

# Terms of Reference

For

## Impact Study on Post Installation Support Services Supported in Selected MHPs in Nepal

### Background

Renewable Energy for Rural Livelihood (RERL) programme funded by United Nations Development Programme/Global Environment Facility (UNDP/GEF) has been implemented under the execution of AEPC. This programme is developed as an integral part of AEPC and thus assists in fulfilling its ambitious targets. It has been noticed that most of the micro/mini hydropower projects have poor governance system including lack of accountability and transparency among the management committee, as a result, the overall performance of the plants is operating in subsistence level. The tariff structures of the plants have not been improved and hardly able to manage operation and maintenance. The MHP project is considered as social asset rather than a profit making enterprise. MHPs still face numerous issues mainly on management, technical and financial aspects as a result it has not properly functioning of its full swings (fall nearly on sick condition). Most of the projects having very low utilization of electricity (average 20%) and also are unable to collect sufficient revenue even for minor O&M costs.

It is envisioning that the plants should be operated and managed as a business model for the sustainability and to increase the attractiveness. This will help to increase the plant load factor and generate revenue to enhance financial sustainability. Thus, the management committee, as well as customers, need to be reoriented towards commercial operation of the plants that have huge potential to induce local economic activities if it properly managed and taken care of. The management committees need to be capacitated and have to orient towards business-like institutions for commercial operation with maintaining transparency, accountability and impartiality for the operation and management of the plants.

AEPC/RERL has been providing on post-installation support services to some selected micro hydro power projects (around 20-25 MHPs attached in the Annex part) in few districts. As part of its efforts to strengthen institutional capacity and commercial operation of MHPs as an enterprise model , RERL had initiated the several numbers of activities like social mobilization, computer billing system, incentive packages, exposure visit, trainings etc. It is believed that these services helped to improve the governance system of MHPs and also support to strengthen the institutional capacity of selected MHPs for their sustainability in future. In line with the provided supports, AEPC/RERL seeks to hire an external consultant firm to undertake an evaluation on impact on post-installation support services provided in selected MHPs in Nepal.

**Objectives:** The main objective of this study is to carry out impact on post installation support services in selected micro-hydro projects (supported by RERL) and review various aspects of their operation. More specifically, the study will measure various sustainability dimensions and services

rendering to community from micro-hydro projects. In particular, the study will identify impact of the post-installation supports on the following sustainability aspects:

It is anticipated that the study will gather and document key learnings from the project implementation and provide some valuable recommendations for future intervention.

#### **The scope of Work:**

- ❖ Technical aspects (reliability of power supply, plant optimization safety measures, increased operation hours, frequency of repair and maintenance works, demand side management, operators' capabilities etc).
- ❖ Institutional aspects (improved governance, participation, transparency, ownership of community, incentives package, clear role and responsibility, financial management, relationship with local government).
- ❖ Economic aspects (revenue generation and profits, employment opportunities, saving and credit activities, maintenance fund inclusive enterprise development)etc).
- ❖ *Impact on performance of End uses*
- ❖ End use services and impacts on beneficiaries e.g time saved by access to agro-processing, performance of students (boys/girls) due to better lighting and extended hours,

The consultant is expected to carry out but not limited to the following activities.

- ❖ Review project documents, identify key strategies and review key field activities.
- ❖ Develop appropriate study methodology for capturing all necessary information to evaluate the impacts of post installation support
- ❖ Analyze data by employing appropriate qualitative and quantitative methods including econometric, case study, ethnography
- ❖ Write a comprehensive study report with key findings and recommendations

The Consultant should mention the detailed methodology for carrying out this study. The study team should consist of technical and social experts with experience in micro hydro. Data and evidences should be obtained from the project sites. Adequate interaction between the study team and the local stakeholders are anticipated. The evaluation will be results-oriented and provide evidence of achievement of expected outputs through the use of quantitative and qualitative methods.

#### **Duration of the Study:**

The assignment will be completed within 6 months from the signing of the contract.

#### **Duties and Taxes:**

The Consultant shall pay all tariffs, duties, other taxes or charges levied by the GoN at any stage during the execution of the work.

#### **Terms of Payment:**

- Payment will be provided after submission the final report.

## **Deliverables:**

The Consultant will be responsible for submitting the followings:

- ❖ **Inception report-** The report shall contain evaluation or impact study objectives and scope, description of evaluation methodology/methodological approach, data collection tools, data analysis methods, key informants/stakeholders, evaluation questions, performance criteria, issues to be studied, work plan and reporting requirements. The report should be submitted within one week after the contract award.
- ❖ **Field report** -The consultant shall submit a debriefing report after completion of field visit. The report shall cover preliminary finding
- ❖ **Draft report-** a draft report is expected after one month of field report with highlighting finding, impact, lessons learned, recommendations and discussions on the future strategy for upscaling of business model i.e. MHP as an enterprise model.
- ❖ **Final report-** is expected to be submitted to AEPC/RERL incorporating all comments and feedback collected from all stakeholders involved one month after receiving the feedback.

## **Team Composition**

The consulting team will comprise the following personnel to carry out the work:

a) A Team Leader with a preferred experience in planning, designing, carrying out similar tasks. The Team Leader must have substantial knowledge on renewable energy projects, preferably relating to Micro-Hydro projects. As the Team Leader will be responsible for review of documents and other relevant literature, develop research method including survey questionnaire, train enumerators and supervising them, data analysis, interpretation and report writing. He or she should hold at least Master's Degree in relevant field and possess a very good interpersonal and communication skills, including proficiency in written English.

b) The survey team should comprise of a necessary number of enumerators and other support staff having extensive experience on assigned tasks. The data enumerators should conduct survey and interact with local stakeholders. Gender balance in the team will be appreciated.

The Consultant shall submit the name(s) of the required human resources to be assigned for the execution of the proposed project. Detailed CVs of the experts to be involved for the conduction of this study must be submitted.

## **Selection/Evaluation Process**

The selection is based on quality and cost based method as per the financial proposal mentioned on Annex A.

## **Documents to be submitted by consultant**

- Financial Proposal (as per Annex B) with signed cover letter
- Updated copy of signed CV

- Copy of VAT Certificate (if applicable)
- Copy of TAX Clearance Certificate of previous fiscal year (if applicable)
- Other relevant documents
- Copy of company/firm registration certificate with renewable (if applicable)

### **Acceptance of Proposal**

All rights are reserved with RERL to approve or disapprove any proposal without giving any reasons whatsoever. If needed, the consultant will be asked for modifications and presentations of the proposal before approval.

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Should you have queries on the notice, please forward an email clearly mentioning your queries to Mr. Subas C. Kunwar at email [subas.kunwar@aepc.gov.np](mailto:subas.kunwar@aepc.gov.np). Although efforts will be made to respond to such queries as soon as possible, kindly set aside ample time for us to furnish responses to your queries.

Expressions of interest (in hard copy) must be personally delivered to the address given below by before 22 August 2018

Alternative Energy Promotion Centre (AEPC)  
Renewable Energy for Rural Livelihood (RERL) Programme  
Address: Khumaltar, Lalitpur  
Telephone: +9771-5539390, 5539391  
Website: [www.aepc.gov.np](http://www.aepc.gov.np)

## LIST OF ANNEXES

### Annex A: Financial Proposal

The lowest bidder will be selected and awarded the assignment. The trainer is expected to submit financial proposal as per the table below:

#### Proposed Budget for this Assignment

SN	Particulars	Qty	Unit	Unit Rate (NPR)	Amount (NPR)
A	Resource person fee		Days		
B.	Enumerator		Days		
C.	Daily allowance for travel (transportation cost will be managed by RERL)		Days		
D	Total Budget (A + B + C)				
E	Overhead (Maximum 10% of D, if applying from firm)				
F	Total Budget with 13% VAT (if applicable)				

### Annex- List of MHP projects

SN	Contact Person	District	MHPs	kW	Contact Number
1	Khagendra B Shah	Achham	Kailash III- Santada	28	9848552082
2	Bharat Saud	Achham	Darna MHP Cooperative Achham	83	9868862080

3	Prem Sodari	Achham	Kalagaun Extension Project, Achham	25	9848678038
4	Bharat B. Rokaya	Achham	Upper Kailash Khola MHP, Achham	65	9848657552
5	Tek Bdr Saud	Achham	Kailash Khola IV and V (Bhatekatiya),	25,35	9878537150
6	Ammar bahadur Batala	Achham	Gaganchhada MHP	45	9865614252
7	Ram Prasad Chalise	Baglung	Nishi Khola II MHP	100	9867682522
8		Baglung	Bhuji Khola V MHP	84	
9	Prem Bahadur Gharti	Baglung	Nishi Khola MHP	100	9805207707
10	Ganesh Kumar Thapa	Baglung	Chachalghat MHP		9840293959
11	Indra Bahdur Gharti	Baglung	Nishi Khola III MHP	100	9823018985
12	Shyam Gharti Magar	Baglung	Bhuji Khola IV MHP	84	9866044981
13	Anil Giri	Baglung	Girindi Khola MHP	75	9857676390
14	Prem Rokaya	Bajura	Juddi MHP	200	9749017469
15	Yesadebi Cooperative	Bajura	Kordhaligad MHP	50	9875811072
16	Surendra Raj Giri	Bajura	Malagad I MHP, Tribeni	100	9843580372
17	Dharma Raj Jaisi	Bajura	Bajrugad MHP	100	9848628397
18	Ramesh K.C.	Gulmi	Baddigad MHP	100	9867411747
19	Jamuna K.C.	Rolpa	Sanghura Khola MHP	60	
20	Hast Bahadur Pun	Rolpa	Kujegar Satlimare MHP	92	9866704443
21		Rolpa	Bagaune Khola MHP	91	9801330666
22	Khadak Dang	Rolpa	Kunpa Sanghura MHP	90	9741484891
23	Moti Ram Bhandari	Rukum	Simlli Khola MHP	29	9868631815
24	Ram Kumar Pun	Rukum	Jama Khola MHP Syala.Rukum	90	9748579308
25	Dinesh Giri	Rukum	Sankh Khola III MHP	60	9857824237
26	Dipak Pun	Rukum	Sankh Khola Dovan MHP Rukum	58	9847864427