



REQUEST FOR PROPOSAL

Five Solar Powered Water Pumping Systems

Project: Water Service to Rohingya Community and Health Clinic (WSRC&HC)	
Adventist Development and Relief Agency Bangladesh 149 Shah Ali Bagh, Mirpur-1, Dhaka-1216	DATE: November 27 th , 2018
	REFERENCE: 1809-13WSRC&HC

ADRA Bangladesh invites qualified vendors to submit their Proposal for the provision of services to Install **05 (Five) Solar Powered Water Pumping Systems** in Rohingya Refugees Camp# 5, 6 & 8W at Kutupalong Ukha, Teknaf, Cox's Bazar. Vendors are requested to avail themselves of the Annex 1 attached, in preparing the Proposal.

Vendors are requested to submit both a **technical** proposal and a **financial** proposal. The Financial Proposal and the Technical Proposal MUST BE COMPLETELY SEPARATE and each of them must be submitted individually and clearly marked. Vendors can choose to submit the proposals either by

- (i) email sent to tenders.tp@adrabd.org for the technical proposal and tenders.fp@adrabd.org for the financial proposal.
- (ii) two separate clearly marked and sealed envelopes to:
*Adventist Development and Relief Agency Bangladesh,
149 Shah Ali Bagh, Mirpur-1, Dhaka-1216.*

The proposals shall quote in the subject line or on the sealed envelopes the reference number **1809-13WSRC&HC**. The proposal submitted later than December 03, 2018 4:00 p.m. shall not be considered for evaluation. In the course of preparing the Proposal, it shall remain the responsibility of the vendor to ensure that it reaches ADRA above on or before the deadline.

The Financial Proposal shall be prepared using the proposed standard form (annex 3). It shall list all major cost components associated with the services, and the detailed breakdown of such costs. All outputs and activities described in the Technical Proposal must be priced separately on a one-to-one correspondence. Any output and activities described in the Technical Proposal but not priced in the Financial Proposal, shall be assumed to be included in the prices of other activities or items, as well as in the final total price. All prices shall be quoted in the currency indicated in BDT.

No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted after submission. At the time of Award of Purchase Order, ADRA Bangladesh reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty-five percent (25%) of the total offer, without any change in the unit price or other terms and conditions.

All bidders/vendors must aware that the goods and services are for the benefit of the Government and goods purchased will normally be transferred to the national partners, or to an entity nominated by it, in accordance with ADRA's policies and procedures. The bidder/vendor shall include in their proposal:

- A statement whether any import or export licenses are required in respect of the goods to be purchased or service to be rendered, including any restrictions on the country of origin, use/dual use nature of goods or services, including and disposition to end users;
- Confirmation that he has obtained licenses of this nature in the past and have an expectation of obtaining all the necessary licenses should their bid be successful.

If you request additional information, please write to procurement@adrabangladesh.org, and the team will provide necessary information within due date. However, any delay in providing such information will not be considered a reason for extending the submission date of your quotation, unless ADRA Bangladesh deems that such an extension is justified and necessary. All/any query regarding the submission of the quotation may be sent prior to the deadline at the email/address mentioned above. The queries and the provided answers will be published only on the <https://www.adrabangladesh.org/tenders> for all interested parties.

Please be advised that ADRA Bangladesh is not bound to accept any Proposal, nor award a contract or Purchase Order, nor be responsible for any costs associated with a Service Providers preparation and submission of a Proposal, regardless of the outcome or the manner of conducting the selection process. The Proposal that complies with all of the requirements, meets all the evaluation criteria and **offers the best value for money** shall be selected and awarded the contract. Any offer that does not meet the requirements shall be rejected.

Proposals submitted by two (2) or more Proposers shall all be rejected if they are found to have any of the following:

- a) they have at least one controlling partner, director or shareholder in common; or
- b) any one of them receive or have received any direct or indirect subsidy from the other/s; or
- c) they have the same legal representative for purposes of this RFP; or
- d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about, or influence on the Proposal of, another Proposer regarding this RFP process;
- e) they are subcontractors to each other's Proposal, or a subcontractor to one Proposal also submits another Proposal under its name as lead Proposer; or
- f) an expert proposed to be in the team of one Proposer participates in more than one Proposal received for this RFP process. This condition does not apply to subcontractors being included in more than one Proposal.

Proposals shall remain valid for the period Of 60 days, commencing on the submission deadline. A Proposal valid for a shorter period shall be immediately rejected and rendered non-responsive. In exceptional circumstances, prior to the expiration of the proposal validity period, ADRA Bangladesh may request Proposers to extend the period of validity of their Proposals. The request and the responses will be made in writing, and shall be considered integral to the Proposal.

ADRA Bangladesh looks forward to receiving the Proposals and thanks interested vendors in advance for the interest in ADRA Bangladesh's procurement opportunities.

Country Director
ADRA Bangladesh

Annex 1: Terms of Reference (ToR)

Background:

Kutupalong is the biggest Rohingya Refugee camp in Bangladesh. More than 700,000 people are living in this camp out of which 53% women and 30% are children. One of the biggest challenges in this camp of the people is to have access to safe WASH facilities that includes lack of clean and safe drinking water leading to health hazards specially for women, children and elders. There are few organizations delivering WASH related services in different areas of Kutupalong, but it is not sufficient to cover such a large number of people due to limited available resources. The humanitarian organizations are struggling to meet the WASH needs of the entire Kutupalong camp area. ADRA would like to contribute in those ongoing efforts in providing WASH services through provision water facilities. This project would be targeted to provide safe and clean drinking water to 5 health clinics that cater at least 750 people on a daily basis, and also would ensure to share the available water to nearby communities depending on the availability of water at the source that would cover at least 1250 Households (7500 people) regularly.

In order to ensure sustainability and long-term operation of the water facility, a group of local volunteers will be trained to operate, maintain, protect and ensure the quality of the water provided (purity level). The provision of safe and clean drinking water to health clinics and communities not only will provide access to the minimum required water to targeted individuals but will also ensure safety and protection from water borne diseases and protects the rights of having access to safe drinking water. The most vulnerable groups such as women and children will be largely benefited from access to safe water that will reduce the risk of diarrhea and cholera in the targeted area.

Rationale:

The intervention will target 5 health clinics operated by one of our partners serving Rohingya communities in Kutupalong camp (specifically no. 5, 6 and 8W). In each health clinic there are about 120 sanitations facility (baths) for the patients, serving an average of 8250 people. The existing deep borewell is not functional due to the lack of power and plumbing network that is required to transport water from borewell to water tank, to treatment unit and eventually to the distribution point.

The water distribution network will primarily serve the clinics, but the community also will have access to water and water related facilities. The project will provide the water pump unit on the existing borewell. It is expected that the water pumps will be powered by multiple photovoltaic (PV) panels. PVC pipeline will transport water from borewell to storage tanks and further to treatment unit, to clinics and to the community distribution points.

The water treatment unit is not subject of the current Request for Proposal.

The following is the general and technical scope of work:

- Preliminary survey/assessment of the installation site (for scheduling a visit on the selected areas kindly email to henry@adrabd.org);
- Preparation of the technical proposal;
- Preparation of the financial proposal;
- Separate submission of the technical and financial proposal;
- Site preparation works;
- Installation;
- Commissioning;
- Direct engagement of the members of the community in technical training for safely operating the Solar Water Pumping System;

Targeted Area:

Services are required for Installation of **five Solar Water Pumping System** in Rohingya Camp# 5, 6 & 8W at Kutupalong, Ukhaia, Teknaf under Cox Bazar district.

Indicative Time Frame

Expected duration of work: 10 days; Under no circumstance the delivery time will be later than 31 December 2018. ADRA Bangladesh, its donors and the project will not be accepting accountability or claims related to this proposal completion after this date. Any items not delivered and installed outside the duration of the project will be considered a donation.

Guideline of proposal submission:

The proposal (duly signed) should comprise the following sections and within the given page limit. The proposal will be accepted, preferably in soft copy form (signed, scanned copy) by quoting in the subject line the reference code mentioned above.

Topic	Maximum Pages
Technical Proposal	
Cover Page	1 page
Table of content	1 page
Assumptions and constraints resulted from the initial site assessment that show a proper understanding of the assignment (Not just copy and paste from the ToR content);	2 pages
Detailed description of the proposed solution	5 pages
Technical spec sheets of the proposed equipment	As needed
User Operation / Maintenance training methodology	2 pages
Work Schedule	
References and/or work orders proving previous experience in performing similar work	2 pages
Team composition along with its rationale/role without CVs. (CVs may be given as attached file)	2 pages
Any other relevant information such as (if available): <ul style="list-style-type: none">- Existing quality assurance mechanism / certifications;- Limits of warranty;- Description of maintenance and service capabilities;- Copies of certification/authorization provided the producer (distribution; warranty service etc.);- Import authorization;	

<u>Kindly ensure separate submission</u>
Financial Proposal
Budget breakdown
Consultancy days and fees (days should be mentioned for key members of the team) if the case
Travel and accommodation (if required)
Any other expenditure (please mention nature of the expenditure)
VAT and Tax (Please calculate the total budget with VAT and Tax)
Any other relevant information (if necessary)
Total Amount (BDT)

Evaluation of Proposals

Preliminary Examination of Proposals

ADRA Bangladesh shall examine the Proposals to determine whether they are complete with respect to minimum requirements, whether the documents have been properly signed, whether or not the Proposer is in the UN Security Council 1267/1989 Committee's list of terrorists and terrorist financiers, and in the ADRA Bangladesh list of suspended and removed vendors, and whether the Proposals are generally in order, among other indicators that may be used at this stage. ADRA BANGLADESH may reject any Proposal at this stage.

Evaluation of Proposals

The proposals will be awarded scores as follows:

Criteria	Maximum scores
Technical proposal	40p
Financial proposal	50p
Delivery time	10p
Total	100p

The procurement panel shall review and evaluate the Technical Proposals on the basis of their responsiveness to the Terms of Reference and other documentation provided, applying the evaluation criteria, sub-criteria, and point system specified. Each responsive Proposal will be given a technical score. A Proposal shall be rendered non-responsive at this stage if it does not substantially respond to the RFP, particularly the demands of the Terms of Reference, which also means that it fails to achieve the minimum technical score. Absolutely no changes may be made by ADRA Bangladesh in the criteria, sub-criteria and point system indicated after all Proposals have been received.

The technical evaluation criteria comprise of the following:

Criteria	Weight
Technical	40p
1. The expertise of the firm/organization	
• Initial site assessment proving a good understanding of the ToR	5p
• Experience in implementing similar solutions (references or work orders of comparable size)	5p
2. Technical compliance	
• Appropriateness of the provided solution in response of the existing constraints. The potential of the solution to deliver consistently the expected results over the expected lifespan;	10p
• Brand Reputation of the proposed equipment	2p
• Existing quality assurance mechanism / certifications	5p
3. Warranties and Post installation maintenance	
• Limits of warranty	3p
• Potential for trouble-free operation	2p
• Maintenance and service capabilities of the supplier are certified/authorized by the producer	5p
4. User / Maintenance training proposed methodology	3p

In the second stage, only the Financial Proposals of those Proposers who achieve the minimum technical score (60% of the total technical score – 24p) will be opened for financial evaluation for comparison and review. The Financial Proposal Envelopes corresponding to Proposals that did not meet the minimum passing technical score (24p) shall be returned to the Proposer unopened.

For rating the vendors, the formula used will be as follows:

Rating the Technical Proposal (TP):
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TP Rating = (Total Score Obtained by the Offer / Max. Obtainable Score for TP) x 100

Rating the Financial Proposal (FP):

FP Rating = (Lowest Priced Offer / Price of the Offer Being Reviewed) x 100

Rating the Delivery time (DT)

DT Rating = (Lowest Delivery time in days / Delivery time of the Offer Being Reviewed in days) x 100

Total Combined Score:

(TP Rating) x (Weight of TP, e.g. 40p) +

(FP Rating) x (Weight of FP, e.g. 50p) +

(DT Rating) x (Weight of DT, e.g. 10p)

Total Combined and Final Rating of the Proposal (e.g. 100p)

ADRA BANGLADESH reserves the right to undertake a post-qualification exercise aimed at determining, to its satisfaction the validity of the information provided by the Proposer. Such post-qualification shall be fully documented and, may include, but need not be limited to, all or any combination of the following:

- a. Verification of accuracy, correctness and authenticity of information provided by the Proposer on the legal, technical and financial documents submitted;
- b. Validation of the extent of compliance to the RFP requirements and evaluation criteria based on what has so far been found by the evaluation team;
- c. Inquiry and reference checking with Government entities with jurisdiction on the Proposer, or any other entity that may have done business with the Proposer;
- d. Inquiry and reference checking with other previous clients on the quality of performance of ongoing or previous contracts completed;
- e. Physical inspection of the Proposer's offices, branches or other places where business transpires, with or without notice to the Proposer;
- f. Quality assessment of ongoing and completed outputs, works and activities similar to the requirements of ADRA BANGLADESH, where available; and
- g. Other means that ADRA BANGLADESH may deem appropriate, at any stage within the selection process, prior to awarding the contract.

Clarification of Proposals

To assist in the examination, evaluation and comparison of Proposals, ADRA BANGLADESH may, at its discretion, ask any Proposer for a clarification of its Proposal. If you request additional information, we would endeavor to provide information expeditiously, but any delay in providing such information will not be considered a reason for extending the submission date of your proposal.

ADRA BANGLADESH's request for clarification and the response shall be in writing. Notwithstanding the written communication, no change in the prices or the substance of the Proposal shall be sought, offered, or permitted, except to provide clarification, and confirm the correction of any arithmetic errors discovered by ADRA BANGLADESH in the evaluation.

Any unsolicited clarification submitted by a Proposer with respect to its Proposal, which is not a response to a request by ADRA BANGLADESH, shall not be considered during the review and evaluation of the Proposals.

Responsiveness of Proposal

ADRA BANGLADESH's determination of a Proposal's responsiveness will be based on the contents of the Proposal itself. A substantially responsive Proposal is one that conforms to all the terms, conditions, TOR and other requirements of the RFP without material deviation, reservation, or omission.

If a Proposal is not substantially responsive, it shall be rejected by ADRA BANGLADESH and may not subsequently be made responsive by the Proposer by correction of the material deviation, reservation, or omission.

Nonconformities, Reparable Errors and Omissions

Provided that a Proposal is substantially responsive, ADRA BANGLADESH may waive any non-conformities or omissions in the Proposal that, in the opinion of ADRA BANGLADESH, do not constitute a material deviation.

Provided that a Proposal is substantially responsive, ADRA BANGLADESH may request the Proposer to submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Proposal related to documentation requirements. Such omission shall not be related to any aspect of the price of the Proposal. Failure of the Proposer to comply with the request may result in the rejection of its Proposal.

Provided that the Proposal is substantially responsive, ADRA BANGLADESH shall correct arithmetical errors as follows:

- a. If there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of ADRA BANGLADESH there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected;
- b. If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail, and the total shall be corrected; and
- c. If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to the above.

If the Proposer does not accept the correction of errors made by ADRA BANGLADESH, its Proposal shall be rejected.

Award of Contract

Prior to expiration of the period of proposal validity, ADRA shall award the contract to the qualified Proposer with the highest total score based on the evaluation method indicated above.

Commercial terms:

The prices quoted are to be considered final (including all applicable taxes, VAT etc.).

Method of payment will be check. The payment terms are: 40% within 15 days from Purchase order and 60% within 15 days after commissioning.

Contract Signature

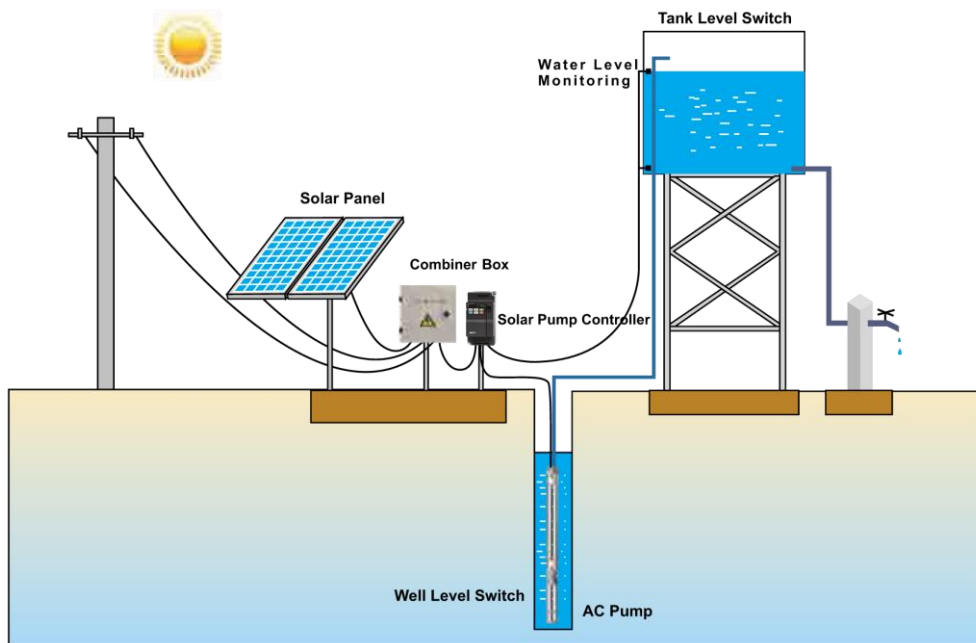
Within fifteen (3) days from the date of receipt of the Purchase Order, the successful Proposer shall sign and date the PO and return it to ADRA. Failure of the successful Proposer to comply this provision shall constitute sufficient grounds for the annulment of the award, ADRA may award the Purchase Order to the Proposer with the second highest rated Proposal or call for new Proposals.

Annex: 2 Technical specifications

A solar photovoltaic (SPV) water pumping system consisting of:

- PV array: Capacity from 1 KWp to 2 KWp
- Hot deep galvanized mounting structure.
- Motor Pump Set D.C. Induction Motor Pump Set.
- Controller and Switch
- Flow meter;
- RCC Civil Structure;
- Lightning arrester;
- Interconnect Cables and “On-Off” switch.
- Transportation, supply, installation, testing & commissioning;

Conceptual drawing:



Note: annotation on the above image does not represent technical specifications or requirements.

Performance specifications and requirements (duty cycle)

Solar PV Water Pumps with PV array capacity in the range of 1 KWp to 2 KWp to be installed on a suitable bore-well. Under the “Average Daily Solar Radiation” condition of 7.15 KWh/ sq.m. on the surface of PV array (i.e. coplanar with the PV Modules), the minimum water output from a Solar PV Water Pumping System at different “Total Dynamic Heads” should be as specified below:

-2.5m³/h at 100m

Note: the suction head is maintained by manually lowering the pump into the bore well.

The actual duration of pumping of water for a day and the quantity of water pumped could vary depending on the solar intensity, location, season, etc.

PV Array

The SPV water pumping system should be operated with a PV array capacity in the range of 1 kilo Watts peak to 2 kilo Watts peaks, measured under Standard Test Conditions (STC).

Sufficient number of modules in series and parallel could be used to obtain the required PV array power output. The power output of individual PV modules used in the PV array, under STC, should be a minimum of 125 Watts peak, with adequate provision for measurement tolerances.

Use of PV modules with higher power output is preferred. Indigenously produced PV module (s) containing mono/ multi crystalline silicon solar cells could be used in the PV array for the SPV Water Pumping systems.

- Modules supplied with the SPV water pumping systems should have a certificate as per IEC 61215 and IEC 61701 specifications or equivalent National or International/ Standards.
- Modules must qualify to IEC 61730 Part I and II for safety qualification testing.
- The efficiency of the PV modules should be minimum 14% and fill factor should be more than 70%.
- Terminal box on module should have a provision for “Opening” for replacing cable, if required.
- There should be a Name Plate fixed inside the module which will give:
 - a. Name of the Manufacturer or Distinctive Logo.
 - b. Model Number
 - c. Serial Number
 - d. Year of manufacture
 - e. Contact details of manufacturer (website, email, phone number)

Motor Pump-Set

- The SPV water pumping systems may use Surface mounted motor pump-set, however submerged motor pump-set are preferred
- The Motor Pump Set should have the following features:
 - The mono block centrifugal motor pump set has its driving unit and impeller mounted on a common shaft, thereby giving it a perfect alignment. The pump should be provided with specially developed mechanical seals which ensure zero leakage.
 - The suction/ delivery pipe (GI/HDPE), electric cables, floating assembly, civil work and other fittings required to install the system.
 - The following details should be marked indelibly on the motor pump set
 - a. Name of the Manufacturer or Distinctive Logo.
 - b. Model Number.
 - c. Serial Number.
 - d. Contact details of manufacturer (website, email, phone number)

Mounting Structures

The PV modules should be mounted on metallic structures of adequate strength and appropriate design with sun tracking system, which can withstand load of modules and high wind velocities up to 100 km per hour. The support structure used in the pumping system should be hot dip galvanized iron with minimum 100-micron thickness.

Water storage

Capacity: 5,000L; Lid: Out thread Hole diameter In Inch - Inlet: 2" Outlet: 1" Overflow: 2" Wash line: 2"

Plumbing and Pipelines

PVC 2" – 600+ m

Electronics and Protection

- Adequate protections should be incorporated against dry operation of motor pump set, lightning, hails and storms, water, salt and insects.
- Full protection against open circuit, accidental short circuit and reverse polarity should be provided.

ON/OFF Switch

A good, reliable switch suitable for DC use is to be provided with the motor pump set. Sufficient length of cable should be (minimum 12 meters) provided for interconnecting between the PV array and the motor pump set.

Warranty

The PV Modules must be warranted for output wattage, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years.

The whole system, including surface pumps shall have a replacement warranty for a minimum of 3 years and should be supported by a no cost maintenance contract for another 2 years. **Required spares parts for trouble free operation during the Warranty period should be provided at no extra cost/included.**

OPERATION AND MAINTENANCE MANUAL

The initial installation of the pump system will be the responsibility of the Selected Technology Provider (STP). After each installation, a separate check & certification of proper implementation will be done by an independent entity.

An Operation and Maintenance Manual, in English and in local language, should be provided with the solar PV pumping system. The Manual should have information about solar energy, photovoltaic, modules, AC motor pump set, tracking system, mounting

structures, electronics and switches. It should also have clear instructions about mounting of PV modules, DO's and DONT's and on regular maintenance and Trouble Shooting of the pumping system (including easy to understand sketches /diagrams for training, memory and reference purposes).

Name and address of the person or Centre to be contacted in case of failure or complaint should also be provided. Warranty cards for modules, electronics & a motor pump set should be provided to the beneficiary.

Annex 3: Financial Proposal Model

Instructions: Please use this template on a company letterhead.

Item	Description	Brand & Country of Origin	Unit of measure	Quantity	Price (BDT)
	Solar PV module...				
	Mounting structure...				
	Pump...				
	Electronics...				
	Water tank....				
	Water tank structure...				
	Transport...				
	Installation....				
	Spare parts....				
	User Training....				
	Maintenance...				
Total amount					
Total amount in words					

The price shall be final (include all applicable taxes, VAT etc.)

Delivery time shall be expressed in days

Commercial terms and conditions