### Request for Proposal

For

Engagement of a Professional Agency for establishment of Post Entry Quarantine (PEQ) Facilities for imported Apple, Walnut and other fruit plants at different locations

### **National Horticulture Board**

(Ministry of Agriculture and Farmers Welfare, Govt. of India)
Plot No.85, Institutional Area, Sector-18,
GURUGRAM-122015 (HARYANA)
Ph. 0124-2347441, Fax: 2342991
Website: nhb.gov.in

(Download document from https://eprocure.gov.in or nhb.gov.in)

S mily

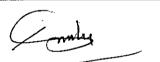
### TABLE OF CONTENTS

Sl. No.	No. Section Description		Page No.	
1		Key Dates	. 3	
2		Disclaimer	. 4	
3	Section 1	Letter of Invitation	5-6	
4	Section 2	Instructions to the Agencies	7-14	
5	Section 3	Eligibility and Evaluation Criteria	15-20	
6	Section 4	Technical Proposal Forms	21-26	
7	Section 5	Financial Proposal Forms	27-30	
8	Section 6	Technical Details	31-38	
9	Section 7	Tentative Work Requirement of PEQ Facilities	39-41	



### **KEY DATES**

S. No.	Activities	Dates
1	Issue of RFP	10/06/2021
2	Last date for submission of written queries for clarification.	18/06/2021
3	Date of pre-bid meeting	23/06/2021
4	Last date and time for submission of proposal (RFP)	02/07/2021
5	Time and date of opening of Technical bids	07/07/2021
6	Time and date of Technical Presentation	15-16/07/2021
7	Time and date of opening of Financial bids	23/07/2021
8	Address at which proposal in response to RFP notice is to be submitted:	Shri Dhal Singh Joint Director National Horticulture Board Plot No 85, Sector 18, Institutional Area, Gurugram Haryana – 122015 Mobile - +91-9845583341, 9765494624 Email: jd.west.nhb@gov.in



#### **DISCLAIMER**

The information contained in the Request for Proposal (RFP) document or subsequently made available to Applicants, whether verbally or in documentary or any other form by or on behalf of the National Horticulture Board (NHB) under Ministry of Agriculture & Farmers Welfare (MoA&FW), Government of India is provided to Applicants on the terms and conditions set out in the RFP and such other terms and conditions subject to which such information is provided.

The RFP is not an agreement and is neither an offer nor invitation by the National Horticulture Board, (herein after to be referred as NHB) to the prospective Applicants or any other person. The purpose of this RFP is to provide interested parties with information that may be useful to them in the formulation of their Proposals pursuant to this RFP.

Information provided in this RFP to the Applicants is on a wide range of matters, some of which depends upon the interpretation of law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. NHB accepts no responsibility for the accuracy or otherwise for any interpretation or opinion in the law expressed herein.

National Horticulture Board also accepts no liability of any nature whether resulting from negligence or otherwise however caused arising from reliance of any applicant upon the statements contained in this RFP. NHB may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumption contained in this RFP.

The issue of the RFP does not imply that National Horticulture Board is bound to select any Applicant or to appoint the selected Applicant, as the case may be. The National Horticulture Board reserves the right to reject all or any of the proposals without assigning any reasons whatsoever.

The Applicants shall bear all its costs associated with or relating to the preparation and submission of its Proposal including but not limited to preparation, copying, postage, delivery fees, expenses associated with visit of facilities, any demonstrations or presentations which may be required by National Horticulture Board or any other costs incurred in connection with or relating to its Proposal. All such costs and expenses will be borne by the Applicants and NHB shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an Applicant in preparation or submission of the Proposal, regardless of the conduct or outcome of the selection Process.

### **Section - 1**

### Letter of Invitation



### National Horticulture Board

(Ministry of Agriculture and Farmers Welfare, Govt. of India)
Plot No.85, Institutional Area, Sector-18,
GURUGRAM-122015 (HARYANA)

Dated: 10 06 2021

To,

The Interested Agencies

Subject: Engagement of a professional Agency for establishment of Post Entry Quarantine (PEQ) Facilities at different locations for imported planting material of Apple, Walnut and other fruit plants—Reg.

Sir / Madam,

National Horticulture Board, Ministry of Agriculture and Farmers Welfare, Government of India requires services of an agency for establishment of "Post Entry Quarantine Facilities for imported planting material of Apple, Walnut and other fruit plants at the following locations:-

- 1. Advanced Centre of Excellence for Horticulture Development at Zainapora in Shopian District, J&K.
- 2. State Horticulture Farm, Shergaon, District -West Kameng, Arunachal Pradesh.
- 3. Seed Potato Farm Dhurla, Gram Panchayat Makrog, Chopal, Distt. Shimla, Himachal Pradesh
- 4. Government Horticulture Garden, Magra, Distt. Tehri Garhwal, Uttrakhand

The details of the services solicited are provided in this Request for Proposal (RFP) document. Interested Agencies can bid for establishment of either one or multiple PEQ facilities. Agencies shall submit separate technical and financial proposals and EMD for establishment of each PEQ facility as per the prescribed format.

The agency will be selected as per the procedure described in the RFP, a copy of which may be downloaded from https://eprocure.gov.in or website of NHB at nhb.gov.in. The complete proposal along with EMD should be submitted on or before 5.00 PM on dated 02.07.2021 as per the attached RFP document. For further information, applicants may visit our website nhb.gov.in.

It is mandatory for the agency to submit proposal within stipulated time failing which the proposal is liable to be rejected. National Horticulture Board reserves the right to accept or reject any or all the offers without assigning any reasons thereof.

Yours faithfully,

Dhal Singh

Joint Director (West Zone)

National Horticulture Board

Mobile: 9845583341

Email: jd.west.nhb@gov.in

### Section - 2

# Instructions to the Agencies

Smily

### INSTRUCTIONS TO THE AGENCIES

### PART-1

### 1. **DEFINITIONS**

- i. "RFP" means the Request for Proposal prepared by the Employer for the selection of Agencies which explains the objectives, activities, tasks to be performed, respective responsibilities of the Employer and the Agencies, and expected results and deliverables of the Assignment.
- ii. "Employer" means the National Horticulture Board, (NHB) Ministry of Agriculture & Farmers Welfare, Government of India who has invited bids for establishment of Post Entry Quarantine facilities with whom the selected Agency signs the Contract for the Services and to whom the selected Agency shall provide services as per the terms and conditions and Terms of Reference (TOR) of the contract.
- iii. "Agency" means any entity that has been shortlisted/selected to submit their proposals that may establish Post Entry Quarantine facilities for the Employer under the Contract.
- iv. "Contract" means the Contract signed between Employer and Agency for this assignment.
- v. "Project specific information" means such part of the Instructions to Agencies used to reflect specific project and assignment conditions.
- vi. "Day" means calendar day.
- vii. "Government" means Ministry of Agriculture and Farmers Welfare, Government of India
- viii. "Instructions to Agencies" means the document which provides to Agencies all information needed to prepare their proposals.
- ix. "LOI" means the Letter of Intent being sent by Employer to the short-listed Agency.
- x. "Proposal" means the Technical Proposal and the Financial Proposal.
- xi. "Assignment" means the work to be performed by the Agency pursuant to the Contract.
- xii. "CMC" means Comprehensive Maintenance Contract.
- xiii. "TEC" means Technical Evaluation Committee.

### 2. <u>INTRODUCTION</u>

- 2.1. National Horticulture Board (NHB) was set up by Government of India in 1984 as an Autonomous Society under Societies Registration Act 1860, thereafter reregistered under the Haryana Registration and Regulation of Societies Act, 2012. NHB has its Head Quarter in Institutional Area, Plot-85, Sector- 18, Gurugram (Haryana)-122015.
- 2.2. National Horticulture Board under Ministry of Agriculture & Farmers Welfare wishes to engage services of an agency/organization for Establishment of "Post Entry Quarantine (PEQ) Facilities for imported quantities of planting material of

Apple, Walnut and other fruit plants at different locations with an objective to meet all the post entry requirements.

- 2.3. Major Components of PEQ Facilities include:
  - i) Land development, fencing, retaining wall contouring etc.
  - ii) Working shed of appropriate size.
  - iii) Administrative and Ancillary Civil structure.
  - iv) Cold Room for planting material.
  - v) Nursery Management tools & mulching inputs
  - vi) Water storage structure.
  - vii) Drip Irrigation System for open field.
  - viii) Irrigation Source (Tube-well/Bore-well)
  - ix) Hi-tech Green House/Screen House.
  - x) Electric Supply (three-phase including transformer).
  - xi) Power backup facilities.
  - xii) Comprehensive Maintenance Contract (CMC) for three years and training of Departmental staff for handling and maintenance of green houses
  - xiii) Any other support/ancillary facilities as deemed necessary for the successful execution and operation of the project.

Note: Technical details of key components are given in Section 6.

### 3. TERMS & CONDITIONS

- i. Interested Applicant can bid for establishment of either one or multiple PEQ facilities.

  Applicant shall submit separate technical and financial proposals and EMD for establishment of each PEQ facility as per the prescribed format.
- ii. Applicant must familiarize themselves with the local conditions of proposed PEQ site (s) after physically visiting the location(s) at their cost and take them into account while preparing their proposals. If any clarification is required on any clause/condition of the RFP, the same may be forwarded within the prescribed time-period to the Employers' representative.
- iii. Applicant shall bear all costs associated with the preparation and submission of their proposals and contract negotiation. The Employer is not bound to accept any proposal and reserves the right to annul the selection process at any time prior to award of the Contract without thereby incurring any liability to the Applicants.
- iv. Proposal should be submitted in two bid system i.e. Technical bid and Financial bid. Financial -bid shall be opened of the applicants who have qualified in Technical bid.
- v. Bids must be accompanied with Earnest Money Deposit of Rs. 10.00 lakhs separately for each proposal in the form of Demand Draft /Banker's Cheque in favour of National Horticulture Board, payable at Gurugram.
- vi. Applicant has to furnish the Solvency Certificate issued by its banker (not more than 3 months old), of value for Rs. 10 Crore.
- vii. A Self Declaration Letter by the bidder on company's letter-head is required to be submitted along with the bid stating that:
  - a. Applicant has not have been blacklisted by any Central/State Government/Public Sector Undertaking, Govt. of India.
  - b. Applicant is not involved in any litigation that may have an impact on delivery of services.
- viii. The bidder shall quote prices which shall be inclusive of GST/Taxes /CMC. The break-up of basic rates and taxes shall be shown while quoting the rates.

2 mily

- ix. The successful bidder shall have to enter into an agreement with the Employer. The bidder will be responsible to fulfill all formalities of the establishment of PEQ facilities as per the terms of the agreement.
- x. The Employer will be at liberty to add or alter any terms & conditions while finalizing the agreement, which will be a binding on the bidder.
- xi. The selected Agency shall be required to furnish a Performance Bank Guarantee (PBG) equivalent to 10% of the contract value rounded off to the nearest thousand Indian Rupees with a validity of 3 years and 5 months in the form of an unconditional and irrevocable Bank Guarantee from a scheduled commercial bank in India in favour of National Horticulture Board payable at Gurugram for the period of contract with 60 days claim period beyond the completion of all contractual obligations. The Performance Bank Guarantee must be submitted after award of work but before signing of the contract. The Performance Bank Guarantee will be forfeited in the event of a breach of contract by the agency in terms of the relevant contract.
- xii. In case any clause of the terms/conditions as laid down in RFP document/agreement is affected by force majeure, then the decision of the Employer will be final.
- xiii. The agency shall be responsible for obtaining all necessary registration (s)/permission (s), approval(s), etc. which may be required for establishment of PEQ facilities from appropriate Competent Authority
- xiv. The agency shall not assign the work, whole or in part, to any other agency, even its own subsidiary or parent agency, to perform its obligation under the work order, without prior consent of the Employer.
- xv. Income tax on the value of supply under rules shall be deducted at source.
- xvi. Agency will be bound to complete the entire work within 120 days from the date of issue of work order by the Employer
- xvii. Agency will impart training to Departmental Staff for handling and maintenance of all the facilities including green houses.
- xviii. In case the material/plant & machinery supplied and installed by the agency are not found as per specifications mentioned in the RFP and other certified documents, the same shall be rejected and agency will have to lift and replace the supplies at his own risk and cost.
- xix. If the established facilities are not found to be as per the desired standards, Employer will have the right to make suitable deductions from the payable amount or reject the payment bill to the agency on its sole discretion, in addition to other remedies including claiming of damages. The decision of Employer in this regard will be final.
- The PEQ facility shall be maintained by the agency for a period of 3 years from the date of completion and commissioning of facilities. The rates offered in the financial proposal shall be inclusive of a Comprehensive Maintenance Contract (CMC) including warranty where applicable, for a period of three years.
- During CMC period of 3 years, apart from routine periodical maintenance of the facilities, Agency will also undertake repair and replacement of spares, whenever required, without any extra payment.
- xxii. All disputes will be subject to Jurisdiction of Gurugram Court only.

### 4. CLARIFICATION AND AMENDMENT TO RFP DOCUMENT

i. Applicant may request a clarification on any clause of the RFP document within the timeframe indicated in the 'Key Dates' section of RFP. Any request for clarification must be sent in writing or e-mail to the Employer's address. The Employer will respond in writing or by e-mail and post all such clarifications on the website <a href="http://www.nhb.gov.in">http://www.nhb.gov.in</a>

Page 10 of 41

- ii. At any time before the submission of proposals, the Employer may amend the RFP by issuing an addendum in writing or by announcing it through its website. The addendum shall be binding on all applicants. Applicants shall acknowledge receipt of all such amendments. To give the applicant reasonable time to take an amendment into account in their proposals, the Employer may, if the amendment is substantial, extend the deadline for the submission of proposal.
- Pre-bid meeting may be convened, if required, to clarify any concern of applicant/bidders regarding the solicitation of documents, scope of work and other details of the RFP documents. This meeting will be formal and the points raised and decision taken on them in the pre-bid meeting will be made available in writing to all perspective applicants/bidders.

### 5. List of Nodal Officers

### (A) Nodal Officers of Project Locations who may be contacted for site visits:

SN	Locations of proposed PEQ facility	Name and Address of Nodal Officers
1.	Advanced Centre of Excellence for Horticulture Development at Zainapora in Shopian district, J&K	Mr Jahangir Hashmi Addl. Secretary (Horticulture) Mobile: 9419168468
2.	State Horticulture Farm, Shergaon, West Kameng District, Arunachal Pradesh	Mr Nawang Lobsang Horticulturist, State Horticulture Farm, Shergaon Mobile: 9485230465
3.	Seed Potato Farm, Dhurla, Gram Panchayat Makrog ,Choupal, Distt. Shimla, Himachal Pradesh	Mr Devender Thakur, Subject Matter Specialist (SMS) Mobile: 7018615569
4.	Government Horticulture Garden, Magra, Distt. TehriGarhwal, Uttrakhand	Mr Ratan Kumar Joint Director (Horticulture) Mobile: 9412436207

### (B) Nodal Officers of NHB

SN	NHB	Name and Address of Nodal Officers
1	National Horticulture Board (Ministry of Agriculture and Farmers Welfare, Govt. of India) PLOT NO. 85, SECTOR-18, INSTITUTIONAL AREA, GURUGRAM-122015 (HARYANA)	Dhal Singh Joint Director (West Zone) National Horticulture Board Mobile: 9845583341 Email: jd.west.nhb@gov.in

Simhs .

### 6. EARNEST MONEY DEPOSIT (EMD)

### 6.1. <u>Earnest Money Deposit</u>

- i. An earnest money of Rs. 10,00,000/- (Rupees Ten lakhs only) may be submitted separately along with technical proposal for each PEQ facility in the shape of Banker's Cheque/Demand Draft in favour of National Horticulture Board payable at Gurugram, Haryana.
- ii. Proposals where Earnest Money Deposit (EMD) is not submitted along with technical proposal within stipulated date and time shall be declared as non-responsive.
- iii. No interest shall be payable by the Employer for the sum deposited as EMD.
- iv. The EMD of the unsuccessful bidders would be returned within one month of award of the work.
- v. Exemption from EMD: According to Rule 170 of GFR 2017 Bid Security is to be obtained from Bidders except Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSMEs).

### 6.2. <u>Forfeiture of EMD</u>

The EMD shall be forfeited by the Employer in the following events:

- i. If the proposal is withdrawn during the validity period or any extension agreed by the Applicant thereof.
- ii. If the proposal is varied or modified in a manner not applicable to the Employer after opening of proposal during the validity period or any extension thereof.
- iii. If the Agency tries to influence the evaluation process.

### 7. SUBMISSION, RECEIPT AND OPENING OF PROPOSAL

- 7.1 Interested Applicants can bid for establishment of either one or multiple PEQ facilities. Applicants shall submit separate technical and financial proposals and EMD for establishment of each PEQ facility as per the prescribed format.
- 7.2 Bid should be submitted in two envelopes -Envelop 1 (Technical Envelope) and Envelope 2 (Financial Bid Envelope) for each PEQ facility separately. The envelopes 1 and 2 should be inserted in third envelope.
- 7.3 An authorized representative of the Agency shall initial all pages of the original Technical and Financial Proposals.
- 7.4 Contents of Technical Bid
  - i. Bid Application on its own letter head in prescribed format Form Tech 1
  - ii. Registration certificate of the firm/company.
  - iii. Income Tax Return of last three years (2017-18, 2018-19, 2019-20).
  - iv. Certificate of Chartered Accountant to show that the turnover of more than Rs.20.00 crore per annum is from construction business of Green House/Quarantine facility for past three years.
  - v. Copy of the experience statement supported by documents.
  - vi. List of Customers and their contact details

Somly

- vii. DD of EMD of Rs.10.00 lakh (Ten lakhs only) drawn in favour of National Horticulture Board payable at Gurugram or The National Small Industries Corporation (NSIC) Certificate per facility.
- viii. Solvency Certificate issued by its banker (not more than 3 months old), of value for Rs. 10 Crore, for execution of the project.
- ix. Self-declaration on Company's letterhead stating that Applicant has not have been blacklisted by any Central/State Government/Public Sector Undertaking, Govt. of India
- x. Copy of at least one of the following quality certifications: ISO 9001:2008, ISO 14001:2004, ISO OHSAS 45001:2018 (equivalent Indian Certification)
- xi. Valid GST registration certificate.
- xii. Any other relevant documents.
- 7.5 Sealing and Marking of Bid: -The copies of the Technical Bid shall be placed in sealed Envelope 1 clearly marking it as "Technical Bid". The Financial Bid shall be placed in separate sealed Envelope 2 clearly marking it as "Financial Bid Do not open with Technical Bid". The two envelopes shall then be placed in third envelope, which shall also be appropriately sealed and marked as "Bid for Tender for "Establishment of Post Entry Quarantine (PEQ) facility for imported planting material of apple and walnut and other fruit plant" at ----- (Name the location for which bid is submitted).
- 7.6 Address and last date for Submission of Bid:- Bid complete in all respect shall be delivered to National Horticulture Board, Ministry of Agriculture and Farmers Welfare, Government of India 85, Institutional Area, Sector 18 Gurugram 122015 (Haryana) on or before the last date and time of submission specified in the document. In addition to the above, the inner envelopes shall indicate the name and address of the Bidder to enable the bid to be returned unopened in case it is declared "late".
- 7.7 **Responsibility of the Bidder:** If the outer envelope is not sealed and marked as required, NHB will have no responsibility for the Bid's misplacement or premature opening.
- 7.8 Rejection of Bid: The Bid Document shall be submitted in the form of printed document. Bids submitted by fax or email will not be entertained. Any condition put forth by the bidder not conforming to the bid requirements shall not be entertained at all and such bid shall be rejected.
- 7.9 Late submission of Bid: -Any bid received by NHB after the deadline for submission of bids prescribed by NHB, will be summarily rejected and returned unopened to the Bidder. NHB shall not be responsible for any postal delay or non-receipt/non-delivery of the documents. No further correspondence on this subject will be entertained.
- 7.10 Opening of Technical Bid:- NHB will open all Technical Bids on the Bid opening date specified in the document. The Bidder's representatives who are present shall sign a register evidencing their attendance. In the event of the specified date of Bid opening being declared a holiday for NHB, the Bids shall be opened at the appointed time and location on the next working day.
- 7.11 Opening of Financial Bids: Financial Bids will be opened and examined/compared after the technical evaluation. The financial bids will be opened only of those bidders, who are found eligible and technically competent in technical evaluation. The name of Bidder, bid prices, total amount of each bid, etc. shall be announced by the NHB at the Financial Bid opening. The NHB will prepare minutes of the financial Bid Opening. The date, time and venue of opening of financial bid will be advised to the shortlisted bidders separately.

Page 13 of 41

- 7.12 Clarifications of Bids: To assist in the evaluation, comparison and on examination of bids, NHB may, at its sole discretion, ask the Bidder for a clarification of its bid including breakup of rates. The request for clarification and the response shall be in writing. If the response to the clarification is not received before the expiration of deadline prescribed in the request, NHB reserves the right to make its own reasonable assumptions at the total risk and cost of the Bidder.
- 7.13 Completeness of Bids: NHB will examine the bids to determine whether they are complete, whether they meet all the conditions of the RFP Document and Technical Specifications, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed and whether the Bid Documents are substantially responsive to the requirements of the Tender Document.
- 7.14 **Rectification of Arithmetical errors:** If there is a discrepancy between the rates in words and figures, the rate in words will govern. If the bidder does not accept the correction of errors, his bid will be rejected and his EMD may be forfeited.

### 8. <u>DISQUALIFICATION</u>:

- i. If the RFP is not filled / submitted in prescribed format.
- ii. The response to the RFP is submitted after the deadline of submission.
- iii. The Interested Applicant has made misleading for false representation in the forms, statements, attachments submitted in proof of eligibility.
- iv. The RFP is not accompanied by required documentation.
- v. The Interested Applicant fails to provide clarifications related thereof, when sought.
- vi. The Applicant should provide/give the correct and true information while submitting the RFP. In case of incorrect/false information found at any stage, the bid will be cancelled and legal action will also be initiated.
- vii. The Interested Applicant is found to canvass, influence or attempt to influence in any manner, the qualification or selection process, including without limitation, by offering RFP or other illegal satisfaction.
- viii. Notwithstanding anything written above or elsewhere, the employer may disqualify the Interested Applicant without assigning or disclosing any reason thereof.

### 9. COMMITTEE FOR PROPOSAL'S EVALUATION

- (i) The Employer will constitute a Technical Evaluation Committee (TEC) to carry out the technical evaluation of proposals for selection of the Agency.
- (ii) From the time the proposals are opened to the time the contract is awarded, the Agency (ies) should not contact the Employer on any matter related to its Technical and/or Financial Proposal.

James .

### Section - 3

## **Eligibility and Evaluation Criteria**

Smy

### 1. ELIGIBILITY CRITERIA

The applicants intending to bid for Establishment of "Post Entry Quarantine (PEQ) Facility for imported planting material of Apple, Walnut and other fruit plants at different locations shall fulfill the minimum following eligibility criteria:

- i. The Applicant must be a legal entity registered under the Companies Act, Limited Liability Partnership (LLP) under the Partnership Act, Partnership Firm, Societies Registration Act, etc. The agency/s must have valid PAN card and GST Registration.
- ii. The Applicant should have minimum Annual Turnover of INR 20 crores during the each of last three financial years ending on March 31<sup>st</sup>, 2020 in the same/relevant trade.
- iii. The applicant has to furnish the Solvency Certificate issued by its banker (not more than 3 months old) of value for Rs. 10 Crore, for execution of the project.
- iv. The Applicant should have in-house team, skills and expertise required for the assignment.
- v. Applicant should have experience of at least 10 years in establishment of similar facilities. Documentary evidence of works completed so far should be enclosed.
- vi. The Applicant should have necessary Global and/or Indian certifications to execute similar projects.
- vii. The applicant must not be barred by any Central Government Department/Agency, State Government Department/Agency at the time of submission of application. The applicant shall provide self-Certification by the Authorized Signatory as proof of the same.

### 2. EVALUATION OF TECHNICAL PROPOSAL

- i. Technical Evaluation Committee (TEC) will carry out the technical evaluation of proposals for selection of the Agency based on the evaluation criteria given at Para No. 3 below. The applicants obtaining a total score of 60 (on a maximum of 100) or more would be declared technically qualified.
- ii. Financial proposals of only those Agencies, which are declared technically qualified, shall be opened publicly on the dates and time specified in the document, in the presence of the representatives of Agencies who choose to attend. The name of the Agencies, their technical score, and their Financial Proposal shall be read aloud.

### 3. EVALUATION CRITERIA

### Technical Evaluation and Scoring Criteria for 100 marks

The technical evaluation of proposals shall be done on the following criteria.

SN	Parameter	Max. Marks
1	Experience in manufacturing/establishment of Greenhouse /facilities a. More than 20 years - 15Marks b. Between > 15 to 20 years - 10 Marks c. Between > 10 to 15 years - 05 Marks	15
2	Manufacturing/establishing of Greenhouse facilities in J&K, Himachal Pradesh, Uttarakhand and Arunachal Pradesh: -  03 Marks for establishment of each Greenhouse facility created maximum up to 05 facilities (Work-order and completion certificate to be provided for each case.)	15
3	Experience of establishment of Post Entry Quarantine (PEQ) facilityfor imported plants in Government Sector. (Work-order and completion certificate to be provided)	10
4	Financial Strength Annual Average Turnover of the Agency from construction business of Green-house/Quarantine facility for the last three financial years  a. More than 30 Crores — 20 Marks b. Between >25 to 30 Crores — 15 Marks c. Between >20 to 25 Crores — 10 Marks  Agency should provide audited balance sheet of last three years ending on March 31 <sup>st</sup> , 2020	20
5.	Solvency Certificate (not more than 03 months old) of value for Rs. 10 Crore from the Banker of the agency for execution of the project.	05
6.	The Agency should have one of the following/equivalent Indian certifications: ISO 9001:2008, ISO 14001:2004, & ISO OHSAS 45001:2018	05
7.	The proposal will be evaluated by the Technical Committee based on the detailed technical presentation about PEQ Facility on following parameters:  a. Understanding and Concept Clarity- 10 Marks b. Creativity and Technical Superiority - 10 Marks c. Implementation Strategy - 05 Marks d. Any other information that might strengthen bidder claim - 05 Marks	30
	Total	100

Page 17. of 41

### 4. METHOD OF SELECTION

In deciding the final selection of the Agencies, the technical quality of the proposal will be given weightage of 70% on the basis of Quality and Cost Based Selection (QCBS) for evaluation. The employer shall short list those agencies/bidders who secure a minimum of 60% marks based on technical evaluation. The financial proposals/bids of only those Agencies who are declared technically qualified will be opened. The proposal with the lowest cost will be given a financial score of 100 and the other proposal given financial scores that are inversely proportional to their prices. The financial proposal shall be allocated a weightage of 30%. For working out the combined score, the employer will use the following formula:

**Total points**:  $(0.7 \times T(s)) + (0.3 \times 100 \times LEC/EC)$ , where T(s) stands for technical score, EC stands for Evaluation Cost of the Financial Proposal, LEC stands for Lowest Evaluated Cost of the Financial Proposal.

The proposals will be ranked in terms of total points scored. The proposal with the highest total points (H-1) will be considered for award of contract and will be called for negotiations, if required.

**Example**: If in response to this RFP, three proposals, A, B and C were received and the Technical Evaluation Committee awarded them 75, 80 and 90 marks respectively, all the three proposals would be technically suitable. Further, if the quoted price of proposals A, B and C were Rs.120, 100 and 110 respectively, then the following points for financial proposals may be given:

A: 100/120 = 83 points B: 100/100 = 100 points C: 100/110 = 91 points

In the combined evaluation, the process would be as follows:

Proposal A:  $75 \times 0.7 + 83 \times 0.3 = 77.4$ 

Proposal B:  $80 \times 0.7 + 100 \times 0.3 = 86.0$ 

Proposal C:  $90 \times 0.7 + 91 \times 0.3 = 90.3$ 

Proposal C would be considered the H1 and would be recommended for negotiations, if considered necessary for approval.

The TEC will correct any computation errors. When correcting computational errors, in case of discrepancy between a partial amount and the total amount, or between words and figures, the former will prevail. In addition to the above corrections the items described in the technical Proposals but not priced, shall be assumed to be included in the prices of other activities of items. In case an activity of line items is quantified in the Financial Proposal differently from technical proposal, no corrections will be allowed to the Financial Proposal.

### 5. **NEGOTIATIONS**

Negotiations, if considered necessary, shall be held only with the Agency who shall be placed as H- 1 bidder after combined evaluation of the Technical and Financial Proposal. Under no circumstance, the financial negotiation shall result into an increase in the price originally quoted by the Agencies. Date and Time for negotiation shall be communicated to the H-1 Agency. Representatives conducting negotiations on behalf of the Agency must have the written authority to negotiate and conclude the contract.

### 6. AWARD OF CONTRACT

- i. After completing negotiations, the Employer shall issue a Letter of Intent (Lol) to the selected Agency and promptly notify all other Agencies who have submitted proposals about the decision taken.
- ii. The selected Agency will sign the agreement after fulfilling all the formalities/pre-conditions, within 7 days of issuance of the letter of intent.
- iii. The Agency is expected to commence the assignment immediately after signing of Agreement and issuance of work order as per timeline given in payment terms at Para –8 of this section.

### 7. CONFIDENTIALITY

Information relating to evaluation of proposals and recommendation concerning awards shall not be disclosed to the Agencies who submitted the proposals or to other persons not officially concerned with the process, until the publication of the award of Contract. The undue use by any Agency of any information related to the process may result in the rejection of its proposal and may be subject to the provisions of the Employer's antifraud and corruption policy.

### 8. PAYMENT TERMS

i. The payment will be released in four installments in the ratio of 30:30:30:10 and will be linked with physical progress of the project as per following milestones: -

SN	Component	Progress	Amount eligible for release in %age	Timeline	Remarks
1	-Land Development, -Fencing, Road, -Foundation and Civil work of Hi-Tech Green House -Source of irrigation and Water structure -Electricity Relevant statutory compliances/	100%	30% (1 <sup>st</sup> instalm ent)	40 days from the date of award of work	Release not to exceed 30% or actual expenditure certified by CA whichever is less

Page **19** of **41** 

	approvals				
2	<ul> <li>Cold Room complete</li> <li>Hi-tech Green House – 50% complete</li> <li>Working shed 50% complete</li> <li>Power backup</li> </ul>	100% unless otherwis e specifie d	30% (2 <sup>nd</sup> instal ment)	75 days from the date of award of work	-DO-
3	- Hi-tech Green House 100% complete - Drip Irrigation in open field – 100% complete - Administrative and /ancillary Civil Structure – 75% complete - Working Shed 100% complete	100% unless otherwis e specifie d	30% (3 <sup>rd</sup> instalm ent)	100 days from the date of award of work	-Do-
4	100% completion and operations of all components as per proposal	100%	10% (4th& final instalment	120 days from the date of award of work	10% to be released after successful completion and operational of the project.

- ii. The physical progress of work for each installment will be inspected by a Technical Committee. The payment will be released after satisfactory Inspection Report and approval of Competent Authority as per para (i) above.
- iii. The all applicable GST/taxes would be paid by agency as per Govt. rules.
  - iv. The Agency is bound to complete the work within the prescribed time. If agency fails to complete the job in stipulated time, the penalty will be imposed for the period of delay.
- v. Performance Bank Guarantee (PBG) will be released after 3 years and 5 months from completion of the project. In case the PBG lapse during the CMC period, the bidder should extend the validity of the same.

Comby

### **Section 4**

# Technical Proposal Forms

Sandy

### **TECHNICAL ENVELOPE**

FORM TECH - 1

### LETTER OF PROPOSAL SUBMISSION ON THE LETTER HEAD OF APPLICANT

To.

Joint Director (West)
National Horticulture Board
Government of India, Plot No.85, Sector 18,
Institutional Area, Gurugram — 122 015 (Haryana)

Dear Sir,

- 1. In response to the Request For Proposal (RFP) No. NHB-RFP document for PEQ facility 2021 Date...... uploaded on the website: <a href="www.nhb.gov.in">www.nhb.gov.in</a> and <a href="www.nhb.gov.in">www.nhb.gov.in</a> an
  - i. Advanced Centre of Excellence for horticulture development at Zainapora in Shophian District, J&K.
  - ii. State Horticulture Farm, Shergaon, West Kameng, District, Arunachal Pradesh.
  - iii. Seed Potato Farm Dhurla, Gram Panchayat Makrog, Development Chopal, Distt. Shimla, HP.
  - iv. Government Horticulture Garden, Magra, Tehri Garhwal, Uttrakhand.
- 2. I/We have thoroughly examined and understood the General and specified terms and conditions of the RFP form and agree to abide by them all into. In testimony, I/we had also signed the declaration and undertaking.
- 3. I/We agree to fulfill the requirement of all components of for Establishment of "Post Entry Quarantine Facility for imported planting material of Apple, Walnut and other fruit plants at one/different location (s) and have quoted the rates inclusive of all GST, Erection, Freight, CMC etc.
- 4. I/We shall be bound by communication of acceptance of the offer within prescribed time.
- 5. I/We accept that the right to accept or reject whole or part of the RFP is reserved with National Horticulture Board Gurugram (Haryana) without assigning any reason. The decision of the committee formed at National Horticulture Board Gurugram (Haryana) will be final and shall be binding on me/us.
- 6. A Demand Draft (D.D.)/ Banker's Cheque of EMD amounting to Rs ......bearing no. ......dated ......2021 drawn in favour of National Horticulture Board payable at Gurugram (Haryana) is enclosed herewith. Applicant (s) registered under NSIC is exempted from EMD.

- 7. As per the terms and conditions, we are submitting our offer in two bid system. The documents required as per RFP document is enclosed in technical bid with EMD/NSIC Certificate. Financial bid contains rates quoted by me/us.
- 8. I/We also agree that **National Horticulture Board**, Gurugram (Haryana) has full rights to open/consider the financial Bid of technically qualified applicants only.
- 9. With respect to contents in Technical Bid and evaluation of the proposal, the decision of National Horticulture Board Gurugram (Haryana) will be final and binding on me/us.
- 10. The following documents duly filled in and signed, are enclosed along-with the RFP:
  - (A) Technical Bid in Envelop no -1 containing following documents.
    - i. Bid Application on the letter head in prescribed format
    - ii. Registration certificate of the firm/company.
    - iii. Income Tax Return of last three years (2017-18, 2018-19, 2019-20).
    - iv. Certificate of Chartered Accountant to show that the turnover of more than Rs.20.00 crore is from construction business of Green House/Quarantine facility for past three years ending March 31,2020. (Form Tech 3)
    - v. Copy of the experience statement supported by documents (Form TECH 2)
    - vi. List of Customers and their contact details
  - vii. DD/ Banker's Cheque of EMD of Rs.10.00 lakh (Ten lakhs only) drawn in favour of National Horticulture Board payable at Gurugram or NSIC Certificate per facility.
  - viii. Solvency Certificate issued by its banker (not more than 3 months old), of value for Rs. 10 Crore, for execution of the project.
  - ix. Self-declaration on Company's letterhead stating that Applicant has not have been blacklisted by any Central/State Government/Public Sector Undertaking, Govt. of India
  - Copy of at least one of the following quality certifications:
     ISO 9001:2008, ISO 14001:2004, ISO OHSAS 45001:2018 (equivalent Indian Certification)
  - xi. Valid GST registration certificate.
  - xii. Any other relevant documents
  - B) Financial Bid in Envelop no. 2
    - (i) Financial Proposal Submission Form FORM FIN-1
    - (ii) Summary of Cost in FORM FIN -2
    - (iii)Break-up of Component-wise cost for PEQ facility FORM FIN-3

Yours Faithfully

Place

Combi P

### **TECHNICAL ENVELOPE**

#### **FORM TECH-2**

### ORGANISATION AND EXPERIENCE

### 1. Profile of Agency/ Organization

Provide here a brief description of the background and organization of your firm/institution/entity. The brief description should include ownership details- date place of incorporation of the agency its objectives etc.(Attach relevant certificate(s)),

### 1.1. Information about the Firm (s)

- i. Name
- ii. Head Quarter
- iii. Address
- iv. Telephone Number
- v. Email Address
- vi. Website
- vii. Date and Country of incorporation (enclose the copy of relevant document)

#### 1.2. Annual Turn Over

Provide Annual Average Turnover of the Agency from construction business of Greenhouse/ Quarantine facility for the last three financial years ending March31, 2020. Project work orders during last 03 years to be attached in support of experience.

### 1.3. Geographic Presence

Provide geographical spread of your firm/entity, especially in hilly regions of India

#### 2. Agency's Experience

Please provide details of experience of agency separately in following areas: (Attached Documentary proof such as Purchase Order with satisfactory Report).

- (i) Experience in manufacturing/establishment/fabrication of greenhouse /quarantine facilities.
- (ii) Experience of manufacturing/establishing/fabrication of greenhouse facilities in J&K, Uttarakhand, Himachal Pradesh and Arunachal Pradesh.
- (iii) Experience in establishment of Post Entry Quarantine (PEQ) facility in the past in following format:

Page 24 of 41

Assignment Name:	
Approx. value of the contract (In Indian Rupees): (Mention contract value in INR or provide range values: Upto Rs lakh, Rs lakh, Rs Cr.	
Country Location within the country	
Duration of assignment (months):	
Name of the Employer:	<del> </del>
Address:	
Approx. value of the services provided by your agency under the contract: (In INR):	
Start Date (month/year)	<u> </u>
Completion date (month/year)	
Name of associated Agencies, if any	
Narrative description of Project:	
Description of actual services provided by your agency within the assignment	nent:

- 3. Documentary proof of having at least one of the following/ equivalent Indian certifications:
  - (i) ISO 9001:2008,
  - (ii) ISO 14001:2004,
  - (iii) ISO OHSAS 45001:2018
- 4. Architectural, Civil and Structural design of PEQ facility
- 5. Other details, if any.

Comby

### **CA CERTIFICATE FORMAT (From Statutory Auditor)**

We hereby certify that average revenue from construction business of Greenhouse/Quarantine facility in the last three financial years (2017-18, 2018-19, 2019-20) is as specified below:

SN	Financial Year	Turnover (Rs in Crore)
1.	2017-18	
2.	2018-19	
3	2019-20	· · · · · · · · · · · · · · · · · · ·
	Total	

Yours Sincerely,
For
Chartered Accountants
Membership Number-
Date-
Place-

### **Section-5**

### Financial Proposal Forms

Date:

### **Financial Proposal Submission Form**

Location of PEQ facility:	
To	

Shri Dhal Singh Joint Director (West) National Horticulture Board Plot No. 85, Sector-18, Institutional Area, Gurugram-122015 (Haryana)

Dear .....,

We the undersigned, offer to provide our services for Establishment of "Post Entry Quarantine (PEQ) Facility for imported planting material of Apple, Walnut and other fruit plants at following locations in accordance with your Request for Proposal dated [INSERT DATE]. Our attached Financial Proposal is for the sum of [Insert amount(s) in words and figures] for following PEQ facility (Pls Tick only one facility):-

- 1. Advanced Centre of Excellence for horticulture development at Zainapora in Shopian District, J&K.
- 2. State Horticulture Farm, Shergaon, West Kameng District, Arunachal Pradesh.
- 3. Seed Potato Farm Dhurla, Gram Panchayat Makrog, Chopal, Distt. Shimla, HP.
- 4. Government Horticulture Garden, Magra, Distt. Tehri Garhwal, Uttrakhand

The quoted fee is for a period of 12 months. This amount is inclusive of all taxes, freight and duties etc applicable as per Govt. Rules. We hereby confirm that the financial proposal is unconditional and we acknowledge that any condition attached to financial proposal shall result in rejection of our financial proposal.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal, i.e., before the date indicated in the 'Key Dates.'

We understand you are not bound to accept any proposal you receive.

Yours sincerely,

Authorized Signature [In full and initials]:

Name and Title of Signatory:

Name of Agency:

Address:

NHB - RFP Document for PEQ Facility

Page 28 of 41

### **Summary of Costs**

S. No	Location of PEQ facility	Total Amount (Rs.)	GST/ Taxes	Total Amount with GST/Taxes (Rs.)		
	(Pls select and Tick √only one PEQ facility)			In Figure	In Words	
1	Establishment of "Post Entry Quarantine Facility for Walnut at Seed Potato Farm Dhurla, Gram Panchayat Makrog, Chopal, Distt. Shimla, HP.					
2	Establishment of "Post Entry Quarantine Facility for Apple at State Horticulture Farm, Shergaon, West Kameng District, Arunachal Pradesh.			- '		
3	Establishment of "Post Entry Quarantine Facility for Apple at Advanced Centre of Excellence for horticulture development at Zainapora Shopian District, J&K					
4	Establishment of "Post Entry Quarantine Facility for Apple at Government Horticulture Garden, Magra, Distt. Tehri Garhwal, Uttrakhand.					

Note: -

- 1. The PEQ facility shall be maintained by the Agency for a period of 3 years from the date of completion and commissioning of facilities. The rates offered in the financial proposal is inclusive of a Comprehensive Maintenance Contract (CMC) for a period of three years, including warranty where applicable, from the date of completion and commissioning of facility and training of Departmental staff for handling and maintenance of all facilities including green houses.
- 2. Please write NA wherever not applicable.
- 3. Indicate break- up of the component-wise cost for PEQ facility in prescribed format Form Fin 3

Authorized Signature:

Name:

Designation:

Name of firm/entity:

Address:

Page Page

### Break-up of component-wise cost for PEQ facility at (--

SN	Item/Component	Unit Rate (Rs)	Unit	Quantity	Cost	GST/Tax	Total Cost Including GST/Tax
<u> </u>							
<u> </u>							
		<del>-</del>					
$\vdash$		7					
		n				<u> </u>	
		<u> </u>					
			****			+	
<del></del>			<u> </u>			<del> </del>	
				-		1	
						<del>-</del>	
			· ·	T			
			-		· · · · · · · · · · · · · · · · · · ·		
	1000						
Total	Price in Figure				7 193	· · · · · · · · · · · · · · · · · · ·	
Total	Price in Words						

### Note:-

- 1. The PEQ facility shall be maintained by the Agency for a period of 3 years from the date of completion and commissioning of facilities. The rates offered in the financial proposal is inclusive of a Comprehensive Maintenance Contract (CMC) for a period of three years, including warranty where applicable, from the date of completion and commissioning of facility and training of Departmental staff for handling and maintenance of all facilities including green houses.
- 2. All components as per enclosed technical details in Section -6 from SN 1-15 are to be separately mentioned under head 'Item/Component".

Authorized Signature:

Name:

Designation:

Name of firm/entity:

Address:

### **Section -6**

### **Technical Details**

NHB - RFP Document for PEQ Facility

Some of the second

Page **31** of **41** 

### Technical Details for various components of PEQ Facility

### ITEM NO-1

SN	TECHNICAL DETAILS
	Fencing
	<ul> <li>Chain Linked Fencing (hot galvanized GI rope wire) fixed on RCC pole minimum 6 feet above the ground and 2 feet below the ground on cement concrete block.</li> <li>Green Net Fencing upto 3 meter high along the entire length of chain linked fencing.</li> </ul>

### ITEM NO-2

SN	TECHNICAL DETAILS
1	Land development, retaining wall, contouring etc.
	As per the Standard Civil Manual/SoR of the State

### **ITEM NO-3**

SN.	TECHNICAL DETAILS
	Working shed size:
]	- 500 SQM for J&K
}	- 300 SQM for Other States
	Structure Frame to be made of hot dip galvanized pipe.
	Roof cover Pre-coated GI sheet 0.5 mm thick.
	Floor: Made of PCC (1:5:10)100 mm thick and CC (1:2:4) 100 mm thick, duly plastered, and minimum 3 inch above ground level.

### ITEM NO-4

SN	TECHNICAL DETAILS
77.	Administrative and Ancillary Civil Structure with One lavatory/ Restroom
	- 300 SQM for J&K
	- 200 SQM for Other States
	Structure Frame: Made of galvanized steel and design as per IS875 standards to
	withstand wind speed of 80 km/h and snow load of the location. Complete structure
	should be flange based and cladding with puff panel minimum 60 mm with inner/outer
	pre-coated GI sheet 0.5 mm thick.

Combi

Window: Made of aluminum frame with 5mm glass and accessories.

Door: Sliding doors made of aluminum frame with all accessories.

Foundation: Minimum upto. 2 feet above ground level, 3 feet below ground level and

12 inch thick /wide

Floor: Floor made of PCC (1:5:10)100 mm thick than CC (1:2:4) 100 mm thick, anti-

slippery tiles of hard material.

Office Furniture: Table-3, Revolving Chair-3, Executive Chair -6, Ceiling Fan -3, LED

Tube light -5

### **ITEM NO-5**

TECHNICAL DETAILS	
Cold Chamber for Planting Material (NCCD/NHB Technical Standards to be followed)	_
CAPACITY: -	
100 MT for J & K	
60 MT for Other States	
Temperature Range: 0-4°C	
Design: As per NHB /NCCD Specifications	
	Cold Chamber for Planting Material (NCCD/NHB Technical Standards to be followed)  CAPACITY: -  100 MT for J & K  60 MT for Other States  Temperature Range: 0-4°C

### **ITEM NO-6**

SN	TECHNICAL DETAILS	
A	Saw Dust Machine 1 to 10 TPH Production Capacity: 1 to 10 tph	
	Material: Mild Steel	
	Wood Drum Type Chipper/Saw dust powder making machine is widely used for chipping wooden logs into wood chips and powder as well. This chipper machine can chip soft and medium hard woods, green or seasoned, etc. of any nature.	
В	Mulching inputs (Sand/ FYM etc.) Standard	

Comba

### **ITEM NO-7**

SN	TECHNICAL DETAILS
	Water Storage Structure
	Site specific water storage structure of required capacity with complete plumbing work and other required accessories.

### ITEM NO-8

SN	PRODUCT TECHNICAL DETAILS
	Drip Irrigation System for open field
	<ul> <li>Drip Irrigation with 16mm LLDPE pipe, PVC fittings accessories</li> <li>Emitting devices at plants (emitter or dripper, micro spray head, inline dripper, or inline drip tube etc.) per acre price to be given complete installation including all parts.</li> </ul>
	Plant to plant distance 1 Feet
	Row to row distance 1 Meter.

### ITEM NO-9

SN	PRODUCT TECHNICAL DETAILS
1	Irrigation source (One Bore well with 5 HP pump motor with other accessories and water discharge pipe 1.25inch etc. near the Greenhouse

### ITEM NO-10

### Hi-Tech Green House/ Containment Facility

SN	PRODUCT TECHNICAL DETAILS		
1.	Hi-Tech Polycarbonate Green House / Screen House Area 500 m <sup>2</sup> for each structure		
	Structure:		
	Structure Frame: All hot galvanized steel zinc cover 275g/m <sup>2</sup> , flange-based ,fasteners also hot galvanized as per IS875 to withstand wind speed 100 km / hr and snow load of the location. Structure should be free from joints/welding points with minimum center height of 4 meter and side walls of 2.5 meter.		
	Pipe Sections to be used for different Structural Member or equivalent will be as below:		
	a) Pillar: 80mm × 50mm × 2mm thickness hot galvanized rectangular tubes. Distance between pillars on lateral line: 2m. Distance between pillars on central line: 4m.		

Pag

- b) Arc: 50mm × 50mm × 2mm thickness.
- c) Ridge: 40mm/41mm.
- d) Crop Bar: 41mm × 41mm x 2mm thickness.
- e) Trusses Tie: 32mm tube structural member, fitted with zinc plated nuts & bolts. Frame is made by 50x50x2mm hot galvanized rectangular tubes.
- f) Gutter: As per requirement with thick moulding hot galvanized steel plate
- g) Roof beam: 40x30x2mm hot galvanized rectangular tubes
- h) Bolts and Nuts: Galvanized bolts and nuts

### 2. | Anti-Chamber Room:

- a) Room Size 2.5meter x 2.5meter x 2.43meter (L ×W×H) covered 10mm double layer Multiwall PolycarbonateUV stabilized sheet.
- b) Sliding Door: Size:  $1.9m \times 0.91m$ , L x W.
- c) Air Curtain: Auto on/off at main entry.

### 3. | Cladding of Roof and all walls of the Greenhouse and double room

Minimum 10 mm thick double layer multiwall Polycarbonate both sides UV stabilized sheets, Aluminum Profile, EPDM gasket, Silicon sealant, Accessories, Roof and Side wall , all covered. Temperature rating of  $100^{\circ}\text{C}$ , impact performance for -  $40^{\circ}\text{C}$  to +120°C, light transmission upto 70-80% with excellent thermal insulation.

### 4. | Shading System:

- A) Internal Shading: Reflective, thermal-aluminium-screen silver with motorised automatic thermal based -mechanism inside the green house.
- 5. High Pressure Fogging System: High water force through customized four way nozzles (fogging nozzles) via high pressure pump -connected -watering system, micro fogging discharge 28 ltr/h, LLDPE 16 mm hanging type with filters.

### 6. | Cooling System:

- a. 1.5 meter high ×150 mm thick, length as per design, evaporative cellulose cooling pad complete with:
  - All necessary framing material of extruded Aluminum profile required supporting distribution & returning piping.
  - Gutters, down spout end caps & drip pan, plumbing kit, pump 220 volts 1 phase
     50 cycles, Drilled PVC piping cap, pad retainer, all suspension hardware.
  - Metal flashings as required to seal pad to vent opening, 6 inch thick evaporative cooling pad material.
- b. Water storage Tank: appropriate capacity as per Section 7
- c. Pump:Monoblock pump-set of 1 HP or appropriate capacity
- d. Axial Flow Fan: Fan size 1200 X 1200X 400 mm with six blades or appropriate capacity
- e. Auto speed control system.

Limbs

### 7. Light:

### A) Photosynthesis Philips 600 W Lamp qty 4

600 W Electronic Green Power 600W EL Plus. Special light for plants providing essential photosynthesis wavelength to the plants for optimum growth & production.

B) CFL: One no will be fitted inside room for visibility during dark time. qty 1

### 8. | Heating system:

Biotech Heat Convector by electric heat convector gerat system 2.4 KW. Complete uniform heat circulation system, so that the heat can be blown in the complete area. Special heat convector gerat system for to maintain required temperature.

### 9. Automatic Control Panel:

Automatic Control System to monitor and control Temperature, Humidity and Lightto maintain chamber climate by optimum controlling of chamber equipment's like cooling fan, heaters, lights etc. It also includes switching system for operating chamber equipment with suitable relays, contractors, and safety devices:

- 7 inch /10 inch HMI with buttons, Data logging Feature
- PLC system with inbuilt analogue module for sensor connection
- Multi- Set point programming.
- Multistage cooling /heating control
- SMS updates over phone
- Data logging is in excel and graphical format.
- Computer access from any place using internet.

#### **SENSORS:**

#### Temperature & RH:

- Range: Range 0-50 °C.
- RH Range 0- 100%.
- Type: 4- 20 mA

### Light sensor (Optional)

• Range: 0- 20 KLUX

• Type: 4-20 mA

### **OUTPUTS:**

### A) Light Control:

Control Cycle: ON/ OFF, multiple stages

Accuracy: ±10 sec/day

### I. B) Temperature controller: Fan& Pad Control

Control type: PID, Multiple stage control

• Temp. Range: 0.1 to 59.9°C.

Page

Accuracy: ±1°C. Hysteresis: 0.4°C II. **Heaters Control:** Control Type: ON/OFF, Multiple stages Temp. Range: 0.1 to 59.9°C. Hysteresis: 0.4°C C) **Humidity Control** Control type: ON/OFF Range: 30% to 90%. (Real RH:  $\pm 2\%$ .  $\pm 1$  digit (at 45%). 10. Civil Work: For Nursery Fruit Plants A) Foundation wall for all sides of Green House along with the double door room. WIDE Based 1.5 feet below earth's surface, 1.5 feet above earth's surface, as kick-9 inch wide. Frame base block height 2 feet. B) Plinth protection: 2 feet wide all around the greenhouse along with buffer room. C) Floor: 3 inch sand filling then ground covered mat fixed D) Pathway: 1 meter wide centre pathway each bay and one meter wide Inside of front/back of hardening chamber made by PCC (1:6:8)75 mm thick and CC (1:2:4) 50 mm thick duly plastered. 11. **Electrical Wiring:** All wires will be of copper for desired load and switches of good quality. Each feature has own electric line with MCB underground in PVC pipe complete set with A grade work. Separateelectrical work, panel board and main switches as well.

#### **ITEM NO-11**

Sr. No.	PRODUCT TECHNICAL DETAILS
1	Electric Supply 3 phase (including transformers) Electrical (approx.)

### ITEM NO-12

SN	TECHNICAL DETAILS
1	Grafting Machine (approx. 300 grafts per hour) -One
Ĺ	

Page **37** of **41** 

### ITEM NO-13

SN	TECHNICAL DETAILS
1	Nursery Management Tools  i. EC & PH meter-1 set  ii. Electronics weighing machine range: 01 mg to 500gm. Qty01  iii. Power sprayer  iv. Knap sack sprayer Qty - 02  v. Secateurs 4
	vi. Net Basket 20 vii. Measurement jar (10-500ml)

### **ITEM NO-14**

TECHNICAL DETAILS				
POWER BACKUP FACILITY Qty. 01				
Generator operating capacity 62.5 KVA with Automatic on/off panel and accessories, Shelter with platform for Generator. (Mahindra / Kirloskar or equivalent)				
Size 6mx4mx4m:3m with shelter				
Structure Frame: all galvanized steel is used and design as per IS875 standards to take withstand of wind speed 120 km/hr				
Roof Cover Pre coated GI sheet 0.5 mm thick.				
RCC Platform for generator & rest floor CC.				
Electrical cabling, earthling work as per required generator				

### **ITEM NO-15**

SN	TECHNICAL DETAILS				
1	Comprehensive Maintenance Contract and Training				
	Period: 03 Years				
	Coverage: Comprehensive Maintenance Contract (CMC) for three years from the date of completion and commissioning of facilities and training of Departmental staff for all facilities including handling and maintenance of green houses. During CMC period, of 3 years, apart from periodical routine maintenance of the facilities, Agency will undertake repair and replacement of spares without any extra payment and training of Departmental staff.				

Note: Unless otherwise specified, all components should be as per the best industry standards

Somethy.

### **Section -7**

# Tentative Work Requirements of PEQ Facilities

### Tentative Component -wise work requirement of PEQ facilities at different locations

Sr.	Components	Unit	Location -1	Location-2	Location-3	Location-4
No.			Advance Centre of Excellence for Horticulture at Zainapora in DisttShopian (J&K) (Area - 20 Ha.)	Govt. Horticulture Garden Magra, Tehri Garhwal, (Uttrakhand). (Area - 14 Ha.)	Seed Potato Farm, Dhurla, Gram Panchayat, Makroj Development, Chaupal, Distt Shimla (HP) (Area - 14 Ha.) Qty.	State Horticulture Farm, Shergaon, Distt West Kameng (Arunachal Pradesh) (Area - 5.00 Ha)
1.	Fencing		Qiy.	Qiy.	Qiy.	Qty.
(i)	Chain linked fencing of the required area	RM	Approx. 1800 or as per actual requirement of site	Approx. 1200  or as per actual requirement of site	Approx. 1200 or as per actual requirement of site	Approx. 800  or as per actual requirement of site
(ii)	Green net cover up to 3 meter all over the fencing.	RM	As above	As above	As above	As above
2	Land development, retaining wall, contouring, etc.	На.	20	14	14	05
3	Working shed	$M^2$	500	300	300	200
4	Administrative & Ancillary Civil structure with one in lavatory /Committee room	M <sup>2</sup>	300	200	200	200
5	Cold Chamber for planting material	MT	100	60	60	60
6	Saw Dust Machine 1 to 10 TPH	TPH	01	01	01	01
7	Water Storage structure	Ltr.	80000	50000	50000	50000
8	Drip irrigation system for open field	На.	6	4	4	2
9	Irrigation source (bore well with 5 HP pump motor with other accessories and water discharge pipe 1.25 inch etc.)	Nos.	01	01	01	01
10	Hi-tech Green House Area 500 m <sup>2</sup> each	$M^2$		8100	8100	4050
11	Electricity supply 3	Nos.	01	01	01	01

NHB - RFP Document for PEQ Facility

Comilia

Page **40** of **41** 

	phase (including transformer)					
SN	Components	Unit	Location – 1 Zainapora (J&K)	Location – 2 Magra (UK)	Location – 3 Dhurla,Shimla (HP)	Location - 4 Shergaon (Arunachal Pradesh)
12	Grafting machine (Approx. 300 grafts/hour)	Nos.	01	01	01	01
13	Nursery Management Tools – as per requirement	Nos.	As per item no. 13 of Section 6	As per item no. 13 of Section 6	As per item no. 13 of Section 6	As per item no. 13 of Section 6
14	Power backup facility, Generator capacity 62.5 KVA with automatic on/off panel	Nos.	01	01	01	01
15	Comprehensive Maintenance Contract for 3 years after completion of the project and Training of Departmental staff.		As per item no. 15 of Section 6	As per item no. 15 of Section 6	As per item no. 15 of Section 6	As per item no. 15 of Section 6

Comby