



Request for Proposal (RFP) **for** **Construction of Speed Breeding Facility**

**RFP No: ICARDA 005- Construction of Speed Breeding Facility at Amlaha
FLRP**

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About ICARDA

The International Center for Agricultural Research in the Dry Areas (ICARDA, or the Center) is a global research-for-development organization with a not-for-profit business model. We envision thriving and resilient livelihoods in dryland communities of the developing world coming with robust incomes, secure access to food, markets, nutrition and health and the capacity to manage natural resources in equitable, sustainable and innovative ways. Since its establishment in 1975 as a treaty-based international organization, ICARDA has implemented research for development programs in more than 50 countries in the world's dry areas, spanning from Morocco in North Africa to Bangladesh in South Asia.

ICARDA is one of 15 CGIAR Research Centers. CGIAR Research works to create a better future for the world's poor. As the world's largest global agricultural innovation network, CGIAR brings evidence to policy makers, innovation to partners, and new tools to harness the economic, environmental and nutritional power of agriculture. Information about the CGIAR can be obtained from www.cgiar.org. ICARDA works through a network of partnerships with national, regional and international institutions, universities, non-governmental organizations and governments in the developing world, and advanced research institutes in industrialized countries.

ICARDA operates a decentralized business model, using information systems deployed in the cloud and accessible by all locations, with oversight and management support, finance, human resource, procurement and information technology and communications provided from Maadi, Cairo, Egypt. ICARDA's temporary headquarters are in Beirut, Lebanon.

ICARDA is a treaty-based international organization founded by the World Bank (IBRD), FAO, UNDP and IDRC in 1975. It has entered into hosting agreements with the countries where it operates, including Afghanistan, Egypt, Ethiopia, India, Jordan, Lebanon, Morocco, Pakistan, Sudan, Tunisia, Turkey, United Arab Emirates and Uzbekistan.

More information about the operations of ICARDA can be obtained from www.icarda.org.

Description of Services

Background

- ICARDA plans to construct Speed Breeding Facility to support & improve the efficiency of research operations.
- ICARDA is requesting proposals from qualified, professional builders & contractors to bid for and construction of the full plant growth chamber.

Objective

To design, construct, and install a 5m x 5m fully controlled indoor speed breeding chamber, capable of supporting extended photoperiods, precise environmental conditioning, benching for propagation trays, and fully automated irrigation and drainage systems.

Work to be performed and deliverables

Scope of Work

- Civil/structural modifications and partitioning
- HVAC setup for temperature control
- Humidity regulation systems
- Benching systems with tray placement capacity
- Advanced LED lighting systems with sensors and programmable photoperiod
- Fully automated irrigation and drainage network
- Electrical, safety, and control panels
- System integration, commissioning, and operator training

Site Address & contact details at site:

ICARDA-Food Legumes Research Platform Bhopal-Indore State Highway, Amlaha, Sehore, Madhya Pradesh – 466113

Duties and Responsibilities

Technical Specifications

Room Dimensions

- Internal Area: 5m (L) × 5m (W) × 3m (H)
- Internal walls and ceiling to be made of PUF insulated panels, 50 mm thick (fire retardant, moisture-resistant)
- Flooring: Non-slip vinyl or aluminium chequered plate

Environmental Conditions

- Temperature: Maintain 22–26 °C
- Humidity: Maintain 50%–70%
- Temperature and humidity to be regulated by:
 - 2 × 2-Ton Inverter AC units (5-star rated)
 - 4 × Digital hygrostats with sensor integration
 - Thermal insulation sealing for all joints and penetrations

Lighting System

- Photoperiod: 22 hours of light, 2 hours darkness
- Lighting: Apollo 8 LED Grow Lights
 - Red/Blue spectrum ratio: 8:1
 - 3 × LED units per bench
- Sensors and controller for automatic scheduling
- Recommendation: Use a programmable photoperiod controller (e.g., Phytotronic or similar) to maintain precise light cycles, even during power interruptions

Benching and Tray Capacity

- 6 × Benches (2m × 1m)
- Each bench to support:
 - 9 RL98 trays (882 SC10R cones) OR
 - 15 D20 trays (300 D40L cones)
- Structure: GI powder-coated steel
- Shelving height adjustable (suggestion for future crop flexibility)
- Trays provided by Stuewe & Sons Inc., or equivalent

Irrigation & Drainage System

- Solenoid valves (auto water fill + drain)
- ARO Diaphragm Pump for rapid draining
- PVC or SS piping network with corrosion resistance
- Drip-line emitters and sensors to ensure uniform water delivery
- Control via a centralized programmable irrigation controller

Control & Monitoring Systems

- Digital Temp/RH display with logging
- Control panel for:
 - HVAC
 - Lighting
 - Irrigation system
 - Emergency shutoff
- Optional Suggestion: Integrate a Wi-Fi-enabled control system with mobile alerts and real-time logging

6. Deliverables

1. Design layout & work plan (to be approved by ICARDA)
2. Complete civil and MEP construction
3. Delivery & installation of all fixtures and equipment
4. Functional testing & commissioning
5. Training manual & hands-on training to ICARDA staff
6. Final project report with warranty certificates

7. Quality Standards

- All materials must conform to ISO 9001:2015 certified standards
- Product datasheets and make/model information must be clearly listed in the proposal
- Electrical systems must conform to Indian Electrical Code (IEC) standards
- Installation workmanship must comply with GMP and cleanroom construction principles

8. Warranty

Warranty for each work/product to be clearly identified in the proposal.

Site Visit Requirement

To ensure the accuracy and feasibility of the proposed technical and financial solutions, all interested bidders are strongly encouraged to schedule a site visit to the ICARDA Food Legumes Research Platform at Amlaha, Madhya Pradesh. This visit will allow vendors to:

- Assess existing infrastructure conditions
- Understand spatial constraints and service points
- Align their technical approach with ICARDA's research environment
- Clarify any context-specific requirements in coordination with ICARDA's technical team

Vendors should schedule their site visit in advance by contacting

Mr. Ankit Gaur

Email: A.Gaur@cgiar.org | Mob: +91-9289630829

Dr. Neha Tiwari

Email: n.tiwari@cgiar.org

Dr. Surendra Barpete

Email: s.barpete@cgiar.org | Mob: +91-8827210552

Submission of proposals

Proposals should follow the template provided below and comply with the Bid Data Sheet instructions. Failure to follow the proposal structure or to comply with the instructions in this Request for Proposal and the Bid Data Sheet will be at the bidder's risk and may affect the evaluation of the proposal.

Bid Data Sheet

No	Data	Specific Instructions
1	Language of the Proposal	English
2	Proposal Validity Period	60 Days
3	Currency of Proposal	INR
4	Deadline for submitting requests for clarifications/questions	20 August 2025
5	Deadline for Proposal Submission	5 September 2025
6	Contact Details for submitting clarifications/questions	PSD: icarda-psd@cgiar.org Dr. Neha Tiwari and Dr. Surendra Barpete Mob: 8827210552 E-mail: n.tiwari@cgiar.org ; s.barpete@cgiar.org
7	Contact Details for Proposal Submission	ICARDA Procurement Services Name – Mr. Ankit Gaur Mob: 9289630829 E-mail: A.Gaur@cgiar.org
8	Manner of Submitting Proposals	Electronic (by email) only
9	Electronic submission requirements	Format: PDF files only Pages must be numbered Subject of email: ICARDA 005- Construction of Speed Breeding Facility at Amlaha FLRP
10	Evaluation Method for the Award of Contract	Combined Scoring Method, using the 50%-50% distribution for technical and financial proposals respectively.

Cost of preparation and submission of the proposal

The bidder shall bear all costs associated with the preparation and submission of the proposal, including but not limited to the possible cost of discussing the proposal with ICARDA and negotiating a contract. ICARDA will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the selection process.

Selection of bidders

Bidders are requested to provide the most appropriate and most cost-effective solution to meet the requirements.

Criteria:

- Proposed methodology is adequate to meet project requirements: the bidder offers the full range of requested services in accordance with the standards laid out in the invitation to bid; the service provider offers a credible approach for quality control and interaction with ICARDA
- The proposed team is adequate to fulfil project objectives : composition, qualifications of team members, collective and individual level of effort, allocation of time across team members
- Credibility of the firm: experience in providing similar services to similar clients, strong commitment to good customer service, level of satisfaction of references,
- Compliance with laws and regulation, adherence to confidentiality policy in relation to client information
- Quality of the submitted documents: clarity, appropriate terminology, compliance with instructions

Proposal template

Bidders must submit their proposal following the template below:

The proposal is made up of four different sections

1. Disclosure form
2. Profile of the bidder
3. Technical proposal
4. Financial proposal

Disclosure Form

To be completed by a duly authorized representative of the Bidder:

On behalf of (_____)

(referred to in this document as "the Bidder"), I (_____) confirm

that I am a duly authorized representative of the Bidder and hereby submit this proposal in response to ICARDA's Request for Proposal **RFP No. ICARDA 005- Construction of Speed Breeding Facility at Amlaha FLRP** . I confirm that I AM NOT aware of any relationship between the Bidder and an ICARDA employee which could result in potential personal gain for the ICARDA employee or which could enable the ICARDA employee to influence the Bidder relationship for perceived personal gain. I confirm that all statements and representations made in the proposal are true and correct.

Date submitted: _____

Submitted by: _____

Name and Title of Authorized Representative: _____

Date: _____

Signature

Profile of the Bidder

Please provide:

- a brief background of your company/firm/organization,
- the legal status of your organization; including registration with the relevant competent authorities,
- your organizational strengths and values,
- our customer service approach, and
- information on prior experience with similar requirements.

Technical Proposal

A. Business need:

Please indicate your understanding of ICARDA's business needs for which you are submitting this proposal.

B. Objectives and deliverables:

Please list the deliverables as specified in this Request for Proposal and indicate whether and how the Bidder commits to deliver these.

C. Approach:

Please provide information on the following:

1. Methodology/approaches you would use to provide the various required services; and
2. Measures to ensure quality control over the delivery of services to ICARDA.

D. Service Management Plan:

Please provide details for how your firm would ensure that it provides satisfactory services to ICARDA. Please explain how you would coordinate the service offering, including proposed meetings and any proposed mechanism for feedback to and/or coordination with ICARDA.

E. Team Composition:

Please provide the following information on the proposed team that would work with ICARDA:

- Team organization
- Individual team members; name, title and role in the team, area of expertise and relevant experience.
- Credentials, if any, with respect to any elements of the Description of Services.

F. Risk Mitigation Plan:

Please list any identified risks which may affect the Bidder's successful delivery of services and any proposed mitigating measures.

G. References:

Please briefly provide Reference list of at least 5 similar assignments of similar size and degree of complexity (consultancy services in the area civil engineering, planning, design, supervision), position held and contact details of the clients

Financial Proposal

Depending of the TOR and the needed service