

**RENEWABLE ENERGY FOR RURAL ECONOMIC DEVELOPMENT PROJECT
POST INSTALLATION VERIFICATION OF VILLAGE HYDRO PROJECTS (SUSTAINABILITY AUDIT)**

1. Key Information

Name of Project			
Date of Commissioning		Capacity	kW
Project Developer			
EM Plant Supplier			
PCI/Non-PCI (Name)			
Number of Households	At inception	Nos	Current Nos
Key reasons If number of households connected has reduced			

2. Current Status

Project in Operation	Yes <input type="checkbox"/> No <input type="checkbox"/>		
How many hrs a day	At inception	24 <input type="checkbox"/> >12 <input type="checkbox"/> 6-12 <input type="checkbox"/> <6 <input type="checkbox"/>	Current 24 <input type="checkbox"/> >12 <input type="checkbox"/> 6-12 <input type="checkbox"/> <6 <input type="checkbox"/>
If there is a reduction, state reasons			
Was the plant in operation during the visit	Yes <input type="checkbox"/> No <input type="checkbox"/>		
If "No", state reasons			
How many months a year is the plant in operation (full capacity)	12 <input type="checkbox"/> 11 <input type="checkbox"/> 10 <input type="checkbox"/> 9 <input type="checkbox"/> <9 <input type="checkbox"/>		
Power is reliable	Yes <input type="checkbox"/> No <input type="checkbox"/>		
If "No", state reasons			
Voltage is stable	Yes <input type="checkbox"/> No <input type="checkbox"/>		
If "No", state reasons			

3. Physical Asset Verification

Item	Availability	Condition
Weir	Yes <input type="checkbox"/> No <input type="checkbox"/>	Good <input type="checkbox"/> Fair <input type="checkbox"/> Needs repair <input type="checkbox"/> Unusable <input type="checkbox"/>
Forebay/Channel	Yes <input type="checkbox"/> No <input type="checkbox"/>	Good <input type="checkbox"/> Fair <input type="checkbox"/> Needs repair <input type="checkbox"/> Unusable <input type="checkbox"/>
Powerhouse	Yes <input type="checkbox"/> No <input type="checkbox"/>	Good <input type="checkbox"/> Fair <input type="checkbox"/> Needs repair <input type="checkbox"/> Unusable <input type="checkbox"/>
Penstocks	Yes <input type="checkbox"/> No <input type="checkbox"/>	Good <input type="checkbox"/> Fair <input type="checkbox"/> Needs repair <input type="checkbox"/> Unusable <input type="checkbox"/>
EM Plant	Yes <input type="checkbox"/> No <input type="checkbox"/>	Good <input type="checkbox"/> Fair <input type="checkbox"/> Needs repair <input type="checkbox"/> Unusable <input type="checkbox"/>
Distribution Wiring	Yes <input type="checkbox"/> No <input type="checkbox"/>	Good <input type="checkbox"/> Fair <input type="checkbox"/> Needs repair <input type="checkbox"/> Unusable <input type="checkbox"/>
Distribution Poles	Yes <input type="checkbox"/> No <input type="checkbox"/>	Good <input type="checkbox"/> Fair <input type="checkbox"/> Needs repair <input type="checkbox"/> Unusable <input type="checkbox"/>
If any of the above is a "No", state reasons		
Type of Poles	At inception	Wooden <input type="checkbox"/> Concrete <input type="checkbox"/>
	Current	Wooden <input type="checkbox"/> Concrete <input type="checkbox"/>
Are Penstocks Exposed	Yes <input type="checkbox"/> No <input type="checkbox"/>	

4. Customer Service

Is the ECS satisfied with the developer		Yes <input type="checkbox"/> No <input type="checkbox"/>	
If "No", state reasons			
Is the ECS satisfied with the EM Plant supplier		Yes <input type="checkbox"/> No <input type="checkbox"/>	
If "No", state reasons			
Has the developer done post-commissioning visits	Yes <input type="checkbox"/> No <input type="checkbox"/>	Approximately how many	
When was the last visit by the developer			
Are further visits by the developer necessary in ECS's opinion		Yes <input type="checkbox"/> No <input type="checkbox"/>	
If "Yes", state reasons			
Does the EM Plant supplier attend to repairs	Yes <input type="checkbox"/> No <input type="checkbox"/>	Is he prompt	Yes <input type="checkbox"/> No <input type="checkbox"/>

5. Future potential of the project

Possibility of the grid reaching the village	Already reached <input type="checkbox"/> Near future <input type="checkbox"/> Remote <input type="checkbox"/>
ECS's view on the future of the project	Upgrade/rehabilitate/renovate <input type="checkbox"/>
	Continue for more than 3 Years <input type="checkbox"/>
	Continue for 1 to 3 years <input type="checkbox"/>
	Continue for less than 1 year <input type="checkbox"/>

6. If the project is abandoned (or to be abandoned within 3 years), reasons:

Grid connection		Machinery Breakdown (age, faults, etc)	
Conflict within ECS		Natural Disaster (damaged by floods etc)	
Other:			

7. ECS

Status of the ECS	Strong <input type="checkbox"/> Weak <input type="checkbox"/> Non-Functional <input type="checkbox"/>		
Contact details	Name of President		
	Address		
	Contact No.		
ECS meetings	Regular <input type="checkbox"/> Irregular <input type="checkbox"/>	Frequency of meetings	
Minutes available for inspection	Yes <input type="checkbox"/> No <input type="checkbox"/>	Minutes well kept	Yes <input type="checkbox"/> No <input type="checkbox"/>
Members have undergone FECS Training	Yes <input type="checkbox"/> Offered, but declined <input type="checkbox"/> Not invited <input type="checkbox"/>		
ECS is conversant with Operational & Maintenance procedures	Yes <input type="checkbox"/> No <input type="checkbox"/>		
How are breakdowns handled?			

Is the ECS capable of absorbing the cost of a major repair (eg. motor burnout)?		Yes <input type="checkbox"/> No <input type="checkbox"/>
Are there any local technicians capable of attending to repairs?		Yes <input type="checkbox"/> No <input type="checkbox"/>
List economic activities carried out using electricity from the VHP		

8. Environmental Compliance/Safety

Is there an opening provided in the weir for a continuous, uninterrupted minimum flow?		Yes <input type="checkbox"/> No <input type="checkbox"/>
Are there any visible signs of soil erosion directly attributable to the project?		Yes <input type="checkbox"/> No <input type="checkbox"/>
Are adequate personal injury protection measures practiced at the powerhouse?		Yes <input type="checkbox"/> No <input type="checkbox"/>
If "No", state reasons		
Are adequate personal injury protection measures practiced at the channel and forebay tank?		Yes <input type="checkbox"/> No <input type="checkbox"/>
If "No", state reasons		
Are adequate safety measures practiced at the project, as per the RERED VH Specification?		Yes <input type="checkbox"/> No <input type="checkbox"/>
If "No", state reasons		

9. According to the villagers, what are the key socio-economic impacts on the community as a result of implementing the VHP?

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Rough sketch of the route to the project