J&K Agro Industries Development Corporation Ltd. Gole Pully, Talab Tillo Jammu.

E-mail Id – dmpsjammu@jkagro.com

E NIT No. 20 of 2024-25 JK Agro

NO: -Agro/DM/PSJ/2331-34

DATED:- 12.07.2024

For and on behalf of J&K Agro Industries Development Corporation Limited, bids are invited from Registered Principal Manufacturers/Authorized Dealers having valid license/ Registration for purchase of following Agriculture items. J&K Agro industries Development Corporation is having a procurement and sales division which procures and supplies Agricultural machineries to Agri. and allied Departments to meet the demands of various Govt Deptts during the financial year. Corporation intends to finalize the Procurement Purchase arrangements through this E-tender.

S. No	Name of item.	Estimated Cost of supplies in lacs	Amount of CDR	Cost of Tender Documents	Date and time of opening of bids (online)
1.	Supply, Installation and commissioning of Natural ventilation Polyhouse, Insect Net House, Shade net House and Hitech poly Carbonate House for rate contract on turnkey basis	122.00	Rs.2,50,000/-	Rs 5900/- (non- refundable)	02.08.2024

1. The Bidding Document Consisting of qualifying information, eligibility, criteria, Specification, set of terms and condition of contract and other details can be seen/downloaded from the departmental website www.jktenders.gov.in as per the schedule of dates given below:-

1	Date of Issue of NIT	12.07.2024
2	Period of downloading of bidder documents	12.07.2024 to 01.08.2024 till 16:00 hrs
3	Bid submission Start date	12.07.2024
4	Bid submission End date	01.08.2024 at 16:00 hrs
5	Date and time of opening of Technical bids (online)	02.08.2024 at 15:00 hrs
6	Date and time of opening of Financial bids (online)	After the complete Technical Evaluation of documents of all participated bidders

- 2. Bids must be accompanied with cost of tenders' documents in shape of Bank Receipt in f/o J&K Agro Industries Development Corp. Ltd bearing J&K Bank Acc No CD-0097010100000962, IFSC Code- JAKA0TNHALL, Earnest money/bid security in the shape of CDR/FDR Pledged in favour of Managing Director J&K Agro Industries Development Corporation Limited.
- 3. The date and time of opening of bid shall be notified on website www.jktenders.gov.in and convey to the bidder automatically through an e-mail message on their mail id. The bids of responsible bidders shall be opened online on same website in the office of Managing Director J&K Agro Industries Development Corporation Limited. (Tender receiving authority).
- 4. The earnest money shall be fortified if:
 - a) Any bidder/ tenderer withdraw his bid/ tender during the period of bid validity or make any Modifications in the terms and conditions of the bid.

b)Failure of Successful bidder to execute the agreement within 07 days after fixation of contract.

5. Instruction to bidders regarding e-tendering process.

- 5.1 Bidders are advised to download bid submission manual from the "Downloads" option as well as from "Bidders Manual Kit" on website www.jktenders.gov.in to acquaint bid submission process.
- 5.2 To participate in bidding process, bidders have to get 'Digital Signature Certificate (DSC) as per Information. Technology Act-2000. Bidders can get digital certificate from any approved vendors.
- 5.3 The bidders have to submit their bids online in electronic format with digital Signature. No bid will be accepted in physical form.
- 5.4 Bids will be opened online as per time schedule.
- 5.5 Bidders must ensure to upload scanned copy of all necessary documents and complete address and contract no. with the bid. Besides, original/Photocopies of documents related to the bid are submitted physically only by L-1 bidder.

Note: - Scan all the documents on 100 dpi with black and white option.

- 6. The department will not be responsible for delay in online submission due to any reasons.
- 7. Scanned copy of **cost of tender document** in shape of Bank Receipt and Earnest Money/Bid Security in shape of CDR/FDR pledged to **Managing Director J&K Agro Industries Development Corporation Limited** must be uploaded with the document of the bid.
- 8. Bidders are advised to use "My Documents" area in their user on www.jktenders.gov.in portal to store such documents as are required.
- 9. The technical Bid must consists of following information and documents.
 - 9.1 All bidders shall include the following information and documents with their bids:-
- (a) Copy of Place of registration and principal place of Business, with complete address and contact details.
- (b) Copy of Principal manufacturer certificate/dealer certificate.
- (c) Copy of GSTIN No. Number
- (d) Copy of PAN Number.
- (e) Copy of Latest GST return file shall be furnished.
- (f) Copy of EMD/FDR.
- (g) Certificate of ISI/BIS.
- (h) Copy of cost of document (COD) in the shape of bank slip.
- (i) Certificate of ISI/BIS standard
- (i) Certificate of CIPET of Polysheet
- (k) Notarized Affidavit as per annexure-A
- (1) Notarized Affidavit as per annexure-B
- (m) Experience Certificate as per clause 22.
- (n) Turnover certificate as per clause 23.
- (o) Bidder should also mention the MRP of the product he/she is bidding for on the letter head of the firm of concerned bidder.
 - 9.2 All documents relating to the bid shall be in the English Language.
 - 10. A) If the bidder does not quote rate/rates for any item/items in BOQ the bidder will not be able to claim those items.
 - B) The Tender documents duly signed with seal on each page in token of acceptance of all terms and conditions of Tender should also be enclosed.
 - C) If at any stage the information and documents submitted by bidder are found to be not correct. His CDR, EMD shall be forfeited besides initiation of Criminal proceedings.

Note: In case the above mentioned documents are not enclosed, the tender can be rejected as per the decision of the Purchase Committee and <u>no document shall be entertained in offline</u> mode.

General conditions of contract:-

- 1. The firm shall have to certify that the rates quoted by them are the lowest rates and has not quoted rates lower than these rates to any Govt. Deptt. /Agency in J&K for the similar items / Stores. If at any stage it is proved that the prices charged by tenderer are higher than the prices quoted to other Departments or higher than the prevailing market rates in JK UT the tenderer shall be liable for prosecution under law and the excess amount charged thereof shall be recovered from your bill/securities etc. All the bills shall be settled at the market rates only vetted by Purchase committee.
- 2. In case the firm fails to supply ordered items, within the stipulated period, the CDR/ Security Slip shall be forfeited and supplier shall have no claim for its refund / release in any manner. Besides, the firm shall be black-listed for future business with JK AIDCL.

3. Guarantee / Warrantee:

The material should be guaranteed for a period of 12 months against any manufacturing defects. In case of any complications/ defects, the complained has to be attended immediately and defective items shall be replaced at your cost. Failure in the compliance of this can cause in the forfeiting of the Security Deposit. The bidder should mention the location of the work shop and should be in a position to service the equipment at site.

4. F.O.R:-

Rates quoted shall be inclusive of all taxes (GST) and F.O.R. Jammu/Kashmir Division of the concerned indenting department at Zone, Subdivision, block/tehsil/District level.

5. Validity of Rates:-

The rates quoted by the suppliers shall remain valid up to one year from the date of issuance of contract and inclusive of all taxes and thereafter shall be extended on mutual agreement only.

6. Dealership Certificate and Test Report.

The firms, which are not Principal Manufacturer and are submitting tenders, are required necessarily to attach a valid Dealership Certificate from Principal manufacturer and test report from ISI/BIS standard.

7. Payments:-

Payments shall be made after receiving from the indenting Deptt. and on receipt and verification of the material by the indenting Deptt. and Corporation and only 90% payment shall be released. 10% payment shall retain in the corporation and shall be released after completion of Defect Liability Period of 12 Months.

8. At the time of supply order 5% shall be deposit on the value of order. It shall be released after the completion of work.

9. Agreement:

The successful firms shall have to execute an agreement in the prescribed format within seven days from the date of intimation to this effect.

10. Delivery schedule

The work NVHP House should be started within 15 days or as per the terms of Supply Order. In case of delay in the supply beyond the stipulated time, 0.25% per day penalty of value of the

ordered material shall be imposed subject to max of 10% billed amount or as the Managing Director, AIDCL may deem fit and /or forfeit the Earnest Money / Security Deposit.

11. ARBITRATION

If any question, dispute or difference what so ever, arises between the firm & the deptt./ Government in relation to or in connection with this contract either of the parties may give notice in writing of such questions, dispute or difference and the same be referred to the Administrative Secretary of the Department for arbitration. This submission shall be deemed to be a submission to arbitration within the meaning of the Jammu & Kashmir Arbitration Act. In witness thereof the parties here to have signed this agreement on the dates respectively mentioned against their signatures. The provision of J&K Arbitration Act Samvat 2002 and of the rules there under and statutory modification thereof shall be deemed to apply to the arbitration disputes if any regarding reference to courts shall be subject to jurisdiction of J&K courts only. If there is any deviation from the specification of the product (test reports), all the penalties in such case will be applicable on the supplier/bidder only.

12. Submission of offer

The tenders shall be opened on the date mentioned in above table 2 at same office in presence of the tenderers who wish to be present or any subsequent date convenient to Purchase Committee.

- **13.** Managing Director, JKAIDCL reserve the right to accept or reject any or all tenders in part or full without assigning any reason thereof.
- **14.** As soon as the acceptance of tenders is conveyed to the successful firm the contract shall be final and binding upon the successful firm and agreement deed shall have to be executed with the Corporation by the supplier within 7 days from the date of issue of letter of acceptance.
- **15.** The Purchase committee reserves the right to accept or reject any tender, part of a tender or all tenders with the permission of MD JKAIDCL without assigning any reason.
- 16. The tenderer along must also submit a soft copy of its latest Income Tax/GST return
- 17. Tender without payment of tender cost shall be rejected.
- **18.** The offer should be signed by the authorized person and his full name and status should be indicated below his signature.
- **19.** The tender should be accompanied with the Technical literature/Boucher/Pamphlets of the products.
- **20.** Corporation reserves the right to carry out market survey also to assess the lowest market rate of the items. However, the lowest market rate shall be offered to tenderer for acceptance on rate contract basis and the bidder shall have no objection for it.

21. Force Majeure:-

If the completion of the supply is delayed by strikes, lockouts, fire accidents, war or any other cause beyond the control of the supplier and the supplier satisfies the Corporation by a documentary proof in that respect, a reasonable extension in the time limit may be granted by the Corporation without effecting or decreasing/increasing the basic price as per force Majeure clause of the agreement. However, damages caused due to strikes, rain or snow shall not constitute an act of God.

22. Qualification conditions for Bidding:

The experience certificates duly signed from the Govt. department/PSU are attached with tender documents. The criteria is given below:

Experience with respect	1. Experience of having successful completed similar supplies
to similar nature of work	during last 07 years ending last day June 2024 should be either of
	the following:-
	a. Three similar completed supplies costing not less than the
	amount equal to 40 % of the estimated cost
	or
	b. Two similar completed supplies costing not less than the
	amount equal to 50 % of the estimated cost.
	Or
	One similar completed supplies costing not less than the
	amount equal to 80 % of the estimated cost.
	2. Tenderer to submit required details & documents in support.

23. Financial Eligibility:-

Financial	The average annual total turnover / revenue from operations for		
Eligibility	the last three financial years (i.e. 2020-21, 2021-22 and 2022-23)		
Criteria Annual	should be of value not less than 30% of estimated cost of contract.		
Turnover	The information shall be supported by CA certificate with UDIN No.		

- 24. The terms and conditions of the corporation is final and is binding on the part of the bidder. No terms and conditions will be accepted from bidder side.
- 25. All the components and material used in establishing the respective structure should uniform to required BIS/ISI/CIPIT standards (as applicable)
- **26.** Third Party Inspection:-

The corporation reserves the right to get the material, machinery and complete line inspected by third party to ensure the material supplied in exactly as per specification mentioned in the tenders' documents for those particulars machine/items.

27. The item in the said E-nit is not for own consumption of the corporation. The corporation receives requirement from various Govt. Departments and other allied departments of Agriculture and accordingly makes procurement on this behalf and supply said requirement to them after add its own service charges. The estimated value of the supply have been work out on the basis of past and anticipated procurement data and requirement received from allied

department. If the volume of business is increased as per assessment i.e 122.00 lacs + 10 %, then a fresh Enit shall be floated.

- **28.** The supplier/firm must has its own office/workshop in the Territory of J&K UT for the purpose of any damage and repairing.
- 29. An Affidavit on Rs.10 non judicial stamp paper that price charged for supplies under contract shall under no circumstances exceed the lowest price at which the contractor sells identical description to any Govt. Department/Institution/Public Enterprises/Undertaking during the period of contract as per Performa attached in Annexure-A.
- 30. An Affidavit on Rs.10 non judicial stamp paper that the company/firm has not been neither black listed nor de-barred from participation in tender by any of the Govt.Department/Organistion/ PSU etc as per Performa attached in Annexure-B.

Note: In case the above mentioned documents are not enclosed, the tender can be rejected as per the decision of the Purchase Committee.

-Sd-Divisional Manager (P&S) Member Secretary, J&K Agro Ind. Dev. Corpn.Ltd. Procurement & Sales Division, Jammu

Copy to.

- 1. Managing Director, JKAIDCL, Jammu for Kind information please.
- 2. Director Finance JKAIDCL, Jammu for Kind information please.
- 3. General Manager CFP, Baribrahmana for kind information please.
- 4. Divisional Manager, P&S, Kashmir for kind information.
- 5. Office File.

JK AGRO INDUSTRIES DEVELOPMENT CORPORATION LTD.

Annexure-A

Affidavit Certificate

I/We				(Name	, Designa	ation	and A	ddress)
here by declaring that price								
circumstances exceeded	-			_	given	to	any	Govt.
Department/PSUs/Institution	s/Organizations	s etc du	iring curren	t year.				
I/We solemnly affirm that the and belief and nothing of a documents submitted by me initiation of Criminal proceed	any sort has b are found to b	been c	oncealed. I	f at any	stage the	e info	ormatio	on and
	Signature of A	Author	ized Signato	ory				
	Name							
	Designation_							
	Name of the	Firm/C	Company					
	Full Address_							
	Stamp							
Place:								
Datad:								

JK AGRO INDUSTRIES DEVELOPMENT CORPORATION LTD.

Annexure-B

Affidavit Certificate

I.	I/We, the undersigne attachments are true a	•	y that all t	the staten	nents ma	de in the r	required
II.	I/We				,	Designation	
	Address) here by decl barred from Department/PSUs/Institute years.	participation	in	tender	by	any	Govt.
	I/We solemnly affirm a knowledge and belief a information and docum be forfeited besides initi	and nothing of any ents submitted by m	sort has b	een conc	ealed I	f at any st	age the
		Signature of A	uthorized Si	gnatory			_
		Name					
		Designation_					
		Name of the F	irm/Compar	ıy			_
		Full Address_					_
		Stamp					_
Pla	ace:						
Da	ted:						

Annexure C

Technical Specification

Detailed Shade Net House (Size 480 sqm)

		Size- 480 sqm (Includes side corridors), Length: 24 m , Width: 20 m Side /Gutter height 4 Mtr Centre Height 5.5 Mtr Bay Width 8 x 4 Mtr No of Span -02 Shape: Dome Type
		SPECIFICATIONS
1	Structure	Folding/dismantlable, on nut bolts, structure made of 60mm, 48mm, 32mm (OD), 1.8- 2.00 mm thick GI pipe structure of BIS standards
	Pipes for columns, purlins, trusses	All structure, Rafters, Purlins, Trusses are of GI pipe and as per IS 1239/3601 standard. All pipes of ISI standard with 2mm thickness.
		Foundation pipe: 48mm OD 2mm GI Pipe. The foundation pipe will be 4 ft.
		Column Pipe: 60mm OD x 2mm thickness GI Pipe.
		Bottom: 48mm OD x 2mm thickness GI Pipe.
		Arch Pipe: 48mm OD x 2mm thickness GI Pipe. Purlins Pipe: 42mm OD x 2mm thickness GI Pipe Bracing Pipe: 32mm OD x 2mm thickness GI pipe
		Corridor: 48mm OD x 2mm thickness GI Pipe
2	Clamps, Easterners and Nut Bolts	Galvanized with good quality of plating to have good anti corrosive properties
3	Foundation/civil work	Columns are fitted over ground bolted to insert pipe of 60mm/50mm*2mm thick compatible GI pipe, length of insert 1 to
		1.1m of 30cm x 90cm size in 1:2:4 PCC ratio
4	Poly Locks	Poly lock profile will be made up of GI section fixed with zigzag spring of GI material with stand the maximum wind load.
5	Cladding Material	Shade Net 50/75% covered with top and sides.
6	Entrance Room & Door	One Ante room of size 2m x 2m x 3m (L X W X H) will be provided and

		covered with UV stabilizes 200- micron film. Two hinge doors of size 1m width & 2m height double door and made of polycarbonate sheet.
7	Fogging and Drip System:	Four-way foggers fixed on 16mm laterals (of any reputed branded) are to be installed just below the shade net with sufficient overlapping to get uniformly in distribution of vapours for getting uniform climatic condition. (with Grid 3mt x 3mtr), Fogger discharge range: - 28 LPH with Motor/Centrifugal pump 1hp (any reputed brand) water Tank 1000 liter- 1nos Drip Irrigation
		1. Network Pipes:
		Main PVC Pipes: 60mm 6kg. as per IS: 4985:2000
		S/M: PVC Pipes: 50mm 6kg used as lateral for drip irrigation. Drain PVC Pipes: 40mm 6 kg.
		2. Fitting & Accessories: Heavy duty- including the PVC, elbow, Tee Bend solvent cement, filter flanged, GI wires etc
		3. Inline tube: Inline Hydro goal 16mm drip ling land among each row with 2 LPH normal flow rate.
		4. LDPE Lateral pipe: Misting line with 16mm
		5. Head Connector & Gasket rubber grommet connect the PVC sub main pipe line.
		6. Barbed Connector: Barbed connector 16mm to connect the inline land hydro gel lateral.
		7. Filtration system: Screen filters of matching capacity
		Dripper : 2 litre/hour, with 30cm dripper to dripper distance self- flushing, non- drain, low profile, top outlet, micro tubes & pegs. 9. Air Release Valve: Long lasting and safe operation of system. 10.Control Valve: Appropriate required the timely opening and closing system must be Operation Pump- 1hp Water Tank 1000 liter- 1nos
8	Control system:	Control Panel With a main ON/OFF switch (reputed make), Light Indicator for main light, starter for Drip Irrigation system and fogging system.

Annexure D

Detailed Shade Net House (Size 240 sqm)

		Size- 240 sqm (Includes side corridors), Length: 20 m , Width: 12 m		
		Side /Gutter height 4 Mtr		
		Centre Height 5.5 Mtr		
		Bay Width 8 x 4 Mtr		
		No of Span -01		
		Sahpe: Dome Type		
		SPECIFICATIONS		
1	Structure	Folding/dismantlable, on nut bolts, structure made of		
		60mm, 48mm, 32mm (OD), 1.8- 2.00 mm thick		
		GI pipe structure of BIS standards		
	Pipes for columns, purlins, trusses	All structure, Rafters, Purlins, Trusses are of GI pipe and as per IS 1239/3601 standard. All pipes of ISI standard with 2mm thickness.		
		Foundation pipe: 48mm OD 2mm GI Pipe. The foundation pipe will be 4 ft.		
		Column Pipe: 60mm OD x 2mm thickness GI Pipe. Bottom: 48mm OD x 2mm thickness GI Pipe.		
		Arch Pipe: 48mm OD x 2mm thickness GI Pipe. Purlins Pipe: 42mm OD x 2mm thickness GI Pipe Bracing Pipe: 32mm OD x 2mm thickness GI pipe		
		Corridor: 48mm OD x 2mm thickness GI Pipe		
2	Clamps, Easterners and Nut Bolts	Galvanized with good quality of plating to have good anti corrosive properties		
3	Foundation/civil work	Columns are fitted over ground bolted to insert pipe of 60mm/50mm*2mm thick compatible GI pipe, length of insert 1 to		
		1.1m of 30cm x 90cm size in 1:2:4 PCC ratio		
4	Poly Locks	Poly lock profile will be made up of GI section fixed with zigzag spring of GI material with stand the maximum wind load.		
5	Cladding Material	Shade Net 50/75% covered with top and sides.		
6	Entrance Room & Door	One Ante room of size 2m x 2m x 3m (L X W X H) will be provided and		

		covered with UV stabilizes 200- micron film. Two hinge doors of size 1m width & 2m height double door and made of polycarbonate sheet.
7	Fogging and Drip System:	Four-way foggers fixed on 16mm laterals (of any reputed branded) are to be installed just below the shade net with sufficient overlapping to get uniformly in distribution of vapours for getting uniform climatic condition. (with Grid 3mt x 3mtr), Fogger discharge range: - 28 LPH with Motor/Centrifugal pump 1hp (any reputed brand) water Tank 1000 liter- 1nos Drip Irrigation
		1. Network Pipes:
		Main PVC Pipes: 60mm 6kg. as per IS: 4985:2000
		S/M: PVC Pipes: 50mm 6kg used as lateral for drip irrigation. Drain PVC Pipes: 40mm 6 kg.
		2. Fitting & Accessories: Heavy duty- including the PVC, elbow, Tee Bend solvent cement, filter flanged, GI wires etc
		3. Inline tube: Inline Hydro goal 16mm drip ling land among each row with 2 LPH normal flow rate.
		4. LDPE Lateral pipe: Misting line with 16mm
		5. Head Connector & Gasket rubber grommet connect the PVC sub main pipe line.
		6. Barbed Connector: Barbed connector 16mm to connect the inline land hydro gel lateral.
		7. Filtration system: Screen filters of matching capacity
		Dripper : 2 litre/hour, with 30cm dripper to dripper distance self- flushing, non- drain, low profile, top outlet, micro tubes & pegs. 9. Air Release Valve: Long lasting and safe operation of system. 10.Control Valve: Appropriate required the timely opening and closing system must be Operation Pump- 1hp Water Tank 1000 liter- 1nos
8	Control system:	Control Panel With a main ON/OFF switch (reputed make), Light Indicator for main light, starter for Drip Irrigation system and fogging system.

Annexure E

Detailed Naturally Ventilated Poly House (Size 480 sqm)

		Size- 480 sqm (Includes side corridors), Length: 24m ,		
		Width: 20 m		
		Side /Gutter height 4 Mtr		
		Centre Height 5.5 Mtr		
		Bay Width 8 x 4 Mtr		
		No of Span -02		
		Shape: Dome Type		
		SPECIFICATIONS		
1	Structure	Folding/dismantlable, on nut bolts, structure made of		
		60mm, 48mm, 32mm (OD), 1.8- 2.00 mm thick		
		GI pipe structure of BIS standards		
	Pipes for columns, purlins, trusses	All structure, Rafters, Purlins, Trusses are of GI pipe and as per IS 1239/3601 standard. All pipes of ISI standard with 2mm thickness.		
		Foundation pipe: 60mm OD 2mm GI Pipe. The foundation pipe will be 4 ft.		
		Column Pipe: 76mm OD x 2mm thickness GI Pipe.		
		Bottom: 60mm OD x 2mm thickness GI Pipe.		
		Arch Pipe: 42mm OD x 2mm thickness GI Pipe. Purlins Pipe: 42mm OD x 2mm thickness GI Pipe Bracing Pipe: 32mm OD x 2mm thickness GI pipe		
		Corridor: 60mm OD x 2mm thickness GI Pipe		
		Curtain Pipe: 20mm OD x 2mm thickness GI Pipe		
2	Clamps, Easterners and Nut Bolts	Galvanized with good quality of plating to have good anti corrosive properties		
3	Foundation/civil work	Columns are fitted over ground bolted to insert pipe of 60mm/50mm*2mm thick compatible GI pipe, length of insert 1 to		
		1.1m of 30cm x 90cm size in 1:2:4 PCC ratio		

4	Poly Locks	Poly lock profile will be made up of GI section fixed with zigzag
		spring of GI material with stand the maximum wind load.
5	Cladding Material	HighqualityUVstabilized5layered(ofanyreputedbrand)LDPEsheet 200 micron thick with drip lock (anti drip) diffused, anti- dust, anti- condensed andproperties.
6	Shade Net	50% UV stabilized provided inside the structure with manually folding spreading system (of any reputed brand) minimum 12-gauge GI wire will be used to fix shade net with sliding arrangement for opening & closing as per requirement.
		Pulleys assembly with nuts & bolts will be provided.
		Curtain rings & curtain clamps with respect to standard specification will be provided.
		Fabric UV stabilized (minimum 150 GSM) will be used for side apron which will be of 1m above ground level.
7	Side Ventilation	Side ventilation of insect net of 30/40 mesh, rolling curtains on four sides with manual chain rollup system
8	Entrance Room & Door	OneAnteroomofsize2mx2mx3m(LXWXH)will be provided and
		covered with UV stabilizes 200- micron film. Two hinge doors of size 1mwidth&2mheightdoubledoorandmadeofpolycarbonatesheet.
9	Fogging and Drip System:	Four-wayfoggersfixed on 16mm laterals (of any reputed branded) are to be installed just below the shade net with sufficient overlapping to get uniformly in distributionofvapoursforgettinguniformclimaticcondition.(with Grid 3mt x 3mtr), Fogger discharge range: - 28 LPH with Motor/Centrifugal pump 1hp(anyreputed brand) water Tank 1000 liter- 1nos
		Drip Irrigation 1. NetworkPipes: Main PVC Pipes: 60mm 6kg. as per IS: 4985:2000 S/M: PVC Pipes: 50mm 6kg used as lateral for drip irrigation.
		Drain PVC Pipes: 40mm 6 kg.

		2. Fitting & Accessories: Heavy duty- including the PVC, elbow, Tee Bend solvent cement, filter flanged, GI wiresetc
		3. Inlinetube: InlineHydrogoal16mmdriplinglandamongeachrow with 2 LPH normal flowrate.
		4. LDPE Lateral pipe: Misting line with16mm
		5. Head Connector & Gasket rubber grommet connect the PVC sub main pipeline.
		6. Barbed Connector: Barbed connector 16mm to connect the inline land hydro gellateral.
		7. Filtration system: Screen filters of matchingcapacity
		Dripper : 2 litre/hour, with 30cm dripper to dripper distance self-flushing,non-drain,lowprofile,topoutlet,microtubes&pegs. 9. Air Release Valve : Long lasting and safe operation of system. 10.Control Valve : Appropriate required the timely opening and closing system must be Operation Pump- 1hp Water Tank 1000 liter- 1nos
10	Control system:	Control Panel With a main ON/OFF switch (reputed make) Light Indicator for main light, starter for Drip Irrigation system and fogging system.

Annexure F

Detailed Naturally Ventilated Poly House (Size 240 sqm)

		Size- 240 sqm (Includes side corridors), Length: 20m , Width: 12 m
		Side /Gutter height 4 Mtr
		Centre Height 5.5 Mtr
		Bay Width 8 x 4 Mtr
		No of Span -01
		Shape: Dome Type
		SPECIFICATIONS
1	Structure	Folding/dismantlable, on nut bolts, structure made of
		60mm, 48mm, 32mm (OD), 1.8- 2.00 mm thick
		GI pipe structure of BIS standards
	Pipes for columns, purlins, trusses	All structure, Rafters, Purlins, Trusses are of GI pipe and as per IS 1239/3601 standard. All pipes of ISI standard with 2mm thickness.
		Foundation pipe: 60mm OD 2mm GI Pipe. The foundation pipe will be 4 ft.
		Column Pipe: 76mm OD x 2mm thickness GI Pipe.
		Bottom: 60mm OD x 2mm thickness GI Pipe.
		Arch Pipe: 42mm OD x 2mm thickness GI Pipe. Purlins Pipe: 42mm OD x 2mm thickness GI Pipe Bracing Pipe: 32mm OD x 2mm thickness GI pipe
:		Corridor: 60mm OD x 2mm thickness GI Pipe
		Curtain Pipe: 20mm OD x 2mm thickness GI Pipe
2	Clamps, Easterners and Nut Bolts	Galvanized with good quality of plating to have good anti corrosive properties
3	Foundation/civil work	Columns are fitted over ground bolted to insert pipe of 60mm/50mm*2mm thick compatible GI pipe, length of insert 1 to

		1.1m of 30cm x 90cm size in 1:2:4 PCC ratio
4	Poly Locks	Poly lock profile will be made up of GI section fixed with zigzag spring of GI material with stand the maximum wind load.
5	Cladding Material	HighqualityUVstabilized5layered(ofanyreputedbrand)LDPEsheet 200 micron thick with drip lock (anti drip) diffused, anti- dust, anti- condensed andproperties.
6	Shade Net	50% UV stabilized provided inside the structure with manually folding spreading system (of any reputed brand) minimum 12-gauge GI wire will be used to fix shade net with sliding arrangement for opening & closing as per requirement.
		Pulleys assembly with nuts & bolts will be provided.
		Curtain rings & curtain clamps with respect to standard specification will be provided.
		Fabric UV stabilized (minimum 150 GSM) will be used for side apron which will be of 1m above ground level.
7	Side Ventilation	Side ventilation of insect net of 30/40 mesh, rolling curtains on two sides with manual chain rollup system
8	Entrance Room & Door	OneAnteroomofsize2mx2mx3m(LXWXH)will be providedand
		covered with UV stabilizes 200- micron film. Two hinge doors of size 1mwidth&2mheightdoubledoorandmadeofpolycarbonatesheet.
9	Fogging and Drip System:	Four-wayfoggersfixed on 16mm laterals (of any reputed branded) are to be installed just below the shade net with sufficient overlapping to get uniformly in distributionofvapoursforgettinguniformclimaticcondition.(with Grid 3mt x 3mtr), Fogger discharge range: - 28 LPH with Motor/Centrifugal pump 1hp(anyreputed brand) water Tank 1000 liter- 1nos
		Drip Irrigation
		1. NetworkPipes: Main PVC Pipes: 60mm 6kg. as per IS: 4985:2000
		S/M: PVC Pipes: 50mm 6kg used as lateral for drip irrigation. Drain PVC Pipes: 40mm 6 kg.

		2. Fitting & Accessories: Heavy duty- including the PVC, elbow, Tee Bend solvent cement, filter flanged, GI wiresetc
		3. Inlinetube:InlineHydrogoal16mmdriplinglandamongeachrow with 2 LPH normal flowrate.
		4. LDPE Lateral pipe: Misting line with16mm
		5. Head Connector & Gasket rubber grommet connect the PVC sub main pipeline.
		6. Barbed Connector: Barbed connector 16mm to connect the inline land hydro gellateral.
		7. Filtration system: Screen filters of matchingcapacity
		Dripper : 2 litre/hour, with 30cm dripper to dripper distance self-flushing,non-drain,lowprofile,topoutlet,microtubes&pegs. 9. Air Release Valve: Long lasting and safe operation of system. 10.Control Valve: Appropriate required the timely opening and closing system must be Operation Pump- 1hp Water Tank 1000 liter- 1nos
10	Control system:	Control Panel With a main ON/OFF switch (reputed make), Light Indicator for main light, starter for Drip Irrigation system and fogging system.

Annexure G

Detailed Insect Proof Net House (Size 480 sqm)

		Size- 480 sqm (Includes side corridors), Length: 24 m , Width: 20 m
		Side /Gutter height 4 Mtr
		Centre Height 5.5 Mtr
		Bay Width 8 x 4 Mtr
		No of Span -02
		Shape: Dome Type
		SPECIFICATIONS
1	Structure	Folding/dismantlable, on nut bolts, structure made of
		60mm, 48mm, 32mm (OD), 1.8- 2.00 mm thick
		GI pipe structure of BIS standards
	Pipes for columns, purlins, trusses	All structure, Rafters, Purlins, Trusses are of GI pipe and as per IS 1239/3601 standard. All pipes of ISI standard with 2mm thickness.
		Foundation pipe: 48mm OD 2mm GI Pipe. The foundation pipe will be 4 ft.
		Column Pipe: 60mm OD x 2mm thickness GI Pipe.
		Bottom: 48mm OD x 2mm thickness GI Pipe.
		Arch Pipe: 48mm OD x 2mm thickness GI Pipe. Purlins Pipe: 42mm OD x 2mm thickness GI Pipe Bracing Pipe: 32mm OD x 2mm thickness GI pipe
		Corridor: 48mm OD x 2mm thickness GI Pipe
2	Clamps, Easterners and Nut Bolts	Galvanized with good quality of plating to have good anti corrosive properties
3	Foundation/civil work	Columns are fitted over ground bolted to insert pipe of 60mm/50mm*2mm thick compatible GI pipe, length of insert 1 to
		1.1m of 30cm x 90cm size in 1:2:4 PCC ratio
4	Poly Locks	Poly lock profile will be made up of GI section fixed with zigzag spring of GI material with stand the maximum wind load.
5	Cladding Material	Insect Net 40mesh covered with top and sides.
6	Entrance Room & Door	One Ante room of size 2m x 2m x 3m (L X W X H) will be provided and
		covered with UV stabilizes 200- micron film. Two hinge doors of size 1m width & 2m height double door and made of polycarbonate sheet.

7	Fogging and Drip System:	Four-way foggers fixed on 16mm laterals (of any reputed branded) are to be installed just below the shade net with sufficient overlapping to get uniformly in distribution of vapours for getting uniform climatic condition. (with Grid 3mt x 3mtr), Fogger discharge range: - 28 LPH with Motor/Centrifugal pump 1hp (any reputed brand) water Tank 1000 liter- 1nos
		Drip Irrigation
		1. Network Pipes:
		Main PVC Pipes: 60mm 6kg. as per IS: 4985:2000
		S/M: PVC Pipes: 50mm 6kg used as lateral for drip irrigation. Drain PVC Pipes: 40mm 6 kg.
		2. Fitting & Accessories: Heavy duty- including the PVC, elbow, Tee Bend solvent cement, filter flanged, GI wires etc
		3. Inline tube: Inline Hydro goal 16mm drip ling land among each row with 2 LPH normal flow rate.
		4. LDPE Lateral pipe: Misting line with 16mm
		5. Head Connector & Gasket rubber grommet connect the PVC sub main pipe line.
		6. Barbed Connector: Barbed connector 16mm to connect the inline land hydro gel lateral.
		7. Filtration system: Screen filters of matching capacity
		Dripper : 2 litre/hour, with 30cm dripper to dripper distance self- flushing, non- drain, low profile, top outlet, micro tubes & pegs. 9. Air Release Valve: Long lasting and safe operation of system. 10.Control Valve: Appropriate required the timely opening and closing system must be Operation Pump- 1hp Water Tank 1000 liter- 1nos
8	Control system:	Control Panel With a main ON/OFF switch (reputed make), Light Indicator for main light, starter for Drip Irrigation system and fogging system.

Annexure H

Detailed Insect Proof Net House (Size 240 sqm)

		Size- 240 sqm (Includes side corridors), Length: 20 m , Width: 12 m
		Side /Gutter height 4 Mtr
		Centre Height 5.5 Mtr
		Bay Width 8 x 4 Mtr
		No of Span -01
		Shape: Dome Type
		SPECIFICATIONS
1	Structure	Folding/dismantlable, on nut bolts, structure made of
		60mm, 48mm, 32mm (OD), 1.8- 2.00 mm thick
		GI pipe structure of BIS standards
	Pipes for columns, purlins, trusses	All structure, Rafters, Purlins, Trusses are of GI pipe and as per IS 1239/3601 standard. All pipes of ISI standard with 2mm thickness.
		Foundation pipe: 48mm OD 2mm GI Pipe. The foundation pipe will be 4 ft.
		Column Pipe: 60mm OD x 2mm thickness GI Pipe.
		Bottom: 48mm OD x 2mm thickness GI Pipe.
		Arch Pipe: 48mm OD x 2mm thickness GI Pipe.
		Purlins Pipe: 42mm OD x 2mm thickness GI Pipe
		Bracing Pipe: 32mm OD x 2mm thickness GI pipe
		Corridor: 48mm OD x 2mm thickness GI Pipe
2	Clamps, Easterners and Nut Bolts	Galvanized with good quality of plating to have good anti corrosive properties
3	Foundation/civil work	Columns are fitted over ground bolted to insert pipe of 60mm/50mm*2mm thick compatible GI pipe, length of insert 1 to
		1.1m of 30cm x 90cm size in 1:2:4 PCC ratio
4	Poly Locks	Poly lock profile will be made up of GI section fixed with zigzag spring of GI material with stand the maximum wind load.
5	Cladding Material	Insect Net 40mesh covered with top and sides.
6	Entrance Room & Door	One Ante room of size 2m x 2m x 3m (L X W X H) will be provided and
		covered with UV stabilizes 200- micron film. Two hinge doors of size 1m width & 2m height double door and made of polycarbonate sheet.

7	Fogging and Drip System:	Four-way foggers fixed on 16mm laterals (of any reputed branded) are to be installed just below the shade net with sufficient overlapping to get uniformly in distribution of vapours for getting uniform climatic condition. (with Grid 3mt x 3mtr), Fogger discharge range: - 28 LPH with Motor/Centrifugal pump 1hp (any reputed brand) water Tank 1000 liter- 1nos
		Drip Irrigation
		1. Network Pipes:
		Main PVC Pipes: 60mm 6kg. as per IS: 4985:2000
		S/M: PVC Pipes: 50mm 6kg used as lateral for drip irrigation. Drain PVC Pipes: 40mm 6 kg.
		2. Fitting & Accessories: Heavy duty- including the PVC, elbow, Tee Bend solvent cement, filter flanged, GI wires etc
		3. Inline tube: Inline Hydro goal 16mm drip ling land among each row with 2 LPH normal flow rate.
		4. LDPE Lateral pipe: Misting line with 16mm
		5. Head Connector & Gasket rubber grommet connect the PVC sub main pipe line.
		6. Barbed Connector: Barbed connector 16mm to connect the inline land hydro gel lateral.
		7. Filtration system: Screen filters of matching capacity
		Dripper : 2 litre/hour, with 30cm dripper to dripper distance self- flushing, non- drain, low profile, top outlet, micro tubes & pegs. 9. Air Release Valve : Long lasting and safe operation of system. 10.Control Valve : Appropriate required the timely opening and closing system must be Operation Pump- 1hp Water Tank 1000 liter- 1nos
8	Control system:	Control Panel With a main ON/OFF switch (reputed make), Light Indicator for main light, starter for Drip Irrigation system and fogging system.

Annexure I

HITECH Poly Carbonate House 160 SQM

_	ППЕСП	Poly Carbonate House 160 SQIVI
Sr. No.	Item	Discription
		AREA: 160SQM
		LENGTH: 20M
1	Total area	WIDTH: 08M
		CENTRE HEIGHT : 4.0M
		SIDE WALL HEIGHT : 2.5M
		SHAPE : Hut Type
		BUFFER ROMM : 2.0M X 2.5M
	STRUCTURE STEEL FRAM : Anti-corrosive, galvanized square pipe of ISI standard	Trusses: beam type 47x47 mm x 2.6mm thick and 38x38 mm x 2.0mm thick to bear wind/snow
2		load strength with load capacity of 0-100 kg/sqm and resist wind speed of 0-150 kmph
		suitable for Temperate regions of jammu & kashmir
		Poles supports : 47mm x 47mm x 2.6mm thick
		Purlin : 38mmx 38mm x 2.0mm thick
		runners : 32mm x 32mm x 2.0 mm thick
		Support : 32mm x 32mm & 25mm x25mm x 2.0mm thick
3	Doors	2nos size 2.0m x 1m
4	Cladding Materials Polycarobonate sheet specifiaction	Thickness : 8mm triple walled
		Impact Performance : -40°C to +120°C
		Both side UV stabilized
		Sheetstructure: 8/3
		U.L Temperature Rating : 100°C
		K valve W/M2k 3,5
		Light Transmission : 78-80%
		Excellent Thermal Insulation : 3.5
		Safe Fire Performance : Self-extinguishing and difficult to ignite
		Fixing by aluminium striping, Thermal safety: silicon
5	Cooling system : ECS	Frame: Coextrded aluminium bottom gutter, side & Top Gutter etc.
		Cooling media : Cellulose Pad size 8m x 1.5m x 100mm
		which give efficiency from 60 to 95%
		Miscellaneous : Fasteners, Galvanised, Rviet- Aluminium
		PVC pipe: 20mm/25mm/32mm with L& T
		Water tank : pvc Tank 1000 liters Mono block Pump : 1hp
		Slow speed axial flow fans - 2 nos
1	I	Slow speed axial flow falls - 2 flos

		Body size: 1200x1200x400mm, Number of blades: 6nos Blade: ss304 grade, shutter: steel speed of propeller: 460RPM approx Voltage: 380V/3-Phase/50HZ, Body Materilas: Galvanized steel
		Additional axial fan 600mm with SS blade to be installed above gutter ht
6	Circulation Fan	3 Nos 21" made of high quality stainless steel, fixed/mount with cable above
		Gutter height in green house, totally enclosed GB motor, to ensure excellent
7		performance of cooling by circulating inner air.
7	Humidification system	This is very important feature of the Green House
		for growing of plants to increase inside Rh.
		Micreo fogging/misting : discharge range : 28l/p Head Control Unit
		Pattern: Hanging type : Pipe 16mm LLDPE colour Black
		Motor: 1.0 HP Monoblock pump : 1No. Filter Disc
		Tank: 500liter
	Automotic Cont. I	PVC Pipe : 32mm/25mm
8	Automatic Control system	Microprocessor based user friendly for Temperature
	System	
		humdity and light dual mode function installed in pre entry area, Power Input- 220-415
		VAC, 50Hz. Three/Single phase, Ambient 5-50°C, RH up-to 90%
		a) Relative Humdity + Temperature Real Time Controller
		b) Timer for light
		c) Main switch (Rotary) d) Individual Indicator
9	Shading	Aarrangement of motor operated automatic rolling screens of 50% shade net, Material: UV resistant materilas, colour Green
10	Electrical Device	High quality ISI approved fittings with copper multi strand
	Electrical Bevice	twisted FR Grade wires and rigid stds of safety with proper MCB copper cable ISI Mark
		MCB ISI Mark
		LED Light ISI Mark
11	Air curtain	Size: 1m wide heavy duty air curtain with blowers made of high quality with 1 HP Motor and Double Blower
		system, powder coated finish at pre entry point with auto main ON/OFF operation at the time of door opening/
		closing (One number to be provided)
12	Civil Construction	Excavation- Manual Excavation of 40cm deep below ground level having a width of 50cm.
		PCC: Lying of 1:5:10 mix on excavated of 4" thickness
		Foundation: Cemented concrete foundation (1:2:4) mix 2' below ground level and one feet above ground level
		Wall: Made of RR stone/cemented block 23cm width 40cm above and 30cm below GL 1:6 (1Cement : 6 fine sand)
ļ		Plastering: 1:6 (1cement: 6 fine sand)
		Path: Cement concrete in (1:2:4) mix of 50mm thick in paths/walk way 2' wide