the reference period
- ☐ Uria(KG)
- ☐ D.A.P(KG)
- ☐ Potash(KG)
- ☐ Others(KG)
- 3.2.10 What were the main reason for not using the chemical fertilizers during the reference period.
- ☐ Too expensive
- ☐ Not available
- ☐ Not necessary
- ☐ Other
- 3.2.11 Quantity of organic fertilizers used on [CROP] During the reference period
- ☐ Quantity produced on the holding (KG)
- ☐ Quantity of organic fertilizers that was purchased(KG)
- ☐ Quantity of organic fertilizers that was exchanged for goods and/or services(KG)
- 3.2.12 What were the main reason for not using the organic fertilizers during the reference period.
- ☐ Too expensive
- ☐ Not available
- ☐ Not necessary
- ☐ Other
- 3.2.13 Were plant protection products used on [CROP] during reference period?
- ☐ Yes
- ☐ No
- 3.2.14 What percentage of [CROP] area was irrigated during the reference year?
- 3.2.15 Was [CROP] cultivated together with other crops (at the same time in the same parcel)?
- ☐ No
- ☐ Yes, for all of the crop
- ☐ Yes, for a part of the crop
- 3.2.16 Answer the following questions about the type of seeds used for [CROP] during the reference period.
- ☐ How many varieties of [TEMPORARY CROP] were planted on the holding?
- ☐ Quantity of the [TEMPORARY CROP] seed consisted in improved varieties
- KG

- ☐ Quantity of the [TEMPORARY CROP] seed consisted in hybrid varieties  
☐ Quantity of the [TEMPORARY CROP] seed consisted in local varieties  
 3.2.17 Report the Quantity of source of local seeds of [TEMPORARY CROP].  
☐ Quantity produced on the holding (KG)  
☐ Quantity obtained at exchanges within the community  
☐ Quantity purchased from local market  
☐ Quantity purchased from seed company  
☐ Quantity received as a subsidy  
 3.2.18 Were the traditional seeds of [TEMPORARY CROP] adapted to local conditions and stresses?  
☐ No  
☐ Yes  
☐ Not known  
 3.2.19 Does the holding have a marketing contract for [CROP]?  
☐ Yes  
☐ No  
 → 3.3.1  
 3.2.20 how much percentage of crop grown by holding is cover by marketing contract?  
 (Note: Repeat the questions for all temporary crops listed in 3.2.2).

### PART 3.3: PERMANENT CROP PRODUCTION AND DESTINATIONS

- 3.3.1 Did the holding grow permanent crops during the reference period?  
☐ No → 4.1.1  
☐ Yes  
 3.3.2 Provide the information about name of the permanent crop, area and production for the reference period.

S.N.	Parcel Number	Name of Crop	Crop plantations with homogeneous plot								No. of scattered trees		Production Quantity (KG)	If 0 in column 8,9 and 11 →3.3.7
			Trees plantation area				Area in Production				Trees in production	Trees not in production		
B/R	K/A	D/P	No.of trees	B/R	K/A	D/P	No.of trees							
1	2	3	4	5	6	7	8	9	10	11				

- 3.3.3 Answer the following questions about the destinations of the holding's production OF MAJOR CROPS during the reference period.  
☐ quantity of [CROP] for own use  
☐ quantity of [CROP] sold  
☐ quantity of [CROP] for animal feeding  
☐ quantity of [CROP] used as pay for labour as wages  
☐ quantity of [CROP] given to service or input providers

3.3.4 Report the stock stored on the holding and off of the holding during the reference period.

- ☐ Quantity of [CROP] stored on the holding
- ☐ Quantity of [CROP] stored at a location off of the holding
- ☐ Quantity of [CROP] lost in post-harvest handling?
- ☐ Quantity of [CROP] lost due to disasters

3.3.5 How was the production of [CROP] compared to the same harvest of the previous year?

- ☐ Similar → 3.3.7
- ☐ Greater → 3.3.7
- ☐ Lower

3.3.6 How much [CROP] was lost due to disasters was lost as compared to the previous year?

kg.

3.3.7 What were the by-products produced on the holding during the reference period [CROP]?

S.N.	Name of by- product	Production Qunatity (KG)	Sold Quantity (KG)
1			
2			
3			

3.3.8 Quantity of chemical fertilizers used on [CROP] During the reference period

- ☐ Uria(KG)
- ☐ D.A.P(KG)
- ☐ Potash(KG)
- ☐ Others(KG)

3.3.9 What were the main reason for not using the chemical fertilizers during the reference period.

- ☐ Too expensive
- ☐ Not available
- ☐ Not necessary
- ☐ Other

3.3.10 Quantity of organic fertilizers used on [CROP] During the reference period

- ☐ Quantity produced on the holding (KG)
- ☐ Quantity of organic fertilizers that was purchased(KG)
- ☐ Quantity of organic fertilizers that was exchanged for goods and/or services (KG)

3.3.11 What were the main reason for not using the organic fertilizers during the reference period.

- ☐ Too expensive
- ☐ Not available
- ☐ Not necessary
- ☐ Other (specify

3.3.12 Were plant protection products used on [CROP] during reference period?

- ☐ Yes

- ☐ No
- 3.3.13 What percentage of [CROP] area was irrigated during the reference period?
- 3.3.14 Was [CROP] cultivated together with other crops (at the same time in the same parcel)?
- ☐ No
- ☐ Yes, for all of the crop
- ☐ Yes, for a part of the crop
- 3.3.15 Does the holding have a marketing contract for [CROP]?
- ☐ Yes
- ☐ No → 4.4.1
- 3.3.16 how much percentage of crop grown by holding is cover by marketing contract?
- (Note: Repeat the questions for all permanent crops listed in 3.3.2).

## SECTION 4: LIVESTOCK PRODUCTION DURING THE REFERENCE PERIOD

### PART 4.1: RAISING ACTIVITIES AND PRODUCTION

- 4.1.1 Are/Were livestock raised on the holding during the reference period/enumeration day?
- ☐ Cattle
- ☐ Buffalo
- ☐ Sheep
- ☐ Goats
- ☐ Pig
- ☐ poultry
- ☐ Others (Bee, Fishery)
- ☐ None of above
- 4.1.2 Do you register the main events about the livestock you raise (births, sales, production, etc.)?
- ☐ Yes
- ☐ No
- 4.1.3 CATTLE
- 4.1.3.1 Were cattle raised on the holding during the reference period?
- ☐ Yes, in the reference period
- ☐ Yes, in the enumeration day
- ☐ No → 4.1.4.1

#### 4.1.3.2 Provide the information of Cattle raised on the holding.

S.N.	Cattle raised on the holding			Number of cattle as of enumerator day			Number of birth during reference period	Number of death animals during reference period		Number of animals purchased during reference period	Number of animals sold during reference period	Number of animals received in full subsidies or free of cost
				Total	Local	Improved		Death from natural causes	Death from disasters			
1	2			3	4	5	6	7	8	9	10	11
	Cattle	Less than one year	M calf									
			F calf									
		Over one year and less than three years	M calf									
			F calf									
		Over three years or three years	Ox									
			Milking cow									
			Non milking cow									

#### 4.1.3.3 Number of cows with different breeds and milk production

Name of animal	S.N.	Varities	Number	Number of cows in lactation	Do you allow calves to succle directly from a cow? Yes 1 No 2	Daily average milk production per animal per day	Lactation period (month)
1	2	3	4	5	6	7	8
Cow	1	Local					
	2	Jersy					
	3	Holstein Fishian					
	4	Others (improved)					

- 4.1.3.4 Report the share of milk used in the following ways during the week of enumerator day.
- ☐ Own use for human consumption  liter
  - ☐ Sold as raw milk  liter
  - ☐ Processed on the holding into milk products  liter
  - ☐ Given to young animals  liter
  - ☐ Destroyed by disasters  liter
  - ☐ Other (specify  liter
- 4.1.3.5 If the share of raw milk sold is greater than 0%, price per liter RS.
- 4.1.3.6 Did the holding have a marketing contract for the milk production of cattle in the reference period?
- ☐ Yes
  - ☐ No → 4.1.3.8
- 4.1.3.7 What percentage of milk production was covered by marketing contract in the reference year?
- 4.1.3.8 Number of male cattle used for traction or draught purposes during reference period
- 4.1.3.9 What was the major feeding practices for the cattle during the reference period?
- ☐ Only grazing
  - ☐ Mainly straw/green grass /silage, with some feeding
  - ☐ Mainly feeding, with some straw/green grass /silage
  - ☐ Only feeding
- 4.1.3.10 What was the sources of feed used during the reference period?
- ☐ Produced on the holding
  - ☐ Common pasture
  - ☐ Purchased
  - ☐ Exchanged
- 4.1.3.11 What was the main type of animal housing system that was used for cattle on the holding during the reference period?
- ☐ Managed
  - ☐ Semi managed
  - ☐ Unmanaged
- 4.1.4 BUFFALOES
- 4.1.4.1 Were buffalo raised on the holding during the reference period?
- ☐ Yes, in the reference period
  - ☐ Yes, in the enumerator day
  - ☐ No → 4.1.5.1

4.1.4.2 Provide the information of Buffalo raised on the holding.

S.N.	Buffalo raised on the holding		Number of buffalo as of enumerator day			Number of birth during reference period	Number of death animals during reference period		Number of animals purchased during reference period	Number of animals sold during reference period	Number of animals received in full subsidies or free of cost
			Total	Local	Improved		Death from natural causes	Death from disasters			
1	2		3	4	5	6	7	8	9	10	11
	Buffalo	Less than one year	M calf								
			F calf								
		Over one year and less than three years	M calf								
			F calf								
		Over three years or three years	M buffalo								
			Milking buffalo								
			Non milking buffalo								

4.1.4.3 Number of buffalos with different breeds and milk production

Name of animal	S.N.	Varities	Number	Number of cows in lactation	Do you allow calves to succle directly from a cow? Yes 1 No 2	Daily average milk production per animal per day	Lactation period (month)
1	2	3	4	5	6	7	8
Buffalo	1	Local					
	2	Murrah					
	3	Murrah cross					
	4	Nili-ravi					
	5	Others (improved)					

4.1.4.4 Report the share of milk used in the following ways during the week of enumerator day.

- ☐ Own use for human consumption  Liter  
☐ Sold as raw milk  Liter  
☐ Processed on the holding into milk products  Liter  
☐ Given to young animals  Liter  
☐ Destroyed by disasters  Liter  
☐ Other (specify)  Liter

4.1.4.5 If the share of raw milk sold is greater than 0%, price per liter RS.

- 4.1.4.6 Were any buffalo slaughtered for meat on the holding during the reference period?
- ☐ Yes
- ☐ No → 4.1.4.12
- 4.1.4.7 Give the information about buffalo slaughtered on the holding during the reference period.
- ☐ Number of buffalos slaughtered
- ☐ Total carcass weight obtained (KG)
- 4.1.4.8 Report the Quantity of buffalos meat used in the following ways during the reference period- slaughtered on the holding.
- ☐ Quantity of meat for own use(KG)
- ☐ Quantity of meat sold(KG)
- ☐ Quantity of meat given to service or input providers (KG)
- ☐ Destroyed stored meat by disasters(KG)
- 4.1.4.9 If the quantity of meat sold is greater than 0 KG, price per KG (RS).
- 4.1.4.10 Did the holding have a marketing contract for the milk and meat production of Buffalo in the reference period?
- ☐ Yes, for meat
- ☐ Yes, for milk
- ☐ No → 4.1.4.12
- 4.1.4.11 What percentage of milk and meat production was covered by marketing contract in the reference year?  %
- 4.1.4.12 Number of male buffalos used for traction or draught purposes during reference period
- 4.1.4.13 What was the major feeding practices for the buffalo during the reference period?
- ☐ Only grazing
- ☐ Mainly straw/green grass /silage, with some feeding
- ☐ Mainly feeding, with some straw/green grass /silage
- ☐ Only feeding
- 4.1.4.14 What was the sources of feed used during the reference period?
- ☐ Produced on the holding
- ☐ Common pasture
- ☐ Purchased
- ☐ Exchanged
- 4.1.4.15 What was the main type of animal housing system that was used for cattle on the holding during the reference period?
- ☐ Managed
- ☐ Semi managed
- ☐ Unmanaged

## 4.1.5 SHEEP

- 4.1.5.1 Were sheep raised on the holding during the reference period?
- ☐ Yes, in the reference period
- ☐ Yes, in the enumerator day
- ☐ No → 4.1.6.1

4.1.5.2 Provide the information of sheep raised on the holding.

S.N.	Sheep raised on the holding		Number of sheep as of enumerator day			Number of birth during reference period	Number of death animals during reference period		Number of animals purchased during reference period	Number of animals sold during reference period	Number of animals received in full subsidies or free of cost
			Total	Local	Improved		Death from natural causes	Death from disasters			
1	2		3	4	5	6	7	8	9	10	11
	Sheep	Less than 6 month	M lamb								
			F lamb								
		6 month or More than 6 month	Ram								
			Ewe								

1.5.3 Were any sheep slaughtered for meat on the holding during the reference period?

☐ Yes

☐ No → 4.1.5.7

4.1.5.4 Give the information about sheep slaughtered on the holding during the reference period.

☐ Number of sheep slaughtered

☐ Total carcass weight obtained (KG)

4.1.5.5 Report the Quantity of sheep meat used in the following ways during the reference period- slaughtered on the holding.

☐ Quantity of meat for own use(KG)

☐ Quantity of meat sold(KG)

4.1.5.6 If the quantity of meat sold is greater than 0 KG, price per KG (RS).

4.1.5.7 Report the Quantity of sheep's wool used in the following ways during the reference period- slaughtered on the holding.

☐ Quantity of raw wool produced(KG)

☐ Quantity of raw wool sold(KG)

☐ Quantity of stored raw wool destroyed by disasters(KG)

4.1.5.8 If the quantity of wool sold is greater than 0 KG, price per KG (RS).

4.1.5.9 Did the holding have a marketing contract for the meat and wool production of sheep in the reference period?

☐ Yes, for meat

☐ Yes, for wool

☐ No → 4.1.5.11

4.1.5.10 What percentage of meat and wool production was covered by marketing contract in the reference year?  %

4.1.5.11 What was the major feeding practices for the sheep during the reference period?

- ☐ Only grazing
- ☐ Mainly straw/green grass /silage, with some feeding
- ☐ Mainly feeding, with some straw/green grass /silage
- ☐ Only feeding

4.1.5.12 What was the sources of feed used during the reference period?

- ☐ Produced on the holding
- ☐ Common pasture
- ☐ Purchased
- ☐ Exchanged

4.1.5.13 What was the main type of animal housing system that was used for small ruminants on the holding during the reference period?

- ☐ Open
- ☐ Traditional barns or buildings
- ☐ Shelter
- ☐ Other (specify

## 4.1.6 GOATS

4.1.6.1 Were goat raised on the holding during the reference period?

- ☐ Yes, in the reference period
- ☐ Yes, in the enumerator day
- ☐ No → 4.1.7.1

4.1.6.2 Provide the information of goats raised on the holding.

S.N.	Goat raised on the holding			Number of goat as of enumerator day			Number of birth during reference period	Number of death animals during reference period		Number of animals purchased during reference period	Number of animals sold during reference period	Number of animals received in full subsidies or free of cost
				Total	Local	Improved		Death from natural causes	Death from disasters			
1	2			3	4	5	6	7	8	9	10	11
	Goat/ Mountain goat	Less than 6 month	M kid									
			F kid									
		6 month or more than 6 month	He goat									
			She goat									

4.1.6.3 Were any goat slaughtered for meat on the holding during the reference period?

- ☐ Yes
- ☐ No → 4.1.6.9

4.1.6.4 Give the information about goat slaughtered on the holding during the reference period.

- ☐ Number of goat slaughtered  (KG)
- ☐ Total carcass weight obtained  (KG)

4.1.6.5 Report the Quantity of goat meat used in the following ways during the reference period-  
slaughtered on the holding.

- ☐ Quantity of meat for own use(KG)
- ☐ Quantity of meat sold(KG)
- ☐ Quantity of meat given to service or input providers(KG)
- ☐ Destroyed stored meat by disasters(KG)

4.1.6.6 If the quantity of meat sold is greater than 0 KG, price per KG (RS).

4.1.6.7 Did the holding have a marketing contract for the meat production of goat in the reference period?

- ☐ Yes
- ☐ No

→ 4.1.6.9

4.1.6.8 What percentage of meat production was covered by marketing contract in the reference year?

4.1.6.9 What was the major feeding practices for the goat during the reference period?

- ☐ Only grazing
- ☐ Mainly straw/green grass /silage, with some feeding
- ☐ Mainly feeding, with some straw/green grass /silage
- ☐ Only feeding

4.1.6.10 What was the sources of feed used during the reference period?

- ☐ Produced on the holding
- ☐ Common pasture
- ☐ Purchased
- ☐ Exchanged

4.1.6.11 What was the main type of animal housing system that was used for small ruminants on the holding during the reference period?

- ☐ Open
- ☐ Traditional barns or buildings
- ☐ Shelter
- ☐ Other (specify

4.1.6.12 Was separate type of animal housing system was used for male goat which were matured for reproduction?

- ☐ Yes
- ☐ No

## 4.1.7 PIGS

4.1.7.1 Were pig raised on the holding during the reference period?

- ☐ Yes, in the reference period  
☐ Yes, in the enumerator day  
☐ No → 4.2.1

4.1.7.2 Provide the information of pig raised on the holding.

S.N.	Pig raised on the holding		Number of pig as of enumerator day			Number of birth during reference period	Number of death animals during reference period		Number of animals purchased during reference period	Number of animals sold during reference period	Number of animals received in full subsidies or free of cost
			Total	Local	Improved		Death from natural causes	Death from disasters			
1	2		3	4	5	6	7	8	9	10	11
	Pig	Less than 6 month									
		6 month or more than 6 month									

4.1.7.3 Were any pig slaughtered for meat on the holding during the reference period?

- ☐ Yes  
☐ No → 4.1.7.9

4.1.7.4 Give the information about pig slaughtered on the holding during the reference period.

- ☐ Number of pig slaughtered   
☐ Total carcass weight obtained (KG)

4.1.7.5 Report the Quantity of pigs meat used in the following ways during the reference period-slaughtered on the holding.

- ☐ Quantity of meat for own use(KG)   
☐ Quantity of meat sold(KG)   
☐ Quantity of meat given to service or input providers(KG)   
☐ Destroyed stored meat by disasters(KG)

4.1.7.6 If the quantity of meat sold is greater than 0 KG, price per KG (RS).

4.1.7.7 Did the holding have a marketing contract for the meat and wool production of pig in the reference period?

- ☐ Yes  
☐ No → 4.1.7.9

4.1.7.8 What percentage of meat production was covered by marketing contract in the reference year?  %

4.1.7.9 What was the major feeding practices for the pig during the reference period?

- ☐ Forages, including roughages  
☐ Crops and agro-industrial by-products  
☐ Swill and household wastes  
☐ Mainly grazing, with some feeding

4.1.7.10 What was the sources of feed used during the reference period?

- ☐ Produced on the holding
- ☐ Common pasture
- ☐ Purchased
- ☐ Exchanged

4.1.7.11 What was the main type of animal housing system that was used for pig on the holding during the reference period?

- ☐ Managed
- ☐ Semi managed
- ☐ Unmanaged

## 4.2 POULTRY

4.2.1 Were poultry raised on the holding during the reference period?

- ☐ Yes, in the reference period
- ☐ Yes, in the enumerator day
- ☐ No

→ 4.3.1

4.2.2 Provide the information of poultry raised on the holding.

S.N.	Poultry raised on the holding		Number		Number of birth during reference period	Number of death animals during reference period		Number of animals purchased during reference period	Number of animals sold during reference period	Number of animals received in full subsidies or free of cost	Main type of housing system Deep litter 1 cage 2 open 3 others 4
			Enumerator day	Reference period		Death from natural causes	Death from disasters				
1	2		3	4	5	6	7	8	9	10	11
1	Broilers										
2	Layers										
3	Giriraj										
4	Indigenous Chicken (Local)										
5	Ducks										
6	Others										

4.2.3 Were any poultry slaughtered for meat on the holding during the reference period?

- ☐ Yes
- ☐ No

→ 4.2.7

4.2.4 Give the information about poultry slaughtered on the holding during the reference period.

- ☐ Number of poultry slaughtered
- ☐ Total carcass weight obtained (KG)

4.2.5 Report the Quantity of poultry meat used in the following ways during the reference period- slaughtered on the holding.

- ☐ Quantity of meat for own use(KG)

- ☐ Quantity of meat sold(KG)   
☐ Quantity of meat given to service or input providers(KG)   
☐ Destroyed stored meat by disasters(KG)

4.2.6 If the quantity of meat sold is greater than 0 KG, price per KG (RS).

4.2.7 Were holding raised egg laying poultry in the reference period?

- ☐ Yes  
☐ No → 4.2.11

4.2.8 Provide the information of egg laying poultry raised on the holding.

S.N.	Buffalo raised on the holding	Number	Number of egg	Daily average number of days for laying egg	Daily average production
1	Layers				
2	Giriraj				
3	Indigenous Chicken				
4	Ducks				

4.2.9 Report the number of egg used in the following ways during the reference period on the holding.

- ☐ Number of sold egg   
☐ Number of egg for hatching   
☐ Number of egg for own use   
☐ Number of loss Egg   
☐ Other

4.2.10 If the number of egg sold is greater than 1, price per egg (RS).

4.2.11 Did the holding have a marketing contract for the meat and egg production of Buffalo in the reference period?

- ☐ Yes, for meat  
☐ Yes, for egg  
☐ No → 4.2.13

4.2.12 What percentage of meat and egg production was covered by marketing contract in the reference year?  %

4.2.13 What was the major feeding practices for the poultry during the reference period?

- ☐ Only feeding  
☐ Mainly feeding, with some grazing  
☐ Mainly grazing, with some feeding  
☐ Mainly grazing

4.2.14 What was the sources of feed used during the reference period?

- ☐ Produced on the holding  
☐ Common pasture  
☐ Purchased  
☐ Exchanged

### 4.3 OTHER ANIMALS AND ANIMAL PRODUCTS

4.3.1 Were honeybees raised on the holding during the reference period?

- ☐ Yes  
☐ No → 4.3.4

4.3.2 Provide the information about area used for honeybeesraising during the reference period.

B/R	K/A	D/P

4.3.3 Provide the information of honeybees raised on the holding.

S.N.	Types of honeybees	Number of beehives		Production of honey in the reference period(KG)	Production of honeycomb (KG)
		Enumenator day	Reference period		
1	2	3	4	5	6
1	Local				
2	Improved				

4.3.4 Were silkworm raised on the holding during reference period?

- ☐ Yes  
☐ No → 4.3.6

4.3.5 Provide the information about area used for silkworm and cocoon production during the reference period.

B/R	K/A	D/P	Cocoon production (KG)	Total value(Rs)

4.3.6 Were mushroom cultivated on the holding during reference period?

- ☐ Yes  
☐ No → 4.3.8

4.3.7 Provide the information about area mushroom used and production during the reference period.

B/R	K/A	D/P	Number of packet	Production (KG)	Total value (Rs)

4.3.8 Were flower cultivated on the holding during reference period?

☐ Yes

☐ No → 4.4.1

4.3.9 Provide the information about area used for floriculture and production during the reference period.

B/R	K/A	D/P	Total value(Rs)

#### 4.4 FISHERY

4.4.1 Were fish raised on the holding during reference period?

☐ Yes

☐ No → 5.1.1

4.4.2 Number of fish pond in the reference period.

☐ Nursery raising

☐ Fishery for fish production

4.4.3 Area of fish pond.

B/R	K/A	D/P

4.4.4 Provide the information about fish production and its utilization in the reference period.

S.N.	Fishery species	Number of nursery	Fish production (KG)	Sold uantity (KG)	Sold price per KG(RS)	Own use for consumption (KG)	Production destroyed by disasters (KG)
1							
2							
3							

## SECTION 5: ECONOMY DURING THE REFERENCE PERIOD

### PART 5.1: OTHER ACTIVITIES OF THE HOLDING

5.1.1 Was the holding engaged in forestry activities?

☐ No

☐ Yes → 5.1.3

5.1.2 Provide the inormation of production of forestry on the holding.

S.N.	Forest production	Total production (KG)	Sold quantity (KG)	Total value(Rs)	Production destroyed by disasters (KG)
1	Timbers				
2	Energy wood				
3	Grass production				
4	Herbs production				
5	Others				

### 5.1.3 Did the holding carry out other on-farm activities than crops and livestock production?

- ☐ Yes
- ☐ No → 5.1.5

5.1.4 Indicate the other on-farm activities engaged in by the holding during the reference period.  
(Only 5 main activities)

- ☐ Processing and of cereal crops
- ☐ Milling activities
- ☐ Processing and preserving of fruit and vegetables
- ☐ Manufacture of crude vegetable oil
- ☐ Manufacture / distillation of local alcohol
- ☐ Manufacture of tobacco products
- ☐ Processing and preserving meat
- ☐ Manufacture of dairy products
- ☐ Selling of holding's products at the market/shop
- ☐ Production of forestry products
- ☐ Production, processing and preserving of fish
- ☐ Production of renewable energy
- ☐ Contractual work for other holdings using the production means of this holding
- ☐ Accommodation, homestay, restaurant, catering and educational activities
- ☐ Making handicrafts
- ☐ Other (specify)
- ☐ None

[illegible]

5.1.5 What share of the household's total income is accounted for by agricultural income (income from crops and livestock)?

5.1.6 For how many month agriculture income is sufficient for household feeding?

5.1.7 How would you rate the contribution of agricultural income to the total income of the holding compared to the previous year?

- ☐ Similar
- ☐ Greater
- ☐ Lower
- ☐ Not applicable → 5.1.9

- 5.1.8 How often was this holding profitable?
- ☐ Unprofitable for all three years
  - ☐ Profitable in one out of the three years
  - ☐ Profitable in two out of the three years
  - ☐ Profitable in three out of the three years
  - ☐ Not applicable
- 5.1.9 Does the holding participate in a farmers' group / cooperative?
- ☐ Yes
  - ☐ No
- 5.1.10 Does the holding have a bank account?
- ☐ Yes
  - ☐ No
- 5.1.11 Did the holding recieved credit facility for agriculture during the reference period?
- ☐ Yes
  - ☐ No → 5.1.13
- 5.1.12 Did the holding recieved agriculture loan with interest subsidy during the reference period?
- ☐ Yes
  - ☐ No
- 5.1.13 Did the holding recieved subsidy/grant from government for agriculture activity during the reference period?
- ☐ Yes
  - ☐ No
- 5.1.14 Which of the following agriculture activities on the holding had been secured by insurance during the reference period?
- ☐ Crop production → 5.2.1
  - ☐ Livestock production → 5.2.1
  - ☐ Fish farming → 5.2.1
  - ☐ Other (specify) → 5.2.1
  - ☐ No
- 5.1.15 Why was the holding not secured by insurance during reference period?
- ☐ Not Access to insurance
  - ☐ Too expensive
  - ☐ Not necessary
  - ☐ No imbursement from insurance claim
  - ☐ Unknown

## PART 5.2 SHOCKS

5.2.1 Did any severe shocks hit the holding during the reference period?

- ☐ Yes
- ☐ No → 5.2.7

5.2.2 Identify the three most severe shocks experienced.

**Production shocks**

- ☐ Drought
- ☐ Erratic rains
- ☐ Floods
- ☐ Hail stone
- ☐ Loss from wildlife
- ☐ Fire
- ☐ Sink
- ☐ Unusually low prices for agricultural output
- ☐ Storm
- ☐ Landslides
- ☐ Extreme temperatures (too hot or too cold)
- ☐ Unusually high level of crop diseases
- ☐ Unusually high level of livestock diseases
- ☐ Unusually high prices for agricultural inputs
- ☐ Theft of agricultural assets, outputs, money or valuables
- ☐ Other (specify

**Household shocks**

- ☐ Serious illness or accident or death of household member(s)
- ☐ Break-up of household
- ☐ Conflict or violence
- ☐ Reduction in the earnings of salaried household member(s) or loss of employment of salaried household member(s)
- ☐ Unusually high food prices
- ☐ Other (specify

5.2.3 What was the holding's main response to [SHOCK]?

- ☐ Sold land and/or buildings
- ☐ Sold crops and/or livestock
- ☐ Sold holding's other assets
- ☐ Found other work, not on the holding
- ☐ Received help from government
- ☐ Received help from NGOs or other organizations
- ☐ Reduced expenses for the holding
- ☐ Received help from relatives
- ☐ Reduced expenses for the household
- ☐ Received loan
- ☐ Received compensation from insurance

- ☐ Past savings  
☐ None of the above
- 5.2.4 Has the holding fully recovered from the shocks?
- ☐ Yes  
☐ No
- 5.2.5 Do you find that the holding is now better able to cope with the shocks?
- ☐ Yes  
☐ No
- 5.2.6 What is your general perception of the level of severity of shocks compared to the past?
- ☐ Similar  
☐ Greater  
☐ Lower
- 5.2.7 List the agricultural machinery, equipment or assets damaged or destroyed by disasters in the reference period

S.N.	Equipment	1 Yes 2 No	Total number	Number destroyed by disasters
1	Iron plough			
2	Power Tiller			
3	Chaff cutter			
4	Milking machine			
5	Shallow Tube Well			
6	Deep Tube Well			
7	Rower Dhiki Pump			
8	Tractor			
9	Thresher			
10	Pumping set/ motor			
11	Animal Drawan Cart			
12	Sprayer			
13	Combined Harvester			
14	Other Equipments			

## PART 6 WORKERS, DWELLING, ASSETS AND SERVICES USED BY THE HOLDING

6.1 Were workers hire for agriculture activities on the holding during reference period?

- ☐ Yes  
☐ No → 6.3

6.2 Provide the information of workers used for agriculture activities on the holding during reference period?

S.N.	Types of worker	Permanent worker		Temporary worker		Exchange labor	
		Male	Female	Male	Female	Male	Female
1	Family member						
2	Manager/Administrators						
3	Skill workers						
4	Unskilled workers						
5	Total						

6.3 Did the holding experience a shortage of workers during the peak periods?

- ☐ Yes  
☐ No → 6.5

6.4 What was the holding's main response for the shortage of workers during the peak periods?

- ☐ Rented on contract to other  
☐ Only partial activities were carried on  
☐ By increasing own engagment on the holding  
☐ Prefer less labor required agriculture activities  
☐ Using modern machine  
☐ stopping the activites

6.5 Provide the information about the type of holder dwelling on the basis of Utilization and tenure.

S.N.	Types of utilization	Total number	Tenure		
			Own	on rented	others
1	For holder's shelter				
2	For livestock raising				
3	For poultry raising				
4	For crop storage				
5	For other activities				

6.6 Provide the information about the types outer wall of holder Dwelling.

- ☐ Mud bonded bricks /stones  
☐ Cement bonded bricks

- ☐ Wood material
  - ☐ Bamboo material
  - ☐ Raw bricks
  - ☐ Galvanized sheet
  - ☐ Others
- 6.7 Provide the information about types of roof of holder dwelling.
- ☐ Galvanized sheet
  - ☐ Concreate Cement
  - ☐ Straw/ thatch
  - ☐ Tile
  - ☐ Wood material
  - ☐ Mud
  - ☐ Others
- 6.8 Provide the information about types of floor of holder dwelling.
- ☐ Mud
  - ☐ Wood/Bamboo material
  - ☐ Ceramic tile
  - ☐ Concreate Cement
  - ☐ Others
- 6.9 Is holding used different room for the kitchen?
- ☐ Yes
  - ☐ No
- 6.10 What is the main sources of water supply of the holding?
- ☐ Piped water (inside holder compund)
  - ☐ Piped water (outside holder compund)
  - ☐ Hand Pump
  - ☐ Covered well
  - ☐ Open well
  - ☐ Grounded water
  - ☐ River
  - ☐ Jar or Bottle
  - ☐ Others
- 6.11 what is the main fuel used for cooking of the holding?
- ☐ Fire wood
  - ☐ LPG
  - ☐ Electricity
  - ☐ Cow dung
  - ☐ Bio Gas
  - ☐ Kerosene
  - ☐ Others
- 6.12 Which of the following is used for light by the holding?
- ☐ Electricity
  - ☐ Kerosene

- ☐ Bio Gas
  - ☐ Solar
  - ☐ Others
- 6.13 Provide the information about types of toilet used by holding?
- ☐ With flush (public drainage)
  - ☐ With flush (safty tank)
  - ☐ Simple
  - ☐ No toilet
- 6.14 Report which items and services the household has. (Fill in all that apply)
- ☐ Cell phone
  - ☐ Landline telephone
  - ☐ Radio
  - ☐ Television
  - ☐ Vehicles
  - ☐ Internet
  - ☐ Computer
  - ☐ Agriculture Equipments
  - ☐ None of the above
- 6.15 Identify the types of information used on the holding during the reference period. (Fill in all that apply)
- ☐ Use of fertilizers and/or plant protection products
  - ☐ Prices of outputs
  - ☐ Crop health issues
  - ☐ Crop types to be produced
  - ☐ Weather forecasts affecting production
  - ☐ Livestock health issues
  - ☐ Livestock feed issues
  - ☐ Livestock breeding
  - ☐ Availability of inputs (including machinery and equipment)
  - ☐ Prices of inputs
  - ☐ Crop rotation and other sustainable agricultural practices
  - ☐ Other environmental information
  - ☐ Value add/ chain (storage, processing, packageing etc.)
  - ☐ No any information used → End of the core module
- 6.16 Identify the main source of information about information for the holding during the reference period.
- ☐ Government or extension service (Fill in all that apply)
  - ☐ Other individual farmer
  - ☐ Farmers' group or association
  - ☐ NGO or non-governmental project
  - ☐ Trader or market stakeholder
  - ☐ Aggravate
  - ☐ others(specify)

6.17 Identify the main method used for consulting the [INFORMATION SOURCE] for information about [INFORMATION]?

- ☐ Face-to-face discussions (Fill in all that apply)
- ☐ Phone calls
- ☐ Radio
- ☐ Television
- ☐ Internet or SMS
- ☐ Press or newspapers
- ☐ Agriculture Apps
- ☐ Other (specify

# PILOT AGRICULTURE INTEGRATED SURVEY 2019, CHITWAN

## PRODUCTION METHOD AND ENVIRONMENT MODULE

### Part 1 ENERGY SOURCES DURING THE REFERENCE PERIOD

- 1.1 Identify the energy sources used by the holding for agricultural activity during the reference period. (Fill in all that apply)

- ☐ Electricity  
☐ Petroleum fuels  
☐ Biomass (wood, plant material, etc.)  
☐ Biogas  
☐ Solar energy  
☐ Other energy or fuel (specify)  
☐ None

### PART 2 : SOIL MANAGEMENT AND IRRIGATION DURING THE REFERENCE PERIOD

#### 2.1 SOIL MANAGEMENT DURING THE REFERENCE PERIOD

- 2.1.1 Calculated area of outdoor arable land covered by temporary crops

B/R	K/A	D/P

- 2.1.2 Report the areas under different tillage methods used on arable land covered by temporary crops.

S.N.	Tillage methods	B/R	K/A	D/P
1	Conventional tillage			
2	Mechanized tillage			
3	Zero-tillage (no tillage)			

- 2.1.3 Considering the longest cropping interval period, report the types of soil cover on the arable land covered by temporary crops.

S.N.	Types of soil cover	B/R	K/A	D/P
1	Bare soil			
2	Plant residues			
3	Next seasonal crop			

- 2.1.4 Was crop rotation being practised on the holding during reference period?

- ☐ Yes  
☐ No

→ 2.1.6

- 2.1.5 If at least two crops rotation being practised, provide the area of land on which crops rotation was practiced?

B/R	K/A	D/P

- 2.1.6 Identify which of the following practices and features were used on the holding during the reference period.

- ☐ Following or shifting cultivation  
☐ Vegetative strips  
☐ Liming  
☐ Terraces  
☐ Rotational grazing  
☐ No any practices

- 2.1.7 Were crop residues and/or other areas on the holding burned during the reference period?

- ☐ Yes  
☐ No → 2.1.9

- 2.1.8 Identify the crops for which residues were burned on the holding during the reference period.

Name of crop	B/R	K/A	D/P

- 2.1.9 Was slash and burn used for clearing land during the reference period?

- ☐ Yes  
☐ No

- 2.1.10 Was agriculture area is utilized as temporary fallow during the reference period?

- ☐ Yes  
☐ No → 2.1.13

- 2.1.11 Was land temporarily fallow burned during the reference period?

- ☐ Yes  
☐ No → 2.1.13

- 2.1.12 Of the total area of land temporary fallow, what was the share of land that was burned?

Percent

- 2.1.13 Was forest or other wooded land burned on the holding during the reference period?

- ☐ Yes  
☐ No → 2.1.15

- 2.1.14 Of the total area of forest or other wooded land on the holding, what was the share of land that was burned?

Percent

- 2.1.15 Was unutilized agricultural area on the holding burned during the reference period?

- ☐ Yes  
☐ No → 2.1.17

- 2.1.16 Of the total unutilized agricultural area on the holding, what was the share of land that was burned?

Percent

2.1.17 Did you use crop residues for feeding and/or bedding livestock during the reference period?

☐ Yes

☐ No

→ 2.1.19

2.1.18 Identify the crops for which residues were used for livestock feed and/or bedding on the holding during the reference period.

Crop residue	For feeding-1 For bedding-2 For both-3

2.1.19 Did the holding conduct a soil analysis/test during the reference period?

☐ Yes

→ 2.1.21

☐ No

2.1.20 Did the holding conduct a soil analysis/test in the past five years?

☐ Yes

☐ No

→ 2.1.22

2.1.21 After soil Analysis/ test, which of the following practices were conducted for improvement of soil as prescribed by technician?

☐ Soil liming

☐ Quality organic manure

☐ balance chemical fertilizer

☐ Green manure

☐ others

☐ No any practices

2.1.22 During heavy rain, do large volumes of water accumulate on the agricultural soil surface?

☐ Yes

☐ No

→ 2.1.24

2.1.23 When water accumulates on the soil surface and runs, how does it appear?

☐ The water is clear

☐ The water is not clear and/or is brown/muddy soil colored because it contains a lot of soil

☐ Don't know

2.1.24 Have there been any of the following changes in the soil on the holding over the last five years?

☐ Change in soil colour

☐ Easyness to plough or work in soil

☐ Difficulties to plough or work in soil

☐ Easyness to emerge crops after planting

☐ Difficulties to emerge crops after planting

☐ Change in the amount of stones present in the soil

☐ None of the above

2.1.25 Have you experienced any of the following soil degradation threats on your holding in last three years?

- ☐ No soil degradation
- ☐ Acidity of soil
- ☐ Imbalance use of chemical fertilizer
- ☐ Soil erosion (loss of topsoil through wind or water erosion)
- ☐ Waterlogging, including by floods
- ☐ Other (specify)
- ☐ None of the above

2.1.26 What is the total area of the holding affected by any of the threats identified above in last three years?

B/R	K/A	D/P

## PART 2.2 IRRIGATION AND DRAINAGE DURING THE REFERENCE PERIOD

2.2.1 Did this agricultural holding use water to irrigate crops (over the last three years)?

- ☐ Yes → 2.2.3
- ☐ No, there is no irrigation available
- ☐ No, I can't afford irrigation
- ☐ No, I don't need irrigation

B/R	K/A	D/P

2.2.2 Area equipped for irrigation in working order

2.2.3 Area irrigated in reference period

2.2.4 Identify which methods of irrigation were used during the reference period.

- ☐ Surface irrigation
- ☐ Sprinkler irrigation/Spray Irrigation
- ☐ Drip irrigation
- ☐ Other (specify)

2.2.5 Identify which sources of irrigation water were used during the reference period. [Share %](#)

- ☐ On-farm ground water  %
- ☐ On-farm surface water  %
- ☐ Off-farm surface water (lakes, rivers, watercourses)  %
- ☐ Dam/Reservoir (used to avoid flooding)  %
- ☐ Tap water  %
- ☐ Rain water  %
- ☐ Rain water Harvesting  %
- ☐ Other source (specify  %

- 2.2.6 Are you observing any reduction in water availability from well or other sources i.e. lake, canal and river (over the last three years)?
- ☐ No, water is always available in sufficient quantity
  - ☐ Yes, water level in my well(s) is progressively going down
  - ☐ Yes, water in river, lake or canal is getting scarce
  - ☐ I do not know
- 2.2.7 Are there organizations dealing with water allocation in the area where this holding is located?
- ☐ Yes, and they are working well
  - ☐ Yes, but they are not working well
  - ☐ No, there are none
  - ☐ No, I don't know
- 2.2.8 Report the total expenses /payment amount made for irrigation during the reference period.  %
- 2.2.9 Were there areas on the holding where drains were present during the reference period?
- ☐ Yes, temporary unmanaged drain
  - ☐ Yes, managed drain
  - ☐ No

### Part 3 FERTILIZERS AND PLANT PROTECTION

#### 3.1 USE OF FERTILIZERS, PLANT PROTECTION AND RICE CULTIVATION DURING THE REFERENCE PERIOD

- 3.1.1 Do you know about the environmental risks associated with the use of synthetic and mineral fertilizers?
- ☐ Yes
  - ☐ No → 3.1.4
- 3.1.2 Did this agricultural holding take specific measures to mitigate the environmental risks associated with the use of synthetic and mineral fertilizers?
- ☐ Yes
  - ☐ No → 3.1.4
- 3.1.3 If so, which specific measures did the agricultural holding take or adopt? (Fill in all that apply)
- ☐ Follow protocols as per extension service or retail outlet directions or local regulations, not exceeding recommended doses
  - ☐ Use organic source of nutrients (including manure or composting residues) alone, or in combination with synthetic or mineral fertilizers
  - ☐ Use legumes as a cover crop, or component of a multi/crop or pasture system to reduce fertilizer inputs
  - ☐ By animal grazing
  - ☐ Distribute synthetic or mineral fertilizer application over the growing period
  - ☐ Consider soil type and climate in deciding fertilizer application doses and frequencies
  - ☐ Use soil sampling at least every 5 years
  - ☐ Other

- 3.1.4 Did this agricultural holding use any pesticides for crop or livestock production?
- ☐ Yes
- ☐ No → 3.1.8
- 3.1.5 What type of pesticides did this agricultural holding used?
- ☐ Green (Safe)
- ☐ Blue (Moderate)
- ☐ Yellow (Strong)
- ☐ Red (Extreme)
- 3.1.6 Did this agricultural holding take specific measures to protect people from health-related risks?
- ☐ Yes
- ☐ No
- 3.1.7 Which of the following measures did this agricultural holding adopt to protect people from health-related risks? (Fill in all that apply)
- ☐ Adherence to label directions for pesticide use
- ☐ Safe disposal of waste (cartons, bottles and bags)
- ☐ Use of safety gear during application
- 3.1.8 Did the Holding adopt any measures in relation to pest control and animal diseases with in the reference period?
- ☐ Yes, in case of plant
- ☐ Yes, in case of animal → 3.1.10
- ☐ No → 3.2.1
- 3.1.9 Which of the following measures did this agricultural holding adopt in relation to plant pest control? (Fill in all that apply)
- ☐ Adherence to label directions for pesticide application
- ☐ Adjustment of planting time
- ☐ Application of crop spacing
- ☐ Application of crop rotation
- ☐ Application of mixed cropping inter-cropping
- ☐ Perform biological pest control
- ☐ Use of disease resistant/tolerant cultivars
- ☐ Systematic removal of plant parts attacked by pests
- ☐ Maintenance and cleansing of spray equipment after use
- ☐ Plants quarantining
- 3.1.10 Which of the following measures did this agricultural holding adopt in relation to animal diseases control? (Fill in all that apply)
- ☐ Adherence to label directions for medicine application
- ☐ Perform biological medicine control
- ☐ Adopting pasture rotation to suppress livestock pest population
- ☐ Maintenance and cleansing of spray equipment after use
- ☐ animals quarantining
- ☐ Use of disease resistant/tolerant livestock breed

### 3.2 RICE CULTIVATION DURING THE REFERENCE PERIOD

- 3.2.1 Was rice cultivated on the holding during the reference period?
- ☐ Yes
- ☐ No
- 3.2.2 How many rice cultivating cycles were there during the reference period?
- 3.2.3 Identify the types of rice that were cultivated during the reference period. (Fill in all that apply)
- ☐ Fine
- ☐ Coarse rice
- 3.2.4 What was the length of the growing period for [RICE]?
- 3.2.5 Identify the irrigation methods and water regimes that were used during the growing period of [RICE].
- ☐ Irrigated, continuously flooded
- ☐ Irrigated, intermittently
- ☐ rain-fed
- 3.2.6 Identify the organic amendments added to the soil before the cultivation of rice during the reference period.
- ☐ Farmyard manure
- ☐ Compost
- ☐ Green manure
- ☐ Other (specify
- ☐ None
- 3.2.7 Identify the rice planting techniques used during the reference period.
- ☐ Transplanting
- ☐ Seed broadcasting
- ☐ Mixed
- 3.2.8 Report the average planting spacing for rice during the reference period
- ☐ Spacing between line(cm)
- ☐ spacing between plant(cm)

## PART 4: LIVESTOCK PRODUCTION METHODS DURING THE REFERENCE PERIOD

### 4.1: ANIMAL BREEDING AND REPRODUCTION DURING THE REFERENCE PERIOD

- 4.1.1 Were veterinary services used on the holding during the reference period?
- ☐ Yes
- ☐ No
- 4.1.5

- 4.1.2 Identify the types of veterinary services used by the holding for [LIVESTOCK] during the reference period.  
(Fill in all that apply)
- ☐ Reproduction
  - ☐ Curative → 4.1.5
  - ☐ preventive → 4.1.5
- 4.1.3 Identify the main animal reproduction technique for [livestock] used on the holding during the reference period.
- ☐ Natural mating
  - ☐ artificial mating
- 4.1.4 Identify the main provider of breeding services for the holding during the reference period.
- ☐ Private veterinarian
  - ☐ Public veterinarian
  - ☐ Self-provision
  - ☐ Village animal health workers
  - ☐ Other (specify)
- 4.1.5 Were antibiotics used on livestock on the holding during the reference period?
- ☐ Yes
  - ☐ No
- 4.1.6 Were microbials used as growth promotor on livestock on the holding during the reference period?
- ☐ Yes
  - ☐ No
  - ☐ Unknown
- 4.1.7 Was traditional medicine applied on the livestock on the holding during the reference period?
- ☐ Yes
  - ☐ No → 4.2.1
- 4.1.8 Identify the objectives of the traditional medicine applied on [livestock] during the reference period.  
(Fill in all that apply)
- ☐ Reproduction
  - ☐ Curative
  - ☐ Preventative
  - ☐ Other (specify)
  - ☐ Known

## 4.2: ANIMAL HOUSING DURING THE REFERENCE PERIOD

- 4.2.1 Was any of the animal housing used to house both humans and livestock?
- ☐ Yes
  - ☐ No
- 4.2.2 Identify the types of ventilation systems in the livestock building(s) on the holding during the reference period.
- ☐ Yes
  - ☐ No
- 4.2.3 Were there temperature controls in the buildings used to house livestock during the reference period?
- ☐ Yes
  - ☐ No

#### 4.3: EQUIPMENT AND TRANSPORTATION OF ANIMALS DURING THE REFERENCE PERIOD

- 4.3.1 Was transhumance practised by the holding during the reference period?
- ☐ Yes
- ☐ No → 4.3.3
- 4.3.2 Identify the types of animals for which transhumance was practised during the reference period. (Fill in all that apply)
- ☐ Cattle
- ☐ Buffaloes
- ☐ Sheep
- ☐ Goats
- 4.3.3 Were live animals taken to pastures outside the holding during the reference period?
- ☐ Yes
- ☐ No
- 4.3.4 Were live animals transported from the holding to a market to sell them during the reference period?
- ☐ Yes
- ☐ No → 4.4.1
- 4.3.5 Identify the main transportation method used to transport livestock to a market during the reference period.
- ☐ By foot
- ☐ By road with motor véhicules
- ☐ Other (specify)

#### 4.4: WATERING OF ANIMALS DURING THE REFERENCE PERIOD

- 4.4.1 Was the main source of water for watering livestock the same for all seasons during the reference period?
- ☐ Yes
- ☐ No → 4.4.3
- 4.4.2 Identify the main source of water used for watering livestock during the entire reference period.
- ☐ Borehole
- ☐ Well
- ☐ Dam or lake
- ☐ River, spring or stream
- ☐ Rainwater harvesting
- ☐ Tap water
- ☐ Other (specify)
- 4.4.3 Identify the main source of water used for watering livestock during the dry season.
- ☐ Borehole
- ☐ Well
- ☐ Dam or lake
- ☐ River, spring or stream
- ☐ Rainwater harvesting
- ☐ Tap water
- ☐ Other (specify)

- 4.4.4 Identify the main source of water used for watering livestock during the rainy season.
- ☐ Borehole
  - ☐ Well
  - ☐ Dam or lake
  - ☐ River, spring or stream
  - ☐ Rainwater harvesting
  - ☐ Tap water
  - ☐ Other (specify \_\_\_\_\_)
- 4.4.5 Were problems encountered in watering livestock during the reference period?
- ☐ Yes
  - ☐ No → 4.5.1
- 4.4.6 Identify the months in which problems were encountered in watering livestock during the reference period.
- ☐ July (Fill in all that apply)
  - ☐ August
  - ☐ September
  - ☐ October
  - ☐ November
  - ☐ December
  - ☐ January
  - ☐ February
  - ☐ March
  - ☐ April
  - ☐ May
  - ☐ June
- 4.4.7 Identify the main problem encountered in watering livestock during problematic periods.
- ☐ Restricted access to water sources
  - ☐ Lack of water in usual water sources
  - ☐ Poor quality of usual water sources
  - ☐ Other \_\_\_\_\_
- 4.4.8 Identify the solution that was implemented to provide water to livestock during problematic periods. (Fill in all that apply)
- ☐ Use of another water source near the holding, for free
  - ☐ Use of another water source near the holding, with payment
  - ☐ Use of another water source far from the holding, for free
  - ☐ Use of another water source far from the holding, with payment
  - ☐ Other \_\_\_\_\_

## 4.5: MANURE MANAGEMENT DURING THE REFERENCE PERIOD

- 4.5.1 Identify the types of manure produced on the holding during the reference period. (Fill in all that apply)
- ☐ Farm yard manure
  - ☐ Composted manure
  - ☐ Bio gas slurry
  - ☐ Liquid manure
  - ☐ None → 5.1

- 4.5.2 Was manure produced on this holding and sold or given to others during the reference period?
- ☐ Yes
- ☐ No → 4.5.4
- 4.5.3 Report the quantity of (manure) that was produced on this holding and sold or given to others during the reference period
- ☐ Quantity of manure that was exchanged for goods and/or services  kg
- ☐ Quantity of manure that was sold  kg
- ☐ Quantity of manure that was given for free  kg
- 4.5.4 Report Percentage of that [manure] was managed using each of the following manure management systems during the reference period.
- ☐ Traditional  Percent
- ☐ Improved  Percent
- 4.5.5 Was manure produced on the holding used for other purposes during the reference period?
- ☐ Yes
- ☐ No → 5.1
- 4.5.6 Report the quantity of manure produced on the holding that was used for the following purposes during the reference period.
- ☐ For fuel (including heating) (Fill in all that apply)
- ☐ For construction
- ☐ For feed

## PART 5 AGROFORESTRY DURING THE REFERENCE PERIOD

- 5.1 Were there agroforestry practices on the holding during the reference period?
- ☐ Yes
- ☐ No → 6.1.1
- 5.2 Identify the types of agroforestry on the holding during the reference period. (Fill in all that apply)
- ☐ Agro-silvicultural area (crops and trees)
- ☐ Silvo-pastoral area (trees and livestock)
- ☐ Agro-sylvo-pastoral area (crops, trees and livestock)
- 5.3 Report then Area of agroforestry during the reference period?
- | B/R                  | K/A                  | D/P                  |
|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | <input type="text"/> |
- 5.4 Identify the main type of trees in the agroforestry during the reference period. (Fill in all that apply)
- ☐ Fruits
- ☐ Daleghash
- ☐ Banpaidawar/ jadibuti
- ☐ Kathpaidawar
- ☐ others
- 5.5 Was forest or other wooded land created on the holding by planting trees during the reference period?
- ☐ Yes
- ☐ No → 6.1.1

- 5.6 Report the area planted with trees to create forest or other during the reference period.

B/R	K/A	D/P

## **PART 6: ACCESS TO AND USE OF INFORMATION SERVICES, INFRASTRUCTURE AND COMMUNAL RESOURCES DURING THE REFERENCE PERIOD**

### **6.1: AGRICULTURAL INFORMATION DURING THE REFERENCE PERIOD**

- 6.1.1 Were market conditions monitored before selling products from the holding during the reference period?
- ☐ Yes
- ☐ No
- 6.1.2 Report the number of visits made to the holding by agriculture technician during the reference period.
- 6.1.3 Was the visits made to the holding by agriculture technician sufficient during the reference period?
- ☐ Yes → 6.2.1
- ☐ No
- 6.1.4 Identify the main reason for not having more visits / sufficient visits to the holding by agriculture technician during the reference period.
- ☐ No need
- ☐ Too far away
- ☐ Service provider was too busy
- ☐ Service provider was not available
- ☐ Unwilling to visit
- ☐ Others

### **6.2: INFRASTRUCTURE (TRANSPORATION, COMMUNICATIONS AND ACCESS TO FACILITIES) DURING THE REFERENCE PERIOD**

- 6.2.1 Identify the types of véhicules that were available on the holding during the reference period. (Fill in all that apply)
- ☐ véhicules for transporting livestock
- ☐ véhicules for transporting feed and crop products
- ☐ véhicules for transporting water or other liquids
- ☐ Refrigerated véhicules
- ☐ Other (specify
- ☐ None

6.2.2 Provide the information on access to a following facility, transportation facility and required time for the holding during reference period

S.N.	Types of facilities	Access		Types of vehicle	Time		Code	Vehicle
		Yes	No		Hours	Minutes		
1	Market						1	By foot
2	Public agriculture / livestock service offices						2	Cycle/ricksaw
3	Private veterinary clinic						3	Motorcycle
4	Aggravate/medicla shop						4	Wheel vehicle
5	Rural agriculture /livestock workers						5	Mixed
6	Food storage						6	Other, specify
7	Agriculture processing center							

6.2.3 Are you aware of any specific agricultural development projects being carried out in the holding's community or neighbourhood during the reference period?

☐ Yes

☐ No

→ 6.2.7

6.2.4 Did the holding participate in the development project(s)?

☐ Yes

☐ No

→ 6.2.6

6.2.5 What was the objective of development project(s) on which holding participate?

☐ Capacity building

☐ support in factors of production like seeds

☐ Mechanization and infrastructural development

☐ Subsidies/ grant

☐ Others (specify)

6.2.6 Identify the main reason why the holding did not participate in the development project(s).

☐ Not interested in participating

☐ Interested in participating, but there was no possibility to participate

☐ Lack of opportunity

☐ Other (specify)

6.2.7 Were there facilities for repairing agricultural machinery in the holding's neighbourhood during the reference period?

☐ Yes

☐ No

→ 6.3.1

6.2.8 Did the holding use the repair facilities?

☐ Yes

☐ No

→ 6.3.1

- 6.2.9 Identify the main reason why the holding did not use the repair facilities.
- ☐ Not necessary, because the relevant knowledge existed on the holding
  - ☐ Not necessary, because there was no machinery used or there was no machinery in need of repair
  - ☐ Too expensive
  - ☐ Other (specify

### 6.3: ACCESS TO COMMUNAL RESOURCES DURING THE REFERENCE PERIOD

- 6.3.1 Was there communal grazing land in the holding's neighbourhood during the reference period?
- ☐ Yes
  - ☐ No → 6.3.4
- 6.3.2 Did the holding use this communal grazing land during the reference period?
- ☐ Yes → 6.3.4
  - ☐ No
- 6.3.3 Identify the main reason for not using the communal grazing land during the reference period.
- ☐ Not applicable/no livestock on the holding
  - ☐ Not necessary because enough feed was available on the holding
  - ☐ No access granted
  - ☐ Problems with other users
  - ☐ Problems with the quality and quantity of pasture
  - ☐ Other
- 6.3.4 Was there communal forest or other wooded land in the holding's neighbourhood during the reference period?
- ☐ Yes
  - ☐ No → 6.3.7
- 6.3.5 Did the holding use this communal forest or other wooded land during the reference period?
- ☐ Yes → 6.3.7
  - ☐ No
- 6.3.6 Identify the main reason for not using the communal forest or other wooded land during the reference period.
- ☐ Not necessary because the forest land on the holding was sufficient for the holding's activities
  - ☐ Too expensive
  - ☐ No access granted
  - ☐ Problems with other users
  - ☐ Problems with the quality and quantity of forest or other wooded land
  - ☐ Other

- 6.3.7 Were there communal irrigation facilities in working order in the holding's neighbourhood during the reference period?
- ☐ Yes
- ☐ No → 7.1
- 6.3.8 Did the holding use these communal irrigation facilities during the reference period?
- ☐ Yes → 7.1
- ☐ No
- 6.3.9 Identify the main reason for not using the communal irrigation facilities during the reference period.
- ☐ Not necessary because the forest land on the holding was sufficient for the holding's activities
- ☐ Too expensive
- ☐ No access granted
- ☐ Problems with other users
- ☐ Problems with the quality and quantity of forest or other wooded land
- ☐ Other

## PART 7: ADAPTATION TO CLIMATE CHANGE AND MITIGATION STRATEGIES DURING THE REFERENCE PERIOD

- 7.1 Did natural extreme events or disasters hit the holding during the reference period?
- ☐ Yes, economic impact → 7.3
- ☐ Yes, physical impact → 7.4
- ☐ Yes, human impact
- ☐ No → 7.5
- 7.2 Report the number of human impacts on the holding for the natural extreme events or disasters that hit the holding during the reference period.
- | Women | Men |
|-------|-----|
|       |     |
|       |     |
|       |     |
|       |     |
|       |     |
|       |     |
- ☐ People killed
- ☐ People injured
- ☐ People rendered homeless
- ☐ People evacuated
- ☐ Other (specify)
- ☐ No impact
- 7.3 Indicate the type of economic impacts incurred by the holding for the natural extreme events or disasters that hit the holding during the reference period.
- ☐ Loss of revenue
- ☐ Loss due to disruption of production
- ☐ Loss of storage food
- ☐ Other economic impacts (specify)
- ☐ No impact

- 7.4 Indicate physical impacts incurred on the holding for the natural extreme events or disasters that hit the holding during the reference period.
- ☐ Area lost
  - ☐ Crop losses
  - ☐ Livestock losses
  - ☐ Aquaculture losses
  - ☐ Biomass losses
  - ☐ Building damages or losses
  - ☐ Other physical losses (specify)
  - ☐ No impact
- 7.5 Do you know about climate change?
- ☐ Yes
  - ☐ No → 8.1
- 7.6 Identify the practices of the holding during the reference period to adapt to climate change. (Fill in all that apply)
- ☐ Multicropping
  - ☐ Shifting cultivation
  - ☐ Use of traditional agricultural heritage practices and knowledge
  - ☐ Use of traditional crop and animal varieties
  - ☐ Use of seeds adapted to local conditions and stresses
  - ☐ Use of new practices or technologies
  - ☐ Change in varieties
  - ☐ Other (specify)
  - ☐ None of the above

## PART 8: WASTE MANAGEMENT DURING THE REFERENCE PERIOD

- 8.1 Identify the types of waste generated by the holding during the reference period.
- ☐ Non-functioning vehicles
  - ☐ Empty packaging of plant protection products (PPPs)
  - ☐ Empty packaging of fertilizer products
  - ☐ Empty packaging of diesel, gasoline or other petroleum products
  - ☐ Empty packaging of seeds
  - ☐ Used plastic film
  - ☐ Ropes and nets (used for forage conditioning or viticulture)
  - ☐ Plant protection products (PPPs) that are no longer usable
  - ☐ Veterinary waste
  - ☐ Fruit-soaking fungicidal liquids
  - ☐ Other non-hazardous organic waste
  - ☐ Other non-hazardous inorganic waste
  - ☐ Other hazardous waste
  - ☐ None of the above

- 8.2 Identify the treatment used by the holding for the waste generated on the holding during the reference period.
- ☐ Waste taken away from the holding by a professional
  - ☐ Waste kept on the holding, treated by burning
  - ☐ Waste kept on the holding, treated by burying
  - ☐ Waste kept on the holding, other treatment (specify
  - ☐ Waste kept on the holding, no treatment
- 8.3 Identify the methods used during the reference period to manage the wastewater generated by the holding.
- ☐ Discharged to a constructed retention or holding pond
  - ☐ Discharged to a septic or sewer system
  - ☐ Applied to agricultural land
  - ☐ Included in the liquid manure system
  - ☐ Not managed, removed through natural drainage
  - ☐ Other (specify)