




 भा. कृ. अनु. प. – केन्द्रीय शुष्क क्षेत्र अनुसंधान संस्थान
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F. No. 45(14)2017-2018/Adm. IV/

Dated: 25.10.2017

NOTICE INVITING TENDER THROUGH E-PROCUREMENT

The Director, ICAR-Central Arid Zone Research Institute, Jodhpur on behalf of the President, Indian Council of Agricultural Research, New Delhi invites online bids under Two bid system from the Manufacturer/ authorised dealers/registered firms for the Supply and Installation of Poly/Green House (Structure N. 1 size 190 Sq.m.) and Structure No. 2 size 180 Sq.m.) at ICAR-CAZRI-Regional Research Station, Leh, Ladakh (J&K).

Critical Date Sheet

1.	Date and Time for Issue/Publishing	03.00 PM on 25.10.2017
2.	Document Download / Sale Start Date and Time	03.00 PM on 25.10.2017
3..	Document Download / Sale End Date and Time	2.00 PM on 08.11.2017
4.	Bid Submission start Date and Time	03.00 PM on 25.10.2017
5.	Bid Submission End Date and Time	02.30 PM on 08.11.2017
6.	Date and Time for Opening of technical Bids	2.30 PM on 09.11.2017
7.	Date and Time for opening of Financial Bid	After finalize the Technical Bid
	Tender Fee Bid Security (Earnest Money Deposit) and Performance Security	Rs. 500.00 Rs. 20,000 for Structure No.1 (190Sq.m.) & Rs. 16,000/- for Structure No.2 (180Sq.m.) @ 5-10% of Contract value
8.	Bank details	"ICAR Unit- CAZRI, Jodhpur" Payable at State Bank of India, Branch Shastri Nagar, Jodhpur (Rajasthan)
9.	Address for Communication	Director, ICAR-CAZRI, Jodhpur-342003 (Raj.) India

Note : The tender form and other details are available on CAZRI's website www.cazri.res.in & CPPP. The interested Manufacturers/authorized dealer/Agency/firm of repute may download the tender document from above websites and upload the same after completing in all respect in the e-procure.gov.in portal as per guidelines mentioned in the portal by or before the due date & time.

**Encl. : Annexure- I to VIII (for technical Bid Cover) &
Annexure IX (for Financial Bid Cover)**

**Asstt. Administrative Officer (S)
for Director**

F.No. 45(14)2017-2018/Admn.IV

Instructions for Online Bid submission

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at:

<https://eprocure.gov.in/eprocure/app>.

REGISTRATION

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link “**Online bidder Enrollment**” on the CPP Portal which is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

PREPARATION OF BIDS

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as "offline" to pay the tender fee / EMD as applicable and enter details of the instrument.
- 4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- 5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- 6) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.

- 7) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 9) Upon the successful and timely submission of bids (i.e. after Clicking “Freeze Bid Submission” in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 10) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

Terms and Conditions

1. The tenderer shall quote rates, which will include the delivery (supply and installations)& other incidental charges. Taxes, if any, should be indicated separately.
2. The rates should be quoted as per the Financial Bid /BOQ format uploaded on the CPP Portal. Taxes, if any, should be indicated separately. It must be noted that the contract shall be awarded to the firm which fulfils all the required specifications, terms and conditions and remains L-1.
3. The firm must also possess valid PAN No., TIN No. & Service Tax registration number and a copy of the same must also be enclosed with the tender document.
4. Copy of latest Income Tax Return may be furnished.
5. Modification in the tender documents after the closing date and time is not permissible.
6. The successful firm shall have to supply the **item (from the date of confirmed supply order) within 30 days /as mentioned in the supply order(P.O.)** and if the materials are not supplied and installed in time then EMD shall be forfeited. The rates quoted shall be valid for 6 months from the date of opening of tender.
7. The contractor/bidder or his representative may contact the undersigned at Tel No.0291-2787152 for any further clarification. No variation in terms of quality of the items shall be entertained or else EMD/Security deposit shall be forfeited.
8. The Director, ICAR-CAZRI, Jodhpur shall have the right to reject all or any of the offers, accept more than one offer, and assign part of the job.
9. Merely quoting of lowest rates does not mean that order shall be given to that firm. The competent authority will finally decide on the basis of quality & performance of past installations.
10. The interested Firms are required to deposit (in original) an Earnest Money Deposit (EMD) of the amount mentioned against each item in the form of Demand Draft from any of the Commercial Bank in favour of "ICAR Unit-CAZRI, Jodhpur", payable at Jodhpur may be addressed to Director, ICAR-CAZRI, Jodhpur on or before bid submission closing date and time as mentioned in critical date sheet. No quotation shall be considered without the earnest money deposit. Demand Draft drawn in favour of any officer other than "ICAR Unit-CAZRI, Jodhpur" payable at Jodhpur' will not be accepted and the tender will be rejected. The earnest money will be refunded only after the finalization of the procurement and no interest will be paid on earnest money.
11. Rates once finalized will not be enhanced/reduced during the currency of the contract. In case of foreign currency, conversion rates in INR will be taken on that day when financial bid will open.
12. In case, the successful bidder shows inability at any stage, after the contract is finalized and awarded, for whatsoever reason(s), to honour the contract, the earnest money / performance security deposited would be forfeited.
13. The Director, ICAR-CAZRI, Jodhpur reserves the right to cancel the contract at any time during the currency period of the contract without giving any reason.

14. The firm to whom the tender will be awarded, will have to deposit the performance security equal to 5% -10% of the total amount at the time of installation of the equipment. If the services are not found to be satisfactory, the performance security is liable to be forfeited. No interest will be paid on performance security.
15. If any dispute(s) arises between ICAR-CAZRI, Jodhpur and the firm with reference to the contract, ICAR-CAZRI, Jodhpur will decide it and its decision will be binding on the firms.
17. **Bid Validity** : 90 days
18. The contract will be given to Least one (L1).
19. The Institute is exempted from payment of excise duty if any. Hence, excise duty will not be paid to the firm.
20. **Payment-**
100% of the contract price on receipt of goods as per specifications by the consignee supported by satisfactory installation/working report.
21. **Installation :- Should be done within stipulated delivery period as per the order at the Institute in consultation with the indenting officer**, failing which Liquidated Damage clause shall apply. Liquidated Damage clause: It would be realized @ 0.5% (half per cent) of the base price (excluding taxes) of the delayed goods for each week of delay subject to maximum 10%.
22. **Price -**
 - i) The price quoted shall be on firm and fixed basis and should be reasonable living no scope for any further negotiation on price.
 - ii) For goods manufactured in India/abroad : The price of the goods should be quoted on FOR basis and in INR (including all kind of charges and taxes) installations commissioning charges, if any.
23. **Jurisdiction of Court :-** The court of the Jodhpur shall have a jurisdiction to decide any dispute arising out of or in respect of contract.
24. **Force Majeure Clause :-** The Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure. For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods. Epidemics, quarantine restrictions, strikes, lockout or any act of war. Notice of the happening of any such event is given by either party to the other within 15 days from the date of occurring thereof. However either party at its discretion can terminate the contract in such cases.
25. **Termination of Contract :-** Time shall be the essence of the contract. The purchaser shall have the right to terminate the contract without any notice in part or in full in any of the following cases:
 - a) The delivery of the material is delayed for causes not attributed to Force Majeure after the scheduled date of delivery.
 - b) The seller is declared bankrupt or becomes insolvent.

Tender ID : DARE_DARE_259503_1

- c) The delivery material is delayed due to causes of Force Majeure by more than reasonable time.
- d) In case Performance Security is not furnished within the time period specified by the purchaser.
- e) Supply in the case of successful Tenderer should strictly confirm to the specifications of the equipment being purchased.
- f) Any change in Address/Telephone/Fax/e-mail of the tenderer should immediately be informed. The state of non-communication by the firm will make the offer liable for rejection.

26. **Acceptance or rejection of offer** :- The Director, ICAR-CAZRI, Jodhpur reserves the right to accept or reject any tender in part or full without assigning any reason thereof. The successful bidder should submit order acceptance letter within 10 days from the date of issue.

'Terms & Conditions are acceptable to us'.

Dated:

(Authorized signatory of the firm)

Technical Bid

Check list of documents to be uploaded by the tenderer in Technical bid cover

The Firms are required to upload copies of the following documents:-

S.No.	Documents required	✓ Attached with Technical bid X Not attached with Technical bid
a)	Scanned copy of Earnest Money Deposit (EMD) and tender fee/its exemption, if any.	
b)	Scanned copy of Firm's registration issued by the Central Govt./State Govt. GST No.	
c)	Scanned copy of TIN No. & GST Registration No.	
d)	RTGS detail of the firm	
e)	Scanned copy of Valid PAN issued by Income Tax Department	
f)	Scanned copy of Income Tax Return of last 2 years	
g)	Scanned copy of signed our terms and conditions	
h)	Tender acceptance letter	
i)	Scanned copy of signed Price Bid undertaking	
j)	Undertaking that firm has not black listed by any government organisation	
k)	Undertaking that items shall be supplied as detailed in tender document	
l)	User list, and i) Scanned copies of the Work Orders awarded to firm by the other Govt. dept./organizations etc. for the said item(s) of last 3 years. ii) In addition the firm should have also at least one year experience of the construction of Poly / Green House in Hilly areas / Leh (Ladakh) for which a scanned copy of work order(s) may be attached.	
m)	Scanned copy of ink signed tender specific authorization from OEM (Original Equipment manufacturer).	
n)	Any other, if any	

Signature of the Tenderer with seal

TENDER ACCEPTANCE LETTER
(To be given on Company Letter head)

Date:

To,

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No: _____

Name of Tender / Work: -

Dear Sir,

1. I / We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely: _____

as per your advertisement, given in the above mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. _____ to _____ (including all documents like annexure(s), schedule(s), etc ..), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organisation too have also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.

5. I / We do hereby declare that our Firm has not been blacklisted/ debarred by any Govt. Department/Public sector undertaking.

6. I / We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organisation shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract , without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

Details of the Firm

Name of the firm : -----

Registered/Postal Address : -----

S.No.	Particulars	
1.	Phone number/Mobile number	
2.	E-mail Address	
3.	PAN No	
4.	GST / TIN / Service Tax Reg. No.	
5.	Applicable Bank Details : Bank Name : Branch Address with Phone No. Account No. Type of Account (Current/Saving)	
6.	RTGS/IFSC Code & Branch	

Signature of the bidder

PRICE BID UNDERTAKING

From: (Full name and address of the Bidder) _____

To,

Dear Sir/Madam,

I submit the Price Bid for _____ and related activities as envisaged in the Bid document.

2. I have thoroughly examined and understood all the terms and conditions as contained in the Bid document, and agree to abide by them.

3. I offer to work at the rates as indicated in the price Bid, inclusive of all applicable taxes except Service Tax.

Yours Faithfully,

Signature of the firm with seal

MANUFACTURER'S (OEM) AUTHORISATION FORM

To

The Director,
ICAR- Central Arid Zone Research Institute,
Jodhpur, Rajasthan 342003

Ref: your Bidding Documents No.....dated.....

Dear Sir,

We....., who are established and reputable manufacturers of
..... (Name and description of the goods offered in the bid) having factories at
..... hereby authorize Messrs..... (name
and address of the agent) to submit a bid, negotiate (as and if necessary) and conclude the contract
with you against your above mentioned Bidding Documents for the above goods manufactured by us.

No company or firm or individual other than Messrs
(name and address of the above agent) is authorized to bid, negotiate and conclude the contract
against this specific Bidding Documents for the above mentioned goods manufactured by us.

We hereby extend our full guarantee and warranty as per the General Conditions of Contract, read
with modification, if any in the Special Conditions of contract for the goods and services offered for
supply against this Bidding Document by the above firm.

Yours faithfully,

(Signature name and designation)

for and behalf of Messrs.....

[name & address of the manufacturers]

Note: *This letter of authorization should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer. The authorization Certificate should be from the "Manufacturer" only and certificate from any other firm/person including OEM arrangements would not be accepted*

(Printed on letter head of firm)

TO WHOM IT MAY CONCERN

We hereby certify that our firm M/s

.....

..... has not been black listed by any Government, or semi Government department in India.

(Signature of the Firm with Seal)

Schedule to tender**Structure No. 1****Specification of Green House Structure No. 1 to be installed at RRS-CAZRI, Leh (J & K)**

Unit Area	:	190 Sq. m.
Length	:	21 m
Width	:	9 m
Center height	:	3.8m
Side height	:	1.5 m (excluding foundation wall)

S.No.	Description of Work	Place of Supply and Installation
1.	Orientation : <ul style="list-style-type: none"> Lengthwise east to west or according to micro-climate available at the location 	RRS-CAZRI, Leh (J & K)
2.	Structure : <ul style="list-style-type: none"> Made of galvanized square pipe of 47mm x 47mm x 2.0 mm thick and 38 mm x 38 mm x 2.0 mm thick, 32 mm x 32mm x 2.0 mm thick. Trusses beam type 0.25 m height to bear snow load Provision of holding of staking hooks for the crop at rood (length wise) by providing galvanized fixed wire 3 mm diameter 	
3.	Door : <ul style="list-style-type: none"> 1 No. of size 1.80m height x 0.90m wide made of polycarbonate sheet with complete locking system 	
4.	Covering : <ul style="list-style-type: none"> U.V. Stabilized 16 mm thick triple walled Polycarbonate sheet to be fixed for whole structure with anodized aluminium section/polycarbonate 'H' & 'U' profile All the joints of sheet properly sealed with silicon sealant to avoid leakage 	
5.	Ventilators : Wall ventilator : Total 8 Nos. <ul style="list-style-type: none"> 2 Nos. of size 0.90mx0.60m, 1 each at both sides of the door 6 Nos. of size 0.90mx0.60m, 3 each at both sides of the Southern and Northern wall (longer wall) at suitable height from the ground level The ventilators will be provided with openable double shutter Roof Ventilator : Total 6 Nos. <ul style="list-style-type: none"> Manually openable from inside the greenhouse nearest point of the roof of size 0.90mx0.60m - 3 Nos. each side of the highest point alternative 	
6.	Foundation Wall : <ul style="list-style-type: none"> The structure will be fixed on 0.45m deep (below ground level) and 0.30m height (above ground level) foundation wall constructed with stone /cemented block/backed bricks masonry of 0.45 m width 	
7.	Plinth Protection : <ul style="list-style-type: none"> 0.45 m wide 40 mm thick 1:3:6 CC over 75mm thick base all side of green house. 	
8.	Plastering of 15 mm thick on stone masonry wall surface in cement mortar of 1:4 composition; Smooth and even finishing	
9.	Provision of suitable drainage facility for rainfall/snow generated runoff alongside structure	
10.	All supporting poles and pipes to be painted with one coat of red oxide and enamel paint.	
11.	All the joints welded/nut bolted with each other.	
12.	The firm should guarantee free maintenance for one year from the date of installation	

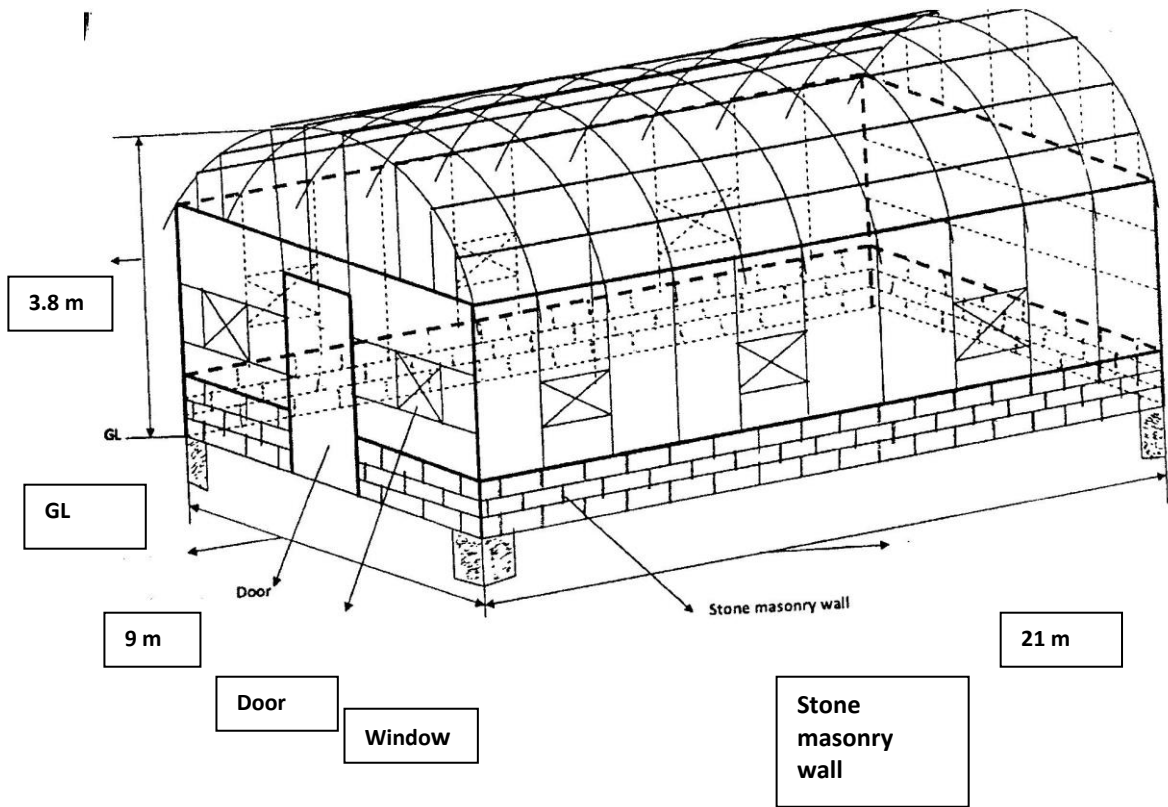
Note : The estimate in respect of Green House Structure-190 Sq. m is separately attached with the proposal.

Schedule of Structure No. 1

Name of work:- Estimate for the Construction of Poly/Green House Structure-No.1, Under NMSHE Project (TF-6), Size-190 Sqm. At CAZRI RRS Leh, Ladakh.

S.No	Description	Qty	Unit
1	Excavation work in foundation trenches or drains not exceeding 1.5 m in width or 10 sqm on plan including dressing of sides and ramming of bottoms lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50m.		
	Ordinary rock	16.2	cum
2	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :		
	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	14	cum
3	Random rubble stone masonry with hard stone in foundation and plinth with cement mortar 1:6 (1cement :6 coarse sand) Item to be executed as per attached specifications.		
	Above 30cm thick wall.	30	Cum
4	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.		
	40 mm thick with 20 mm nominal size stone aggregate	30	sqm
5	15 mm cement plaster on the rough side of single or half brick wall of mix :		
	1:4 (1 cement: 4 fine sand)	75	sqm
6	Providing and fixing G.I. Tubular frames for doors, windows, ventilators and cupboard with L-Type section made of 1.60mm thick G.I. Sheet, joints mitred and welded and grinded finish profiles required size with 15x3mm lugs 10cm long embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primers.		
	Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately).	1275	Kg
7	Finishing walls with Acrylic Smooth exterior paint of required shade :		
	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	30	sqm
8	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :		
	Two or more coats on new work	50	sqm
9	Covering with Triple Layer Poly carbonate sheet 16mmThk.	450	sqm

The estimated cost of Rs. 10,00,000.00 based on Local Market rates of Leh, Ladakh (J & K) for above.



Schedule to tender**Structure No. 2****TECHNICAL SPECIFICATION OF Green House Structure No. 2 to be installed at RRS-CAZRI, Leh (J & K)**

Unit Area	:	180 Sq. m.
Length	:	20 m
Width	:	9 m
Center height	:	3.7m
Side height	:	2.0 m (excluding foundation wall)

S.No.	Description of Work	Place of Supply and Installation
1.	Earthwork excavation : Trench (Throughout the green house area) <ul style="list-style-type: none"> 0.60m below ground level. Earthwork volume of about 110 cubic m 	RRS-CAZRI, Leh (J & K)
2.	Orientation : <ul style="list-style-type: none"> Lengthwise north-south or according to micro-climate available at the location 	
3.	Wall : Foundation Wall : <ul style="list-style-type: none"> 0.90m width and 0.45m depth of stone masonry/cemented block 0.60m deep trench in cement mortar of 1:6 compositions. Plastering of 15 mm thick on stone masonry wall surface in cement mortar of 1:4 composition; Smooth and even finishing External load-bearing wall built of mud bricks/stone: <ul style="list-style-type: none"> 0.30m wide along the length of the structure with a layer of insulation of 0.3 m width and an internal thermal storage wall of 0.30m width (Total width of the wall-0.90m) ; height of the wall should match with the centre height of the structure. On the eastern and western side (along the width of the structure) elevation as per the slope Wall insulation: <ul style="list-style-type: none"> First 1 m with stone gravel mixed with any thorn or local bushes followed by 2 m height insulation with moist soil, straw and wild bushes and rest 0.7 m height insulation with saw dust / wood chips Wall finishing : <ul style="list-style-type: none"> Laying strips of planks upto 0.075 m thick on top of the insulating layer and covering the insulating layer with mud Cement wash plaster inside length orientation and traditional mud plaster on rest of the wall area Wall painting: <ul style="list-style-type: none"> White wash and black paint on the inner and outer side of the wall as per the prevailing site condition 	
4.	Access door (main) : 01 No. <ul style="list-style-type: none"> Open towards outside of size 1.8m height x 0.90m width covered with polycarbonate sheet opening outside 	
5.	Entry chamber : 01 No. <ul style="list-style-type: none"> Dimension 3 m x 4 m made of mud bricks (0.30m width) just adjoining the access door The walls to be sloped at the angle of greenhouse wall 1 No. door of size 1.8m x0.90m covered by stainless steel mesh with complete locking system Roofing made of sticks, straw and mud 	
6.	Mud Roofing : <ul style="list-style-type: none"> Slope in between 70-80% on north facing wall side with willows/ballies/poplar/thick sticks in a continuous layer across the beam resting against the line of mud bricks. Painting of ballies/sticks with one coat of paint Application of 0.075m thick layer of mud mixed with coarse chopped straw The layering of willows, ballies/poplars/sticks supported by an axis beam (Iron channel) with the two ends resting on western and eastern wall The axis beam placed on grouted iron poles joined at the top to the axis beam (nut bolt and welded 	

7.	<p>Support Structure :</p> <ul style="list-style-type: none"> Made of galvanized square pipe of 47mm x 47mm x 2.0 mm thick and 38 mm x 38 mm x 2.0 mm thick, 32 mm x 32 mm x 2.0 mm thick at suitable distance horizontally and vertically from angle to angle. The joints welded / nut bolted with each other 	
8.	<p>Supporting poles :</p> <ul style="list-style-type: none"> Iron poles at 2.99m distance to support the roofing (placed on main supporting pipe/axis beam) and fixation of square pipes Foundation of supporting poles are made of cement concrete welded on foundation plates Pipes and poles are to be painted with one coat of red oxide and enamelled paint. 	
9.	<p>Ventilators :</p> <p>Wall ventilator :</p> <ul style="list-style-type: none"> 1 No. window (0.90m x 0.60m) in line with access door (main) Provision of 4 windows of the size 0.90mx0.60m in different places in pipe frame area of openable function at suitable height from ground level Ventilators would be covered by steel 20-40 mesh <p>Roof Ventilator :</p> <ul style="list-style-type: none"> Manually openable from inside the greenhouse nearest point of the roof (size 0.90mx0.60m)- 3 Nos. Construction is similar to wall ventilator but the upper side of the shutter is covered with a painted metal sheet 	
10.	<p>Polycarbonate sheet covering :</p> <ul style="list-style-type: none"> Total pipe structure along with the half roof area covered with 16 mm, triple layer polycarbonate sheet with proper aluminium tee biddings, nut and bolts,. All the joints of sheet properly sealed with silicon sealant to avoid leakage. 	
11.	<p>Plinth Protection :</p> <ul style="list-style-type: none"> 0.45 m wide 40 mm thick 1:3:6 CC over 75mm thick base all side of green house. 	
12.	<p>Stairs :</p> <ul style="list-style-type: none"> Provision of stair(s) inside the greenhouse at access door 	
13.	Provision of suitable drainage facility for rainfall/snow generated runoff alongside structure	
14.	The firm should guarantee free maintenance for one year from the date of installation	

Note : The estimate in respect of above Green House Structure-180 Sq. m is separately attached with the proposal.

**Asstt. Administrative Officer (S)
for Director**

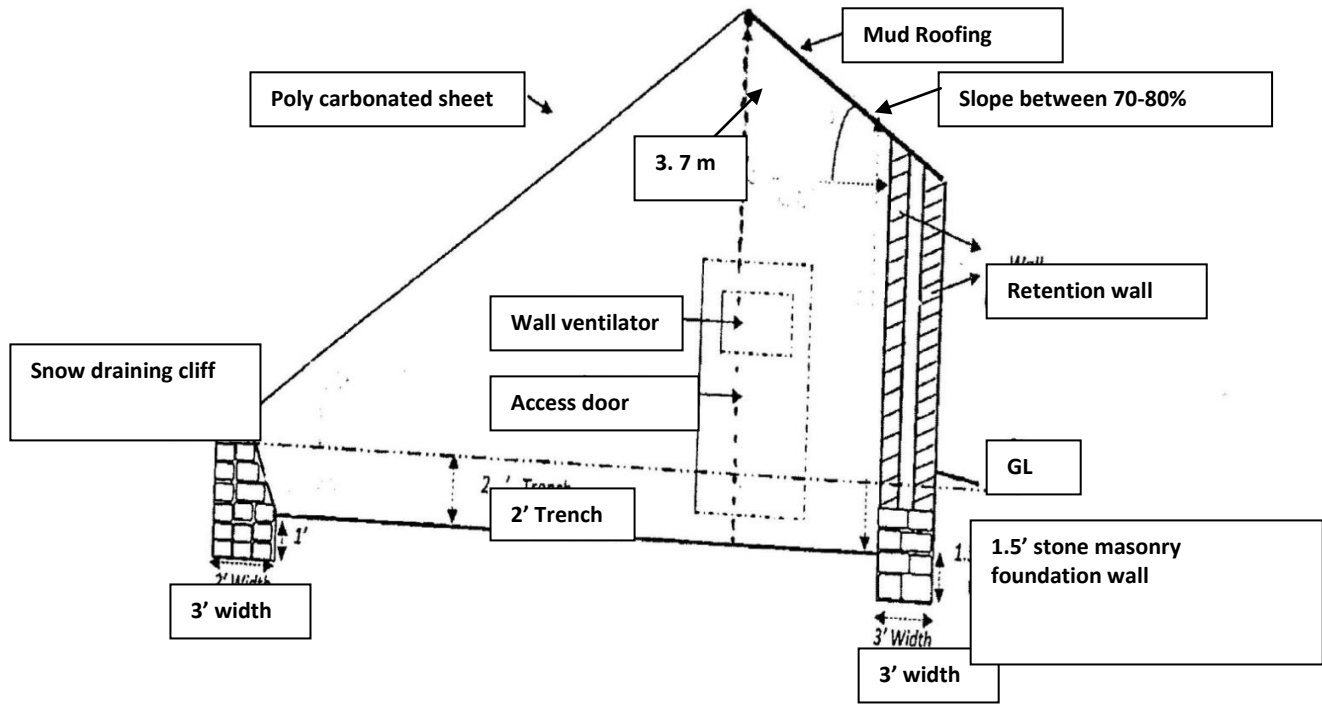
Schedule of Structure No. 2

Name of work:- Estimate for the Construction of Poly/Green House Structure-No.2, Under NMSHE Project (TF-6), Size-180 Sqm. At CAZRI RRS Leh, Ladakh.

S.No	Description	Qty	Unit
1	Excavation work in foundation trenches or drains not exceeding 1.5 m in width or 10 sqm on plan including dressing of sides and ramming of bottoms lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50m.		
	Ordinary rock	110	cum
2	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :		
	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	4	cum
3	Random rubble stone masonry with hard stone in foundation and plinth with Mud mortar. Item to be executed as per attached specifications.		
	Above 30cm thick wall.	106	Cum
4	Mud Roofing	70	Sqm.
5	Wall Insulation	18	Cum
6	Acess door(Main)1 Nos.	40	Kg
7	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :		
	Two or more coats on new work	150	sqm
8	15 mm cement plaster on the rough side of single or half brick wall of mix :		
	1:4 (1 cement: 4 fine sand)	150	sqm
9	Providing and fixing G.I. Tubular frames for doors, windows, ventilators and cupboard with L-Type section made of 1.60mm thick G.I. Sheet, joints mitred and welded and grinded finish profiles required size with 15x3mm lugs 10cm long embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primers.		
	Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately).	1095	Kg
10	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.		
	40 mm thick with 20 mm nominal size stone aggregate	30	sqm
11	Covering with Triple Layer Poly carbonate sheet 16mmThk.	200	sqm

Tender ID : DARE_DARE_259503_1

The estimated cost of Rs. 8,00,000.00 based on Local Market rates of Leh, Ladakh (J & K) for above.



FINANCIAL BID FOR STRUCTURE No. 1**(To be scanned and uploaded separately under financial bid cover)****Supply and Installation of Green House Structure No. 1 to be installed at RRS-CAZRI, Leh (J & K)**

Unit Area	:	190 Sq. m.
Length	:	21 m
Width	:	9 m
Center height	:	3.8m
Side height	:	1.5 m (excluding foundation wall)

S.No.	Description of Work	Place of Supply and Installation
1.	Orientation : <ul style="list-style-type: none"> Lengthwise east to west or according to micro-climate available at the location 	RRS-CAZRI, Leh (J & K)
2.	Structure : <ul style="list-style-type: none"> Made of galvanized square pipe of 47mm x 47mm x 2.0 mm thick and 38 mm x 38 mm x 2.0 mm thick, 32 mm x 32mm x 2.0 mm thick. Trusses beam type 0.25 m height to bear snow load Provision of holding of staking hooks for the crop at rood (length wise) by providing galvanized fixed wire 3 mm diameter 	
3.	Door : <ul style="list-style-type: none"> 1 No. of size 1.80m height x 0.90m wide made of polycarbonate sheet with complete locking system 	
4.	Covering : <ul style="list-style-type: none"> U.V. Stabilized 16 mm thick triple walled Polycarbonate sheet to be fixed for whole structure with anodized aluminium section/polycarbonate 'H' & 'U' profile All the joints of sheet properly sealed with silicon sealant to avoid leakage 	
5.	Ventilators : Wall ventilator : Total 8 Nos. <ul style="list-style-type: none"> 2 Nos. of size 0.90mx0.60m, 1 each at both sides of the door 6 Nos. of size 0.90mx0.60m, 3 each at both sides of the Southern and Northern wall (longer wall) at suitable height from the ground level The ventilators will be provided with openable double shutter Roof Ventilator : Total 6 Nos. <ul style="list-style-type: none"> Manually openable from inside the greenhouse nearest point of the roof of size 0.90mx0.60m - 3 Nos. each side of the highest point alternative 	
6.	Foundation Wall : <ul style="list-style-type: none"> The structure will be fixed on 0.45m deep (below ground level) and 0.30m height (above ground level) foundation wall constructed with stone /cemented block/backed bricks masonry of 0.45 m width 	
7.	Plinth Protection : <ul style="list-style-type: none"> 0.45 m wide 40 mm thick 1:3:6 CC over 75mm thick base all side of green house. 	
8.	Plastering of 15 mm thick on stone masonry wall surface in cement mortar of 1:4 composition; Smooth and even finishing	
9.	Provision of suitable drainage facility for rainfall/snow generated runoff alongside structure	
10.	All supporting poles and pipes to be painted with one coat of red oxide and enamel paint.	
11.	All the joints welded/nut bolted with each other.	
12.	The firm should guarantee free maintenance for one year from the date of installation	

Note : The estimate in respect of Green House Structure-190 Sq. m is separately attached with the proposal.

F.No. 45(14)2017-18/Admn.IV

Name of work:- Construction of Poly/Green House Structure-No.1, Under NMSHE Project (TF-6), Size-190 Sqm. At CAZRI RRS Leh, Ladakh.

S.No	Description	Qty	Unit	Rate per unit	Total Amount
1	Excavation work in foundation trenches or drains not exceeding 1.5 m in width or 10 sqm on plan including dressing of sides and ramming of bottoms lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50m.				
	Ordinary rock	16.2	cum		
2	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	14	cum		
3	Random rubble stone masonry with hard stone in foundation and plinth with cement mortar 1:6 (1cement :6 coarse sand) Item to be executed as per attached specifications.				
	Above 30cm thick wall.	30	Cum		
4	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.				
	40 mm thick with 20 mm nominal size stone aggregate	30	sqm		
5	15 mm cement plaster on the rough side of single or half brick wall of mix :				
	1:4 (1 cement: 4 fine sand)	75	sqm		

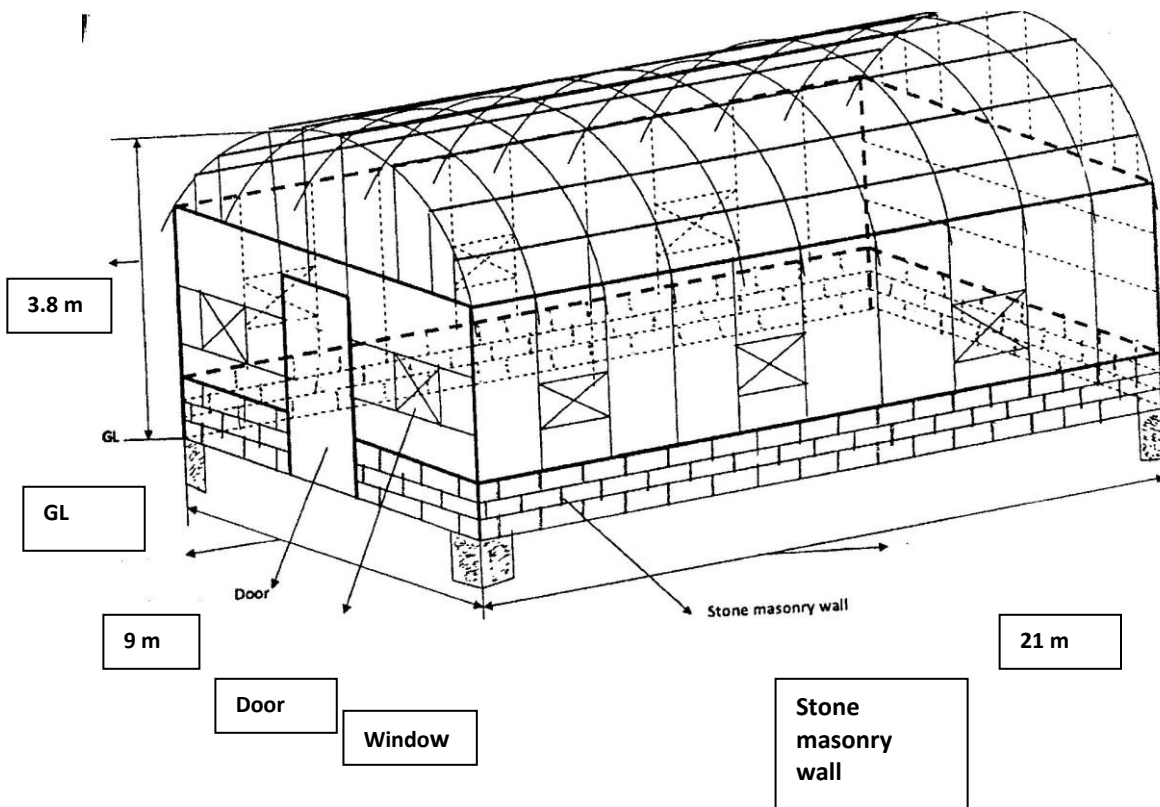
6	Providing and fixing G.I. Tubular frames for doors, windows, ventilators and cupboard with L-Type section made of 1.60mm thick G.I. Sheet, joints mitred and welded and grinded finish profiles required size with 15x3mm lugs 10cm long embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primers.				
	Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately).	1275	Kg		
7	Finishing walls with Acrylic Smooth exterior paint of required shade :				
	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	30	sqm		
8	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
	Two or more coats on new work	50	sqm		
9	Covering with Triple Layer Poly carbonate sheet 16mm Thick.	450	sqm		
		Grant Total Rs :			

Note : The rate may be quoted keeping in view the specification and drawing attached of Poly House/Green House 190

sq. m. (Structure No. 1) also.

F.No. 45(14)2017-18/Admn.IV

Poly / Green House (190 sq. m.) Structure No. 1



F.No. 45(14)2017-18/Admn.IV**FINANCIAL BID FOR STRUCTURE No. 2****(To be scanned and uploaded separately under financial bid cover)**Supply and Installation of Green House Structure No. 2 to be installed at RRS-CAZRI, Leh (J & K)

Unit Area	:	180 Sq. m.
Length	:	20 m
Width	:	9 m
Center height	:	3.7m
Side height	:	2.0 m (excluding foundation wall)

S.No.	Description of Work	Place of Supply and Installation
1.	Earthwork excavation : Trench (Throughout the green house area) <ul style="list-style-type: none"> 0.60m below ground level. Earthwork volume of about 110 cubic m 	RRS-CAZRI, Leh (J & K)
2.	Orientation : <ul style="list-style-type: none"> Lengthwise north-south or according to micro-climate available at the location 	
3.	Wall : Foundation Wall : <ul style="list-style-type: none"> 0.90m width and 0.45m depth of stone masonry/cemented block 0.60m deep trench in cement mortar of 1:6 compositions. Plastering of 15 mm thick on stone masonry wall surface in cement mortar of 1:4 composition; Smooth and even finishing External load-bearing wall built of mud bricks/stone: <ul style="list-style-type: none"> 0.30m wide along the length of the structure with a layer of insulation of 0.3 m width and an internal thermal storage wall of 0.30m width (Total width of the wall-0.90m) ; height of the wall should match with the centre height of the structure. On the eastern and western side (along the width of the structure) elevation as per the slope Wall insulation: <ul style="list-style-type: none"> First 1 m with stone gravel mixed with any thorn or local bushes followed by 2 m height insulation with moist soil, straw and wild bushes and rest 0.7 m height insulation with saw dust / wood chips Wall finishing : <ul style="list-style-type: none"> Laying strips of planks upto 0.075 m thick on top of the insulating layer and covering the insulating layer with mud Cement wash plaster inside length orientation and traditional mud plaster on rest of the wall area Wall painting: <ul style="list-style-type: none"> White wash and black paint on the inner and outer side of the wall as per the prevailing site condition 	
4.	Access door (main) : 01 No. <ul style="list-style-type: none"> Open towards outside of size 1.8m height x 0.90m width covered with polycarbonate sheet opening outside 	
5.	Entry chamber : 01 No. <ul style="list-style-type: none"> Dimension 3 m x 4 m made of mud bricks (0.30m width) just adjoining the access door The walls to be sloped at the angle of greenhouse wall 1 No. door of size 1.8m x0.90m covered by stainless steel mesh with complete locking system Roofing made of sticks, straw and mud 	

6.	<p>Mud Roofing :</p> <ul style="list-style-type: none"> Slope in between 70-80% on north facing wall side with willows/ballies/poplar/thick sticks in a continuous layer across the beam resting against the line of mud bricks. Painting of ballies/sticks with one coat of paint Application of 0.075m thick layer of mud mixed with coarse chopped straw The layering of willows, ballies/poplars/sticks supported by an axis beam (Iron channel) with the two ends resting on western and eastern wall The axis beam placed on grouted iron poles joined at the top to the axis beam (nut bolt and welded) 	
7.	<p>Support Structure :</p> <ul style="list-style-type: none"> Made of galvanized square pipe of 47mm x 47mm x 2.0 mm thick and 38 mm x 38 mm x 2.0 mm thick, 32 mm x 32 mm x 2.0 mm thick at suitable distance horizontally and vertically from angle to angle. The joints welded / nut bolted with each other 	
8.	<p>Supporting poles :</p> <ul style="list-style-type: none"> Iron poles at 2.99m distance to support the roofing (placed on main supporting pipe/axis beam) and fixation of square pipes Foundation of supporting poles are made of cement concrete welded on foundation plates Pipes and poles are to be painted with one coat of red oxide and enamelled paint. 	
9.	<p>Ventilators :</p> <p>Wall ventilator :</p> <ul style="list-style-type: none"> 1 No. window (0.90m x 0.60m) in line with access door (main) Provision of 4 windows of the size 0.90mx0.60m in different places in pipe frame area of openable function at suitable height from ground level Ventilators would be covered by steel 20-40 mesh <p>Roof Ventilator :</p> <ul style="list-style-type: none"> Manually openable from inside the greenhouse nearest point of the roof (size 0.90mx0.60m)- 3 Nos. Construction is similar to wall ventilator but the upper side of the shutter is covered with a painted metal sheet 	
10.	<p>Polycarbonate sheet covering :</p> <ul style="list-style-type: none"> Total pipe structure along with the half roof area covered with 16 mm, triple layer polycarbonate sheet with proper aluminium tee biddings, nut and bolts,. All the joints of sheet properly sealed with silicon sealant to avoid leakage. 	
11.	<p>Plinth Protection :</p> <ul style="list-style-type: none"> 0.45 m wide 40 mm thick 1:3:6 CC over 75mm thick base all side of green house. 	
12.	<p>Stairs :</p> <ul style="list-style-type: none"> Provision of stair(s) inside the greenhouse at access door 	
13.	<p>Provision of suitable drainage facility for rainfall/snow generated runoff alongside structure</p>	
14.	<p>The firm should guarantee free maintenance for one year from the date of installation</p>	

Note : The estimate in respect of above Green House Structure-180 Sq. m is separately attached with the proposal.

Asstt. Administrative Officer (S)
for Director

F.No. 45(14)2017-18/Admn.IV

Name of work:- Construction of Poly/Green House Structure-No.2, Under NMSHE Project (TF-6), Size-180 Sqm. At CAZRI RRS Leh, Ladakh.

S.No	Description	Qty	Unit	Rate per unit	Total Amount
1	Excavation work in foundation trenches or drains not exceeding 1.5 m in width or 10 sqm on plan including dressing of sides and ramming of bottoms lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50m.				
	Ordinary rock	110	cum		
2	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	4	cum		
3	Random rubble stone masonry with hard stone in foundation and plinth with Mud mortar. Item to be executed as per attached specifications.				
	Above 30cm thick wall.	106	Cum		
4	Mud Roofing	70	Sqm.		
5	Wall Insulation	18	Cum		
6	Acess door(Main)1 Nos.	40	Kg		
7	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
	Two or more coats on new work	150	sqm		
8	15 mm cement plaster on the rough side of single or half brick wall of mix :				
	1:4 (1 cement: 4 fine sand)	150	sqm		

9	Providing and fixing G.I. Tubular frames for doors, windows, ventilators and cupboard with L-Type section made of 1.60mm thick G.I. Sheet, joints mitred and welded and grinded finish profiles required size with 15x3mm lugs 10cm long embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primers.				
	Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately).	1095	Kg		
10	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.				
	40 mm thick with 20 mm nominal size stone aggregate	30	sqm		
11	Covering with Triple Layer Poly carbonate sheet 16mm Thick.	200	sqm		
		Grant Total Rs :			

Note : The rate may be quoted keeping in view the specification and drawing attached of Poly House/Green House 180

sq. m. (Structure No. 2) also.

Poly / Green House (180 sq. m.) Structure No. 2

