# जनजातीय उप-योजना (टी.एस.पी) Tribal Sub-Plan (TSP) भा.कृ.अनु.प. — भारतीय कृषि अनुसंधान संस्थान

#### ICAR - INDIAN AGRICULTURAL RESEARCH INSTITUTE

मिसिल संख्या File No. TSP/2019-20/2

दिनांक Dated: 25/02/2020

## निविदा-सूचना

निदेशक भा.कृ.अ.प.—भारतीय कृषि अनुसंधान संस्थान नई दिल्ली द्वारा निम्नलिखित वैज्ञानिक उपकरण / वस्तु की आपूर्ति एवं कार्य हेतु प्रतिष्ठित निर्माताओं / अधिकृत डीलरों / आपूर्तिकर्ताओं से दो बोली प्रणाली (तकनीकी एवं वित्त बोली) के अन्तर्गत सील बंद **ऑनलाईन क्यूटेशन** आमंत्रित की जाती है। क्यूटेशन / निविदा प्रस्तुत करने की अंतिम तिथि <u>16.</u> 03.2020 समय 13.00 बजे तक। क्यूटेशन / निविदा को दिनांक <u>17.03.2020</u> को समय 14.30 बजे निर्धारित समिति के समक्ष खोली जाएगी। Online quotations are invited from reputed Manufacture/Dealer /Supplier in two bid system (Technical bid & Financial bid) for purchase of following Scientific Equipment/Items on behalf of Director ICAR-Indian Agricultural Research Institute, New Delhi. The last date for submission of Bid <u>16/03/2020</u> at 13.00 hrs. The bid will be opened on dated <u>17/03/2020</u> at 14.30 hrs. by the prescribed committee.

विस्तृत नियम व शर्तों को भा.कृ.अ.सं. की वेबसाईट www.iari.res.in पर देखें एवं ऑनलाईन के लिए www.eprocure.gov.in देखा जा सकता है। Please visit <u>www.iari.res.in</u> for Details Rules and Regulation and Log on <u>www.eprocure.gov.in</u> for online.

क्रम संख्या	वैज्ञानिक उपकरण / वस्तु का नाम	मात्रा	बयाना राशि
Sl. No.	Name of Equipment/ Item	Quantity	EMD
1.	Vacuum Dryer	02 Units (One Unit to be installed at the Division of Food Science & Postharvest Technology, ICAR-IARI, New Delhi and the other at ICAR-IARI Regional Station, Kalimpong, West Bengal)	62,500.00

# बोली लगाने के निर्देश और नियम एवं निविदा की शर्तें Instructions to the bidder and terms & conditions of tender:

- 1. आपके द्वारा दी गयी मूल्य दर क्यूटेशन प्राप्ति हेतु निर्धारित अन्तिम दिन से कम से कम 180 दिनों तक मान्य होगी। यदि आपूर्तिकर्ता द्वारा 180 दिनों की न्यूनतम अविध की वैधता के संबंध में कोई अन्तर हो तो उसका विशेष रूप से उल्लेख होना चाहिए। The rates quoted shall be valid for a minimum period of 180 days from the last date fixed for submission of bid.
- 2. क्यूटेशन में दर्शायी गई दरों में सामान/सामग्री की नि:शुल्क आपूर्ति अथवा स्थापन शामिल होगा। हांलांकि विदेशी मुद्रा में दर्शाए गए उपकरण को एफ.ओ.बी./सी.आई.पी. आधार पर दर्शाया जाए। The rates quoted shall include delivery and installation at the respective sites. However, equipment quoted in foreign currency must be quoted on FOB/CIP basis.
- 3. यदि सामान विदेश—निर्मित है और दर विदेशी मुद्रा में दिया गया है तो ऐसी परिस्थिति में कस्टम डयूटी छूट प्रमाणपत्र (सी.डी. र्ड.सी.) जारी किया जाएगा जो कि केवल भा.कृ.अ.सं. के लिए ही मान्य होगा । Custom Duty Exemption Certificate (CDEC) will be issued only when the bid is quoted in foreign currency in case of foreign made items only and meant for IARI
- 4. क्यूटेशन में संबंधित सामान का पूरा विवरण दिया जाएगा । Full specifications of the item/article quoted for shall be given in the quotation.
- 5. उपरोक्त दिए गए दर में यदि किसी भी प्रकार का अतिरिक्त कर/टैक्स/डयूटी लगाया जाना है तो उसका संकेत स्पष्ट रूप से दिया जाना चाहिए 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.
- 6. बोली के साथ बतौर बयाना राशि का **डिमांड माँग ड्राफ्ट / भुगतान आदेश / मियादी जमा रसीद / बैंक गारंटी को** निदेशक, मा. कृ. अनु. संस्थान,नई दिल्ली— 110012 के नाम किसी भी राष्ट्रीयकृत बैंक में देय हो, अवश्य संलग्न होना चाहिए। जिसके बिना, क्यूटेशन पर बिचार नहीं किया जायेगा। बयाना राशि की मूल प्रति सीधे तौर पर संबंधित निविदा आमंत्रित अधिकारी को आखिरी तारीख तक या ऑफलाईन दर जमा करने से पहले पहुंच जानी चाहिए। **डिमांड माँग ड्राफ्ट / भुगतान आदेश / मियादी जमा रसीद / बैंक गारंटी** से संबंधित सभी जानकारी व्यक्तिगत रूप से भेजी जानी चाहिए, इस संबंध में प्राप्त स्कैन कॉपी / या जो डाटा आपूर्तिकता द्वारा दर जमा करने के दौरान दिया गया है उससे मिलान किया जाएगा अन्यथा इस क्यूटेशन को रदद माना जाएगा। EMD should be paid in the form of D.D./Pay Order/ Fixed Deposit

Receipt/Bank Guarantee from commercial bank drawn in favour of Director, IARI payable at New Delhi. The original EMD should be submitted to the Tender Inviting Authority on or before the last date and time of offline bid submission. The details of D.D./Pay Order/Fixed Deposit Receipt/ Bank Guarantee physically sent, should tally with the details available in the scan copy and the data enter during the bid submission time otherwise the uploaded bid will be rejected.

- 7. इस संस्थान द्वारा निविदाकर्ता को किसी भी सुरक्षा जमा राशि और बयाना राशि पर ब्याज नहीं दिया जाएगा। No interest on security deposit and earnest money deposit shall be paid by the Institute to tenderer.
- 8. क्यूटेशन प्रकिया पूरी होने के पश्चात असफल बोलीदाताओं को उनकी जमा की गयी बयाने की राशि वापस कर दी, जायेगी जबिक सफलतम बोलीदाता के मामले में यह राशि नियम के अनुसार सुरक्षा जमा के रूप में समायोजित की जा सकती है, जो कि ऑडर के राशि की 10 प्रतिशत होगी और यह डिमांड माँग झाफ्ट/भुगतान आदेश/मियादी जमा रसीद/ बैंक गारंटी निदेशक, मा. कृ. अनु. संस्थान,नई दिल्ली— 110012 के नाम किसी भी राष्ट्रीयकृत बैंक में देय हो, जिसकी वैधता सभी कार्य को पूरा करने के 60 दिनों, साथ के साथ उपकरण/सामान की गारंटी भी शामिल होगी । The EMD shall be refunded to the unsuccessful bidders after finalization of the quotation. In case of successful bidder, it can be adjusted towards security deposit which is 10% of the order value in the form of D.D./Pay Order/Fixed Deposit Receipt/Bank Guarantee from commercial bank drawn in favour of Director, IARI payable at New Delhi and shall remain valid for 60 days beyond the date of completion of all contractual obligation of supplier including warranty obligation for the equipment/goods. Here would however, be no performance security deposit for equipment/goods costing less than Rs. 1.00 lakh (Rs. One Lakh).
- 9. फर्म द्वारा दो वर्ष की वारंटी प्रदान की जाएगी। यदि सामान/उपकरण के विवरण में वारंटी की अवधि में किसी भी प्रकार परिवर्तन है, तो उस वारंटी को अंतिम माना जाएगा। Two years warranty has to be invariable provided by the firm. In case, there is any variation in the warranty period given in the specification of the item/equipment, the warranty period shall be the final as given in the specification.
- 10. कार्य के पूरा होने के बाद फर्म / पूर्तिकता को तीन पूर्व रसीद बिल प्राप्त होने के बाद भुगतान e-payment के माध्यम से किया जाएगा। Payment will be made by mode of e-payment to the supplier/firm after satisfactory completion of work and receipt of pre-receipt bills triplicate.
- 11. निदेशक, भा. कृ. अनु. संस्थान, नई दिल्ली के पास बिना कारण बताये सभी क्यूटेशनओं को पूर्ण या आंशिक रूप से स्वीकार या अस्वीकार करने के अधिकार प्राप्त हैं। The Director IARI, New Delhi reserves the right to accept or reject any or all the quotations either in full or in parts without assigning any reason.
- 12. उपरोक्त शर्तों का पालन न करने वाली क्यूटेशनों को अस्वीकार करने के लिये उत्तरदायी होंगी। Quotations not complying with the above conditions are liable to be rejected.
- 13. TIN/VAT/PAN/C.S.T. Nos. के स्कैन कॉपी को क्यूटेशन के साथ में संलग्न किया जाए। Scanned copy of TIN/VAT/PAN/C.S.T. Nos may be attached with the bid.
- 14. किसी कारण अनुबंध में कोई विवाद उत्पन्न होने पर भारतीय कानून और न्यायालय, नई दिल्ली की अधिकारिता के अधीन होगा । सिचव, भारतीय कृषि अनुसंधान परिषद द्वारा एकमात्र मध्यस्थ नियुक्त किया गया है, जिसका निर्णय दोनों पार्टियों (Supplier और Purchaser) पर अंतिम माना जाएगा। In case, any 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 on both parties (Supplier and Purchaser)
- 15. सफल बोलीदाता को सौंपे गए कार्य को निर्धारित आपूर्ति आदेश के भीतर कार्य करना होगा जैसा आपूर्ति आदेश में दर्शाया गया होगा यदि ऐसा नहीं किया जाता तो कम से कम 2% तथा अधिकतम 10% की क्षति नष्ठ कटौती के रूप में उनके बिल से काटी जाएगी। The successful bidder has to execute the indented Job/Work as mentioned in the supply order placed with them within the stipulated period as given in the supply order placed by this office failing which 2% per week and maximum of 10% deduction as liquidated damage charges will be made from the bill in case the job is not completed within the given stipulated period.

(सहायक प्रशासनिक अधिकारी) Asstt. Admn. Officer

## **Technical Specifications**

### Vacuum Dryer (2 Units required)

# Specifications of UNIT 1 (To be supplied to IARI, Regional Station located at Kalimpong, West Bengal

- 1. Entire body (inner & outer chamber) to be made of SS 304 with all joints argon arc welded and dull/mirror polished. The system should have no sharp corners either internally or externally.
- 2. The inner and outer chambers must be insulated using 50 mm thick high-density polyurethane material to prevent heat loss.
- 3. Must be provided with one swinging type front door with viewing window, silicon gasket, hinges, handle, four lock nuts, etc. to prevent any loss of temperature and vacuum.
- 4. Must have at least three internal perforated shelves each having a minimum size of 450 x 600 x 45 mm for holding the drying material.
- 5. A total of six drying shelves (three inside the system + 3 extra) must be provided.

6. Internal capacity :  $\geq 100$  lts. 7. Operating temperature range : RT to 75°C 8. Temperature accuracy :  $\pm 0.5$ °C

- 9. Temperature inside the vacuum chamber must be maintained though a circulating water jacket around the internal chamber for uniform maintenance of drying temperature.
- Must be provided with suitable compact & durable hot water circulating bath having the following specifications

- Must have microprocessor based PID temperature controller with membrane keypad and soft touch switches.
- o All measurement & control parameters must be on LCD/LED/ VFD display.

11. Operating vacuum range : 0.02 to 1 atm or 16 to 760 mmHg

12. Vacuum accuracy :  $\pm 0.01$  atm or 5 mm Hg

13. Must be supplied with double stage oil sealed vacuum pump of the following specifications for maintaining vacuum

 $\begin{array}{lll} \circ & \text{Capacity} & : & \geq 0.5 \text{ kW} \\ \circ & \text{Oil capacity} & : & \geq 1.0 \text{ lt.} \\ \circ & \text{Nominal pumping speed} & : & \geq 20 \text{ m}^3/\text{hr.} \\ \circ & \text{Noise level} & : & \leq 58 \text{ dB} \\ \end{array}$ 

- 14. Suitable condenser for collecting the removed moisture (moisture trap) must also be provided along with drainage facility.
- 15. The moisture trap must have working temperature range 20°C which should be controlled through microprocessor based PID temperature controller having membrane keypad with soft touch switches.
- 16. System must be provided with all requisite nozzles for pressure gauge, vacuum gauge, safety valve, vent valve, washing spray nozzles, jacket with nozzles for hot water inlet, outlet, drain, safety valve & pressure gauge.
- 17. The system must have digital LCD/LED/VFD display of set and operating parameters as well as timer.
- 18. All the measurement and control systems must be PID based.
- 19. All safety features for protecting the system from over pressure must be provided.

- 20. The equipment along with all its accessories must have 2 years comprehensive warranty.
- 21. It is mandatory for the bidders to quote for the cost of Comprehensive Annual Maintenance Contract (CAMC) for three years post warranty period failing which the bids shall automatically be treated as non-responsive.
- 22. The bidder must also quote for any required accessory, spares, etc. required for the standalone operation of the system. ICAR-IARI shall only be responsible for providing suitable location and power requirement for operating the said system.
- 23. Each bidder must provide detailed printed catalogues highlighting each of the required specifications in the same along with their technical bids failing which they are liable to be technically rejected.

#### Specifications of UNIT 2 (To be supplied to IARI, New Delhi)

- 1. Entire body (inner & outer chamber) to be made of SS 304 with all joints argon arc welded and dull/mirror polished. The system should have no sharp corners either internally or externally.
- 2. The inner and outer chambers must be insulated using 50 mm thick high-density polyurethane material to prevent heat loss.
- 3. Must be provided with one swinging type front door with viewing window, silicon gasket, hinges, handle, four lock nuts, etc. to prevent any loss of temperature and vacuum.
- 4. Must have at least three internal perforated shelves each having a minimum size of 300 x 300 x 45 mm for holding the drying material.
- 5. A total of six drying shelves (three inside the system + 3 extra) must be provided.

6. Internal capacity :  $\geq 200$  lts. 7. Operating temperature range : RT to 75°C 8. Temperature accuracy :  $\pm 0.5$ °C

- 9. Temperature inside the vacuum chamber must be maintained though a circulating water jacket around the internal chamber for uniform maintenance of drying temperature.
- Must be provided with suitable compact & durable hot water circulating bath having the following specifications

 $\begin{array}{lll} \circ & \text{Capacity} & : & \geq 50 \text{ Ltr,} \\ \circ & \text{Operating temperature range} & : & \text{RT to } 100^{0}\text{C} \\ \circ & \text{Temperature resolution} & : & 0.1^{\circ}\text{C} \\ \circ & \text{Temperature accuracy} & : & \pm 0.5^{\circ}\text{C} \\ \circ & \text{Pump pressure} & : & \geq 750 \text{ mbar} \\ \circ & \text{Pump flow capacity} & : & \geq 25 \text{ lts./min.} \\ \end{array}$ 

- Must have microprocessor based PID temperature controller with membrane keypad and soft touch switches.
- o All measurement & control parameters must be on LCD/LED/ VFD display.

11. Operating vacuum range : 0.02 to 1 atm or 16 to 760 mmHg

12. Vacuum accuracy :  $\pm 0.01$  atm or 5 mm Hg

 Must be supplied with double stage oil sealed vacuum pump of the following specifications for maintaining vacuum

 $\begin{array}{lll} \circ & \text{Capacity} & : & \geq 0.5 \text{ kW} \\ \circ & \text{Oil capacity} & : & \geq 1.0 \text{ lt.} \\ \circ & \text{Nominal pumping speed} & : & \geq 20 \text{ m}^3/\text{hr.} \\ \circ & \text{Noise level} & : & \leq 58 \text{ dB} \\ \end{array}$ 

- 14. Each of the drying tray must be mounted on suitable load cells for continuous measurement and recording of weight.
- 15. Weight measurement and display range of upto 10 kg. with least count of  $\pm$  0.1g must be provided.
- 16. Suitable data logger for recording of weight of all three trays; temperature; and vacuum inside the chamber at 1 min. intervals for at least 20 hours must be provided.
- 17. The system must have suitable provision for downloading of recorded data using a USB drive.

- 18. Suitable condenser for collecting the removed moisture (moisture trap) must also be provided along with drainage facility.
- The moisture trap must have working temperature range 20°C which should be controlled through microprocessor based PID temperature controller having membrane keypad with soft touch switches.
- 20. System must be provided with all requisite nozzles for pressure gauge, vacuum gauge, safety valve, vent valve, washing spray nozzles, jacket with nozzles for hot water inlet, outlet, drain, safety valve & pressure gauge.
- 21. The system must have digital LCD/LED/VFD display of set and operating parameters as well as timer.
- 22. All the measurement and control systems must be PID based.
- 23. All safety features for protecting the system from over pressure must be provided.
- 24. The equipment along with all its accessories must have 2 years comprehensive warranty.
- 25. It is mandatory for the bidders to quote for the cost of Comprehensive Annual Maintenance Contract (CAMC) for three years post warranty period failing which the bids shall automatically be treated as non-responsive.
- 26. The bidder must also quote for any required accessory, spares, etc. required for the standalone operation of the system. ICAR-IARI shall only be responsible for providing suitable location and power requirement for operating the said system.
- 27. Each bidder must provide detailed printed catalogues highlighting each of the required specifications in the same along with their technical bids failing which they are liable to be technically rejected.