

BAIF Development Research Foundation

Techno-Commercial Bid

Tender Notice: BAIF / IRESA Bid/June 01/2026-27, date-15/06/2026

Last Date for Submission: 30/06/2026

Supply, installation, and commissioning of IRESA units at various states (Rajasthan, Uttar Pradesh, Uttarakhand, Karnataka, Telangana, Andhra Pradesh, Tamil Nādu, Bihar, Odisha, Chhattisgarh, Jharkhand, Maharashtra, Gujarat, Madhya Pradesh, Goa, West Bengal, Himachal Pradesh, Panjab) in India, for next two years.

*** IRESA: BAIF has developed the “Integrated Renewable Energy and Sustainable Agriculture (IRESA)” approach which presents a complete package of activities around the central theme of household-level biogas units. IRESA consist of household-level biogas units + BAIF Slurry Filter 5G. Please provide the cost for only the Biogas system. BAIF will add the cost of BAIF slurry filter 5G, which will be equal for all the biogas vendors/bidders. ***

A. Commercial terms

SN	Particulars	Information by bidder
1	Name of the bidder	
2	Address of the bidder	
3	Contact Person, Contact Number and E-mail	
4	EMD DD No., date, bank (Amount is NOT to be mentioned) (DD of Rs. 25,000/- in the name of BAIF Development Research Foundation)	
5	Whether experience certificate is enclosed. (Work completion certificates of single & cumulative works must be enclosed as per eligibility criteria)	
6	Whether documentary proof of annual turnover is enclosed (IT returns / P&L / balance sheet / auditor's report of last three years - 2022-23, 2023-24, 2024-25)	

7	Permanent Account Number (PAN) (Enclose copy)	
8	GST Registration Number (Enclose copy)	
9	Certificate of incorporation / registration (Enclose copy)	
10	Whether the bidder is a manufacturer or authorised dealer / Supplier (Enclose authorisation / dealership certificate)	
11	Whether the bidder is an employee or a relative of an employee working in BAIF/BISLD. If yes, please mention the name, designation, and department.	
12	Whether the bidder has understood the work and scope & conditions	

B. TECHNICAL SPECIFICATIONS FOR FLOATING DOME FAMILY SIZE (2M³) PRE-FABRICATED BIOGAS PLANTS

Sr. No.	Technical Specifications	Vendor Response
1	<u>Scope:</u> Installation & commissioning of family size (2m³), HDPE / FRP make pre-fabricated floating dome biogas plant with central guide pipe, spring mechanism, inlet pipe, inlet connections, outlet pipe, outlet connections, gas pipe, slurry handling system and double burner stove.	
2	<u>Locations:</u> Rajasthan, Uttar Pradesh, Uttarakhand, Karnataka, Telangana, Andhra Pradesh, Tamil Nādu, Bihar, Odisha, Chhattisgarh, Jharkhand, Maharashtra, Gujarat, Madhya Pradesh, Goa, West Bengal, Himachal Pradesh, Punjab (Multiple blocks in each state)	

3	Quantity required: 200 Units (Quantity may increase or decrease)	
4	TECHNICAL SPECIFICATIONS FOR FAMILY SIZE (2M³) PREFABRICATED BIOGAS PLANTS	
4.1	Construction Material a) Construction Material should be in line with specifications of materials as per IS:12701:1996 relating to rotational moulded polyethylene tanks and / or IS:12986:1990 relating to Fibre Reinforced Plastic. b) Construction Material of biogas digester and gasholder shall be such that it does not impart any colour, odour or any toxic effect and it shall not contaminate biogas slurry. c) Polyethylene resin to be used for the manufacturing of biogas digester and biogas holder should be of rotational moulding grade. d) Biogas digester and biogas holder shall be manufactured from carbon black compounded polyethylene. (Percentage of carbon black content within 2 to 3%, dispersion of carbon black shall be satisfactory) e) Materials should be UV treated. f) Materials to be used for prefabrication/ construction of such biogas plants – are to be guaranteed by the manufacturers to have minimum useful life of 10 years.	
4.2	Gas generation capacity a) 2 m³ per day	
4.3	Overall dimensions a) Digester volume: 3 m³ b) Gas holder volume: 1.2 m³	
4.4	Biogas digester a) The HDPE / FRP digester shall be made of a minimum 4.5 mm to 5.5 mm average wall and bottom thickness for the digester, gasholder, inlet and outlet pipe with provision for inlet and outlet connections, central guide, and gas holder structure. b) For others, please specify the details c) HRT: 30 days	
4.5	Biogas holder a) The HDPE / FRP biogas holder shall be made of 4.4 mm average minimum thickness with provision for outlet	

	connections. It shall also have provisions to accommodate extra weight in case of variation in end-use point distance. It must have arrangements to connect ½" (12.7 mm) gas outlet connection. The minimum weight of the gas holder shall be maintained in relation to the biogas plant capacity and pressure of the gas required for transporting it from plant site to the kitchen/end use point.	
4.6	Central guide pipe a) The biogas plant shall have a central guide pipe made of stainless steel with a minimum thickness of 2.0 mm (or specific details). Central guide pipe shall be made in such a way that holds the spider and also such that it allows the spring to move vertically up/down smoothly.	
4.7	Spring spider mechanism a) It shall be provided with black corrosion-resistant paint or powder coated and with proper spring index which exerts sufficient pressure to displace biogas at 100 to 150 mm of the water column. The spider should be made of SMC material with provision to connect with a central guide pipe. It shall fit onto the biogas holder in such a way that it makes the biogas holder's up/down movement freely and smoothly.	
4.8	Inlet pipe a) Inlet pipe shall be of a minimum 4" UPVC / PVC.	
4.9	Inlet connections a) Inlet connections shall be of 4" UPVC / PVC with adequate gaskets and check nut.	
4.10	Outlet connection a) Outlet connection shall be moulded and an integral part of Biogas Digester; it should be compatible with 4" flexible UPVC/PVC pipe and the joint may be finished in such a way that no leakage of biogas plant slurry takes place during the life span of the plant.	
4.11	Gas outlet valve a) Gas outlet valve shall be of minimum ½" (12.7 mm) with inside threaded connections and leaving no chance of gas leakage at the base of the joint with gas holder.	
4.12	Gas outlet connections a) It shall be ½" (12.7 mm) PVC / UPVC connection with adequate gasket and check.	

	b) Moisture trap for periodic water removal	
4.13	Gas outlet pipe a) Gas outlet pipe shall be of HDPE 16-20 mm, 15 m long.	
4.14	Slurry handling system a) Slurry Filter* as per BAIF's design to be provided for slurry handling & solid-liquid separation. b) Slurry filter for 2 m3 Biogas c) Which will separate solids and liquid d) Two sets of capacity 80 lit i.e. 40 lit. Solid and 40 lit Liquid. e) Work cycle 24 Hrs. (For new vendors, costs and other details will be provided by BAIF after signing of NDA. Hence, please keep it blank.)	
4.15	Biogas stove a) Double burner b) Stainless steel body with 16 CFT brass burners. c) Handle type knobs d) Provision for Biogas lighter	
4.16	Finishing a) The internal and external surface of the biogas digester and biogas holder shall be smooth, clean and free from other hidden internal defects, such as air bubbles, pits and metallic or other foreign material inclusions. The mould parting line and excess material near the top rim of digester and gas holder shall be cut and finished to the required level. Defects in fabrication if any, like air bubbles and pits at mould parting line and at top rim of the biogas digester shall be checked by hot-air filler rod welding method with no scope for leakage.	
4.17	Marking All the biogas plants & accessories shall be distinctly marked with the following information: a) Manufacturer's name, initials or recognised trade mark; b) Product code and capacity in cubic metre along with daily quantity in kg of cattle dung to be fed. c) Serial number along with serial number of the unit/manufacturing line. Lot or batch number and year of manufacture. d) All the plants produced would be given a distinct lot number & serial number as a mark of identification by the manufacturer. e) Project branding	

	Above shall be moulded / screen printed on the external surface.	
4.18	Installation & commissioning a) Installation and commissioning of biogas plants shall be done by the company/manufacturer's authorised and trained personnel. The users of biogas plants shall be provided an "Operation and maintenance" manual in print form along with the warranty and guarantee clauses. b) Vendor should ensure that each and every component is transported by the vendor to the respective household and with complete installation, inclusive in the cost as quoted in the tender.	
4.19	Moisture Trap: Provide moisture trap or moisture removal arrangement for filtration/removal of moisture	
4.20	Warranty a) Complete system shall be warranted for a period of 1 year (12 months) from the date of commissioning for malfunctioning, manufacturing defects, bad workmanship, improper installation etc.	
4.21	Annual Maintenance Contract (AMC) a) The vendor shall provide 2 years AMC from the date of commissioning covering quarterly service visits, complaint redressal visits within 24 hours and on-site parts replacement. b) Basic training to local person for repair maintenance and troubleshooting should be provided by the vendor. c) Extra set of spare and material with tool kit should be provided to the local person. d) Appropriate payment should be made for any repair and maintenance undertaken by a local person.	
4.22	Required civil work and pit digging are excluded.	
5	<u>Qualifying conditions:</u> a) Extra set of spares and tool kit • Provide extra perforated filter min 2 in No. for 10 IRESA units or 10% whichever is maximum. • Provide spares to the locally trained persons 2 in No. of each or 10% whichever is maximum.	

	b) Training to local person for Installation & repair maintenance • Provide toolkit (Two spanners, hacksaw blades with frame, spirit level, screwdriver set, etc.) c) Appropriate payment for Installation, Annual maintenance contract and for repair and maintenance to the local person (please specify the amount). d) Share the required pre-requisites	
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AND / OR

B. TECHNICAL SPECIFICATIONS FOR FLEXIBLE TYPE FAMILY SIZE (2M³) PRE-FABRICATED BIOGAS PLANTS

Sr. No.	Technical Specifications - Flexible model 2M	Vendor Response
1	<u>Scope:</u> Installation & commissioning of family size (2m ³), PVC composite fabric make prefabricated biogas plant with sand bags, inlet pipe, inlet connections, outlet pipe, outlet connections, gas pipe, slurry handling system and double burner stove.	
2	<u>Locations:</u> Rajasthan, Uttar Pradesh, Uttarakhand, Karnataka, Telangana, Andhra Pradesh, Tamil Nādu, Bihar, Odisha, Chhattisgarh, Jharkhand, Maharashtra, Gujarat, Madhya Pradesh, Goa (Multiple blocks in each state).	
3	<u>Quantity required:</u> 200 Units (Quantity may increase or decrease.)	
4	TECHNICAL SPECIFICATIONS FOR FAMILY SIZE (2M³) PREFABRICATED BIOGAS PLANTS	
4.1	Construction Material a) Construction Material – PVC composite fabric of 750 gsm	

	b) Construction Material for biogas digester and gasholder should be such that it does not impart any colour, odour or any toxic effect and it should not contaminate the biogas slurry. c) Materials should be UV treated. d) Materials to be used for prefabrication/ construction of such biogas plants are to be guaranteed by the manufacturers to have minimum useful life of 10 years.	
4.2	Gas generation capacity a) 2 m³ per day	
4.3	Overall dimensions a) Digester volume: 3 m³ b) Gas holder volume: 1.2 m³	
4.4	Biogas digester a) PVC composite fabric digester with 750 gsm and gasholder, inlet and outlet pipe with provisions for inlet & outlet connections. b) HRT: 30 days	
4.5	Biogas holder a) PVC composite fabric gas holder attached to digester. It shall also have provisions to accommodate extra weight in case of variation in end use point distance. It must have arrangements to connect ½" (12.7 mm) gas outlet connection. The minimum weight of the gas holder shall be maintained in relation to the biogas plant capacity and pressure of the gas required for transporting it from plant site to the kitchen/end use point.	
4.6	Inlet pipe a) Inlet pipe shall be of minimum 4" PVC.	
4.7	Inlet connections a) Inlet connections shall be of 4" PVC with adequate gasket and check nut.	
4.8	Outlet connection a) Outlet connection shall be 4" PVC pipe and joint may be finished in such a way that no leakage of biogas	

	plant slurry takes place during the life span of the plant.	
4.9	Gas outlet valve a) Gas outlet valve shall be of minimum ½” (12.7 mm) with inside threaded connections and leaving no scope for gas leakage at the base of the joint with gasholder.	
4.10	Gas outlet connections a) It shall be ½” (12.7 mm) PVC / UPVC connection with adequate gasket and check. b) Moisture trap for periodic water removal	
4.11	Gas outlet pipe a) Gas outlet pipe shall be of HDPE 16-20 mm, 15 m long.	
4.12	Slurry handling system a) Slurry Filter* as per BAIF’s design to be provided for slurry handling & solid-liquid separation. b) Slurry filter for 2 m3 Biogas c) Which will separate solids and liquid d) Two sets of capacity 80 lit. i.e. 40 lit. Solid and 40 lit. Liquid. e) Work cycle 24 Hrs.	
4.13	Biogas stove a) Double burner b) Stainless steel body with 16 CFT brass burners. Or Biogas Double Burner Cast Iron Painted Stove c) Handle type knobs	
4.14	Finishing a) The digester should be manufacturing using high quality hot air welding process and should be checked for any leakages before dispatch. The finishing should be good.	
4.17	Marking All the biogas plants & accessories shall be distinctly marked with the following information:	

	a) Manufacturer's name, initials or recognised trade mark. b) Product code and capacity in cubic metre along with daily quantity in kg of cattle dung to be fed. c) Serial number along with serial number of the unit/manufacturing line. Lot or batch number and year of manufacture. d) All the plant produced should be given a distinct Lot number & serial number as a mark of identification by the manufacturer. e) Project branding with BAIF Name Above shall be moulded/screen printed on the external surface.	
4.18	Installation & commissioning a) Installation and commissioning of biogas plants shall be done by the company/manufacturer's authorised and trained personnel. The users of biogas plants shall be provided an "Operation and maintenance" manual in digital form along with warranty and guarantee clauses. b) THE SUPPLIER should ensure that each and every component should be transported by THE SUPPLIER at respective household locations and ensure complete installation, included in the cost as quoted in the tender.	
4.19	Moisture Trap: Provide moisture trap or moisture removal arrangement for filtration/removal of moisture	
4.20	Warranty a) Complete system shall be warranted for a period of 1 year (12 months) from the date of commissioning for mal-functioning, manufacturing defects, bad workmanship, improper installation, etc.	

4.21	Annual Maintenance Contract (AMC) a) THE SUPPLIER shall provide 2 years AMC from the date of commissioning covering quarterly service visits, complaint redressal visits within 48 hours and on-site parts replacement. b) Basic training to local person for repair maintenance and troubleshooting should be provided by THE SUPPLIER. c) Extra set of spare and material with tool kit should be provided to the local person. d) Appropriate payment should be made for any repair and maintenance undertaken by the local person.	
4.22	Required civil work and pit digging are excluded.	
5	<u>Qualifying conditions:</u> a) Extra set of spares and tool kit • Provide extra perforated filter min 2 in No. for 10 IRESA units or 10% whichever is maximum. • Provide spares to the locally trained persons 2 in No. of each or 10% whichever is maximum. b) Training to local person for repair maintenance • Provide toolkit (Air blower, hacksaw blade, adhesive, etc.) c) Appropriate payment for Annual maintenance contract and for repair and maintenance to the local person (please specify the amount) d) Share the required pre-requisites	

ANNEXURE I

Price Bid

Tender Notice: BAIF / IRESA Bid/June 01/2026-27, date-15/06/2025

Last Date of Submission: 30/6/2026

Supply, installation, commissioning of IRESA Units at various states (Rajasthan, Uttar Pradesh, Uttarakhand, Karnataka, Telangana, Andhra Pradesh, Tamil Nādu, Bihar, Odisha, Chhattisgarh, Jharkhand, Maharashtra, Gujarat, Madhya Pradesh, Goa, West Bengal, Himachal Pradesh, Punjab) in India, for next two years.

Table 1: Offer summary (Details in Table 2)

Sr.	Description	Qty.	Price ([₹])	GST (___%) (if applicable) ([₹])	Any other (Transportation & Loading Unloading) ([₹])	Final offered price ([₹])
A	Basic cost of FAMILY SIZE (2M ³) PREFABRICATED BIOGAS PLANTS					
B	Comprehensive maintenance of 2 years					
C	Installation, commissioning, testing & on-site training & spare parts					
Total						

Rupees (in _____ words):
_____ only.

***Please note that the quoted rates should be valid for at least next two years and variation of only 10% and above in the cost of material/ transport will be considered and will be applicable for all the selected bidders/vendors.

SCHEDULE – C Part Replacement of IRESA

Sr. No.	Description	Amount	Remark
1	Part Replacement of IRESA Models	_____	Gas Valve: Rs: ____/- Gas Nipple: Rs: ____/- Biogas Stove: Rs: ____/-

Date:

Signature with seal of bidder

Note: Price Bid must strictly adhere to the above format and must be typed and printed on A4 page.

Signature and seal are required on all the pages of the Price Bid.

Note: A word copy of the Price Bid is available at the time of opening the bid.

ANNEXURE II
Undertaking

Date: _____

To

Ref.: Tender Notice: BISLD/BAIF _____

Supply, installation & commissioning of IRESA Units at various states (Rajasthan, Uttar Pradesh, Uttarakhand, Karnataka, Telangana, Andhra Pradesh, Tamil Nādu, Bihar, Odisha, Chhattisgarh, Jharkhand, Maharashtra, Gujarat, Madhya Pradesh, Goa, West Bengal, Himachal Pradesh, Punjab) in India

Dear Sir,

In response to the tender invited by you, I/ We have examined the notice, conditions, specifications and terms of the contract and I/We agree to abide by all instructions in these documents attached hereto and hereby bind myself /ourselves to execute the work as per schedule stipulated in the tender notice.

I / We further agree to sign and execute all agreements / bonds as may be required by BAIF/ BISLD to abide by all conditions of the contract and to carry out all work as per specifications, failing which, I / We shall have no objection for the forfeiture of the earnest money / security money deposited with BAIF/ BISLD.

I / We also undertake that I / We have not been blacklisted by any entities any time.

I / We enclose herewith the required documents.

Yours sincerely

Signature of bidder with seal

Encl.:

1. Techno-commercial bid with supporting documents
2. Price bid

ANNEXURE III

List of previous works if any

Sr.	Location	Date of commission	Capacity (hp)	Client	Reference Contact (name, Tel. No. & E-mail)
1					
2					
3					
4					
5					
-					
-					
-					
-					

Signature of bidder with seal

Note: Annexure IV should be typed and printed on A4 page adhering to the above format.

Qualifying Criteria for Bidders:

To become eligible, each bidder must satisfy the following;

SN.	Criteria	Specific Requirement	Documents required
1.	Applicant Entity	Legal entities duly registered firm under the Companies Act 1956/2013. Or public/semi-public entities, which are financially sound.	Certificate of incorporation/registration GST Registration certificate PAN details
2	Technical	The Vendors shall have experience of having successfully carried out and completed similar works during the last 3 years ending last day of the month previous to the one in which applications are invited.	Work done certificate for similar nature of work (copy of work order and satisfactorily completion report)
3	Financial	Annual Financial Turnover during the last 3 consecutive financial years should be at least Rs. 20 Lakhs. Net worth should be positive. The bidder should submit the following, i] Valid Income Tax Clearance Certificate ii] Balance Sheet for the last 3 years. iii] Profit & Loss account for the last 3 years	Proof of Income tax return, audited balance sheet and profit & loss account (certified by CA).
4	Other Technical Requirements:	• The bidder shall be located within the territory of India and shall be well approachable either by road/rail/air. • The bidder shall be fully equipped with the required Infrastructure & facilities as per scope of work. • The bidder shall have qualified & experienced manpower and skilled workers as per the scope of work.	• Proof address; registered office and operational sites in Maharashtra • List of available infrastructure and facilities at operational sites located in India • List of skilled staff with the company giving their experience and qualifications.

Requested to Submit the Proposal on or before 30/06//2026 at 5.00 pm.

Application received after date and time will not be considered for sort listing. All the hard copies have to be sent to the following address.

Mr. Mahesh Lade / Mr. Roshan Ahire

BAIF Development Research Foundation

BAIF Bhavan, Dr. Manibhai Desai Nagar, Warje, Pune 411058

Phone-020-25231661 E-mail: maheshlade@baif.org.in