



**INFORMATION SCIENCE & TECHNOLOGY DEPARTMENT
GOVERNMENT OF SINDH**

REQUEST FOR PROPOSAL

FOR THE

**BARANI AREA WATER AVAILABILITY STUDY / PILOT WATER SUPPLY
PROJECT DISTRICT MALIR**

(ON TURNKEY BASIS)

www.sindh.gov.pk

APRIL, 2015

Note: *The bidder is expected to examine the Bidding Documents, including all instructions, forms, terms, specifications and charts / drawings. Failure to furnish all information required by the Bidding documents or submission of a Bid not substantially responsive to the Bidding Documents in every respect would result in the rejection of the Bid.*

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Article I. DEFINITIONS

In this Contract, the following terms shall be interpreted as indicated:

"Commencement Date of the Contract" means the date of signing of the Contract between the Purchaser and the Contractor.

"Contract" means the agreement entered into between the Purchaser and the Contractor, as recorded in the Contract Form signed by the parties, including all Schedules and Attachments thereto and all documents incorporated by reference therein.

"Contract Price" means the price payable to the Contractor under the Contract for the full and proper performance of its contractual obligations.

"Contractor" means the individual or firm whose bid has been accepted by the Purchaser and the legal successors, in title to the Contractor.

"Contract Value" means that portion of the Contract Price adjusted to give effect to such additions or deductions as are provided for in the Contract, which is properly apportionable to the Software or Services in question.

"Purchaser" means the Information, Science & Technology Department, Government of the Sindh, Karachi - Pakistan.

"Services" means services, such as testing, training and other such obligations of the Contractor covered under the Contract.

"Works" means all Software / Hardware to be provided and services to be rendered & work to be done by the Contractor under the Contract.

"SPPR 2010" means Sindh Public Procurement Rules 2010 (Amended 2013)

"SPPRA" means Sindh Public Procurement Regulatory Authority established under Section 3 of Sindh Public Procurement Act, 2009.

Article II. INVITATION TO BID

Information, Science & Technology Department Government of the Sindh (hereinafter referred to as Purchaser), invites sealed bids from eligible bidders for **“Barani Area Water Availability Study / Pilot Water Supply Project District Malir”**.

1. Tender Bids in sealed envelopes as per information are required. Proponents applying for bids should submit duplicate Financial Proposal and Technical Proposal in two separate envelopes with clear marking of “Technical Proposal” and “Financial Proposal” as per Single Stage - Two Envelope process as per SPPR Rules 2010 (Amended 2013). The interested bidder must have valid NTN also. Only Income Tax and Sales Tax registered firms are eligible to participate.
2. The bidder must quote for the complete scope of work. The bid offering partial scope of work shall be rejected as non-responsive.
3. The Technical Proposal should contain all the bid items without quoting the price and must list firm’s clientele, resumes / CV’s of the team. Financial bids of Firms not obtaining minimum passing criteria on Technical basis will not be opened.
4. Interested eligible bidders may obtain further information on the bid and inspect the bidding documents at the office of Section Officer (General), Information, Science & Technology Department, Government of Sindh, 1st Floor, Building No. 6, Sindh Secretariat, Shahra-e-Kamal Ataturk, Karachi, Tel: +92-21-9921-3841 Fax: +92-21-9921-1414.
5. All bids must be accompanied by an earnest money 2.5% of total bid amount, and must be accompanied with the financial offer. Bid without bid security of required amount and prescribed form shall be rejected.
6. Information, Science & Technology Department Government of the Sindh will not be responsible for any costs or expenses incurred by bidders in connection with the preparation or delivery of bids.
7. The Bid prices and rates are fixed during currency of contract and under no circumstance shall any contractor be entitled to claim enhanced rates for any item in this contract.
8. Bidders shall submit Bids, which comply with the Bidding Documents. Alternative Bids will not be considered. The attention of bidders is drawn to the provisions of Clause on “Determination of Responsiveness of Bid” regarding the rejection of Bids, which are not substantially responsive to the requirements of the Bidding Documents.
9. The Information, Science & Technology Department, (Procurement Agency) Government of Sindh may reject any tender as per provision of SPP Rules 2010 (Amended 2013).
10. All prices quoted must include any Taxes applicable, such as Income Tax, etc. If not specifically mentioned in the quotation, then it will be presumed that the prices include all the taxes.
11. Failure to Complete the Task within the stipulated time period will invoke penalty of 0.025% of the total cost per day. In addition to that, Security Deposit (CDR) amount will be forfeited and the company will not be allowed to participate in future tenders as well.

**Secretary to the Government of Sindh
Information, Science & Technology Department
Government of Sindh**

Article III. BID FORM

To,
Secretary,
Information, Science & Technology Department,
Government of Sindh,
Karachi.

Sir:
Having examined the bidding documents, the receipt of which is hereby duly acknowledge, for the above Contract, we, the undersigned, offer to supply, deliver, test and impart training in conformity with the said bidding documents for the Total Bid Price.

Pak Rupees (in figures _____ in words _____)

or such other sums as may be ascertained in accordance with the Price Schedule attached hereto and made part of this Bid.

We undertake, if our Bid is accepted, to complete the Works in accordance with the Contract Execution Schedule provided in the Schedule – A, Special Stipulations to Bid.

If our Bid is accepted, we will provide the performance security in the sum equivalent to equal to 10% of the Contract Price or the same will be deducted from the running bills.

We agree to abide by this Bid for the period of ninety (90) days from the date fixed for bid opening of the Instructions to Bidders, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof in your Notification of Contract Award, shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest-priced or any Bid that you may receive.

Dated this-----day of -----2015

WITNESS		BIDDER	
Signature -----		Signature -----	
Name -----		Name -----	
Title:- -----		Title -----	
Address. -----		Address -----	

Article IV. BID SECURITY FORM

WHEREAS -----(hereinafter called "**the Bidder**") has submitted its bid dated -----for the "**Barani Area Water Availability Study / Pilot Water Supply Project District Malir**"., (hereinafter called "**the Bid**").

KNOW ALL MEN by these presents that We -----(Name of Bidder) of -----(Name of Country) having our registered office at -----(address of Bidder) hereinafter called "the Bidder") are bound into the Information, Science & Technology Department, Government of Sindh, Karachi, Pakistan (hereinafter called "the Purchaser") in the sum of -----, for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns, by these presents.

Sealed with the Common Seal of the Bank this-----day of-----, 2015

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form; or
2. If the Bidder does not accept the corrections of his Total Bid Price; or
3. If the Bidder, having been notified of the acceptance of its Bid by the Purchaser during the period of bid validity:
 - (a) Fails or refuses to furnish the performance security, in accordance with the Instructions to Bidders; or
 - (b) Fails or refuses to execute the Contract Form, when requested. or

We undertake to pay to the Purchaser up to the above amount, according to, and upon receipt of, its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both or all the three above stated conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to -----2015, the period of bid validity, and any demand in respect thereof should reach the Bank not later than such date.

(NAME OF BANK)
By-----
(Title)
Authorized Representative

Article V. PERFORMANCE SECURITY FORM

To,
Secretary,
Information, Science & Technology Department,
Government of Sindh,
Karachi-Pakistan

WHEREAS (Name of the Contractor) -----Hereinafter called "the Contractor" has undertaken, in pursuance of the bid for "**Barani Area Water Availability Study / Pilot Water Supply Project District Malir**", dated _____ 2015, (hereinafter called "the Contract").

AND WHEREAS it has been stipulated by you in the Contract that the Contractor shall furnish you with a bank guarantee by a recognized bank for the sum specified therein as security for compliance with the Contractor's performance obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor a Guarantee:

THEREFORE WE hereby affirm that we are Guarantor and responsible to you, on behalf of the Contractor, up to a total of _____ (Amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the Contractor to be in default under the Contract, and without cavil or argument, any sum or sums as specified by you, within the limits of _____ (Amount of Guarantee) as aforesaid without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until _____ day of _____, 2015, or twenty-eight (28) days of the issue of the Defects Liability Expiry Certificate, whichever is later.

[NAME OF GUARANTOR]

Signature _____

Name _____

Title _____

Address _____

Seal _____

Article VI. GENERAL TERMS & CONDITIONS

- Bids not confirming to the terms, conditions and specifications stipulated in this RFP will be rejected.
- Information, Science & Technology Department, Government of Sindh invites this tender under **single stage- two envelope procedure, under SPPRA Rules, 2010 (Amended 2013)** from all interested companies to implement this component on TURN-KEY basis.
- Proposal after due date and time will not be accepted for any reason. Proposals must not be sent by Facsimile or e-mail. Such submissions will not be accepted for any reason.

Bid/ Proposal shall comprise 2 packages (one in original & other in duplicate) for the “**Barani Area Water Availability Study / Pilot Water Supply Project District Malir**” containing two separate envelopes. Each package shall contain separately the financial proposal and the technical proposal;

- a) Envelopes shall be marked as “FINANCIAL PROPOSAL” and “TECHNICAL PROPOSAL” in bold and legible letters to avoid confusion;
- b) Initially, only the envelope marked “TECHNICAL PROPOSAL” shall be opened;
- c) Envelope marked as “FINANCIAL PROPOSAL” shall be retained in the custody of the Information, Science & Technology Department, Government of Sindh without being opened;
- d) Procurement Committee shall evaluate the technical proposal in a manner prescribed in advance, without reference to the price and reject any proposal which does not conform to the specified requirements;
- e) No amendments in the technical proposal shall be permitted during the technical evaluation;
- f) Financial proposals of technically qualified bids shall be opened publicly at a time, date and venue announced and communicated to the bidders in advance;
- g) Financial proposal of bids found technically non-responsive shall be returned unopened to the respective bidders; and
- h) Bid found to be the lowest evaluated or best evaluated bid shall be accepted.

This is a Turnkey Solution, so the vendor shall be responsible to provide warranties/support of equipments for at least 3 years with respect to the project “**Barani Area Water Availability Study / Pilot Water Supply Project District Malir**” and also to ensure fulfillment of any unforeseen requirements during the said project period.

- Final selection shall be based on the assessment of Technical and Financial proposals.
- Bidders shall be required to obtain at least 80% Technical Marks to qualify for the evaluation of Financial Bids.
- The bid security money of the successful bidder will be released after 90 days from the submission of completion certificate issued by the Information, Science & Technology Department, Government of Sindh.
- All/any terms and conditions not specified here shall be dealt with reference to pertinent SPP Rules, 2010 (Amended 2013).

Bid Security

A bid security, in the shape of a Bank Draft/Pay Order in favor of Section Officer (General), Information, Science & Technology Department, Government of Sindh, equivalent to 2.5 % of the total cost of bid should be submitted along with the tender.

Performance Security

Performance Security in shape Bank Draft/Pay order/Bank Guarantee in favor of Information, Science & Technology Department, Govt. of Sindh at 10% of the total bid may be submitted by the successful bidder after issuance Letter of Acceptance.

Validity of the proposal

All proposal and price shall remain valid for a period of 90 days from the closing date of the submission of the proposal. However, the responding organization is encouraged to state a longer period of validity for the proposal.

Currency

All currency in the proposal shall be quoted in Pakistani Rupees (PKR). The Bid prices and rates are fixed during currency of contract and under no circumstance shall any contractor be entitled to claim enhanced rates for any item in this contract.

Withholding Tax, Sales Tax and other Taxes

The responding organization is hereby informed that the Government shall deduct tax at the rate prescribed under the tax laws of Pakistan, from all payments for services rendered by any responding organization who signs a contract with the Government. The responding organization will be responsible for all taxes on transactions and/or income, which may be levied by government. If responding organization is exempted from any specific taxes, then it is requested to provide the relevant documents with the proposal.

Warranties

All Hardware equipments should have warranty by Principle, including parts and labour in the following manner:

1. 3 Years Parts & labour Warranty.
2. The equipment supplied should be through verifiable distribution channel in Pakistan.
3. The responding organization (RO) to be authorized Partner/ Reseller, OF THE ORIGINAL MANUFACTURER, in Pakistan.

Support Capabilities

Responding organization should indicate the support capabilities for the provided equipment and hardware in the following format:

S.No	Item	Action Item	Response Time (in Hours)
1	Imported Equipment / Hardware	Replacement	
		Repair	
		Re-Configuration	
		Backup Replacement	
2	Local Equipment / Hardware	Replacement	
		Repair	
		Re-Configuration	
		Backup Replacement	

Compliance to Specifications

The Responding Organization (RO) to provide information as per (Compliance sheet). RO may not propose any kind of refurbished Hardware/ components in their technical proposals.

Financial Capabilities

The RO(s) shall describe the financial position of its organization. Income Statement or Report should be included in the detailed Technical proposal.

Penalty Clause

It is utmost importance that schedule to tender should be filled in very carefully and the instructions set forth above, scrupulously complied with failing which the offer will be ignored. In case of non-completion of supply within stipulated period Earnest Money will be forfeited in favor of the Information, Science & Technology Department Sindh, Karachi.

- An affidavit that the firm has not been entangled in litigation with any client during the last 3 years.
- An affidavit that the firm has never been blacklisted by any Government Department.

Joint Ventures

Bids can be submitted by a joint venture of two companies or partners but shall comply with the following requirements:

- a) The Bid, and in case of successful Bid, the Contract form, shall be signed by all so as to be legally binding on all the partners;
- b) One of the partners shall be authorized to be In-charge; and this authority shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners;
- c) The partner In-charge shall be authorized to incur liabilities, receive payments and receive instructions for and on behalf of any or all partners of the joint venture;
- d) all partners of the joint venture shall be liable jointly and severally for the executing of the Contract in accordance with the Contract terms, and a relevant statement to this effect shall be included in the authorization mentioned under (b) above as well as in the Bid Form and the Form of Agreement (in case of a successful Bid); and

A copy of the agreement entered into by the joint venture partners shall be submitted with the Bid.

Article VII. DELIVERY TIME AND PAYMENT MODE

08 weeks after issuance of Letter of Award /Work order

The payment shall be released as per the invoice of actual work done, submitted by the vendor that will be paid after completion of all codal formalities in accordance with the available amount released as per the budget by Finance Department, Government of Sindh.

The technical offer may be submitted (in duplicate) with the following documents

1. Company Profile with complete address, telephone No. Fax. No. and e-mail address and contact person.
2. Partnership / Reseller letter or agreement copy which authorize Bidder to sell or market the Proposed for the project **“Barani Area Water Availability Study / Pilot Water Supply Project District Malir”**.
3. Details of installed / provide / deployment of equipments in similar nature project in Pakistan.
4. No conditional offer will be accepted
5. Covering Letter: A covering letter from the Head of the company or an authorized representative of the applicant should be attached with the proposal.
6. CNIC of the Chief Executive or authorized representative of the bidder.
7. NTN Certificate
8. GST Certificate
9. Valid Professional Tax Registration
10. Sindh Revenue Board (SRB) Certificate.
11. PEC Certificate.
12. Organization Chart and Team Composition: Team composition and outline of roles of the team members shall be provided in the technical document.
13. Description of the methodology and work plan: Detailed methodology, work plan and list of activities should be proposed. The proposed methodologies will be evaluated during the technical evaluation and will form an integral part of the contract.
14. Proven experience of maintenance and operations of similar nature of projects.

Article VIII. INSTRUCTIONS FOR RESPONDING ORGANIZATIONS

Communication

Enquiries regarding this RFP shall be submitted in writing/email to:

Section Officer (Gen.)

Information, Science & Technology Department, Government of Sindh

1st Floor, Building No. 6, Sindh Secretariat, Shahrah-e-Kamal Ataturk, Karachi

Email Address: sog.it@sindh.gov.pk

Tel: +92-21-9921-3841, +92-21-9921-3811 Fax: +92-21-9921-1414

Mode of Delivery and Address

Bid / Proposal shall comprise 2 packages (one in original & other in duplicate) for the "Establishment of Centralized Command & Control Centre (Surveillance & Monitoring) at Chief Minister House Karachi" containing two separate envelopes. Each package shall contain separately the financial proposal and the technical proposal; envelopes shall be marked as "FINANCIAL PROPOSAL" and "TECHNICAL PROPOSAL" in bold and legible letters to avoid confusion; should be submitted by hand or courier on or before **14th December, 2015 at 2.00 p.m** at the address given below:

Section Officer (Gen.)

Information, Science & Technology Department, Government of Sindh

1st Floor, Building No. 6, Sindh Secretariat, Shahrah-e-Kamal Ataturk, Karachi

Tel:+92-21-9921-3827, Fax:+92-21-9921-1414

Proposal after due date and time will not be accepted for any reason. Proposals must not be sent by Facsimile or e-mail. Such submissions will not be accepted for any reason.

Submission of Proposal

The complete proposals should be submitted by **14th December, 2015 at 2.00 p.m** at the address given above. Please provide original brochures of all the equipment proposed.

Opening of Proposals

15. Technical Proposals of the participating bidders will be opened in the same day i.e **14th December, 2015 at 2.30 p.m** in front of Procurement Committee of the project "**Barani Area Water Availability Study / Pilot Water Supply Project District Malir**" and in presence of intending bidders or their authorized representatives who may like to be present in the Committee Room of Information, Science & Technology Department, Government of Sindh, 1st Floor, Sindh Secretariat, Building No. 6, Shakra-e-Kamal Ataturk, Karachi.

The Bank Draft for Bid Bond to be enclosed in a separate envelope, labeled as "Bank Draft (Bid Bond)", and which should be sealed. Proof of Sales Tax and NTN numbers should also be provided. (Please provide photocopies of relevant documents).

Article IX. Evaluation and Comparison of Technical and Financial Bids

Initially Technical Proposals will be opened and evaluated by the Procurement Committee. Bidders who will be technically qualified will be eligible to open their Financial bids, subsequently in accordance with rules and procedures laid down in SPP Rules, 2010 (Amended 2013).

The Purchaser will evaluate and compare the bids that have been determined to be substantially responsive. The evaluation will be performed assuming the Contract will be awarded to the Best Evaluated Bidder for the entire solution of **“Barani Area Water Availability Study / Pilot Water Supply Project District Malir”** as per Single Stage Two Envelope Procedure as per SPP Rules, 2010 (Amended 2013).

Description Weights

Technical Evaluation Qualification = 80%

Basis of Evaluation and Comparison of Bid

The Technical Evaluation shall be evaluated on the basis of following parameters.

Evaluation Parameter	Total Marks	Questionnaire
Company profile		All companies registered with Income Tax & Sales Tax Department, will be allowed to participate. For their company profile and financial strength and general standing in the business market, etc., they would have already been judged on merit. Hence the weight age for each parameter May be fixed by the I,S&T Department as per requirement.
1. Technical Proposal (Qualification 560/700)	560/700	
Team	100	Proposed Team for the project. CV's reflects their education and experience in the relevant field.
Registration with concerned authorities	100	Registration with Income Tax, Sales Tax and Sindh Revenue Board (SRB), PEC etc
Hardware items Specification	200	Compliance with required specifications mentioned with this RFP Attach Brochure of quoted models
Support Capabilities	100	After sales and support for maintenance of Hardware.
Financial Capabilities	100	Financial Capabilities (Annual Turnover of Rs.100 million annual) With Bank statements.
Relevant Experience (Similar nature of Projects and its sizes)	100	The firm having experience of minimum 3 years in the relevant field. Work orders/Purchase orders of 3 similar projects and its sizes. The total work done (including ongoing projects) worth more than 100 Million
Total Marks in Technical Evaluation	700	

Team and Staffing

While selecting a staff member following should be considered and stated for each member:

1. Relevant experience
2. Role against relevant experience
3. Overall contribution to the Implementation
4. Experience with Public Sector / Government Organizations
5. Qualifications
6. Total Experience

The implementation team would play a pivotal role in the implementation/ installation/ deployment of required items/equipments in various Barani areas as identified by the concerned authorities.

The Sample Form given in the relevant section should be used for providing CVs of staff to be deployed at the project.

INFORMATION REQUIRED

The following will be required as part of technical project details by all bidders in following order.

a) General

1. Name of Bidder
2. No of Years in business in Pakistan
3. No of Offices locations in Pakistan
4. Annual Turnover (Million Rs.)
5. Value of projects in hand (details May be given)
6. Year of Incorporation
7. Status of the Bidder
 - a) Sole Proprietor
 - b) Partnership Firm
 - c) Private Limited Company
 - d) Public Limited Company
 - e) Entity registered / incorporated outside Pakistan (Give details)
 - f) Other (Please specify)
8. Names of Owner / Partners / Chief Executive / Directors
9. Details of Registered Head Office (Address, Phone, Facsimile, Email and Website information)

b) Details of total staff employed

- 1 No of permanent staff employed: Technical /Managerial
- 2 Cumulative Experience (in years)

c) Experience of Implementation of proposed project

- 1 No. of similar projects that have been completed successfully
- 2 No of government project completed
- 3 No of non-government project completed

d) Support Capabilities

- 1 Years in Business in Support area
- 2 No. of Staff employed: (Capable of providing Support)
- 3 Cumulative Experience (in years)
- 4 List of Customers of "Support" along with contact details

e) Special Instruction

- 1 Incomplete applications will not be considered.
- 2 Any firm, which furnishes wrong information, will be liable for legal proceeding and if any contract is awarded, the same will be cancelled.
- 3 Authority Letter from Principal Company for product and vendor authentication.
- 4 The tender must be filled on prescribed form without any alteration/over writing.
- 5 Conditional tenders/bids will not be acceptable.
- 6 Information, Science & Technology Department reserves the right to increase or decrease the scope of work / number of items without assigning any reason.
- 7 Only companies registered with Sales Tax and Income Tax Departments shall be eligible to participate in the tender (proof of registration is required).
- 8 Every page of this tender document should be signed and sealed by the bidder.
- 9 Contacting the Purchaser

- a. Any effort by a bidder to influence the Purchaser in the Purchaser's decisions in respect of bid evaluation, or Contract award will result in the rejection of the bidder's bid.

Article X. SCOPE OF WORK

The pilot project titled “**Barani Area Water Availability Study / Pilot Water Supply Project District Malir**” has been conceived under “Science Technology”, since I.T department has been re-structured as Information, Science & Technology Department. Project’s location is District Malir, a sub-urban traditional agro growing area suffering water shortage or brackish under ground water. Hence agriculture activities have become limited despite being conveniently located. Such a situation has also resulted in an un-employment besides general deprivation. If working is done on underground water through this project then economic prosperity and general well being is expected when agro, dairy and poultry etc products are sold in adjoining Karachi costing less fuel expenditure, time besides convenience and economic benefits to consumers & famers. Project includes Resistivity Survey, Boring, Solar/RSO system alongwith Solar bulb component etc to be deployed in various Barani areas of District Malir on need basis.

Moreover, being nearer to Karachi, less time consumption to occur, therefore people of Karachi to get fresh products at cheap rates due to direct farm to market access and to ensure quick returns to the farmers. The farmer / grower will also get better prices due to elimination of middle man who takes away major profits.

Its to promote agriculture, agro profits, employment, better market mechanism for Karachi, socio-economic upliftment of sub-urban areas, crime control etc. such satellite adjoining agro growing areas are must for an ever spreading and growing Karachi specially in case of crises.

The project distinguishes itself from other alike or similar projects in many ways as its deployment is not necessary in the form of a package. It’s to be either severally or jointly on need basis. Moreover Resistivity Survey, Crop Advise and Solar/RSO system alongwith Solar bulb component etc are other distinctive features.

Project’s success will encourage other farmers and to pave way for further agro economic development, reduction of poverty and to improve Law & Order situation and sustainability. Such a pilot project’s success is quite positively expected and would serve as role model for the stakeholders for conceiving bigger projects in public interest specially in other Barani areas where underground water is also brackish and resultantly causing un-employment coupled with other socio-economic distresses.

Following facilities to be provided to cultivator of District Malir (Taluka Malir & Taluka Gadap) on need basis:

- i) Boring (Water lifting system, fittings and resistivity)
- ii) RO System (2200LPH)/RO Solar System
- iii) Submersible Pump (200 ft) approx.
- iv) Solar Electric Generation System for submersible pump (12000 Watt)
- v) Water Storage Tank 25x25x1.5(m)
- vi) Solar Light Bulb

Methodology to be implemented of the project:

All facilitation mentioned as above will be provided to recipients jointly as a package incase cultivator is without all such facilities or severely (component wise) on case to case basis. This will make the project more implementable and versatile and to register more beneficiaries. It is to avoid duplicity also. For example, incase already a cultivator has a bore but has electricity problems then he will be provided Solar System only and also no need of Resistivity survey/boring. In case cultivator has the facilities of electricity etc but water is brackish making cultivation impossible then he might be provided RO System only and so on and so forth. Complete single package costing has been done inclusive of cost per item.

Available budget to be spent as per ground per item requirements and to vary from case to case basis in sequel to technical selection of pilot sites being in consonance with the aims and objectives of the project to seek /achieve success for Project's mass application in later stages. Documents etc of Zamindar (applicant) & survey / reporting by Field Team and approval of IS&T department accordingly will give finality to site selection, the number and technical requirements effecting the installation of items as per observance of codal formalities.

Note: Complete installation/deployment/transportation on site will be the responsibility of the successful bidder.

Article XI.**FINANCIAL PROPOSAL**

1. The earnest money 2.5% of the Total bid value in the form of bank pay order / demand draft in favor of "Section Officer-General, Government of Sindh" shall be enclosed in the Financial Bid. No bid will be entertained without the earnest money.
2. Financial Bid should comprise of a detailed quotation in the due compliance to following format:

Sr.No.	Description of Items	No. of Quantity	Unit Price including all applicable taxes.	Total Price including all applicable taxes.
1.	Boring (Water lifting system, fittings and restivity)	10		
2.	RO System (2200 LPH)	10		
3.	Submersible Pump (200 ft)	10		
4.	Solar Electric Generation System for submersible pump (12000 Watt)	10		
5.	Water Storage Tank 25x25x1.5 (m)	10		
6.	Solar Light Bulb	50		
	Total Price including all applicable taxes.			

Note – Item-wise quantity may increase / decrease as per ground requirements read with Page No.18 within the quoted cost.

Article XII.

Detailed Specification

Note: All specifications hardware items higher and equivalent may also be considered

- 1. BOR** :- Restivity Survey /Excavation/ drilling boring for watering in all respect
 - i. Depth 300 feet
 - ii. Dia 8 inches with casing
- 2. SUBMERSIBLE PUMP** :- Providing, fixing and installation submersible pump approved quality with cabling, jointing, riser pipe, pressure pipe, nuts and bolts starting complete in all respect.
 - i. Submersible pump/ motor manufactured by GRUNDFOS (ENGLAND) or equivalent.
- 3. SOLAR ELECTRIC GENERATION SYSTEM** :- Providing fixing and installation solar panels approved quality fixing with surface mounted G.I. channels framing (2"x 3/8") with nuts and bolts including D.C. wire with required size and gauge underground PVC pipe covered cabling as per required load jointing with conductors in all respect with complete accessories and pump controller, electric panels, with C.C. foundation complete.
 - i. For Submersible pump 7.5 H.P
 - ii. 10. K.W to 12. K.W
 - iii. Pump controller 11.5 to 15.5 K.V.A
 - iv. Framing with G.I. channel (2"x 3/8")
 - v. C.C. 1:2:4 Foundation
 - vi. D.C. Wiring / with panel ON/OFF
- 4. R.O SYSTEM/ SOLAR R.O. SYSTEM**:- Providing fixing and installation reverse osmosis plant for drinking and agriculture purpose approved quality with 10'x10' block masonry room height 8' precast slab complete in all respect.

SPECIFICATIONS OF DESALINATION R.O. SYSTEM 2200. LPH

PRE-FILTRATION UNIT

Feed Water Pump

Make: Grundfos / Lowara

Material: Stainless Steel

Multimedia Sand Filter

Make : Wave Cyber / Pentair

Material : Fiber Reinforced Plastic/ Granule Reinforced Plastic

Media : Gravel, Silica Sand & Activated Carbon

Micron Cartridge Filtration

Make : Big Blue or Equivalent

Particle Cut Off Size: 5 Micron

Housing : PVC

High Pressure Pump

Type : Multistage (Vertical)
 Make Grundfos
 Material Stainless Steel

Discharge Head

Make : Grundfos
 Material : Stainless Steel

Motor Data:

Manufacturer : Grundfos

REVERSE OSMOSIS UNIT

Capacity : 2200 LPH
 Feed water TDS : Up to 5,000 ppm
 Product water TDS : 100 ppm
 R.O. Membrane Make : FLIMTEC DOW - USA or Equivalent
 Pressure Vessels Make : Flowmatic - or Equivalent
 Skid Mounted Frame : Enamel painted Mild Steel
 Control Panel : Semi - Automatic
 Inclusive of : Liquid filled pressure gauges, inter-connected piping work & electrical connections.

INSTRUMENTS & CONTROL

Control Panel 01

Flow Meters 02

TDS Meter 01

Type : LCD

Pressure Gauges

Type : Dial Type SS Glycerin Filled

Make : Wika

5. WATER STORAGE TANK :

S.No	Item	Unit	Quantity
1	Excavation in foundation of buildings bridges & other structures & as directed by engineer in charge	Cum	15.45
2	C.C Brick or Stone ballast 1-1/2" to 2" gauge Ratio 1:4:8 (for bed) & as directed by engineer in charge	Cum	140.45
3	C.C plain i/c placing compacting finishing & curing complete (i/c screening & washing of stone aggregate without shuttering) ratio 1:2:4(for bed and under wall) & as directed by engineer in charge	Cum	119.11
3	C.C plain i/c placing compacting finishing & curing complete (i/c screening & washing of stone aggregate without shuttering) ratio 1:2:4(for stairs and walls) or as directed by engineer in charge	Cum	75.89

4	Cement plaster 1:6 upto 2.00 m height 0.02m thick or as directed by engineer in charge	Cum	18.667
5	Erection and removal of shuttering for Plain Cement Concrete (vertical) or as directed by engineer in charge	Sq.ft	4121.21
6	back filling of water storage tank with borrow pit excavated soil including dressing, compaction etc or as directed by engineer in charge	Cum	636
7	providing and fixing M.S. sluice valve 8" dia	No	1
8	providing and fixing G.I. Pipe 8" dia	Rft	20

6. **SOLAR LIGHT**:- Providing mobile solar light with chargeable solar energy battery system.