



**OFFICE OF THE
DIVISIONAL FOREST OFFICER, CHILIKA WILDLIFE DIVISION**

AT/PO- GOPINATHPUR, BALUGAON, DIST- KHORDHA, ODISHA, PIN-752030

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O.O.No. 146 /ECRICC/03/2026

Dated: 09th September, 2026

NOTICE INVITING QUOTATION (NIQ)

**Design, Fabrication, Supply & Installation of a Seagrass Marine Aquarium Display Unit
at Wetland Research & Training Center (WRTC), Barkul.**

Sealed quotations are invited from experienced, reputed and financially sound firms/agencies engaged in aquarium design, marine filtration systems, civil flooring works, and green house/poly-house fabrication, for the design, fabrication, supply, installation and commissioning of a Seagrass marine aquarium display system integrated with a hard-standing floor and a green house enclosure, strictly as per the design, layout and technical specifications set out in this Notice.

The quotations should reach the office latest by **Dt. 28th September 2026** before **12.00 noon** by courier/registered/speed post/by hand, Which will be opened on the **same date** at **03.00 pm** in presence of the Purchase Committee and bidders.

The work is to be executed on a turnkey basis (design, material, labour, installation and testing and maintenance) at the site to be indicated to the successful bidder.

1. Scope of Work

1. Fabrication and installation of an 8-aquarium marine display stand (2 lines x 4 aquariums), complete with individual marine filtration (sump) systems for each Seagrass aquarium at WRTC, Barkul.
2. Supply and laying of cement floor tiling over the designated area.
3. Design, fabrication and erection of a green house structure enclosing the aquarium set-up, complete with doors, ventilation and control system.
4. All associated plumbing, electrical, pumping and control works necessary to make the system fully functional, tested and ready for operation.
5. Take up complete operation & comprehensive annual maintenance as detailed in the terms and conditions of the tender.
6. Basic training to the staff for handling of the aquariums.

2. Technical Specifications:

2.1 Aquarium Stand & Tanks:

- Total aquariums: 8 Nos., arranged in 2 lines of 4 aquariums each
- Aquarium size (each): 4 ft (L) x 2 ft (W) x 2 ft (H)

- Glass thickness: Base: Toughened glass -12 mm, & Sides: Low iron 19mm glass with aquarium grade net cover provision.
- Overall stand footprint: 16 ft (length) × 2.5 ft (depth) per line, 2 lines
- Tank height: 2 ft; gap between tank and filter chamber: 1 ft; filter chamber height: 1.5 ft
- Stand material: Stainless steel pipe, 40 mm × 40 mm section (304 grade)
- Each aquarium to have its own independent marine filter system suitable for sea grass ecosystem (down-sump) — not a shared/common sump.
- Acrylic Corner Protector must be installed at the edges of all Aquariums.

2.2 Marine Filter System (per aquarium, down-sump type)

- Stage 1 — Filter sock / mechanical filtration: removal of suspended solids and debris.
- Stage 2 — Bio-media chamber (ceramic rings): biological filtration for ammonia/nitrite conversion.
- Stage 3 — Leve rock / bio-balls chamber: additional biological filtration and water polishing.
- Stage 4 — Return pump chamber: pumps filtered water back to the display tank.
- Sump dimensions (each): approx. 4 ft (L) × 1.5 ft (filter height), positioned below the display tank with overflow (down-pipe) connection.
- Includes complete plumbing — PVC pipes, valves and fittings — and electricals: circulation/return pumps, air pumps, wiring and control points.
- Proper salinity, filtration, lighting and water-circulation systems must be provided and demonstrated for saltwater/marine suitability as suitable for Seagrass ecosystem.
- Adequate setup to be provided to balance CO₂ for Seagrass ecosystem.

2.3 Cement Floor Tiles

- Coverage area: 27 ft × 50 ft (approx. 1,350 sq. ft) — to be surveyed and confirmed at site before execution.
- Cement tiles laid to a true, level surface capable of bearing the loaded weight of the aquarium stand and water&should be anti-skid.
- Surface to be finished for durability and ease of cleaning/maintenance in a wet/humid environment.

2.4 Greenhouse Structure

Coverage area: 28 ft × 51 ft (approx. 1,428 sq. ft) — to be surveyed and confirmed at site before execution.

Frame Material

- Hot-dip galvanised iron (GI) pipe structure — suited to coastal/high-salinity conditions.
- Main columns/trusses: GI pipe, 50–65 mm NB, 2.5–3 mm wall thickness
- Purlins/rafters: GI pipe, 32–40 mm NB
- Galvanising: as per IS 4759, minimum 85 microns coating

- Door frame members: heavier gauge (65 mm NB) for structural stability at openings
- Foundation: RCC footing with GI base plates and anchor bolts; depth per site soil test
- Truss/bay spacing: 3–3.5 m typical, to be finalised after wind-load calculation
- Welded joints: re-galvanized/zinc-rich painted post-fabrication
- Frame-to-sheet connection: aluminum profile/H-section clips with EPDM washers (avoid direct GI-to-polycarbonate contact)

Covering Material

- Polycarbonate sheet (primary roof/wall covering), UV-stabilised
- Green shade net (secondary layer) as applicable — placement (over polycarbonate vs. wall-level).
- Poly-film as applicable, per site requirement.

Green Shade Net Specification

- Material: HDPE monofilament, knitted, UV-stabilised
- Shade percentage: 35–50% (adjust based on whether the aquarium has supplemental lighting)
- Color: Green
- GSM: 90–110
- UV stabilisation: minimum 5-year manufacturer-rated life
- Standard reference: IS 16008
- Fixing: nylon rope/hooks or aluminium batten with grommets, 40–50 cm spacing

Doors

- Two doors included in structure
- Frame reinforced with heavier-gauge GI at openings (per frame spec above)

Ventilation / Climate Control

- One temperature Control fan and a exhaust fan with associated control system to be provided.
- Fan mounting point and ducting requirements to be confirmed with equipment vendor before finalising frame layout in that section
- Overall system intended to protect seagrass, and equipment from heat/humidity extremes
- One Thermometer and one light meter should be provided for monitoring.

Working Tables:

Two (02) nos. of Working Tables shall be provided inside the Green House structure for office and demonstration purposes, one of size 4 ft (L) × 2.5 ft (W) × 2.5 ft (H), and other one of size 6 ft (L) × 2.5 ft (W) × 2.5 ft (H) fabricated from powder-coated MS (mild steel) frame/anodised aluminium frame with a weather-resistant, water-proof laminated/HPL top surface (or SS-top as applicable), suitable for indoor humid conditions; each table shall include one lockable drawer/cabinet

for storage and be designed for durability under the greenhouse's humidity and moisture-prone environment.

Daily Monitoring Board

- Purpose: for recording daily observation/monitoring data of Seagrass and associated aquarium parameters (water quality, temperature, salinity, feeding, remarks, etc.)
- Size: approx. 3 ft (W) × 2 ft (H) (to be confirmed at site)
- Material: weather-resistant laminated MDF/HPL board or powder-coated MS sheet, suitable for humid greenhouse conditions
- Surface: writable surface — either whiteboard (melamine/ceramic-coated) with permanent grid/format printed, or laminated printed format with re-writable overlay
- Mounting: wall-mounted/stand-mounted with aluminium/MS frame border, corrosion-resistant fixtures and fasteners
- Accessories: to include marker pen holder/tray and duster holder
- Content layout: pre-printed table format (Date, Parameter, Reading, Observed by, Remarks) as per project's monitoring protocol — final format/content to be provided by project team before fabrication

SOP (Standard Operating Procedure) Board

- Purpose: display of standard operating procedures for greenhouse/aquarium operation, maintenance, and safety protocols
- Size: approx. 4 ft (W) × 3 ft (H) (to be confirmed at site)
- Material: weather/moisture-resistant laminated board (HPL/MDF) or powder-coated MS sheet with UV-resistant print lamination
- Content: printed/laminated SOP content (fixed, non-editable), including step-wise procedures, dos and don'ts, emergency contact numbers, and safety instructions
- Mounting: wall-mounted with aluminium/MS frame, tamper-resistant fixtures
- Finish: matte anti-glare laminate for readability under greenhouse lighting conditions
- Content to be finalised in consultation with the project's technical team (SIST/IIT Bhubaneswar) prior to printing

Naming/Identification Board

- Purpose: display of project name, funding agency details, and greenhouse/facility identification (as per GCF/government branding/visibility guidelines)
- Size: approx. 4 ft (W) × 2.5 ft (H) (to be confirmed at site and as per visibility guideline requirements)
- Material: weather-resistant ACP (Aluminium Composite Panel)/laminated MS sheet with UV-protected digital print, suitable for outdoor-facing mounting at greenhouse entrance

- Mounting: fixed at greenhouse entrance/prominent location, with corrosion-resistant frame and fasteners
- Content: project name (ECRICC), implementing/funding agency logos (Government of Odisha, GCF, UNDP/executing entity as applicable), facility name, and QR code/contact details (if required)
- Design/content and logo usage to comply with GCF and Government of Odisha visibility/branding guidelines — final artwork to be approved by SPMU before fabrication

2.5 Quarantine Chamber & Water Support System

- Water tank — Syntex (or equivalent ISI-marked make), 2,000 Ltr capacity — 1 No.
- Quarantine chamber — cement construction with fibre casting (4 ft L x 4 ft W x 2.5 ft H) — 1 No.
- Heavy-duty GI stand (15 mm pipe), 5 ft height, to support the water tank/quarantine chamber — 1 No.
- Motor, including protein skimmer, connecting pipework and other essentials (salt mix & probiotics) required to commission the quarantine/water support system — as required

(The quarantine chamber shall be used for acclimatisation/observation of new stock before introduction to the main display, and the water tank shall serve as the reserve/make-up water source for the system. The motor, protein skimmer and associated fittings shall be sized to suit the combined water volume of the quarantine chamber and reserve tank, and shall be demonstrated as functional at the time of handover.)

3. General Technical Requirements

- The bidder must ensure the aquarium stand is placed on a strong, level and adequately load-tested surface.
- All electrical work must include proper earthing and protection suitable for a wet/humid environment. The vendor will ensure all electric supplies from the source of electrical connection to the aquarium site including complete internal electrification and lights/fans/fitting/electric meter for monitoring electricity usages.
- All materials used must be new, of standard/branded make, and suitable for continuous marine/saltwater service.
- Any deviation from the specifications above must be pre-approved in writing by the issuing office.
- The vendor will be provided support to collect Seagrass specimens available in the Chilika landscape, under the technical guidance of IIT Bhubaneswar/SIS Team). The vendor shall be liable for the maintenance of the Seagrass ecosystem so established/displayed. In the event of failure, the vendor must submit proper written justification for the failure. This justification will be vetted by the Technical Committee, and if any lapse or negligence on the vendor's part is established, the Committee may decide to levy an appropriate penalty/compensation.

- The bidder/vendor shall be liable for the repair and maintenance of the aquarium and associated systems for a period of three (3) years from the date of successful commissioning.
- The whole unit will be under comprehensive Annual maintenance for 3 years. The quote for such maintenance will be mentioned by the vendor in the financial bid separately.

4. Indicative bill of Quantities

Bidders shall quote firm, all-inclusive rates against the Price Bid format at Annexure-I. The quantities and reference below are indicative, based on the design reviewed, and are provided to guide bidders — actual site measurement shall govern final billing.

4.1 Aquarium Stand with Marine Filter System

Sl.	Item Description	Qty	Unit
1	Aquarium (4 ft × 2 ft × 2 ft, Base Glass- Toughened 12 mm, Side: Low iron 19 mm glass, top coverd with aquarium grade net)	8	Nos.
2	Stainless steel pipe stand (40 mm × 40 mm) (304 Grade)	1	Set
3	Marine filter system (down-sump) for each aquarium	8	Sets
4	Plumbing — PVC pipes, valves, fittings	1	Lot
5	Electricals — pumps, air, wiring, control	1	Lot

4.2 Cement Floor Tiles

Sl.	Item Description	Size (ft)	Area (sq.ft)
1	Branded Cement floor tiles (Kajaria/H & R Johnson/Simpolo/ Ceramics)	27 × 50	1,350

4.3 Green House

Sl.	Item Description	Size (ft)	Area (sq.ft)
1	Green house Shed with two doors, 2 Working table, one exhaust fan with control system, One Daily Monitoring Board, One SOP Board inclusive of internal Electrification & other	28 × 51	1,428

4.4 Quarantine Chamber & Water Support System

Sl.	Item Description	Qty	Unit
1	2000 Ltr Water tank- Syntex	1	Nos
2	Quarantine Chamber – Cement with fiber casting (4 ft –L x 4 ft W x 2.5 ft- H)	1	Nos
3	Heavy GI Stand- (15mm pipe) - 5 feet height	1	Nos
4	Motor (including Protein skimmer, Pipe, and other essentials (Salt & Pribiotics)	1	As required

Site Visit:

Proposed Site: Wetland Research & Training Center (WRTC), Barkul campus.

To ensure a complete and clear understanding of the scope of work, all prospective bidders are required to make a site visit to the proposed site of installation at Wetland Research & Training Center (WRTC), Barkul on any working day between 3:00 PM and 5:00 PM on or before 21.09.2026 i.e date of pre-bid meeting. Bidders intending to visit the sites are requested to confirm their participation through email in advance at sistchilika@gmail.com and may contact **89894772745 (Soumya Ranjan Panda)** for further coordination.

Pre-Bid Meeting:

The Pre-Bid Meeting will be held on 21.09.2026 at 4:00 PM at the **Office of the Divisional Forest Officer, Chilika Wildlife Division, At/PO: Gopinathpur, Balugaon.** The Pre-Bid Clarification will be issued by 22.09.2026 only in the designated websites i.e www.ecrcc.org & www.wildlife.odisha.gov.in in the tender section.

Payment Terms:

Payment shall be released as per the following norms:

- 20% against the delivery of all major materials at the site.
- 20% upon successful installation of the stands.
- 30% upon completion of installation of glassware, fittings, and greenhouses.
- 30% upon making the entire setup fully functional, commissioning, and ready for Seagrass introduction.
- The Contractor shall submit a Performance Bank Guarantee (PBG) equivalent to 3% of the total contract value, valid up to 60 days beyond the expiry of the contract period.

Eligibility Criteria for Bidders

1. The firm/agency should have at least 03 years of demonstrable experience in aquarium fabrication and/or marine filtration systems, or civil/green house construction as relevant to the scope quoted. Work order must be submitted in this regard to justify the same.
2. Valid GST registration certificate registration must be furnished.

3. PAN card and firm registration proof (proprietorship/partnership/company, as applicable) must be furnished.
4. Firm should not have been blacklisted by any Government department/PSU/local body as on the date of submission — a self-declaration to this effect must be enclosed.
5. Documentary proof of at least two similar completed works in Government department to be provided.
6. The average minimum annual turnover of Rs. 6 Lakhs must be provided along with supporting documents such as GST or IT Return / Audited Financial statement etc.

General Terms and Conditions

1. Rates quoted must be all-inclusive of material, fabrication, transportation, labour, installation, testing and commissioning, unless taxes are shown separately as instructed in the Price Bid format.
2. Delivery/completion period: 45-60 days from the date of work order, subject to site readiness and material availability.
3. Any additional work, modification or variation beyond the agreed scope and specifications will be treated as extra and billed only after prior written approval of the issuing office.
4. The successful bidder shall provide a minimum warranty of 12 months on fabrication, plumbing, electrical and filtration equipment against manufacturing/installation defects, from the date of handover and the warranty will be made available from the OEMs by the vendor.
5. The stand, sump and civil flooring must be executed on a strong, level and adequately prepared surface as identified at WRTC, Barkul campus.
6. The bidder shall be responsible for the safety of their workers and for compliance with applicable labour, safety, insurance and environmental safeguard during execution.
7. In case of any dispute, the decision of the issuing office/competent authority shall be final and binding. Jurisdiction for any legal proceedings shall be subject to jurisdiction of the Court in Khordha.
8. Canvassing in any form will lead to disqualification of the bid.
9. The successful bidder must execute the work strictly as per the approved design, drawings and specifications enclosed with this Notice; unauthorized deviation may lead to rejection of work and forfeiture of security deposit, if any.
10. The issuing office/competent authority further reserves the right to cancel, withdraw, suspend or annul this Notice Inviting Quotation and the bidding process arising therefrom, in part or in full, at any point of time — whether before or after receipt/opening of quotations and whether before or after issue of the work order — without assigning any reason thereof, and without any liability or compensation whatsoever to the bidders towards costs incurred in the preparation and submission of their quotations."

Submission of Quotation

1. Quotations must be submitted in a single sealed envelope super scribed "**Quotation for Design, Fabrication, Supply & Installation of a Seagrass Marine Aquarium Display Unit**" and should be reached by courier / speed/ registered post/ by hand on or before **28th September 2026 by 12.00 noon** at Office of the **Divisional Forest Officer, Chilika Wildlife Division, Balugaon, District Khordha, Pin 752030.**
2. The Single Sealed envelope must contain 2 separate sealed envelopes as:
 - (A) **Technical Bid**
 - a. **Technical Bid** must contain- firm profile, eligibility documents, technical compliance statement, and proposed execution timeline, Tender paper cost & EMD.
 - b. Tender Paper cost of ₹6,000/- (Rupees Six Thousand only) and Earnest Money Deposit (EMD) of ₹25,000/- (Rupees Twenty-Five Thousand only), in form of Demand Draft in favor of Divisional Forest Officer, Chilika Wildlife Division, Balugaon should be provided along with technical bid documents.
 - (B) **Financial/ PriceBid** — as per the format at Annexure-I.

(Note: The Separately sealed Technical Bid and Financial/Price bid must be sealed in a single envelope super scribed "**Quotation for Design, Fabrication, Supply & Installation of a Seagrass Marine Aquarium Display Unit**" and submitted.)
3. Quotations received after the last date and time specified above will not be considered.
4. Incomplete quotations, or those not accompanied by the requisite eligibility documents, are liable to be rejected.

Evaluation of Quotations

1. Technical Bids will first be evaluated for compliance with the eligibility criteria and technical specifications as mentioned above.
2. Only bidders found technically compliant will have their Price Bids opened.
3. Among technically qualified bidders, the work will ordinarily be awarded to the Lowest Responsive Bidder (L-1), subject to the issuing office's satisfaction on quality, capability and past performance.


9/9/26
Divisional Forest Officer,
Chilika Wildlife Division
Divisional Forest Officer
Chilika Wildlife Division

Annexure-I: Price Bid Format:-

(To be filled in and submitted by the bidder on their own letterhead, quoting firm all-inclusive rates)

Sl.	Item Description	Qty/Area	Unit	Rate (₹)	Amount (₹)
1	Aquarium Stand with Marine Filter System (8 Aquariums, complete as per Section 2.1 & 2.2)		Set		
2	Cement Floor Tiles (as per Section 2.3)	[27 ft x 50 ft]	Sq.ft		
3	Green House Structure (as per Section 2.4)	[28 ft x 51 ft]	Sq.ft		
4	Quarantine Chamber & Water Support System(as per Section 2.5)		Set		
5	Annual Maintenance Charges on the total project cost 1 st Year 2 nd Year 3 rd Year				
				GST/Taxes (if extra)	
	GRAND TOTAL				

Delivery/Completion Period Offered: _____

Validity of Offer: _____

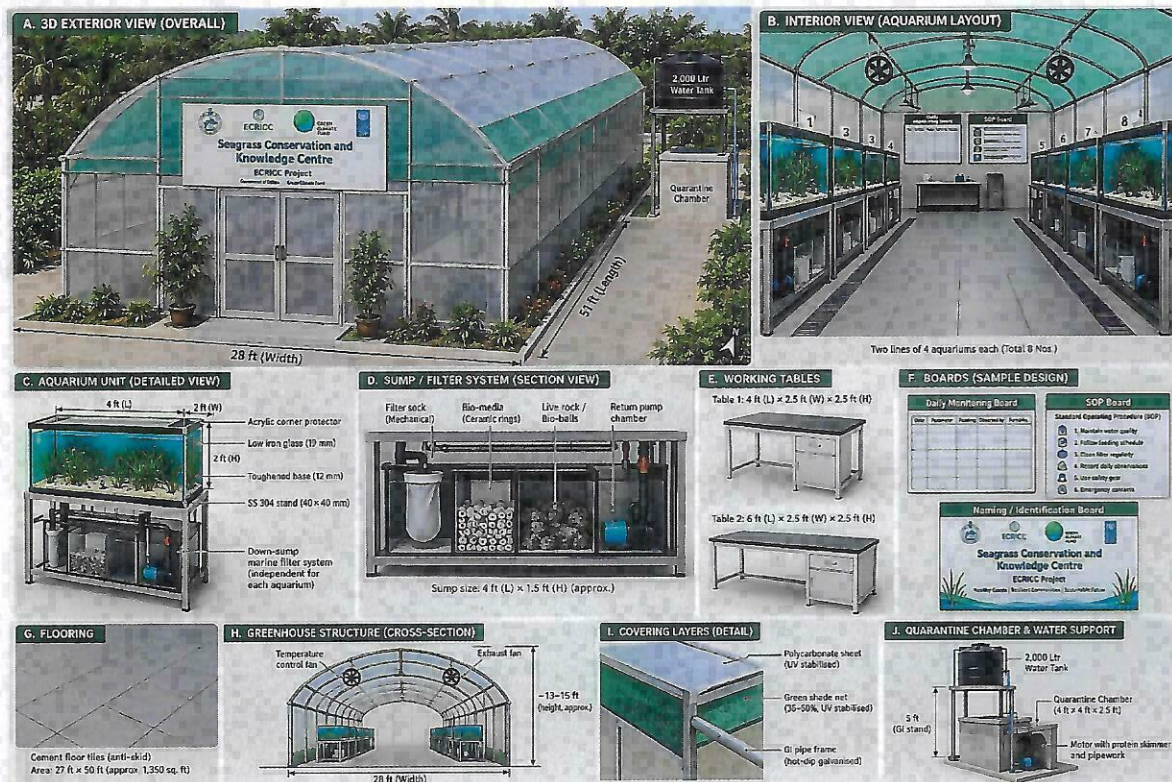
Warranty Offered: _____

Signature of Bidder with Seal:

Name: _____ Date: _____


**Divisional Forest Officer
Chilika Wildlife Division**

Note: This Notice Inviting Quotation, together with the design/layout referenced in Section 23, forms the basis of the technical requirement. Bidders are advised to visit the site before quoting.



NB: The aforementioned design is solely for representative purpose. The Bidders may propose their own design based on the proposed technical requirements as mentioned in the NIQ.


Divisional Forest Officer
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