

The Energy & Resources Institute (TERI)
6C, Darbari Seth Block,
India Habitat Centre, Lodhi Road, New Delhi – 110003

TERI invites Bids from Prospective Bidder for the supply, installation, commissioning and maintenance of Bio toilets for approximately 100 sites in the rural areas of Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura.

The bid document is available at TERI's website <http://www.teriin.org/Announcements/> from 8th July 2016. Interested bidders may view, download the Bid document, seek clarification and submit their Bid up to 29.07.2016; 1100 hrs.

(Head-Materials)

TERI

Covering Letter

FROM:

(Full name and address of the Bidder)

.....

.....

To:

Head-Materials,

The Energy and Resources Institute (TERI)

Darbari Seth Block, India Habitat Centre

Lodhi Road, New Delhi - 110003

Subject: Offer in response to EOI for Boitoilets

Sir,

We hereby submit our offer in full compliance with terms & conditions. The bid, duly signed on each page, is submitted along with our acceptance of all specifications as well as terms/ Conditions.

We confirm that, we have the capability to supply, install, implement and carryout 3 years comprehensive warranty maintenance of Bio toilest in the given time period (Supporting document in proof of capacity should be attached).

(Signature of Bidder)

With Seal

SCOPE OF WORK

Objective: To provide Bio toilets at approximately 100 sites at the project site at various districts, in the state of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura.

Scope of the work: Scope of work under the project is as defined below:

- I. **Procurement, Supply, and Delivery of all components (hardware materials) of Bio toilet at project sites.**
- II. **Installation and commissioning of Bio toilet at every site.**
- III. **On-site warranty of the complete system for three years**

Delivery

Delivery of materials: Delivery of the materials should be completed within 90 days from the date of purchase order. All the materials as specified in the purchase order should be delivered at the sites of installation. Transit insurance and storage insurance till the handing over of all materials will be within the scope of work. The vendor should provide the manufacturer's warranty on all components supplied.

Delivery time for installation and commissioning: Installation should be completed within 21 days from the date of delivery of material. The systems will be deemed commissioned only after successful trial run of the system for three days from the date of installations. Warehousing and storage of all components will be in the scope of work till the commissioning of all systems as per the purchase order.

On-site Warranty

The vendor will be responsible for complete on-site warranty of the installed systems for three years from the date of commissioning including preventive and corrective maintenance service

Payment Terms

The payment terms will be as follows:

- (a) 70% payment against delivery of material at the designated site, as per purchase order, on site and subject to submission of documents listed as points 'a' to 'h' under 'Documents' as proof of delivery.
- (b) 20% payment against installation and commissioning of biotoilet at each designated site, as per purchase order, on site, along with proof of establishing of service center, and subject to submission of documents listed as points 'i' to 'k' under 'Documents' as proof of completion
- (c) 10% payment after 1 year from the date of installation, given timely and satisfactory warranty coverage during the elapsed period and on submission of document listed.
- (d) Purchase order for on-site warranty for five years will be included with the cost. However, the payment for this activity will be released as reimbursement and half-yearly basis, on submission of documents listed as points 'l' to 'o' as proof of execution.

Documents

Following documents need to be submitted to TERI for processing of payments:

- (a) Invoice against purchase order issued.
- (b) Proof of delivery at site (sign and stamp of person who has received and verified the materials)
- (c) Delivery challan(s)/ waybill
- (d) Local entry tax bill (if applicable)
- (e) The warranty certificates for complete system (as per Purchase Order)
- (f) The manufacturer's test report for all the material supplied.
- (g) Data sheet for all major components
- (h) All reports should be stamped and signed by the authorized representative of the vendor.
- (i) Invoice of installation and commissioning as per purchase order.
- (j) Commissioning and handover certificate (as prescribed), counter-signed by User/TERI Representative/NGO.
- (k) Minimum two (2) photographs (preferably dated) for each site in soft copy (Compact Disc) of the biotoilet. Photos should be clear and of minimum postcard size.
- (l) All reports should be stamped and signed by the authorized representative of the vendor.
- (m) Detailed complaint log of all the complaints received during the period (every six months).
- (n) Rectification log of all complaints attended and remedial measures taken (every six months).

(o) Verification report signed by user and TERI representative.

NOTE:

- (a) For the prompt execution of the project, TERI may choose more than one vendor for carrying out the project.
- (b) The selected vendor is mandatorily required to open office to carry out on-site warranty services at site within a month from the date of purchase order.

(Signature of bidder with seal)

PART-2: INSTRUCTION TO BIDDERS

1. The Bidder is expected to examine all instructions, forms, terms and specifications as mentioned in the document. Failure to furnish all information required, documents or submission of a bid not substantially responsive to the Bid Document in every respect will be at the Bidder's risk and is likely to result in out-right rejection of the bid.

2. LOCAL CONDITIONS

It shall be imperative on each bidder to fully inform him of all local conditions and factors, which may have any effect on the execution of the works covered under these documents and specifications. TERI shall not entertain any request for clarifications from the Bidder, regarding such local conditions.

3. CLARIFICATION:

A prospective Bidder requiring any clarification of the documents may contact TERI in writing or by mail at the TERI's mailing address indicated in the Invitation for EOI.

Enquiries/clarifications may be sought by the Bidder as per the following:

Technical queries: Dr Swapan Kumar Sinha @ 919435115209, and email: sksinha@teri.res.in.

Any other queries: Ms Trisha Sharma Email: trisha.sharma@teri.res.in

4. BID PRICE

The Bidder shall indicate prices on the appropriate financial bid schedule.

5. DUTIES AND TAXES

The price quoted should include all taxes and duties, custom duty, excise duty, service tax, sales tax, C.S.T., local taxes, Trade Tax/VAT, Income Tax, Surcharge on income tax etc. if any. A Bidder shall be entirely responsible for all taxes, duties, license fees, etc. All taxes payable as per Government income tax & service tax norms will be payable by the Bidder. TDS will be deducted from the payment of the Bidder as per the prevalent laws and rules of Government of India and Government of Bihar in this regard.

6. BID CURRENCIES

Prices shall be quoted in Indian Rupees (INR) only.

7. PERIOD OF VALIDITY OF TENDER

Validity of the offer should be 4 months from the date of financial bid of the bidders.

8. CLARIFICATION OF TENDER

- 8.1 To assist in the examination, evaluation and comparison of bids TERE may at its discretion ask the bidder for a clarification of its bid. The request for clarification and the response shall be in writing.
 - 8.2 TERE reserves the right to interpret the Bid submitted by the Bidder in accordance with the provisions of this document and make its own judgment regarding the interpretation of the same. In this regard TERE shall have no liability towards any Bidder and no Bidder shall have any recourse to TERE with respect to the selection process. TERE shall evaluate the Bids using the evaluation process specified in this document or as amended, at its sole discretion. TERE's decision in this regard shall be final and binding on the Bidders.
9. TERE reserves the right to accept any bid and to reject any or all bids.

(Signature of Bidder with Seal)

PART 3: GENERAL CONDITIONS OF CONTRACT

1. In the deed of contract unless the context otherwise requires:-
2. TERI shall short list the successful bidder (s) on “Rate Contract” basis after verifying their capacity (or may choose one party i.e. L1, to execute the order). The Project shall be executed by TERI. The successful bidder (s) shall have to sign the Contract with TERI.

DEFINITIONS:

3. “TERI” shall mean The Director General of TERI or his representative and shall also include its successors in interest and assignees. The “Contractor” shall mean (successful bidder) i.e. the person whose tender has been accepted by TERI and shall include his legal representatives and successors in interest.
4. The contractor, (i.e. the successful bidder), may be allowed to operate in the State where work to be carried out through a single authorized dealer for execution of the orders placed on authorized dealer. It will be the sole responsibility of the contractor, to execute orders placed as per time schedule, and to ensure quality parameters, specifications and other requirements provided in the tender document and as per agreement.
5. In the interest of the work and the programme, agreement executed between the contractor/ bidder and the “TERI” may be extended to a mutually agreed period, if the need so arises. It shall be sole responsibility of the contractor/ bidder to get verified the quality & quantity of the supplied material at the site of delivery.

6. LIQUIDATED DAMAGES

If the contractor/ bidder fails to perform the services within the time periods specified in the contract, the “TERI” shall without prejudice to its other remedies under the contract deduct from the contract price as liquidated damage, a sum equivalent to 1.0% of the price of the unperformed services for each week (For the purposes of calculation of delay, part of week shall be treated as week) of delay until actual performance up to a maximum deduction of 10% of the delayed services. Once the maximum is reached, the “TERI” may consider termination of the contract. In the case of violation of contract, TERI may confiscate pending payments/ dues of the contractor/ bidder assigning specific reasons and shall also have the power to debar/ blacklist the contractor/ bidder in similar circumstances. TERI may also invoke performance/security bank guarantee of 10%.

The contractor/ bidder shall have to comply with all the rules, regulations, laws and by-laws for the time being in force and the instructions if any, of the organization, in whose premises the work has to be done. "TERI" shall have no liability in this regard.

7. FORCE MAJEURE

- 7.1 Notwithstanding the provisions of clauses contained in this deed; the contractor/ bidder shall not be liable for forfeiture of its performance security, liquidated damages, termination for default, if he is unable to fulfill his obligation under this deed due to event of force majeure circumstances.
- 7.2 For purpose of this clause, "Force majeure" means an event beyond the control of the contractor/ bidder and not involving the contractor/ bidder's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of Government either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 7.3 However, if a force majeure situation arises, the contractor/ bidder shall immediately notify the "TERI" in writing. The decision of the competent authority of TERI in above conditions shall be final.
8. The High court of Judicature at New Delhi and Courts subordinate thereto, shall alone have jurisdictions to the exclusion of all other courts.
9. The contractor/ bidder shall not, without the consent in writing of "TERI", transfer, assign or sublet the work under the contract or any substantial part thereof to any other party.
10. "TERI" shall have at all reasonable time access to the works being carried out by the contractor/ bidder under the contract. All the work shall be carried out by the contractor/ bidder to the satisfaction of "TERI".
11. If any question, dispute or difference what so ever shall arises between "TERI" and the contractor/ bidder, in the connection with the agreement except as to matters, the decisions for which have been specifically provided, either party may forthwith give to the other notice in writing of existence of such question, dispute or difference and the same shall be referred to the sole arbitration of the Director General, TERI or a person nominated by him. This reference shall be governed by the Indian Arbitration and Conciliation Act 1996, and the rules made there under. The award in such arbitration shall be final and binding on both the parties. Work under the agreement shall be

continuing during the arbitration proceedings unless the "TERI" or the arbitrator directs otherwise.

12. "TERI" may at any time by notice in writing to the contractor/ bidder either stops the work all together or reduces or cut it down. If the work is stopped all together, the contractor/ bidder will only be paid for work done and expenses distinctly incurred by him as on preparation or the execution of the work up to the date on which such notice is received by him. Such expenses shall be assessed by "TERI", whose decision shall be final and bidding on the contractor/ bidder. If the work is cut down, the contractor/ bidder will not be paid any compensation what so ever for the loss or profit which he might have made if he had been allowed to complete all the work included in the contract.

13. INSPECTION AND TESTS

- 13.1 The following inspection procedures and tests are required by the "TERI" in the presence of "TERI"'s representative if so desired by "TERI".
- 13.2 The "TERI" or its representative shall have the right to inspect and / or to test the goods to confirm their conformity to the contract. The special conditions of contract and/ or the Technical specifications shall specify what inspections and test the "TERI" required.

14 INSPECTION AT WORKS.

- 14.1 The "TERI", his duly authorized representative shall have at all reasonable times access to the contractor/ bidders premises or works and shall have the power at all reasonable time to inspect and examine the materials and workmanship of the works during its manufacture.
- 14.2 The contractor/ bidder shall give the "TERI", 15 day's written notice of any material being ready for testing. It shall be mandatory that such notice should reach "TERI" within 30 days of placement of work order. Such tests shall be on the contractor/ bidder's accounts/ expenses except for the expenses of the inspector. "TERI" reserves the full rights, to waive off inspection of material.
- 14.3 The contractor/ bidder are required to get the entire lot of the ordered material inspected at one time, before the supply of the materials.
- 14.4 All arrangements for the inspection of materials will be done by bidder.

14.5 The inspection by "TERI" and issue of dispatch instruction there of shall in no way limit the liabilities and responsibilities of the contractor/ bidder in respect of the agreed quality assurance programme forming a part of the contract.

15 WARRANTY

15.1 The contractor/ bidder shall warrant as per standards for quality that anything to be furnished shall be new, free from all defects and faults in material, workmanship and manufacture, shall be of the highest grade and consistent with established and generally accepted standards for material of the type ordered, shall be in full conformity with the specifications, drawing or samples, if any and shall if operable, operate properly.

Nothing in clause 18 above shall in any way release the contractor/ bidder from any guarantee or other obligations under this contract.

15.2 The Warranty period shall be 3 Years for the complete system from the date of commissioning and handing over of the system. The contractor/ bidder shall rectify defects developed in the system within Warranty period promptly. In case the defects are not rectified within a week of the receipt of the complaint by the contractor/ bidder, "TERI" shall have full liberty to restore the system in working condition. The expenditure so incurred by "TERI" shall be deducted from the contractor/ bidder pending claims, security/performance guarantee deposit or in other law full manner.

15.3 Since the maintenance of the system may also be taken up by the contractor/ bidder after expiry of 03 years of warranty period if the end user/"TERI" so desires, the contractor/ bidder shall take up annual maintenance of the installed system.

15.4 The contractor/ bidder shall maintain the system under annual maintenance contract with the end user.

16. Notice statement and other communication send by "TERI" through registered post or telegram or fax or Email to the contractor/ bidder at his specified addresses shall be deemed to have been delivered to the contractor/ bidder.

17. Any work which is not covered under this contract but is essential required for the completion of job (To the satisfaction of TERI) shall be carried out by the contractor as extra item or which payment shall be made separately at the rates decided by TERI.

18. The work shall be carried out by the contractor/ bidder as per design and drawings approved by "TERI", wherever, necessary, the contractor/ bidder shall submit relevant designs and drawings for approval of "TERI", well in advance. Work carried out without

“TERI”’s approval shall not be accepted and the “TERI” shall have right to get it removed and to recover the cost so incurred from the contractor/ bidder.

19. PATENT RIGHT AND ROYALTIES.

The Contractor/ bidder shall indemnify the “TERI” against all third party claims of Infringement of patent, royalty's trademark or industrial design rights arising from use to the goods or any part thereof.

20. PACKING FORWARDING

20.1 Contractor/ bidders, wherever applicable, shall after proper painting, pack and crate all the equipment in such manner as to protect them from deterioration and damage during rail and road transportation to the site and storage at the site till time of installation. Contractor/ bidder shall be held responsible for all damage due to improper packing.

20.2 The contractor/ bidder shall inform the “TERI” of the date of each shipment from his works, and the expected date of arrival at the site for the information of the “TERI” project offices at least 7 days in advance.

21. DEMURRAGE WHARFAGE, ETC

All demurrage, wharfage and other expenses incurred due to delayed clearance of the material or any other reason shall be to the account of the contractor/ bidder.

22. INSURANCE

The goods supplied under the contract shall be fully insured against loss or damage incidental to manufacture or acquisition, transportation, storage during transportation shall be included in the bid price.

23. TRANSPORTATION

The contractor/ bidder is required under the contract to deliver the goods to the site. Road permit and entry taxes to be facilitated and arranged by the bidder.

24. TERMINATION FOR INSOLVENCY

“TERI” may at any time terminate the contract by giving written notice to the contractor/ bidder without compensation to the contractor/ bidder, if it becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or

affect any right of action or remedy, which has accrued or will accrue thereafter to the “TERI”.

25. TERMINATION FOR CONVENIENCE

The “TERI”, may by written notice sent to the contractor/ bidder, terminate the contract, in whole or in part at any time for its convenience. The notice of termination shall specify that termination is for the purchaser’s convenience in the interest of “TERI”.

26. APPLICABLE LAW

The contractor/ bidder shall be interpreted in accordance with the laws of the purchaser’s country i.e. India.

27. NOTICE

27.1 Any notice given by one party to the other pursuant to the contract shall be sent in writing or by Email and confirmed in writing to the address specified for that purpose in the special condition of contract.

27.2 A notice shall be effective when delivered or on the notice’s effective date, whichever is later.

28. TAXES DUTIES AND INSURANCE:

The price quoted should include all taxes, duties and Insurance expenditure, custom duty, excise duty, service tax, sales tax, C.S.T., local taxes, Trade Tax/VAT, Income Tax, Surcharge on income tax etc. if any. A supplier/ contractor/ bidder shall be entirely responsible for all taxes, duties, license fees, etc. All taxes payable as per Government income tax & service tax norms will be payable by the contractor/ bidder. If any new tax/duty is levied during the contract period the same will be borne by the contractor exclusively. TDS will be deducted from the payment of the contractor/ bidder as per the prevalent laws and rules of Government of India and Government of Bihar in this regard.

29. The Contractor/ bidder shall continue to provide spare parts after the expiry of warranty period at the users cost till the product life. If the contractor/ bidder fail to continue to supply spare parts and services to users, “TERI” shall take appropriate action against the Contractor/ bidder.

30. After successful supply/commissioning of the system and training, the system will be handed over to the person designated by the TERI.

- 31.** It shall be the sole responsibility of the contractor/ bidder to get verified the quality & quantity of the supplied material at the site of delivery.

(Signature of Bidder with Seal)

TECHNICAL SPECIFICATIONS

1. Benchtop anaerobic digesters (for demonstration):Quantity 100

System requirements

- Reactor Capacity in volume 15L
- Inlet port
- Sample collection port from reactor
- Manual mixing in reactor without opening
- Modular Glass framed inspection slit with open close provision in the reactor
- Gas collection in floating drum with pressure gauge
- Gas outlet with biogas enhancer with H₂S and CO₂ scrubber
- Biogas burner with regulator
- Sludge outlet



2. Biotoilet: quantity 100 nos.

DRDO Model comprises biodigester tank and super structure

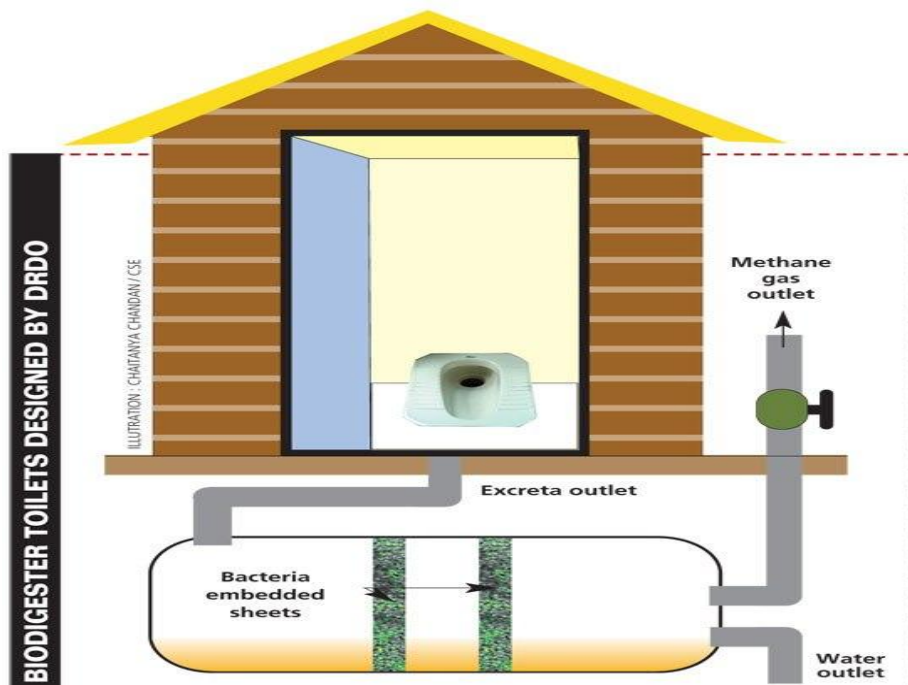
Biodigester tank common

- All weather Anaerobic microbial consortium inoculum (operating temperature 5-50C) immobilized in PVC material in Bioigester tank
- Biodigester tank size 6 CUM suitable for use of 50-60 person. Shape rectangle or cylindrical
- Biodigester tank made of Mile steel or FRP
- Underground digester to reduce effect of atmospheric temperature fluctuation
- Gas production monitoring device
- H₂S scrubber to the biogas pipelines to remove malodour

- Methane harvesting and usage in gas burner pipeline etc
- Chlorination pit before the liquid discharge point to ensure decontamination of pathogen
- Flushing provision
- Operation: charging of seeding materials
- Unlimited urination provision

Super structure 2 per unit with boys and girls separated

- 750 mm x 900 mm x 1900mm; or 800 mm x 1000 mm x 1900 mm
- Superstructure, PCC tank floor, RCC Toilet Floor, PVC Door and Frame, RCC/PVC/GI sheet Toilet Roof.
- Raised commode to reduce soil flowing into reactor
- Centrifugal pump capacity 0.1 HP DC motor
- Suction below ground 30 ft
- Delivery above ground 40 ft
- Plumbing: 16mm diameter
- Discharge: 500L/hr
- Solar Panel: 90W (45w x 2 units)
- Electrical items such as exhaust DC fan or LED light which can run alternative to water pump with same switch.
- Plumbing
- Overhead water tank 1000L Syntax make



(Signature of bidder with seal)

FINANCIAL BID

Name of the Firm: -----

Implementation of approximately 100 bio toilets in the Schools of rural areas of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura.

Sl. No.	Item	Unit Rate (in Rs)
1	Biotoilets: DRDO Model comprises anaerobic biodigester tank, wide range microbial consortia (temperature -10° C to 35 °C), Gas scrubber for CO ₂ , H ₂ S, moisture, Gas production monitoring devices, Gas distribution tubing, Gas burner, Super structure, solar photovoltaic powered water lifting to over head tank	
Total Amount (in figures and words)		

NOTES:

1. Certified that rates quoted above are as per the requirement, specification, terms & condition mentioned.
2. The rates are inclusive of all taxes & duties, storage, transportation up to site, insurance, etc. and any other job required to properly commissioned the system.

(Signature of bidder with seal)

Annexure

Tentative location details where biotoilets to be installed

Sl. No.	State	District	Number of biotoilets
1.	Arunachal Pradesh	Papumpare, Tawang	5
2.	Assam	Kamrup, Udalguri, Nagaon, Goalpara, Sonitpur,	35
3.	Manipur	Imphal west, Thoubal, Bishenpur	10
4.	Meghalaya	West Khasi Hills, Ri Bhoi	15
5.	Mizoram	Aizawl, Kolashib, Serchip	10
6.	Nagaland	Kohima, Dimapur	5
7.	Sikkim	East Sikkim	5
8.	Tripura	West Tripura, North Tripura, South Tripura, Unakuti	15
			100