

Living with Landslides: Perceptions of Risk and Resilience in Far West Nepal

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Appendix 1: Household Survey Form

Village: Sunkuda / Bajedi

Municipality _____

Ward number _____

Community name _____ Community number _____

Household number _____

Respondent's First name _____ Surname _____

Telephone number of respondent (if any) _____

Social media use (if any)

- Interview outcome a. _____ Complete b. _____ Incomplete
- Name of interviewer _____
- Name of survey quality control _____ Date _____
- Name of data entry person _____ Date _____

Part 1: Household roster

1.1 Ethnicity – A. ___ Brahmin, B. ___ Chhetri, C. ___ Thakuri, D. ___ Dalit; E. ___ Others

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1.2 Make a complete list of all the people registered in this household, beginning with your immediate family and then the extended family (begin with person being interviewed). List the names of all children of the respondent even though they are not currently residing in a household (e.g., attending college outside)

	Gender	Age	Relation to HH head	Mainly living – Local=1 Out =0	EDU *	Main Occupation **	Mobile Phone ***	Disability and/or special needs (1/0)	Employer	Additional Comments
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										

* **Education:** A-No schooling / B-primary / C-secondary / D-tertiary / E-other

** **Occupation:** A-student / B-farming / C- housewife /D-govn employed / E-other job locally / F-job outside / G-others

*** **Mobile phone:** 0-no phone / 1–feature phone / 2–smart phone (if having both 1 &2, write 2)

Additional notes on demography of the household:

1.3 Association with social groups and organizations -

	HH member No. from the 1 st column of roster table	Type of organization *	How long have you been involved?	Your role	purpose of participating in group: (write answers in box)	organisation Name	Affiliation **
					Resources / information / others		
1.							
2.							
3.							
4.							
5.							
6.							

* Type of organisation

a. Disaster risk management committee;
c. Irrigation committee;
e. Local club;

b. Development committee;
d. Ward committee;
f. Co-operative;

- e) _____ We have enough resources to be fully prepared for future landslide event that may occur in my area. [PHYSICAL]
- f) _____ We receive useful information warning us about future landslide risks in advance. [EWS]
- g) _____ We have good vegetation and ecosystem in this area that can protect us from landslides. [NATURAL]

2.3 SUBJECTIVE RESILIENCE / CAPACITIES - Do you agree/disagree with the following statements about **your household/family?**

- a) _____ Considering the last major landslide event in your area, if a similar landslide takes place, my household will barely be affected (not affected or affected a little bit). [RESISTANCE]
- b) _____ Considering the last major landslide event in your area, if a similar landslide had just recently ended, my household can cope with it and fully recover within six months. [COPING]
- c) _____ Considering the last major landslide event in your area, if a similar landslide had just recently ended, my household will not be as worried. [ADAPTIVE PREFERENCE]
- d) _____ if landslide were to become more frequent and severe in the future, my household can adapt to the threats and still get a way to survive, for example through further diversifying our livelihood. [ADPATIVE CAPACITY]
- e) _____ If landslide were to become more frequent and severe in the future, my household can transform way of living, such as migrate out. [TRANSFORMATIVE CAPACITY]

Part 3: House, Land and Assets

3.1 What are the main materials of the floor, walls, and roof of house

- A. _____ Concrete; B. _____ Wooden; C. _____ Half concrete-half wooden
D. _____ Mud; E. _____ Half Mud – Half Concrete; E. _____ Other _____

3.2 Home ownership

- A. _____ Own house (no mortgage); B. _____ Own house (mortgage); C. _____ Lease
D. _____ Rent; E. _____ Does not pay rent; F. _____ Other (specify)

3.3 Land ownership (list out the units common there – ropani, katthas, bighas)

- A. _____ Agriculture is not main occupation;
B. _____ Own land; C. _____ Lease;
D. _____ Rent; E. _____ Does not pay rent;
F. _____ Other (specify) _____

3.4 Please RANK your annual expenditures in the last 2 years?

- A. _____ Education (fees and stationeries for children's)
- B. _____ Medication and hospital
- C. _____ Agriculture (to buy seeds, hire labors, fertilizers, fodder for livestock's uses)
- D. _____ Renovate/repair house
- E. _____ Foods and Clothes
- F. _____ Others, please specify _____
- G. _____ Others, please specify _____

Part 4: Livelihood, Hazards and Finance

Livelihoods

4.1 Please rank the following income sources in terms of their relative share of your total income

Income type	RANK	Relative % *	Comments
A. Agriculture (Farm work on own land/livestock rearing)			
B. Agriculture labor			
C. Day/wage labor (off-farm)			
D. Formal employment (Government/Non-Government Jobs)			
E. Business (e.g., providing transport services, importing goods)			
F. Remittances			
G. Others, please specify _____			

* For the **top 3**, please also indicate the relative percentage in categories –

a. <10%; b. 10-25%; c. 25-50%; d. ~ 1/2; e. 50-75%; f. 75-90%; g. >90%

4.2 What are the major crops and their yields in 2017-2018 period? (List them)

	<i>Crop type</i>	<i>Planted Area</i>	<i>Yield</i>	<i>Comments</i>
1				
2				
3				
4				
5				
6				

4.3 Generally in 2017-2018 how many months of food can you produce from your own fields per annum? ___ months

4.4 What are the main disaster hazards affecting your community?

A-Landslide / B-Flood / C-Drought / D-Wind / E-Fire / F-Other (please specify)

<i>Type</i>	<i>Rank</i>	<i>Details</i>	<i>Frequency</i> Increase = I No change=N Decrease=D	<i>Intensity</i> Increase = I No change=N Decrease=D

Can you, in your own language, describe which types of landslides that you have observed in your area?

4.5 Which of the followings do you think are the major contributors to landslide hazard in the past 10 years?

<i>Reasons/factors</i>	<i>Rank</i>	<i>Trend in the past 10 years</i> Better/No Change/Worse	<i>Details (if any)</i>
Deforestation			
Open Grazing			
Road Construction			
Agriculture Practices			
Weak Geology			
Rainfall			
Others			

4.6 Over the last 10 years was your house affected by landslides?

___ No / ___ Yes, please briefly describe impacts _____

4.7 Over the last 10 years has anyone your household affected personally by landslides?

___ No / ___ Yes, please briefly describe impacts _____

4.8 Over the last 10 years has your land been affected by landslides?

___ No / ___ Yes, please briefly describe impacts _____

4.9 When landslides occur, how are these livelihood activities affected:

Hardly at all = 1 / Somewhat (<50%) = 2 / Badly (>50%) = 3 / Entirely = 4

A. _____ Agriculture (Farm work on own land/livestock rearing)

- B. _____ Agriculture labor
 C. _____ Day/wage labor (off-farm)
 D. _____ Formal employment (Government/Non-Government Jobs)
 E. _____ Business (e.g., providing transport services, importing goods)
 F. _____ Remittances
 G. _____ Others, please specify _____

4.10 Over the last 10 years has your household experimented with any new production/earning (livelihood) activity?

- ___ No = 0
 ___ Yes = 1, please describe _____

4.11 Over the last 10 years has your household made deliberate change in livelihood practice in response to new knowledge gained? ___ No = 0 / ___ Yes = 1, please briefly describe (including sources of knowledge)

Financial security

4.12 Does your household have enough savings or other assets to enable all members to survive in the event of landslide ?

- A. _____ For up to 1 month; B. _____ For up to 2 weeks;
 C. _____ For up to 1 week; D. _____ For less than 2 days

4.13 Does your household have access to financial institution or saving and credit groups?

- ___ No = 0 / ___ Yes = 1, please list names _____

4.14 In the past 10 years has your household taken out a loan or been able to take out a loan? ___ No / ___ Yes,

from whom? _____

- purpose? A. _____ Housing; B. _____ Farming; C. _____ Marriage;
 D. _____ Education; E. _____ Foreign Employment;
 F. _____ Hazard related prevention or repair; G. _____ Others _____

4.15 In the past 10 years has your household sold any valuables?

___ No / ___ Yes, sold what to whom _____

- purpose? A. _____ Housing; B. _____ Farming; C. _____ Marriage;
 D. _____ Education; E. _____ Foreign Employment;
 F. _____ Hazard related prevention or repair; G. _____ Others _____

4.16 If you are struck by a landslide and suffer some substantial losses and damages and you need borrow money, which are the three names that you would go? Please provide them in the order of reliability to your household.

1. _____ (Local _____ / Outsider _____)
2. _____ (Local _____ / Outsider _____)
3. _____ (Local _____ / Outsider _____)

4.17 Do you have excess livestock/ stores to sell in the event of hardship?

___ No / ___ Yes, list type & quantity _____

4.18 Since 2017 has the household accessed useful support from state agriculture/ livestock services?

___ No / ___ Yes, please specify _____

4.19 Does your household take advantage of technical and/or financial resources from outside of the community to support economic development? (e.g. state, federal or private foundation grants, technical assistance, etc.)

___ No / ___ Yes, please specify _____

Part 5: Services

5.1 In our community people get the services they need (health/education/drinking water/banking). _____

Strongly Agree = 1; Agree = 2, No opinion = 3, Disagree = 4, Strongly disagree = 5

Energy

5.2 Please rank your main sources of energy sources

	<i>Type</i>	<i>Rank</i>	<i>Main uses *</i>	<i>Landslide impact in last 2 years</i>	<i>Trend **</i>
A	Solar				
B	Grid				
C	Wood				
D	Coal				
E	Other				

* A-Lighting / B-Cooking / C-Heating / D-Equipment and Appliances / E-Others _____

** A-Increase / B-No change / C-Decrease (in the past 10 years)

Water

5.3 Can you access enough safe and clean drinking water:

___ Yes / ___ No (specify _____)

5.4 Where do you obtain your water to drink daily? Select multiple options

- A. _____ Household tap; B. _____ Communal tap; C. _____ Hand-pump
 D. _____ Shallow-well; E. _____ River/ stream; F. _____ Small dams/ponds
 G. _____ Purchase; H. _____ Others (specify) _____

5.5 Does the accessible amount and source of water change seasonally?

_____ Yes / _____ No

If yes, please specify how _____

5.6 How long does it take you to collect drinking water?

A. _____ Up to 5 min; B. _____ up to 30 min; C. _____ up to 1 hour

D. _____ Up to 2 hours; E. _____ > 2 hours;

5.7 Who mainly collects water for the household

A. _____ Men; B. _____ Both men & women; C. _____ Women;

D. _____ Children; E. _____ others (specify) _____;

5.8 Was your water source affected by landslides in the past 2 years? (**Impacts**)

_____ No

_____ Yes, please describe _____

5.9 Was the situation getting _____ in the past ten years?

A-Better / B-No Change / C-Worse

Health and Hygiene

5.10 Do all members always have access to health post/clinics?

A. _____ Yes, within 1 hour; B. _____ Yes, within half a day; C. Yes, within a day;

D. _____ No (describe situation _____)

5.11 Does the health post/ clinics operate generally all weeks/months throughout the year?

_____ Yes / _____ No, please describe problem _____

5.12 How many days each week do they operate? _____ days

5.13 Was the health service's normal operation affected by landslides in the past 2 years?

_____ No / _____ Yes, please describe impacts _____

How long did it take to resume the normal operation?

5.14 Was the situation getting _____ in the past 10 years?

A-Better / B-No Change / C-Worse

Education

5.15 Access to school- A. ___ Yes, within 1 hour; B. ___ Yes, within 3 hours; C. ___ No

5.16 Do all eligible children in the household attend school? _____ Yes (1) / _____ No (0)

5.17 Does the schools have special operation schedule during monsoon seasons?

___ No / ___ Yes, please describe _____

5.18 Was the school's normal operation affected by landslides in the past 2 years?

(Impacts)

___ No / ___ Yes, please describe impacts _____

How long did it take to resume the normal operation? _____

5.19 During and after the landslide events, does school operate normally?

___ Yes / ___ No, please describe impacts _____

5.20 Was the situation getting _____ in the past ten years? A-Better / B-No Change / C-Worse

Community Forest

5.21 Does your community have community forest? _____ Yes (1) / _____ No (0)

5.22 Does your household have access to community forest?

___ No / ___ Yes, please describe uses _____

Forest uses trend over the past 10 years is –

A. _____ more uses; B. _____ remain the same; C. _____ less uses

5.23 Was your community forest affected by landslide hazard? How?

5.23 What rules and regulations do you have to control deforestation/theft/grazing activities in community forest?

5.24 Were they implemented? And effectiveness?

5.25 Status of community forest is ___ than non-community forest.

A. Better; B. Similar; C. Worse

What is the trend of the status of your community forest over the past 10 years? _____ Non-community forest? _____

A. Significant increase;

B. Some increase;

C. No change;

D. Some decrease;

E. Significant decrease;

F. I cannot tell.

Part 6: Risk preparedness, responses, and reduction

6.1 Do you know where to go to in an emergency? _____ Yes (1) / _____ No (0)

6.2 Has someone in your family attended regular disaster preparedness meetings/ training over/mock exercises since 2015 Earthquake? (meetings can be arranged by government and non-government officials if not CDMCs)

_____ No / _____ Yes à who _____ please describe briefly _____

6.3 Does this type of activities help in disaster preparedness? Also, list in what ways these activities are useful.

_____ No / _____ Yes, please describe briefly _____

6.4 Is your household aware of any disaster related plans/activities from municipality/wards?

_____ No / _____ Yes, please describe briefly _____

6.5 Do the members know which number to call in the event of an emergency?

_____ Yes (1) / _____ No (0)

6.6 Who is most likely to provide you with assistance in a disaster? Please rank them.

- | | |
|---------------------------------------|-----------------------------------|
| a. _____ Family/ friends/ neighbours; | b. _____ Community/Neighbourhood; |
| c. _____ Government; | d. _____ Religious groups; |
| e. _____ The Red Cross; | f. _____ NGOs; |
| g. _____ Private sector/ businesses; | h. _____ Others |

6.7 Can you name any organisations (NGO, GON or CBO) that have provided DRR/ development/agriculture projects in your community since the 2015 earthquake?

	Organisation Name	Classification* (NGO, GON, CBO)	Date	Type of project		DRM cycle * (if applicable)				Importance 1. Very important 2. somewhat important; 3. Not important
				Resources (F= food, L=loan, M= Material, La= Labour)	Information	Before	During	Recovery	Reconstruction	
1.										
2.										
3.										
4.										

6.8 Over the past 10 years has your household taken or participated in any of the following measures in order to better living with landslides?

- A. _____ Afforestation, planting trees
- B. _____ Restriction of open grazing
- C. _____ Construction of check dams along gullies (created by surface run-offs) and in riverside
- D. _____ Construction of drainage control diversion ditches to flow excessive water
- E. _____ Evacuate to open and safe place.
- F. _____ Temporary shelter in shed during monsoon.
- G. _____ Sell valuable assets to make a living.
- H. _____ Borrowing food items in barter system.
- I. _____ Joining a community group
- J. _____ Out Migration (Migration to safe place in betterment of living, e.g., to India for short duration to earn money)

6.9 **LEADERSHIP** - Do you agree or disagree with the following statements?

Strongly Agree = 1; Agree = 2, No opinion = 3, Disagree = 4, Strongly disagree = 5

- a) _____ People in the community trust public officials / leaders.
- b) _____ The community has effective leaders in terms of landslide issues – they have accurate and up to date knowledge about landslide and are positively influential in landslide decision making.
- c) In your opinion who are the 5 most important people in your community (people who the community rely on for leadership and decision making), and why?

	Role/Job	Reason (why are they important - part of organisations/ committees/ access to services)	Household ID (to be filled later)
Name 1.			
Name 2.			
Name 3.			
Name 4.			
Name 5.			

Appendix 2: Household Demographics

Total

Respondents' demographics	Percentage (%)
Gender	
Male	55
Female	45
Age (Years Old)	
18-30	17
31-50	48
51-65	22
66-75	9
75+	4
Education	
No Schooling	57
Primary	20
Secondary	16
Tertiary	7
Occupation	
Student	4
Agriculture	58
Housewife	11
Government Employed	5
Job Locally	7
Job Outside	14
Others	1
Number of family members	
1-5	53
6-10	45
11-15	1
16-20	1

Bajedi

Respondents' demographics	Percentage (%)
Gender	
Male	65
Female	35
Age (Years Old)	
18-30	15
31-50	45
51-65	24
66-75	13
75+	3
Education	
No Schooling	52
Primary	21
Secondary	20
Tertiary	7
Occupation	
Student	4
Agriculture	52
Housewife	14
Government Employed	4
Job Locally	8
Job Outside	16
Others	2
Number of family members	
1-5	52
6-10	45
11-15	2
16-20	1

Sunkuda

Respondents' demographics	Percentage (%)
Gender	
Male	52
Female	47
Age (Years Old)	
18-30	17
31-50	49
51-65	18
66-75	10
75+	6
Education	
No Schooling	66
Primary	15
Secondary	11
Tertiary	8
Occupation	
Student	1
Agriculture	58
Housewife	10
Government Employed	6
Job Locally	6
Job Outside	18
Others	1
Number of family members	
1-5	54
6-10	44
11-15	1
16-20	1