



**DIVISION OF AGRICULTURAL ENGINEERING
ICAR-INDIAN AGRICULTURAL RESEARCH
INSTITUTE
NEW DELHI-110012**



File No.113/RFS (18-13)/2019-20/AE

Dated: 22-4-2019

TENDERNOTICE

Online bids are invited in two bids system(i) technical bid and (ii) financial bid on behalf of Secretary,ICAR, New Delhi from eligible bidder for **Fabrication and installation of Agricultural machines** designed and developed by Division of Agricultural Engineering, ICAR-IARI, New Delhi -110012 (mentioned in tender). The submission for above item through online is on **13th May, 2019** upto 13:00 PM. The bid will be opened on **14th May, 2019** at 15:00 PM.

1. **Name of the equipment/item** : Fabrication and installation of Agricultural machines designed and developed by Division of Agricultural Engineering, ICAR-IARI, New Delhi -110012
2. **Pre-bid conference** : **29th April, 2019** at 11:00 AM (Display of prototypes available in the Division)
3. **Submission of tender document:** **13th May 2019** up to 13:00 PM
4. **Opening of technical bid of tender :** **14th May 2019** at 15:00 PM
5. The rates quoted shall be valid for a minimum period of one year from the date of approval of the rate contract by the competent authority.
6. The rates quoted shall be for free of delivery (**FOR**) at the Division of Agricultural Engineering, ICAR-IARI, New Delhi – 110 012.
7. If taxes, duties or any other charges over and above the rates quoted leviable actual percentage of such taxes/duties/other charges should be clearly indicated.
8. Tender shall be completed in all respect. The installation and demonstration is to be done by the manufacturer/fabricator at the site of installation anywhere in the country.
9. The firm will be paid 100% of the contract amount after supplying the item on the site of installation and successful installation and demonstration of the machine.
10. **The bid should be accompanied with earnest money at the following rates**

Item No	Name of the Item/equipment	EMD (Rs.)
Schedule I	Compost making and handling machines	25000/-
Schedule II	Animal Feed Block making machines with different capacities and their accessories	40000/-
Schedule III	Power and manually operated Agricultural machines and implements	25000/-

11. EMD should be in the form of Demand Draft/Pay Order/Fixed Deposit Receipt/Bank Guaranty from the Commercial Bank in favour of the Director, IARI on any Nationalized Bank, without which the tender will not be entertained. The EMD shall be refunded to the unsuccessful tenderer after finalization of the tender. In case of successful bidder, it can be adjusted towards security deposit as per rule.

12. Warranty certificate or a minimum period of ONE YEAR from the date of installation thereby providing for replacement of parts and/ or repair/ service at the cost of manufacturer/fabricators furnished.
13. **The lowest rate for each item would be offered to each of the eligible competent bidders with sufficient manufacturing infrastructure and upon acceptance thereof, the panel of such manufacturer / fabricator would be drawn. The Director, IARI, New Delhi reserves the right to place the order of fabrication of machines to any empanelled competent manufacturer and/or to the licensee manufacturer at the approved rate if the demand warrants so.**
14. The quality of material used and work man-ship employed in fabrication of the machines will be monitored by the team of technical expert of IARI at manufacture's workshop.
15. The manufacturer will also be required to provide after sales service to the satisfaction of the customers on payment basis after the warranty period.
16. Payment will be made by e-payment on Syndicate Bank, Pusa, New Delhi -110 012 after satisfactory completion of work and successful installation of machine at site and receipt of pre-receipt bills triplicate.
17. In case any parts/components stores are found defective /damaged during or after delivery to consignee, the suppliers will replace or repair the store under warranty at consignee's location in India free of cost
18. The Director IARI, New Delhi reserves to him/herself the right to accept or reject any or all the tenders either in full or in parts without assigning any reason.
19. Notwithstanding anywhere else mentioned to the contrary on this document, the bids would be evaluated on price of the equipment and accessories, if any, & also taking the CCMC/AMC charges for arriving at the selected firm.
20. Tenders not complying with the above conditions are liable to be rejected.
21. The AMC also be quoted for three years after warranty period.

The following documents must be furnished with the technical bid failing which tender will not be accepted at all.

1. **GST Registration Number**
2. **Pan Card**
3. **Scanned copy of Earnest Money Deposit (EMD)**
4. **Details of infrastructure, facility of manufacturer/principal firm**
5. **Details of skilled workers**
6. **Literature/pamphlet about the firm**
7. **The tender documents duly signed by the concerned firm accepting the same should be attach with technical bid**

Asstt.Admn. Officer

**SCHEDULE OF TENDER
(ADVERTISED TENDER ENQUIRY)**

NAME OF DIVISION/ UNIT: AGRICULTURAL ENGINEERING, IARI, New Delhi – 110 012

Tel: No. 011-25842294

Tender No. 113/RFS (18-13)/2019-20/AE

For and on behalf of the Secretary, ICAR, the Director, IARI invites online tenders on the prescribed forms **Chapter -IV** and **V**, for the fabrication of prototype of the following items as detailed in this schedule to tender. However it may be noted that it will be the discretion of the IARI authority whether to fabricate the below mentioned equipment or not.

1. Item to be fabricated

	Description of prototype to be fabricated	Qty. (tentative)	EMD
Schedule I : Compost making and handling machines	1.Pusa Compost Turner cum Mixer	01	25000/-
	2.Pusa Automatic Compost Sieving Machine	01	
Schedule II :Animal Feed Block making machines with different capacities and their accessories	1. Animal feed block formation machine (Capacity : 250 kg per hour)	01	40000/-
	2.Mobile Feed Block Formation Machine (Capacity: 100 to 125 kg per hour)	01	
	3. Feed block making machine (Stationery) (Capacity : 100 to 125 kg per hour)	01	
	4. Manual Feed block making machine (Capacity : 10 kg per hour)	01	
	5.Feed and fodder mixer	01	
	6.Feed and fodder crusher	01	
	7.Urea Molasses Mineral Block making Machine (UMMB)	01	
	8.Hydraulic oil cooling system for 250 kg per hour animal feed block making machine	01	
Schedule III : Power and manually operated Agricultural machines and implements (as per specification mentioned on chapter III)	1. Aqua-Ferti Seed Drill	01	25000/-
	2. Hydrogel Applicator	01	
	3. Carrot planter	01	
	4. Carrot harvester	01	
	5. Garlic planter	01	
	6. Garlic harvester	01	
	7. Okra seed extractor	01	
	8. Onion seed extractor	01	
	9. Onion harvester	01	
	10. Pusa Basmati Rice Thresher	01	
	11. Power winnower	01	
	12. Chaff cutter with safety gadgets	01	
	13. Wheel hand hoe	01	
	14. Portable power chaff cutter	01	
	15. Manual Paddy thresher	01	
	16. Safety gadgets for chaff cutter	01	
	17. Pregerminated paddy seeder	01	

2. THIS TENDER ENQUIRY HAS THE FOLLOWING CHAPTERS AND ANNEXURES:

Schedule to Tender

Chapter I	:	Instructions to Bidders
Chapter II	:	Conditions of Tender /Contract
Chapter III	:	Schedule of Requirement
Chapter IV	:	Proforma for Technical Bid
Chapter V	:	Proforma for financial bid
Annexure -I	:	Performance Statement for last 3 years
Annexure-II	:	Certificate for compliance of instructions
Annexure-III	:	Checklist for tenderes

3. You are requested to study the tender documents completely and ensure all documents and Annexure are correctly filled in, check and then submit your offer.

4. Tenderers are advised to carefully go through all the conditions and documents attached with this tender enquiry, before applying the tender. All tender documents attached with the tender are sacrosanct for considering any offer as a complete offer. All tender documents must be duly completed, signed by authorized signatory on each page and returned with the offer.

Signature of Tenderer with office seal

Asstt. Admn. Office

CHAPTER-I

Instructions to Bidders

1. Name of Stores : Division of Agricultural Engineering, IARI, New Delhi -110012
2. Submission of tender document : 13th May, 2019 up to 13:00 PM
3. Opening of technical bid of tender : 14th May, 2019 at 15:00 PM

4. Earnest Money Deposit	Item No	Name of the Item/equipment	EMD (Rs.)
	Schedule I	Compost making and handling machines	25000/-
	Schedule II	Animal Feed Block making machines with different capacities and their accessories	40000/-
	Schedule III	Power and manually operated Agricultural machines and implements	25000/-

Demand Draft/Pay Order/ Fixed Deposit receipt/Bank Guarantee in favour of Director, IARI from any nationalized Bank payable at New Delhi

5. Offer validity : Six months from date of opening of tender.
6. Extension of validity & Earnest money : If the validity of the tender is extended, the validity of the Earnest money will also have to be suitably extended by the tenderer failing which their tender shall not be considered by the purchaser after the expiry of the said period.
7. Eligibility for Responding :
- i) Only manufacturers /reputed firms duly registered and having PAN number, valid registration with GST (where applicable) are eligible for submitting the tender. Tenderer having quoted for ISI/ISO certified equipment/service shall have preference.
 - ii) The foreign manufacturers of the tendered stores will have to specify in the tender document, details of the sales service to be provided after expiry of warranty period.
 - iii) Indian agents of foreign manufacturers/principal are allowed to participate in the tender subject to the following conditions: -
 - a) The Indian agent will submit along with the tender documents a copy of latest authority letter/agreement from the foreign manufacturer /principal.
 - b) Such agreement/authority with the foreign manufacturers/principal should be a long- term agreement and not merely for the present tender.
 - c) If the agreement is only for the present tender, the offer received is liable to be rejected.
 - d) The Indian agent will provide details of the after sales service and post contractual support i.e. repair, maintenance, supply of spare parts etc. that he will carry out.
 - e) Offers from firms whose business activities are limited to procuring items from manufacturers, both Indian and Foreign and supplying the same to the purchaser, and having no after sales service backup will not be entertained.
 - f) Where the quoting party /Indian representative claims to be subsidiary or branch office or an authorized representative or principal foreign manufacturer /supplier in India, then a copy of approval from RBI/Ministry concerned for operating business in India as subsidiary /branch /liaison or joint –venture may be submitted with offer. The Indian agent of foreign manufacturer should be Registered with GeM only in case the bid is for item falling in the restricted list of the Export & Import Policy of Govt. of India

copy of the current concerned Registration Certificate must be enclosed failing which the bid will not be accepted.

g) The tenderer must have latest income tax clearing certificate /PAN no/TIN

h) The tenderer must have GST registration certificate

i) The firm must have trade registration certificate

Signature of Tenderer with office seal

- 8. Demonstration of equipment** : The purchaser has the right to have a demonstration of the equipment/item in his premises. The supplier has to abide by this condition. The demonstration has to be arranged by the supplier at his own cost.
- 9. Prototype supply** : In the case of consumable materials, the firm has to provide sample(s) and in the case of fabrication prototype has to be provided by the firm.
- 10. Delivery Required By** : **For Indian manufacturer** - Within 60 days from the Date of issue of award letter or as specified in the supply order.
For Foreign firms – 90 days from the date of opening of letter of credit (LC).
- 11. Terms of Delivery** : **For Indian\manufacturer suppliers:-FOR Division of Agricultural Engineering, ICAR-IARI, New Delhi - 110012 IARI/Units**
For Foreign manufacturer/suppliers: - On FOB Basis
- 12. Inspection after Receipt of Goods** : The inspection will be done by the Divisional Committee in the presence of firms representative. The successful tender will have to provide at his own cost and arrangement technically qualified personnel at the consignee's location for joint inspection. These personnel must be able to unpack, assemble and demonstrate the use of the equipment fully and identified each Part/Machines supplied. Any consumables that are essential will be provided by the supplier free of cost. **In case of receipt of materials in damaged condition the suppliers will have to arrange the replacement of goods free of cost. All expenses in this regard will be borne by the supplier. The quality of material used and work man-ship employed in fabrication of the machine will be monitored by the team technical expert of IARI at manufacture's workshop**
- 13. Packing & Marking** : The packing and preservation of the supplied goods shall be airworthy/seaworthy /roadworthy (as the case may be) so that it may provide their safety during transit period. The seller shall guarantee that the packing is strong enough to withstand the safety of the goods during transport. The packing should satisfy the security seal in the clearing warehouse and shall carry the fragile or other markings as required.
Each packing case shall have labels as follows:
Contract No. _____
Consignee: Name of the
Division/Unit _____

Signature of Tenderer with office seal

Purchaser: Director, IARI, New Delhi – 110012

14. Compliance Statement : The firms must submit compliance statement –cum-technical bid in the format given in Chapter -IV failing which their offer will be treated as incomplete and is liable to be rejected.

15. Earnest /Security Deposit :

Item No	Name of the Item/equipment	EMD (Rs.)
Schedule I	Compost making and handling machines	25000/-
Schedule II	Animal Feed Block making machines with different capacities and their accessories	40000/-
Schedule III	Power and manually operated Agricultural machines and implements	25000/-

EMD should be deposited alongwith Technical bid in the form of Crossed Demand Draft/Pay Order/ Fixed Deposit receipt/ Bank Guarantee in the name of the Director, IARI, New Delhi from any Nationalized Bank payable at New Delhi. No other form of deposit will be accepted. There will be no exemption for paying earnest money. EM is compulsory for all.

In case, therefore, if any tenderer fails to deposit the Earned Money the tender will be rejected straightway.

16. Guarantee/Warranty : Minimum one year comprehensive onsite warranty is required. Warranty Terms period will start from the date of installation of items. In case at installation stores /part of stores are found defective /damaged during or after delivery to consignee, the suppliers will replace or repair the store under warranty at consignee's location in India free of cost or if any case it is required to sent back to the foreign manufacturer. Bank Guarantee equivalent to the cost of equipment is required to be submitted before lifting the store. All expenses in this regard will be borne by the supplier.

17. Performance : The successful bidder will have to submit a performance security of equivalent to **10% of the Contract /Order value** before the issue of award letter valid till 60 days + the period of expiry of the Warranty/Guarantee period in shape of crossed Demand Draft/Pay order/Fixed Deposit Receipt/Bank Guarantee from a nationalized bank in favour of the Director, IARI, New Delhi. The performance security will remain valid till expiry of warranty period. This will be released after completion of warranty period.

18. Liquidated Damages : In case the firm does not complete the supply within the laid down agreed Security delivery period as per contract, liquidated damages will be charged @ 0.5% per week or part thereof subject to a maximum of 10% of the contract value. However, the Institute reserves the right to either further extend or cancel the contract after expiry of delivery date and recover the liquidated damages from the dues of the firm or by legal means.

19. Dispute settlement : The dispute arising out of this contract shall be subject to the jurisdiction of Indian laws & court at New Delhi. Sole arbitrator is appointed by the Secretary, ICAR, New Delhi. His decision will be final and binding to both parties (Supplier and Purchaser)

20. Submission of the : Online tenderers must be in TWO BID SYSTEM

proposal

Items to be fabricated as per our prototype

Signature of Tenderer with office seal

21. Two Bid System

- : The tenderers should submit the tenders in **TWO BID SYSTEM** i.e. the Tenderers should give the **price bid as per Chapter -V and the technical details/bid as per Chapter -IV** along with detailed specifications
- vi) Price bids of only those offers, which will be technically acceptable, will be opened for which the firms will be informed accordingly.
- : **A. TECHNICAL BID**
 - a) The bid should contain the following:
 - i) Tender documents duly completed and signed but **WITHOUT INDICATING THE RATE QUOTED.**
 - ii) The technical details as per the prototype in the Division of Agricultural Engineering
 - iii) Earnest Money
 - iv) Details of supplies of similar equipment (if any) as per Annexure-III along with copies of supply orders.
 - v) Latest agreement /authorization from the foreign firms in case Indian agent is submitting tender on its behalf.
 - vi) Trade registration certificate from the RBI/Ministry/Department concerned.
 - vii) Latest income tax clearance certificate /copy of PAN card/TIN
 - viii) Latest GST clearance certificate.
 - ix) Technical bulletin with specifications clearly stated with model.
- B. FINANCIAL BID**
 - i) Details of rates, taxes, duties, discounts, if any, quoted by the bidder, and should be submitted as per Chapter-V.
 - ii) Any documents in support of price bid.
 - iii) For Indian manufacturer rate should be at F.O.R. destination.
 - iv) For foreign supplier rates should be at FOB basis

22. Evaluation of the Proposal

- : A two stage procedure will normally be adopted: -
 - i) Stage-I:**
Specification other than those of our prototypes will not be accepted.
 - ii) Stage-II**
Financial Evaluation
 - a) The price bids of only those firms found meeting the laid down specifications at stage I shall be opened, evaluated and considered further.
 - b) It is in the tenderers interest to include all relevant and detailed technical data as supporting documents along with their bid.

23. Mode of Payment

- : **A. FOR INDIGENOUS SUPPLIERS: -**
Payment on bill basis after supply, satisfactory installation, commissioning and performance of the equipment at New Delhi and after certification by our Scientists concerned.
- B. FOR IMPORTS: -** The payment shall be made through irrevocable Letter of Credit (L.C.). LC will be opened on 90% value of the equipment/item on FOB value and shall be released on presentation of complete and clear shipping documents. Rest 10% will be released only after satisfactory installation and commissioning of the equipment. This will not include commission to the Indian Agent. Payment to the Indian agent will strictly be

made in Indian

Rupees after satisfactorily commissioning of equipment's.

All bank charges outside India will be borne by the supplier. In case the delivery date of the contract is extended to take care of delay in supply, for which the supplier is responsible, the tenure of the letter of credit so extended, the expense incurred therefore such extension is to be borne by the supplier.

- 24. Training** : **THE TENDERERS SHALL PROVIDE TRAINING TO THE USER AS PER THE TERMS & CONDITIONS OF THE CONTRACT. IT HAS BEEN SPECIFIED IN TECHNICAL & FINANCIAL BIDS FREE OF COST AT THE TIME OF INSTALLATION/ COMMISSION OF EQUIPMENT AT THE CONSIGNEES/USERS LOCATION. AS SPECIFIED BY THE PURCHASER. ALL EXPENSES IN THIS REGARD WILL BE BORNE BY THE SUPPLIER.**

NOTE: If the bid is submitted by the authorized dealer on behalf of the Manufacturer/OEM, than valid authorization certificate of the Manufacturer/OEM must be attached with the bid, otherwise bid will not be considered.

25. As per CVC's guidelines No.12-02-6CTE-SPJ(1)-2/161730 (circular No.3/1/12) dated 13/1/2012, in a tender, either the Indian Agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender. Further, if an agent submits bid on behalf of the Principal/OEM the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.

A legally agreement/contract shall be executed with the contractor/firm by the Institute before installation of all/any type of instrument/machine as per the instructions of the Indian Council of Agricultural Research (ICAR).

- 26. Insurance** : **As applicable in the case of imported goods. For indigenous item it will be responsibility of the supplier to supply the material in good condition on FOR basis without involving the risk of the purchaser.**

Signature of Tenderer with office seal

All damages which may occur as a result of defective packing shall be borne by the seller.

CHAPTER-II CONDITIONS OF TENDER/CONTRACT

1. All annexures, attached with the Tender should be duly filled in and supported with requisite documents for considering any offer as a complete offer.

2. Director, IARI, New Delhi, reserves the right to cancel/reject any or all the tenders without assigning any reason.

3. **EARNEST MONEY DEPOSIT** : EMD should be deposited in the form of crossed Demand Draft/Pay Order / fixed deposit receipt/Bank Guarantee in favour of Director, IARI from any Nationalized Bank payable at New Delhi. No other form of deposit will be accepted. Technical bid without supported with earnest money, therefore will be rejected. There will be no exemption for paying earnest money. However, Firms registered with the Central Purchase Organization/NSIC only are exempt from submitting bids without EMD (proof of registration must be attached therefore without which it will not be considered).

(A) No interest shall be payable by the purchaser on the EM deposited by the tenderer.

(B) The EM deposited is liable to be forfeited if the tenderer withdraws or amends impairs or derogates from the tender in any respect within the period of validity of his tender.

(C) If the successful tenderer fails to furnish the performance security as required in the contract within the stipulated period, the **Earnest Money** shall be liable to be forfeited by the purchaser.

(D) **EMD** of the unsuccessful tenders shall be returned after finalization of tender.

(E) Tender strictly in conformity to the specifications and delivery of which is possible with the specified period need only be submitted

(F) In case of accepted tender the last date of supply mentioned as per the delivery period has to be adhered to in letter and spirit, failing which penalty @5% (five percent) of the value of item for delay of 15 days or fraction thereof imposed and be deducted from the bill or the earnest money and the purchase order shall automatically stand cancelled.

(G) The rate quoted per unit should be inclusive of all taxes and incidentals and be F.O.R., IARI, NEW DELHI

(I) Specifically mention concession/ discount and facilities such as period of warrantee/guarantee, free servicing, installation etc in the tender itself. It should be supported with leaflet, brochure etc.

(J) Supply made by goods train or by road transport at the discretion, risk and cost of supplier. Mode of transport should be specified in the tender offer. Transit loss/damage if any born by the supplier.

(K) In case of equipment a guarantee certificate for a minimum period of ONE YEAR from the date of installation thereby providing for replacement of parts and/ or repair/ service at the cost of supplier furnished.

(L) Payment will be made by cheque/ pay order within one month after satisfactory execution of purchase order in full by supplying item at site of installation and after

successful installation and demonstration of machines. Part supply will not be accepted

(M) The repair/service facilities and availability of spares for the stores/ equipment after supply shall have to be mentioned in the tender.

(N) The list and addresses of laboratories/ universities to whom the stores have been supplied by the firm may also be furnished.

(O) If the supply is rejected, the stores/equipment should be transported/taken back by the supplier at his cost and risk within 10 days from the date of rejection. In case of failure to remove the rejected material, ground rent chargeable at the rate of half percent of the cost of the material per week.

(P) All the rates quoted for articles/ equipments must be for F.O.R. IARI, New Delhi. In case of import, it will be on F.O.B basis and custom clearance shall be done through our custom-clearing agent.

(Q) Purchase order/supply order related to this tender Notice shall subject any or all conditions stipulated above whether or not mentioned in the purchase/ supply order.

(R)Period for which the offer will remain open/contract period: The tenders shall remain valid up to one year from the date of approval.

(S) The lowest rate for each item would be offered to each of the eligible competent bidders with sufficient manufacturing infrastructure and upon acceptance thereof, the panel of such manufacturer / fabricator would be drawn. The Director, IARI New Delhi reserves the right to place the order of fabrication of machines to any empanelled competent manufacturer and/or to the licensee manufacturer at the approved rate if the demand warrants so.

4. Guarantee/warranty

I Except otherwise provided in the invitation to tender the contractor hereby declares that the goods/stores/articles/equipment sold/supplies to the purchaser/consignee under this contract shall be of best quality and workmanship and new in all respects and shall be strictly in accordance with the specification and particulars mentioned/contained in the contract. The contractor hereby guarantees that the said goods/stores/articles would continue to confirm to the description and quality aforesaid for a period of **thirty six months** from the date of receipt of goods/articles/equipment in good condition at site by the consignees in case of supply contract and **thirty six months from the date of installation and satisfactory** taking over of the goods/stores/articles/equipment at site by consignee where installation and commission is involved and notwithstanding the fact that the purchase /inspection authority has inspected and/or approved the said goods/stores/articles equipment or such if during the **36 months the said goods/stores/articles/equipment** be discovered not to confirm to the description and quality aforesaid or not giving satisfactory performance or have deteriorated and the decision of the purchase /consignee in that behalf shall be final and binding on the contractor/seller and the purchaser shall be entitled to call upon the contractor/seller to rectify the goods/stores/articles/equipment or such specified period as may be allowed by the purchaser in his discretion on application made thereof by the contractor/seller, and in such an event, the above period shall apply to the goods/stores/articles/equipment rectified from the date of rectification mentioned in the warranty thereof, otherwise the contractor/seller shall pay the purchaser such

compensation as may arise by reason of the breach of warranty therein contained.

The manufacturer will also be required to provide after sales service to the satisfaction of the customers.

Signature of Tenderer with office seal

II. Guarantee that they will supply the spare parts, if and when required on agreed basis for an agreed price. The agreed basis could be and including but without limitation an agreed discount on the catalogue price or an agreed percentage of profit on landed cost.

III. Warranty to the effect that before going out of production for the spare parts they will give adequate advance notice to the purchaser of the equipment so that the later may undertake the balance of lifetime requirements.

5. (a) **Price** :
- A. For goods manufactured in India: - on FOR basis (including all kind of charges and taxes)
 - i) Installation commissioning charges, if any
 - B. For goods manufacture abroad: - The price of the goods should be quoted on FOB basis excluding the Indian agent commission if any. Installation commissioning charges, if any
- The Institute is exempted from payment of excise duty. Hence, excise duty will not be paid to the firm.
- Sales tax: “we are not authorized to issue Sales Tax Form C&D”;
- The Institute is exempted from payment of Custom Duty
- 5.(b) **AMC of Equipment** :
6. **Penalty for use of undue influence** :
- After the warranty/ Guarantee term is over, the firm should mention the charges of AMC at least for first three years.
 - The seller should undertake that he has not given offered or promised to give directly or indirectly any gift, consideration, reward, commission, fees brokerage of inducement to any person in service of the Purchaser or otherwise in procuring, the contract or forbearing top do or for having done or for borne to do any act in relation or execution of the contract or any other contracts with the Institute for showing or for bearing to show favour or disfavor to any person in relation to the contract or any other contract in the IARI. Any breach of the aforesaid undertaking by the seller or any one employed by him or acting his behalf whether with or without the knowledge the seller or the commission of any offers by the seller or any one employed or acting on his behalf, as defined in Chapter-IX of the IPC, 1860 or the Prevention of Corruption Act, 1947 or any other Act enacted for the Prevention of Corruption shell entitle the purchase to cancel the contract and all or any other contract with the Institute seller and recover from the seller the amount of any loss arising from such cancellation. A decision of the purchaser or his nominee to the effect that a breach of the undertaking had been committed shall be final and binding on the seller.
 - Giving or offering of any gift, bribe or inducement or any attempt at any such act on behalf of the seller towards any officer /employee of the purchaser or to any other person in a position to influence any officer /employees of the purchaser for showing any favour in relation to this or any other contract sell render
7. **Past Performance** :
- Bidders must enclose performance statement for the last 3 years in the Proforma supplied with the tender at Annexure- III.
8. **Laws governing the** :
- The contracts shall be governed by the laws of India for the time being in force. The

- contracts** contract shall be interpreted in accordance with these laws.
- 9. Jurisdiction of Court** : The court of the New Delhi shall have a Jurisdiction to decide any dispute arising out of or in respect of contract.
- 10. 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, it's 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 involving the Supplier's fault or negligence and not foreseeable. Such event may include, but are 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.

Signature of Tenderer with office seal

- 11. Termination of contracts** 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.
 - 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.
- Supply in the case of successful tenderer should strictly confirm to the specifications of the equipment being purchased.
- 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.
- 12. Govt. Regulations** : It shall also be confirmed that there are no Govt. restrictions or limitation in the country of the supplier or countries from which sub-components are being procured and/or for the export of any part of the system being supplied. Supplies/Contracts shall provide a certificate this effect
- 13. Acceptance or rejection of offer** : The Director, IARI, New Delhi 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 15 days from the date of issue.
- 14. Page Numbering & Signatures** : Every page of the tender must be numbered and signed by the authorized signatory giving his/her name and designation below the signature.

Signature of Tenderer with office seal

Asstt. Admn. Officer

CHAPTER - III
Division of Agricultural Engineering
IARI, New Delhi -110012

Specification of the equipment/item (in detail) to be fabricated

		Technical specification of the items
Schedule I : Compost making and handling machines		
1.	Pusa compost Turner cum mixer	Mixing rotor diameter (mm) : 400, Length of rotor(mm) : 2670 , Rotor shaft diameter(mm) : 63, Length of rotor shaft(mm) : 2870, Hydraulic system with base plate, hoses (5 nos.) and direction control valve (5 nos.) : 1000 mm stroke, 63 mm cylinder dia., No. of blades over rotor surface : 42(nos.), Length of blade (mm) : 260, Width of blade(mm) : 80, Dimension of Water tank (mm) : 1220 x 1350 x 1250, Side tank (mm), 1250 x 730 x 760 Other specifications are as per prototype available in the Division of Agricultural Engineering, IARI, New Delhi-12
2.	Pusa Automatic compost sieving Machine	Rubber conveyor belt: 400mm × 3 ply × 5m, Tromel (Chakri): 3m × 1m dia, Feeding table: 915 mm × 610mm, Process conveyor belt: 3.5m × 400mm × 3ply Power source: Three phase Electric motors (2 hp, 3 hp and 3 hp) Other specifications are as per prototype available in the Division of Agricultural Engineering, IARI, New Delhi-12
Schedule II : Animal Feed Block making machines with different capacities and their accessories		
1.	Animal feed block formation machine (Capacity : 250 kg per hour)	Details of the Feed Block Machines (Stationary unit) Capacity- 250 kg per hour, 80 blocks per hour, Block size-20 cm x 20 cm, Block weight 5-7 kg, Power 30-hp, Working pressure 6000 psi, Feed block density 400 kg/m ³ , Electric motor ABB/Bharat Bijli/NGEF, Radial plunger Pump 30 lpm double discharge-Standard Hydraulics make, Vane pump – 60 GPM Vickers make, Solenoid valves-Yuken, Cylinder seal kit- PU, Electric component – L&T make, Complete with hydraulic oil-4 barrels – N 68, Spray painting of machine, Tool kit (Pipe wrench, screw wrench and Allen Key set), oil reservoir capacity of power pack 800 litre and made of 6 mm thick MS plate with cooling system to maintain oil temperature at 50-60oC. Main Cylinder: 200 mm bore, 1600 mm stroke, 150 mm ram, Port size 32 mm, Extension 75 mm Door cylinder: 125 mm bore, 275 mm stroke, 53 mm ram, port size 20 mm, extension 100 mm Cylinders are of steel, fitted with ram of forged steel double acting. Cylinder assembly complete with gun metal bushes, PU seals, wiper seals and O rings, ram grounded to its full working length, Body of machine should be made of 40 mm thick MS plate with front and

		<p>rear plates of 80 mm thickness with suitable reinforcement as per our prototype.</p> <p>Other specifications are as per prototype available in the Division of Agricultural Engineering, IARI, New Delhi-12</p> <p>Installation charges anywhere in India may be quoted separately. One-year performance guarantee is essential.</p>
2.	<p>Mobile Feed Block Formation Machine (Capacity: 100 to 125 kg per hour)</p>	<p>Capacity 100 to 125 kg per hour, at 100 kg/m³ feed density, Feed block size 15 x 15 cm, feed block density 400 kg/m³, Feed block weight 1.5 to 2 kg, Hand lever, (High-Tech / Standard hydraulic make) operating Working pressure 6000 psi</p> <p>Power Pack: Oil Tank (Circular/Rectangular), made out of 10 mm thick sheet, capacity 200 litre, 6.5 bhp air-cooled Diesel Engine (Kirloskar / Field Marshal) operated, Vane Pump 40 Lpm (Vicker/ Yuken make), Plunger Pump 5.6 Lpm at 400 kg /cm² (Standard Hydraulic / Vicker make), Suction filter, oil level indicator, air breather, PCM, Pressure gauge, pressure relief valve</p> <p>Main Cylinder: 125 mm bore, 1000 mm stroke, 100 mm ram</p> <p>Door Cylinder: 65 mm bore, 60 mm stroke, 40 mm ram, PU seals</p> <p>Body of Machine: to be fabricated out of 40 mm thick plate</p> <p>Pipe line: High Pressure hose (600 psi)</p> <p>Machine Fitted on pneumatic wheel trolley 10'x 5' (300cm x 180cm), supported on leaf springs and with steering system.</p> <p>Other specifications are as per prototype available in the Division of Agricultural Engineering, IARI, New Delhi -12</p>

3.	Feed block making machine (Stationery) (Capacity : 100 -125 kg per hour)	Capacity 100 to 125 kg per hour, at 100 kg/m ³ feed density, Feed block size 15 x 15 cm, feed block density 400 kg/m ³ , Feed block weight 1.5 to 2 kg, Hand lever, (High-Tech / Standard hydraulic make) operating Working pressure 6000 psi Power Pack: Oil Tank (Circular/Rectangular), made out of 10 mm thick sheet, capacity 200 litre, 7.5 bhp air-cooled Diesel Engine (Kirloskar / Field Marshal) operated, Vane Pump 40 Lpm (Vicker/ Yuken make), Plunger Pump 5.6 Lpm at 400 kg /cm ² (Standard Hydraulic / Vicker make), Suction filter, oil level indicator, air breather, PCM, Pressure gauge, pressure relief valve Main Cylinder: 125 mm bore, 1000 mm stroke, 100 mm ram Door Cylinder: 65 mm bore, 60 mm stroke, 40 mm ram, PU seals Body of Machine: to be fabricated out of 40 mm thick plate Pipe line: High Pressure hose (600 psi) Installation charges anywhere in India may be quoted separately. One-year performance guarantee is essential.
4.	Manual Feed block making machine (Capacity : 10 kg per hour)	As per the specification of prototype available in the Division of Agril.Engg
5.	Feed and fodder mixer	Powered by 3 hp electric motor, capacity 1000 kg/h, As per the specification of prototype available in the Division of Agril. Engg
6.	Feed and fodder crusher	Powered by 3 hp electric motor, capacity 1000 kg/h, As per the specification of prototype available in the Division of Agril. Engg
7.	Urea Molasses Mineral Block making Machine (UMMB)	Capacity 150 kg/h, powered by 1 hp electric motor, As per the specification of prototype available in the Division of Agril. Engg
8.	Hydraulic oil cooling system for 250 kg per hour animal feed block making machine	Capacity of 2 ton for maintaining hydraulic oil temperature upto/below 50 °C in power containing 700 liter oil.
Schedule III : Power and manually operated Agricultural machines and implements		
1.	Aqua-Ferti Seed Drill	Operated by 45 hp tractor having field capacity 0.4 ha/h, As per the specification of prototype available in the Division of Agril. Engg
2.	Hydrogel Applicator	Operated by 45 hp tractor having field capacity 0.25 ha/h, As per the specification of prototype available in the Division of Agril. Engg
3.	Carrot planter	Two beds each with 4- rows with adjustable row to row spacing, operated by 45 hp tractor having field capacity 0.5 ha/h, As per the specification of prototype available in the Division of Agril. Engg
4.	Carrot harvester	A single cutting blade (angle 15°) consists of equally spaced three v-type cutting edges. Width of coverage of

		the carrot harvester is 1.3 m. Operated by 45 hp tractor having field capacity 0.5 ha/h, As per the specification of prototype available in the Division of Agril. Engg
5.	Garlic Planter	Aluminum casted vertical metering plates with eight hemi spherical cups, operated by 45 hp tractor, row spacing of 150 mm, As per the specification of prototype available in the Division of Agril. Engg
6.	Garlic Harvester	Digging blade of size 600 mm x 300 mm with rake angle of 15°. Operated by 45 hp tractor, having field capacity 0.24 ha/h, As per the specification of prototype available in the Division of Agril. Engg
7.	Okra seed extractor	Powered by 2hp electric motor, capacity 70 kg/h, As per the specification of prototype available in the Division of Agril. Engg
8.	Onion seed extractor	Powered by 1 hp Single-phase motor; capacity 25 kg (Onion umbel) / h, As per the specification of prototype available in the Division of Agril. Engg
9.	Onion harvester	As per the specification of prototype available in the Division of Agril. Engg
10.	Pusa Basmati Rice Thresher	Operated by tractor PTO (Minimum 35 hp), capacity 1000-1500 kg/h, As per the specification of prototype available in the Division of Agril. Engg
11.	Power winnower	Powered by 1 hp Single-phase motor, capacity 300-600 kg/h, As per the specification of prototype available in the Division of Agril. Engg
12.	Chaff cutter with safety gadgets	As per the specification of prototype available in the Division of Agril. Engg
13.	Wheel hand hoe	As per the specification of prototype available in the Division of Agril. Engg
14.	Portable power chaff cutter	Portable power chaff cutter fitted with 3 phase electric motor of 15 hp,1440 rpm along with switch and starter and also equipped with conveyor and blower suitable for green and dry fodder chopping Capacity: 5-6 tons/h for green fodder and 0.5-1 tons/h for dry fodder; gross length of cut: 20 to 30 mm
15.	Manual Paddy thresher	As per the specification of prototype available in the Division of Agril. Engg
16.	Safety gadgets for chaff cutter	As per the specification of prototype available in the Division of Agril. Engg
17.	Pregerminated paddy seeder	As per the specification of prototype available in the Division of Agril. Engg

The following materials should be used for the above machines

1. All nuts, bolts and fasteners should be cold forged BSW.
2. Self aligned sealed Bearings within built block (Standard make).
3. Shaft material EN-8
4. Sheet metal work CRCA 18 gauge sheet.
5. V-Belts: ISI mark

6. Good quality v-pulley
7. All machines should have spray painting with primer coating, safety guards and permissible noise level

Other specification as per our prototype, which can be seen in Division of Agricultural Engineering on working days (9:30 am to 4:30 pm)

Asstt. Admn. Officer

CHAPTER IV
Division of Agricultural Engineering
IARI, New Delhi -110012

TECHNICAL BIDS
(To be sealed in separate Cover)

Specification of the equipment / item(in detail) to be purchased.

S. No	Details of Technical Specifications	Whether complied with YES/NO	If yes, please attach Tech literature of the equipment duly printed & clearly specify page No of Bulletin which specifically confirm this	If no, attach deviation statement	Remarks (if any)

N.B.:- All the bidders are requested to provide true statement in the columns. Concealing of facts will liable to be rejected the tender completely. No communication will be made in this regard.

Signature of Tenderer with office seal

Annexure-I

PERFORMANCE STATEMENT FOR LAST 3 YEARS

S.N	Name of the items	Name of the office by whom order was placed	Order No. &date(Please enclose copy of supply orders)	Value of supply order	Delivered in time or not	If not please specify the reason	Attach satisfactory working report from each office (Yes/No)

Signature of Tenderer with office seal

CHAPTER V
Division of Agricultural Engineering
IARI, New Delhi -110012
PROFORMA FOR PRICE BID
(Compulsory to be filledup with details by the bidder)

S. No	Details of Specifications	Rate/Unit	Net Price
1.			
2.			
3.			
4.			
5.			
6.	Optional accessory		
	I)Ex-factory price offer(excluding agency commission, to be invariably Separately shown and if nothing is claimed reasons thereof must be indicated failing which the bid will not be considered)		
	II)Training Cost, if any		
	Packaging & handling charges		
	FOB Price excluding agency commission		
	Any payment to be paid in Indian Rupees towards agency commission, Supply of Indian made item and other charges like GST		
	Name of items:-		
	1.		
	2.		
	3.		
	4.		
	GST:		
	Total :		

*Components to be supplied locally to be clearly indicated.

CERTIFICATE TO BE SIGNED BY THE TENDERER

CERTIFICATE

It is certified that, I have read and understood and will comply all instructions contained in tender enquiry and its schedule. All pages of schedule to tender from pageto.... have been filled properly and signed.

Signature of tenderer:- _____

Name in block letters:- _____

Name of firm: _____

Full address: _____

(i) Telephone No: _____

(ii) Mobile No: _____

(iii) FaxNo: _____

(iv) E mail id: _____

(v) Website: _____

Signature of Tenderer with office seal

Annexure-III

Check list for Tenderers

Before submission of (ON-LINE) tender documents, Tenderers should check they have complied with the following requirements:-

Sl.No.	Requirementstobecheckedbeforesubmissionofthetender	Compiled(Please indicate) <u>Yes</u> aftercomplying withthe requirement)
1	Scanned copy of Earnest moneyDeposit (EMD)hasbeenenclosed.	
2	Copyofvalidregistration certificate withGeMinthecaseofIndianAgentenclosedonlyin casethebidisforitemfallingintherestrictedlistoftheExport&ImportPolicyofGovt.ofIndia	
3	Copyoftrader registrationcertificatefromtheRBI/Ministryordepartmentconcernedinthecase offoreignsubsidiaryfirm	
4	EncloseGSTRegistrationcertificateandPANNo.	
5	Complettenderdocumentshavebeenenclosed,aftersignature&stampingonALLpages.	
6	ProposalhasbeensubmittedintwobidsystemsTechnicalBid&separatepriceBidaspertender enquiry.	
7	Offervalidityasrequiredintenderhasbeenaccepted&clearlymentionedintenderdocument.	
8	DeliveryTerms&Periodaspertenderhavebeenacceptedandmentionedintender.	
9	PaymentTermsaspertenderhavebeenacceptedandmentionedintender.	
10	Compliance statement as per chapter-IV has been enclosed along with supporting technical documents/proofforeachpoint/parameterclearlyshowingitiscompliedwithornot.	
11	Performancstatement for3yearsas requiredintenderin the laid downformatas per annexure-Ihasbeenenclosed.Ifnot,reasonsarespecificallygivenin writing.	
12	Warrantytermsaspertenderaccepted.	
13	Annexure-IIregarding complianceof all conditions mentioned in the tender form has been enclosed.	
14	Statusoftenderer hasbeenclearlywrittenintender–manufacturerormanufacturesauthorized agent.If authorizedagent, valid latestagreementauthorityletter/agreementforthestoresquoted fromthemanufacturerhas beenenclosed.	
15	FreeTrainingon useofequipmentaftersupply, as specifiedtender, has been accepted inwriting.	
16.	The tendererhasclearlymentionedinwritingthatbusinessdealings with theirfirms havenot been bannedbyanyGovt. /Privateagency.	
17.	If the tenderer wants to mention any specific condition, it must be mentioned on the covering/forwardingletteronlywhichwillbeplacedonthefirstpageofthetechnicalbid.Such condition mentioned in any other document shall notbe givenanyconsideration.	

Signature of Tendererwith office seal

Compliance Report

		Technical specification of the items	Yes	No
Schedule I : Compost making and handling machines				
1.	Pusa compost Turner cum mixer	Mixing rotor diameter (mm) : 400, Length of rotor(mm) : 2670 , Rotor shaft diameter(mm) : 63, Length of rotor shaft(mm) : 2870, Hydraulic system with base plate, hoses (5 nos.) and direction control valve (5 nos.) : 1000 mm stroke, 63 mm cylinder dia., No. of blades over rotor surface : 42(nos.), Length of blade (mm) : 260, Width of blade(mm) : 80, Dimension of Water tank (mm) : 1220 x 1350 x 1250, Side tank (mm), 1250 x 730 x 760 Other specifications are as per prototype available in the Division of Agricultural Engineering, IARI, New Delhi-12		
2.	Pusa Automatic compost sieving Machine	Rubber conveyor belt: 400mm × 3 ply × 5m, Tromel (Chakri): 3m × 1m dia, Feeding table: 915 mm × 610mm, Process conveyor belt: 3.5m × 400mm × 3ply Power source: Three phase Electric motors (2 hp, 3 hp and 3 hp) Other specifications are as per prototype available in the Division of Agricultural Engineering, IARI, New Delhi-12		
Schedule II : Animal Feed Block making machines with different capacities and their accessories				
1.	Animal feed block formation machine (Capacity : 250 kg per hour)	Details of the Feed Block Machines (Stationary unit) Capacity- 250 kg per hour, 80 blocks per hour, Block size-20 cm x 20 cm, Block weight 5-7 kg, Power 30-hp, Working pressure 6000 psi, Feed block density 400 kg/m ³ , Electric motor ABB/Bharat Bijli/NGEF, Radial plunger Pump 30 lpm double discharge-Standard Hydraulics make, Vane pump – 60 GPM Vickers make, Solenoid valves-Yuken, Cylinder seal kit- PU, Electric component – L&T make, Complete with hydraulic oil-4 barrels – N 68, Spray painting of machine, Tool kit (Pipe wrench, screw wrench and Allen Key set), oil reservoir capacity of power pack 800 litre and made of 6 mm thick MS plate with cooling system to maintain oil temperature at 50-60oC. Main Cylinder: 200 mm bore, 1600 mm stroke, 150 mm ram, Port size 32 mm, Extension 75 mm Door cylinder: 125 mm bore, 275 mm stroke, 53 mm ram, port size 20 mm, extension 100 mm Cylinders are of steel, fitted with ram of forged steel double acting. Cylinder assembly complete with gun metal bushes, PU seals, wiper seals and O rings, ram grounded to its full working length, Body of machine should be made of 40 mm thick MS plate with front and rear plates of 80 mm thickness with suitable reinforcement as per our prototype. Other specifications are as per prototype available in the Division of Agricultural Engineering, IARI, New Delhi-12 Installation charges anywhere in India may be quoted separately. One-year performance guarantee is essential.		
2.	Mobile Feed Block	Capacity 100 to 125 kg per hour, at 100 kg/m ³ feed density, Feed block size 15 x 15 cm, feed block density 400 kg/m ³ , Feed block		

	Formation Machine (Capacity: 100 to 125 kg per hour)	weight 1.5 to 2 kg, Hand lever, (High-Tech / Standard hydraulic make) operating Working pressure 6000 psi Power Pack: Oil Tank (Circular/Rectangular), made out of 10 mm thick sheet, capacity 200 litre, 6.5 bhp air-cooled Diesel Engine (Kirloskar / Field Marshal) operated, Vane Pump 40 Lpm (Vicker/ Yuken make), Plunger Pump 5.6 Lpm at 400 kg /cm ² (Standard Hydraulic / Vicker make), Suction filter, oil level indicator, air breather, PCM, Pressure gauge, pressure relief valve Main Cylinder: 125 mm bore, 1000 mm stroke, 100 mm ram Door Cylinder: 65 mm bore, 60 mm stroke, 40 mm ram, PU seals Body of Machine: to be fabricated out of 40 mm thick plate Pipe line: High Pressure hose (600 psi) Machine Fitted on pneumatic wheel trolley 10'x 5' (300cm x 180cm), supported on leaf springs and with steering system. Other specifications are as per prototype available in the Division of Agricultural Engineering, IARI, New Delhi -12		
3.	Feed block making machine (Stationery) (Capacity : 100 -125 kg per hour)	Capacity 100 to 125 kg per hour, at 100 kg/m ³ feed density, Feed block size 15 x 15 cm, feed block density 400 kg/m ³ , Feed block weight 1.5 to 2 kg, Hand lever, (High-Tech / Standard hydraulic make) operating Working pressure 6000 psi Power Pack: Oil Tank (Circular/Rectangular), made out of 10 mm thick sheet, capacity 200 litre, 7.5 bhp air-cooled Diesel Engine (Kirloskar / Field Marshal) operated, Vane Pump 40 Lpm (Vicker/ Yuken make), Plunger Pump 5.6 Lpm at 400 kg /cm ² (Standard Hydraulic / Vicker make), Suction filter, oil level indicator, air breather, PCM, Pressure gauge, pressure relief valve Main Cylinder: 125 mm bore, 1000 mm stroke, 100 mm ram Door Cylinder: 65 mm bore, 60 mm stroke, 40 mm ram, PU seals Body of Machine: to be fabricated out of 40 mm thick plate Pipe line: High Pressure hose (600 psi) Installation charges anywhere in India may be quoted separately. One-year performance guarantee is essential.		
4.	Manual Feed block making machine (Capacity : 10 kg per hour)	As per the specification of prototype available in the Division of Agril.Engg		
5.	Feed and fodder mixer	Powered by 3 hp electric motor, capacity 1000 kg/h, As per the specification of prototype available in the Division of Agril. Engg		
6.	Feed and fodder crusher	Powered by 3 hp electric motor, capacity 1000 kg/h, As per the specification of prototype available in the Division of Agril. Engg		
7.	Urea Molasses	Capacity 150 kg/h, powered by 1 hp electric motor, As per the		

	Mineral Block making Machine (UMMB)	specification of prototype available in the Division of Agril. Engg		
8.	Hydraulic oil cooling system for 250 kg per hour animal feed block making machine	Capacity of 2 ton for maintaining hydraulic oil temperature upto/below 50 °C in power containing 700 liter oil.		
Schedule III : Power and manually operated Agricultural machines and implements				
1.	Aqua-Ferti Seed Drill	Operated by 45 hp tractor having field capacity 0.4 ha/h, As per the specification of prototype available in the Division of Agril. Engg		
2.	Hydrogel Applicator	Operated by 45 hp tractor having field capacity 0.25 ha/h, As per the specification of prototype available in the Division of Agril. Engg		
3.	Carrot planter	Two beds each with 4- rows with adjustable row to row spacing, operated by 45 hp tractor having field capacity 0.5 ha/h, As per the specification of prototype available in the Division of Agril. Engg		
4.	Carrot harvester	A single cutting blade (angle 15°) consists of equally spaced three v-type cutting edges. Width of coverage of the carrot harvester is 1.3 m. Operated by 45 hp tractor having field capacity 0.5 ha/h, As per the specification of prototype available in the Division of Agril. Engg		
5.	Garlic Planter	Aluminum casted vertical metering plates with eight hemi spherical cups, operated by 45 hp tractor, row spacing of 150 mm, As per the specification of prototype available in the Division of Agril. Engg		
6.	Garlic Harvester	Digging blade of size 600 mm x 300 mm with rake angle of 15°. Operated by 45 hp tractor, having field capacity 0.24 ha/h, As per the specification of prototype available in the Division of Agril. Engg		
7.	Okra seed extractor	Powered by 2hp electric motor, capacity 70 kg/h, As per the specification of prototype available in the Division of Agril. Engg		
8.	Onion seed extractor	Powered by 1 hp Single-phase motor; capacity 25 kg (Onion umbel) / h, As per the specification of prototype available in the Division of Agril. Engg		
9.	Onion harvester	As per the specification of prototype available in the Division of Agril. Engg		
10.	Pusa Basmati Rice Thresher	Operated by tractor PTO (Minimum 35 hp), capacity 1000-1500 kg/h, As per the specification of prototype available in the Division of Agril. Engg		

11.	Power winnower	Powered by 1 hp Single-phase motor, capacity 300-600 kg/h, As per the specification of prototype available in the Division of Agril. Engg		
12.	Chaff cutter with safety gadgets	As per the specification of prototype available in the Division of Agril. Engg		
13.	Wheel hand hoe	As per the specification of prototype available in the Division of Agril. Engg		
14.	Portable power chaff cutter	Portable power chaff cutter fitted with 3 phase electric motor of 15 hp,1440 rpm along with switch and starter and also equipped with conveyor and blower suitable for green and dry fodder chopping Capacity: 5-6 tons/h for green fodder and 0.5-1 tons/h for dry fodder; gross length of cut: 20 to 30 mm		
15.	Manual Paddy thresher	As per the specification of prototype available in the Division of Agril. Engg		
16.	Safety gadgets for chaff cutter	As per the specification of prototype available in the Division of Agril. Engg		
17.	Pregerminated paddy seeder	As per the specification of prototype available in the Division of Agril. Engg		

Document required

- 1. GST Registration Number**
- 2. Pan Card**
- 3. Scanned copy of Earnest Money Deposit (EMD)**
- 4. Details of infrastructure, facility of manufacturer/principal firm**
- 5. Details of skilled workers**
- 6. Literature/pamphlet about the firm**
- 7. The tender documents duly signed by the concerned firm accepting the same should be attach with technical bid**