

Government of Nepal Ministry of Energy, Water Resources and Irrigation Alternative Energy Promotion Center (AEPC) Mini Grid Energy Access Project (MGEAP)

Questionnaire for Pre-Feasibility Study (PFS) of Solar, Wind and Solar Wind Hybrid Mini Grid Subproject

The following questions are intended to collect site information while conducting PFS of mini grid solar, wind and solar wind hybrid subproject.

Subpr	oject Name:				
Rural Municipality/Municipality: District:					
Ward I	No/Tole:		Date	of Site Visit:	
	and information.		•		
I. Gen	eral Information:				
	tudy Team	T			
S.N.	Name	Desig	gnation	Contact No.	Signature
1		Team	Leader		
2		Team	Member		
3		Team	Member		
	ocal Persons contacted or persons):	Interviev	wed (includ	ding Rural Muni	cipality/Municipality
		Interviev	wed (includ	ding Rural Muni	cipality/Municipality
		Interview	, 	ding Rural Muni	
Chair	rpersons):	Interview	, 		
Chair S.N.	rpersons):	Interview	, 		
S.N.	rpersons):	Interview	, 		cipality/Municipality Contact Number
S.N. 1 2	rpersons):	Interview	, 		
S.N. 1 2 3 4	rpersons):	Interview	, 		
Chair S.N. 1 2 3 4 1.3 Si	Name of the Person		Ac		
Chair S.N. 1 2 3 4 1.3 Si Name of	Name of the Person ite Accessibility: f nearest road-head:		Ac		
Chair S.N. 1 2 3 4 1.3 Si Name of	Name of the Person ite Accessibility: f nearest road-head:	coated ()	Ac	ddress	Contact Number
Chair S.N. 1 2 3 4 1.3 Si Name of	Name of the Person Name of the Person ite Accessibility: f nearest road-head:	coated ()	Ac	Gravel ()	others ()
Chair S.N. 1 2 3 4 1.3 Si Name of Road-he Walking f no roa	Name of the Person ite Accessibility: f nearest road-head:	coated ()	Ac	Gravel ()	others ()

Na	me of the nearest NEA gr	id point:						
	tance from proposed sub							
Co	Comments, if any:							
1.6 N	Aigra budra Dawar Blanta	in Aron (if oxio	4 \					
	Micro-hydro Power Plants	·	1					
Location	Location Size (kW) Distance (km) Comments							
<u> </u>								
2. Soc	io-Economic Survey:							
	Households and Populati	on of the propo	sed subp	roject s	ite:			
					Popu	lation	Remarks	
S.N.	Name of Tole	Numbe	er of HH	Ма	ıle	Female	1	
1								
2								
3								
4								
5								
2.2	Source of household inco	ome:						
S.N.	Р	articular				Sha	re (%)	
1	Agricultural production							
2	Service/Jobs except ren	nittance						
3	Income from remittance	S						
4	Anchor/Business							
5	Others, if any							
23	Total no of existing ancho	ors or business	es:					
S.N.	Name of Anchor/Busin				Sour	ce of energy	/ being used	
1							,	
2								
3								
4								
5								

1.5 NEA National Grid

3.1 F	Present Source of Electricity	in the sui	oproj	ect site:					
S.N.	Types of Source	of Source No of HH		No of Anch	ors/ No of Inst		titutions		
S.IV.	Types of Source	INO OI F	1П	Businesses		(community uses)		Remarks	
1	Solar home systems								
2	Small solar home systems								
3	Pico-hydro								
4	Micro-hydro								
5	Kerosene								
6	Diesel Generator set								
7	Others, if any								
3.2 <i>A</i> S.N.	Average Household Power D Appliances/Equipments	Quan (A)	tity	Estimated Watt per Unit (B)	t	Total Power (Watt) C = A * B	Ave	rage daily (Hour/day)	
1	LED Lights			5 (<i>5</i>)					
2	Radio								
3	Mobile Charging								
4	Television								
5	DTH Receiver								
6	Fan								
7	Computer/Laptop								
8	Refrigerator								
	Others, if any								
		-	Total	Power (Wa	tt)				
3.3 E	Existing or Potential Anchor	or Busine	ss Po	ower Demar	nd (Pl	ease use the lis	t or edit	as required):	
S.N.	Appliances/Equipments (Quantity (A)		stimated att per Unit (B)		otal Power (Watt) C = A * B	_	e daily use ur/day)	
1	Telecom Tower								

2.4 After installation of mini grid solar, wind and solar wind hybrid system, is there any possibility of

entrepreneurship development? If so, please list out the potential anchor or business.

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3. Present Situation and Electricity Demand:

2	Grill Industry			
3	Saw Mill			
4	Hulling/Milling/			
	Grinding			
5	Hotels			
6	Computer Institute &			
	Electronic Center			
7	Photocopy Center			
8	Cold Storage			
9	Irrigation/Water			
	Pumping			
10	Private Hospital/Clinics			
11	Banks			
12	Others, if any			
		Tota	al Power (Watt)	

3.4 School Power Demand (Please use the list or edit as required):

S.N.	Appliances/Equipments	Quantity (A)	Estimated Watt per Unit (B)	Total Power (Watt) C = A * B	Average daily use (Hour/day)
1	LED Lights				
2	Computers/Laptops				
3	Mobile Charger				
4	Television				
5	Printers				
6	Projectors				
7	Others, if any				
		Tot	al Power (Watt)		

3.5 Health Post Power Demand (Please use the list or edit as required):

S.N.	Appliances/Equipments	Quantity (A)	Estimated Watt per Unit (B)	Total Power (Watt) C = A * B	Average daily use (Hour/day)
1	LED Lights				
2	Refrigerator/Vaccine				
	Fridge				
3	Mobile Charger				
4	Nebulizer				
5	Sterilizer Machine				

6	Infant Radiant Warmer			
7	Suction Pump			
8	Others, if any			
		Tot	al Power (Watt)	

3.6 Other Community Power Demand (Please use the list or edit as required):

S.N.	Appliances/Equipments	Quantity (A)	Estimated Watt per Unit (B)	Total Power (Watt) C = A * B	Average daily use (Hour/day)
1	Rural Municipality/				
	Municipality Office				
2	Rural Municipality/				
	Municipality Ward				
	Office				
3	Street Lights				
4	Communication Center				
5	Others, if any				
		Tot	al Power (Watt)		

3.7 Estimated Cumulative Electricity Demand of the subproject site (Please use the list or edit as required):

S.N.	Electricity Users	Quantity	Total Power
			Requirement (kW)
1	Households demand		
2	Anchor/Business demand		
3	School demand		
4	Health post demand		
5	Other Community power demand		
6	Others, if any		
	Total Power (kW)		

4. Assessment of Potential Renewable Energy Resources:

- 4.1 Potential resources for mini grid based power generation in the subproject site
 - A) Solar Photovoltaic (PV)
 - B) Wind Energy
 - C) Solar Wind Hybrid
 - D) Micro/Mini Hydro
 - E) Others

4.2	Solar	Photovoltaic ((PV):
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S.N.	Particulars	Description		Remarks
1	Average number of sunshine hours/day			
2	Orientation of the land (facing towards)	South	North	
	Please tick out of 4 options.	East	West	
2	Available land area for PV Array (m²)			
3	Available land area for Power House (m²)			
4	GPS Coordinates for PV Array and Power House Location			

4.3 Wind Energy:

S.N.	Particulars	Description	Remarks
1	Available land area for Wind Turbine (m²)		
2	GPS Coordinates for Wind turbine Location		

4.4 Land Details:

	S.N.	Particulars	Description	Remarks
ſ	1	Type of Land		
	2	Ownership of Land		

	4.5 Are there any noticeable high v Yes()Nar	_	locations in and aro	ound subproject site ? No ()	
_	In the contract of the lands of the land	(. 12 . (. 11 .			
5.	Is the proposed subproject site loc	cated in follov		_	
	A) Protected area □		B) Community fore	est 🗆	
	 C) Government forest □ E) Leasehold forest □ G) Cultural heritage/religious site □ I) Buffer zone □ K) Area used by indigenous people □ 		D) Religious forest □		
			F) Private Forest □		
			H) National park □ J) Conservation Area □		
			L) Wildlife Sanctua	ary □	
	M) Wetland □				
	N) Unique or aesthetically valuable land or water form □				
	O) Range of endangered or threa	atened anima	als and birds 🏻		
	P) None of above $\ \square$				
6.	Study Team Recommendation:				
	(I) Solar Mini Grid System	(II) Wind M	ini Grid System	(III) Solar Wind Hybrid System	m
	(IV) Not Recommended				

Name of Community Representative:							
Signature:							
Phone Number:	Mobile Number:						
Name of Representative from Rural Municipality/Municipality:							
Designation:							
Signature:	Mobile Number:						
Name of Representative from ESCO/Consulting Firm/Consultants:							
Designation:							
Signature:	Mobile Number:						

NOTE:

ESCO/ Consulting Firms/Consultants are encouraged to provide additional information in addition to above asked check-list.