



## जबलपुर सहकारी दुग्ध संघ मर्यादित

(मध्य प्रदेश सहकारी सोसायटीज अधिनियम 1960 के अधीन पंजीकृत)

ISO. 9001 : 2000 & 22000: 2005



+91 9406 900 500  
+91 8305 225 339



www.sanchijabalpur.com  
jdsanchi@gmail.com



करौदा-इमलिया, कटनी रोड,  
आधारताल, जबलपुर 4820004 (म.प्र.)



शुद्धता का संकेत

GST: 23AAAAJ0485D1Z6

PAN: AAAAJ0485D

Tender Ref No: 014 /Pur-137/JSDSM/ 2022/Jabalpur

Date:-17.05.2022

### E- Tender Notice

Jabalpur Sahakari Dugdh Sangh Maryadit Jabalpur invites on-line tenders from Manufacturer/distributor/Suppliers having adequate experience in design, supply, erection, testing and commissioning of D.P.M.C.U. for Jabalpur Sahakari Dugdh Sangh Maryadit. The tender documents containing the terms and conditions can be purchased online & downloaded through following website <http://www.mptenders.gov.in> from 18.05.2022 12:00 AM onwards. The tender will be opened in the office of the undersigned as mentioned in tender time schedule (key date) the detailed Tender form can be seen (only reference) at our sangh website : [www.sanchidairy.com](http://www.sanchidairy.com) .The C.E.O., J.S.D.S.M reserves the right to accept or reject any or all the tenders without assigning any reasons.

S.No.	Particulars	Quantity	EMD	Cost of Tender doc	Last date and time for purchase and submission of tender Form	Tender Opening Date and Time
1.	Supply, Installation & Commissioning of D.P.M.C.U. For Jabalpur Sahakari Dugdh Sangh.	30 Approx	Rs 3,00,000/-	Rs. 1000/-	On Dated 09.06.2022 Purchase upto 12:00 pm and submission upto 2:00 pm	10.06.2022 at 2:00 pm

Chief Executive Officer



GST: 23AAAAJ0485D1Z6  
PAN: AAAAJ0485D

## जबलपुर सहकारी दुग्ध संघ मर्यादित

(मध्य प्रदेश सहकारी सोसायटीज अधिनियम 1960 के अधीन पंजीकृत)  
ISO. 9001 : 2000 & 22000: 2005



+91 9406 900 500  
+91 8305 225 339



www.sanchijabalpur.com  
jdssanchi@gmail.com



करौदा-इमलिया, कटनी रोड,  
आधारताल, जबलपुर 4820004 (म.प्र.)



शुद्धता का संकेत

Tender Ref No: 014 /Pur-137/JSDSM/ 2022/Jabalpur  
17.05.2022

Date:-

### TENDER DOCUMENTS

YEAR-2022

**Tender for Supply, Installation & Commissioning of D P M C U**

#### INDEX

Schedule I	:	General terms & conditions
Schedule II of work	:	Material, Specifications & Scope
Schedule III Form B.	:	Tenderer's details in Form A &
Schedule IV	:	Price Bid
Last date & time for issue of tender form	:	18.05.2022 upto 12:00 pm.
Last date & time of submission of Tender	:	09.06.2022 upto 12:00 pm.
Date & Time of opening of tenders	:	10 .06.2022 at 02:00 pm.

**CHIEF EXECUTIVE  
OFFICER**

**Jabalpur Sahakari Dugdh  
Sangh Maryadit**

**JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR**  
**ANNEXURE-I**  
**INSTRUCTIONS TO BIDDERS**

**Tender Ref No: 014 /Pur-137/JSDSM/ 2022/Jabalpur**  
**17.05.2022**

**Date:-**

1. Tenders are invited for the Supply, Installation & Commissioning of D.P.M.C.U. for DCS of Jabalpur Sahakari Dugdh Sangh Jabalpur from reputed Manufacturers/Suppliers/distributors.
2. The Tenderer are requested to go through the tender document's instructions and various terms and conditions contained in Annexure-I to II. It may be noted that no conditions or stipulations to the contrary or which are inconsistent will be accepted.  
Tenderer are requested to ensure that all such schedules along with questionnaire (duly filled-in), are submitted along with their offer. The Tenderer should also note that in absence of any of the schedules, their offer is likely to be rejected.
3. All the details to be filled Sealed as per tender document format and tenderer should read all instructions for compliance before submitting his tender.
4. The tender to be submitted in two parts as explained below:-  
**(A):** This part is fulfilling the requirement of deposit towards Earnest Money and Technical Bid along with duly filled questionnaire, and Technical Bid as per tender document (duly filled) and documents supporting the same. Scanned copies of above documents are to be uploaded online on the website [www.mptender.gov.in](http://www.mptender.gov.in) and photocopies of technical bid documents are to be submitted physically in envelop- A.  
**(B) -** This part shall contain duly filled Price Bid (Form-B) as per price bid format and To be uploaded online on the website [www.mptender.gov.in](http://www.mptender.gov.in) . Please note that Price bid format is to be uploaded online mode only and not to be submitted physically or else bid will be rejected without opening technical bid.

**Terms & Conditions**

**1. BASIC QUALIFICATION OF TENDERER**

This tender is open for Registered and reputed manufacturer/suppliers/distributors who provide satisfactory evidence:-

- (i) Bidder must quote for those make of DPMCU which are supplied/installed in any cooperative dairies in last five years.
- (ii) Preference will be given to Indian manufacturer so that stage wise inspection of Equipment can be offered to check the quality of product.
- (iii) Preference will be given to the tenderer having Separate Spare & Service Dept. and having sufficient Number of service Engineers in the Madhya Pradesh State.

**2. EARNEST MONEY**

The supplier shall deposit the Earnest Money amount (EMD) of amount Rs. **3,00,000.00** for DPMCU payable. In case, the supplier withdraws his offer during the validity period, after placement of order, the EMD amount shall be forfeited.

(i) **RETURN OF EARNEST MONEY TO TENDERER**

EMD shall be returned to the un-successful Tenderer. No interest shall be paid on EMD amounts.

**3. TAXES AND DUTIES**

All taxes and duties should be included in the prices quoted. Any kind of taxes and duties shall not be paid extra. However, the breakup of taxes & duties must be indicated separately.

**4. AMENDMENT IN SPECIFICATIONS**

The JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR- May revise or amend the specification and drawing, prior to the date notified for opening of Bid of tender. Such revision/ amendment, if any, will be communicated to all those who have bought the tender documents from our office and also uploaded on our web site [www.sanchidairy.com](http://www.sanchidairy.com)

**5. ALTERNATIVE TENDERS**

Tender should be submitted as per intent of tender documents; any alternative offers are liable for rejection.

**6. MISTAKES IN TENDERS**

Rates should be quoted in both; figures and words. In case of ambiguity between rates in figures and words, lower of the two/beneficial to the JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR shall be considered. Such offers can also be rejected on recommendation of committee.

**7. Documents to be submitted with the Tender (Mandatory)**

- a) Copy of Registration Certificate of the Firm / Organization (Tenderer).
- b) Copies of purchase orders last five years.
- c) Copy to latest Income Tax returns & copy of Permanent Account Number (PAN) and GSTIN.
- d) Client list
- e) Completion/Performance certificates
- f) Income Tax/Sales Tax returns of last two years

**8. ALTERATIONS/CORRECTIONS IN TENDERS**

Any alteration/correction in the tender document should be counter-signed. Further, no post tender alteration/correction shall be entertained.

**9. INCOMPLETE TENDERS**

Tender which is incomplete or obscure in any form is liable for rejection.

**10. ACCEPTANCE OF PART/WHOLE TENDERS & NEGOTIATION OVER TENDERERS RIGHTS THERE OF**

- (A) Chief Executive Officer, Jabalpur Sahakari. Dugdha Sangh Mydt., The Power to Negotiate with Lowest tenderer On the Tender Date or Any Suitable Date Decided Thereof.

- (B) JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR- Reserves the right to accept/ reject wholly or partly any tender without assigning any reason whatsoever. The JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR- in this regard shall not entertain any correspondence.

**11. AMBIGUITIES IN CONDITIONS OF TENDERS**

In case of ambiguous or self-contradictory terms/conditions mentioned in the tender, interpretation as may be advantageous to the JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR shall be taken without any reference to the tender.

**12. DIS-QUALIFICATION OF TENDERS**

Tenderer will not be permitted to change the substance of his tender on post interpretation/improper understanding grounds. This includes post tender price changes/ modifications etc. after opening of Price Bid. In such events, otherwise, that is, when a supplier does not comply, tender will be rejected.

**13. DEVIATIONS FROM TERMS & CONDITIONS**

Offers with deviations in the terms of payment, liquidated damages, EMD and performance guarantee are liable to be rejected outrightly.

**14. SUBMISSION OF TENDERS**

The tender shall be submitted in two (2) parts: - Part-I shall contain "EARNEST MONEY DEPOSIT" & " TECHNICAL BID". The supplier shall ensure that the prices/rates are filled in accordance with the Performa for "Price and Quantity." **Price Bid should submit online mode only.**

15. It may please be noted that the due date/ time of opening can be altered, extended, if felt necessary by the purchaser, without assigning any reason thereof. However, due intimation shall be communicated in such a case.

**16. OPENING OF E.M.D. & TECHNICAL BID**

Mandatory documents to be submitted as per above shall be part of Technical Bid. The concerned tender committee of JSDS shall first open the Part —I of all the Tenderer and verify the Earnest Money Deposit and Technical Bid submitted by the Tenderer. Then after the validity of Earnest Money Deposit as required. In case, the requirements are incomplete in EMD and Technical Bid other of Price Bid of the concerned Tenderer shall not be opened. The requirement for EMD and Technical Bid shall be verified and thereafter, the second part, i.e. Price Bid submitted online mode by the Tenderer shall be opened on the same date in respect of eligible Tenderer.

**17. VALIDITY OF TENDERS**

The offers shall be valid for 90 days. Validity of the offer shall be counted from the date of opening of tenders. Those who do not agree for a validity of 90 days will do so at their own risk and their offers are liable to be rejected.

**18. ACCEPTANCE OF TENDER**

- i) The JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR- may reject any or all tenders or to accept any tender considering advantageous to JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR
- ii) The JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR-. May split the quantities against the tender on more than one supplier for the same item. The JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR-.shall assigns no reasons for this and the same will be binding on the Tenderer.

**19. PAYMENT TERMS:-**

Payment shall be made by A/c payee Cheque or RTGS only. The Schedule of Payment shall be as follows:

- a) 70% against the safe receipt of material at site i.e. JSDSM, Jabalpur Main Dairy Plant.
- b) 20% after installation, Commissioning and successful trial run of supplied equipment.
- c) 10% after submission of performance bank guarantee of 10% of total project cost with validity not less than one year from date of commissioning. This payment will be processed after submission of Invoices, Delivery challans by supplier.

**20. PRICES AND STATUTORY LEVIES**

- (i) The tenderer should quote price F.O.R. destination including Erection, Installation & Commissioning and trial run charges on turnkey basis. However, break up of following elements may be indicated separately:-
  - (a) Unit Ex-works/Ex-go down rate including packing and forwarding.
  - (b) Excise Duty applicable on Ex-works price as on date of Tender.
  - (c) Sales Tax: - C.S.T. / M.P. Commercial Tax /GST
  - (d) Freight charges.
  - (e) Any other levy/taxes.
  - (f) No revision on any account shall be allowed during execution of the order.
- (ii) Prices offered by the tenderer should be firm and free from all escalations. The prices offered should be valid at least for a period of 90 days from the date of tender opening. Rate approval shall be communicated within 30 days from the date of tender opening.
- (iii) The Material to be supplied shall be dispatched to site by Road transport under intimation to the purchaser and consignee. Depending upon the type of

material, the supplier shall have to carry out proper packing/crating to avoid damage/breakage during transit. Road permit for dispatch of material if required will be sent by JSDS on written request from supplier.

- (iv) After rate approval, the party shall have to ***execute an agreement on a non-judicial stamp paper worth Rs. 1000/-*** to be executed with Jabalpur Sahakari Dugdh Sangha Maryadit, Jabalpur.

**21. TRANSIT RISK**

(a) Responsibility regarding covering of risks during transit of material shall entirely be on the supplier. The JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR- shall, in any case, not bear the transit risks/ transit insurance charges.

(b) Insurance shall be arranged by the supplier.

**22. SUBMISSION OF DRAWING AND LITERATURE**

All the relevant drawings, layouts shall be submitted along with supply of machines. One set of drawing, Descriptive Literature and instructions Manual for Erection, Commissioning and maintenance of the equipment's ordered, shall be supplied.

- 23. DELIVERY:** Supply, Erection, Installation & Commissioning shall be commenced within 3 months (including rainy season) from the date of receipt and acceptance confirmation of order or from the date of contract agreement whichever is applicable. In case of any delay due to assembling or any other technical reasons, supplier will have to communicate in advance in written to the CEO, Jabalpur Sahakari Dugdh Sangha Maryadit-Jabalpur.

**24. FORCE MAJEURE**

Force majeure condition is herein defined as:-

- (a) Natural phenomena, such as floods, draughts, earth-quakes and epidemics.
- (b) Act of any Government Authority, domestic or foreign, such as war, quarantines, embargoes, licensing control or production or distribution restrictions.
- (c) Accident and disruptions such as fires, explosions, increase in power cut with respect to date of tender opening, break-down of essential machinery or equipment's etc.
- (d) Strikes slow down, lockouts continuing for more than three (3) weeks.
- (e) Failure or delay in the supplier's source of supply due to force majeure causes enumerated at (a) to (d) above, provided the supplier produces documentary evidence to show that there were no other alternative sources of supply available to him or if available, the lead time required was likely to be longer than the duration of the Force Majeure at the normal source of supply.



(f) Any cause which is beyond the reasonable control of the supplier or purchaser as the case may be. All the provisions of this clause shall apply whether the disrupting cause is total or partial in its effect upon the ability of the supplier to perform.

25. The original bills should be forwarded to the paying authority and should be marked "ORIGINAL". The bill should indicate Sales Tax Registration Number and date allotted to him under Sales Tax Act. 28. The invoice in triplicate with relevant documents such as Material Receipt in good condition etc. should be submitted to JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR

26. **PERFORMANCE GUARANTEE**

26.1 **If during the course of 18 months subsequent to the date of receipt of consignment or 12 months from the date of commissioning whichever is earlier (wherever applicable) any of the goods found to be defective in materials or workmanship or develops defects during service, they will have to be replaced by the supplier, free of all charges. All necessary arrangements on these accounts will be made by the supplier.**

26.2 The said material if required to be replaced, shall be collected by the supplier/firm from Area Stores/ work site at their own cost and at their own responsibility. These materials will like-wise be returned duly repaired/replaced and tested subsequently by the supplier to the destination indicated on "FREIGHT PAID BASIS" at their cost in a reasonable time of 30 days from the date of intimation. The guarantee period as stipulated in clause 32.1 above shall also be applicable for repaired/replaced material, which shall however be counted afresh from the date of its delivery in our stores/site.

26.3 Further, it is clarified that all the charges towards supply of fabrication materials including packing, forwarding, loading, unloading shall be borne by the supplier. The amount deposited under security deposit clause shall also cover the performance guarantee of the material. All equipment/ line materials reported failed within the specified guarantee period may be replaced free of cost by the supplier.

26.4 Actual cost of dismantling and replacement of these equipment's/ materials with the new ones may be charged to the supplier's account. 34.5 To and fro transportation cost of such failed equipment may also be borne by the supplier/supplier.

26.5 In the event of the supplier's inability to adhere to the aforesaid provisions, suitable penal action will be taken, which may include blacklisting of the firm for future business with the JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR- for a certain period.

27. **COMPLETENESS OF EQUIPMENTS**

The equipment/material shall be completed in every respect with all minor fittings and accessories, even though these may not be specifically mentioned in the purchaser's specifications or the tender's offer. The supplier shall not be eligible for any extra price in respect of such minor fitting and accessories which can be considered as an essential part of the basic equipment even though not specifically mentioned in the specification or in the offer.

**28. EXTENSION ORDER**

The JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR- Reserves right to place an extension order for any additional quantity to the extent of 100% quantity of the original order on the same rates, terms and conditions within six months from the date of order.

**29. RECOVERIES FOR LIABILITIES AGAINST OTHER CONTRACTS**

All amount recoverable from the successful Tenderer against earlier contracts including orders on sister concern with the JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR-will be adjusted from payment due against the contract that may be awarded under this specification.

**30. COMPLIANCE OF REGULATIONS**

The supplier should execute and deliver such documents, as may be needed, by the purchaser in evidence of compliance. All laws, Rules and Regulations are required to be incorporated in this reference. Any liability arising out of contravention of any of the laws shall be the sole responsibility of the supplier and the purchaser shall not be responsible in any manner whatsoever.

**31. CANCELLATION OF ORDER**

31.1 The JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR-. May upon written notice of default, terminate contract in the circumstances detailed hereunder:-

a) If in the opinion of the JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR, the supplier fails to deliver the material within the time specified or during the period for which extension has been granted by the JSDS.

b) If in the opinion of the JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR, the supplier fails to comply with any of the other provisions of this contract or material is found not in accordance with prescribed specifications and or the approved samples.

c) As a result of stage inspection, if applicable, it is revealed that material and/or, workmanship is substandard which is likely to affect the performance of the Finished product, a notice would be served' by the JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR-to the supplier to suspend further activities and to take urgent steps towards corrective measures, failing which the entire order would be cancelled.

31.2 In the event of such termination, JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR shall exercise its discretionary power as :-a) to recover from the supplier the agreed liquidated damages.

OR

b) To purchase from elsewhere after giving due notice to the supplier on account and at the risk of the supplier such stores/ material not so delivered or others of similar description in respect of consignment not yet delivered.

OR

c) to cancel the contract reserving JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR-'s right to recover damages.

31.3 Notwithstanding that the powers under clause (a, b & c) referred to above, are in addition to the rights and remedy available to the JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR under the general law of India relating to Contract.

31.4 In the event of risk purchase of stores of similar description, the opinion of the JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR shall be final. In the event of action taken under clause 39.2(a) or (b) above, the supplier shall be liable to pay for any loss, which the JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR- may sustain on that account but the supplier shall not be entitled to any saving on such purchases made against the default. 33.5 The decision of the Chairman, JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR- shall be final regarding the acceptability of the stores supplied by supplier and the JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR- shall not be required to give any reason in writing or otherwise at any time for the rejection of the stores/ material. 39.6 In the event, JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR- does not terminate the order as provided in clauses above, the supplier shall continue execution of order, in which case he shall be liable to the JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR-.

## 32. ARBITRATION

शुद्धता का संकल्प

In case of any dispute, if arises between the parties relating to any terms and conditions of the Tender / Agreement and or regarding the agreement /tender before or after the filling of tender and /or execution of the agreement, any party may refer the dispute to a sole arbitrator who will be the Chairman of Jabalpur Sahakari Dugdh Sangha Maryadit, Jabalpur or a person nominated by him whose decision and award shall be final and binding to both the parties. The arbitration proceedings shall be under and accordarice with provision of Arbitration and Conciliation Act 1996. Supplies under the Contract shall be continued by the supplier during the arbitration proceedings, unless otherwise, directed in writing by the Purchaser or unless the matter is such that the work cannot possibly be continued until the decision of the arbitrators or of the Umpire, as the case may be, is issued.

**33. JURISDICTION**

Any dispute or difference, arising under, out of, or in connection with this tender/ contract order shall be subject to exclusive jurisdiction of competent court at Jabalpur only.

**34. RANDOM TESTING-**

Inspection of material after receipt or waiver of inspection will not relieve the supplier from his responsibility to supply the material strictly in accordance with the specification. The JABALPUR SAHAKARI DUGDH SANGHA MARYADIT, JABALPUR In case, the samples fail to withstand the required test, the entire lot will be liable to be rejected (i.e. unused material so supplied) and the supplier will have to refund the amount paid, including all taxes and duties, as well as the test charges thereof, after inspection. Such quantities or rejected material as identified, shall be removed by the supplier and replaced in full at his own cost.

**35. CORRESPONDANCE:-**

Copies of all important correspondence on subject should be sent to "CEO, Jabalpur Sahakari Dugdh Sangh Maryadit, Jabalpur".

**36. CONSEQUENCES OF BREACH OF AGREEMENT**

If the authorized person of the unit or a partner in the contract/tendering firm commit breach of any of the conditions of agreement it shall be lawful for the Chief Executive Officer, Jabalpur Sahakari. Dugdha Sangh Mydt., to cancel the contract and purchase or authorize to purchase stores at the risk and costs of the unit.

**37. DISPUTE ARBITRATION & FINAL AUTHORITY**

37.1) It should be clearly understood that in the event of any dispute between supplier and purchaser due to deviation from any terms and conditions of work order & contract agreement, the decision of the Chairman, Jabalpur Sahakari Dugdha Sangh Mydt., in this respect will be final and binding on the both supplier and purchaser.

37.2) For matters of dispute, relating to the interpretation of the above clause, the decision of the Chief Executive Officer, Jabalpur Sah. Dugdha Sangh Mydt., shall be final and binding on all the concerned.

**38. Liquidated damages**

If the supplier fails to deliver any or all of the Goods or perform the Services within the time period (s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to:

- i) Upto 15 days 1% of the contracted value
- ii) Between 16 to 30 days 2% of the contracted value
- iii) Beyond 30 days 5 % of the contracted vale JSDS reserves the rights to either to cancel the order and make alternative purchase from other sources at the risk and cost of the of defaulting supplier.

### **Technical Specification of Data Processor Based Milk Collection Unit**

#### **1. Functional Requirements:**

---

1.1 The Unit should be suitable for instant weighing of milk, measuring fat & SNF content, calculating the amount payable to the member based on FAT and/or FAT & SNF weight, printing the amount calculated thereof with member identification details. The Unit shall also be used for maintaining the main records of the collection centre together with the details of milk business transactions of the village milk co-operative society.

1.2 The Unit should be able to measure milk component contents viz. fat from 0.5 % to 12 % & SNF from 6% to 12 % and able to weigh milk up to 200 kg per batch at a time. This should process approximately 70 samples of milk per hour.

#### **2. Design & Other Requirements:**

---

The DPMCU specs detailed below are minimum required specification. The vendor has to provide for all the components/ tools/ software required for meeting operational & functional requirement. Bidders can offer better & higher version specs if available with them which could be considered, but without any extra weightage.

##### **2.1 Operating Environment:**

All the components of the DPMCU should be rugged and must operate in dusty, hot and humid village environment where power outages and supply fluctuations are frequent. The operators may not be skilled persons and not conversant in using electronic equipment:

- Power supply : 160 to 260+10 % V (AC); 50 Hz + 3% or 12 V (DC)
- Ambient Temperature : 5 - 50 C
- Relative Humidity : 50 % to 95 %

##### **2.2 Operational provisions:**

2.2.1 **Installation and Commissioning:** All the components of the DPMCU should be assembled, configured, commissioned and demonstrated for the purpose of smooth milk collection by the supplier to the satisfaction of the user.

2.2.2 **Warranty:** All the components included in the DPMCU shall be warranted for 01-year comprehensive warranty from date of supply except Burnt & broken items are not covered. Supplier to ensure the installation and commissioning of proper earthing before start of actual operation of DPMCU.

2.2.3 The supplier should also provide Annual Maintenance Contract after one year warranty period on chargeable basis, if felt necessary by the purchaser.

2.2.4 Training

- Comprehensive training for 01 day in class room
- Hands-on training for 02 shifts of milk collection on all operational aspects of the milk analyzer and other DPMCU components to the staffs at Village level and other officers of the Milk Union.
- Between 1st & 2nd month of installation refresher training in group shall be imparted at a nodal location.

2.2.5 Operational & Cleaning SOPs (including leaflet on troubleshooting) - Provide laminated wall chart indicating important steps involved in operation & cleaning of the Milk Analyzer for displaying in the Collection Centre.

### 3. Scope of Work:

---

- This is a complete job for supply, installation, testing and commissioning of the DPMCU system which can collect all milk collection data at DCS level.
- The Unit should be suitable for instant weighing of milk, measuring fat, SNF & water content, calculating the amount payable to the member based on fat, SNF & weight, printing the amount calculated thereof with member identification details.
- Integrated unit shall consist of Data processor to accept data from electronic Weighing Scale, Milk analyzer & Milk producer detail manually entering, process milk billing & write processed data on pen drive or print in report format.
- Automatic tare option for Weigh Scale to allow multiple entries of can by any single member.
- System should be able to capture data from electronic weighing scale and milk analysers which can transfer data through RS-232 serial port
- System must be easy to operate, safe and secure and prevented from unauthorized access.
- Comprehensive warranty for One year.

- Ensure proper and accurate functioning of all the components of the DPMCU and impart training to the operating staff in operation, maintenance and routine check till the operating staffs are confident in operation and routine maintenance.

#### 4. Detailed Specifications:

##### 1.0 Data Processor Milk Collection Unit (DPMCU)

Data processor is to be used at village society level, so should be simple, rugged and easy to operate with appropriate functional keys. Salient features of data processor are

TECHNICAL SPECIFICATIONS OF DPMCU <sub>s</sub>		
1.0 DATA PROCESSOR UNIT		
S. No.	Particulars	Specification
1.1	Operational Requirement	Provision of import of Producer master, Rate chart data from Milk Union/main dairy plant through pen-drive (USB/ Serial/Smart Card) Based on the requirement.
		To accept data from electronic weighing machine, milk analyzer after entering The milk producer code number manually.
		Data transfer from DPU through pen drive (USB/Serial) to other computer Through a customized utility software.
		Reports as under:
		1. Producer Slip in English
		2. Shift End Summary in English-Reports-In 40/80 column
		3. Dispatch slip, Local sale, Payment Registers & Member listing in English-Reports on EXTERNAL DOT MATRIX PRINTER- In 40/80 Column format.
		Customized reports as per Milk union requirement with possible inputs.
		Entering of Milk Rate Chart by Pen drive (USB / Serial).
		Two set so rate charts (Buff. & Cow both), one for current & other as "Effective from date".
		Rate chart type to support –Fat ; FAT & SNF-As required by purchaser
Data backup through USB Pen Drive.		

		Input services data entry and storage.
		To develop, if any additional report required by purchaser
1.2	Technology	Advanced 'Micro Controller' based
1.3	Display	LCD 4 Line / 20 Character OR HIGHER
1.4	Memory	2 GB SD Card, 2 Years data storage for @ 1000 Members.
1.5	RS-232 Interface	For Milk Analyzer, Electronic Weigh Scale, Remote Display Unit, DMP / Other suitable Printers & Pen Drive as required for incorporating all functionalities as required by the user.
1.6	Environment	5-50 Deg. C, 85 % Rh, Village Dusty Environment.
1.7	Printer	Interface for External Dot Matrix Printer
1.8	Power Supply	230 V AC, 50 Hz. or 12 V DC Input.
1.9	Key Board	Matrix type / PC Keyboard
1.10	Real Time Clock	Inbuilt
1.11	Consumables & Accessories with each DPU	Paper Role 05 No.
		All required Power Cord 1.5M with plug top-01 No.
		All interconnecting Data Leads 2M-Dully fitted with RS-232 Connectors at both ends-As Required for Weigh Scale, Milk Analyzer & Remote Display Unit.
		Suitable Paper holder to hold paper rolls-01 No.
1.12	Modem	DPU should incorporate in build 2G/3G Enabled Modem to communicate with portal Functionalities:- 1. Online Rate Chart Syncing Facility. 2. All Farmer Transactions to Sync to Portal. 3. Facility to send SMS to farmer.
		Recurring cost of data/SMS not a part of this tender. Will be post excitation and instillation OF DPU's

## 2.0 DOT MATRIX PRINTER:

S. No.	Particulars	Specification
2.1	Printable Column	Dot Matrix Type 9-Pins- 40 or 80 Column
2.2	Operating Voltage	230 V 50 Hz AC or 12 V DC input
2.3	Print Method	Impact dot matrix
2.4	Print Direction	Bi-direction parallel interface/USB/Serial
2.5	Print speed	Min.4.7 LPS
2.6	Paper Handling	Friction feed
2.7	Paper Path	Manual insertion-front or rear in -top out



2.8	MTBF (hrs. at 25% duty cycle)	5 million lines
2.9	Copy Capability	Original +1 Copy
2.10	Accessories	Ribbon Cartridge, Paper holder-1 No. Each

### 3.0 SPECIFICATION FOR MILK ANALYSER

S. No.	Particulars	Specification
3.1	Functional Requirement	To Test & display FAT, SNF & Added Water of sample Milk Analysis and display of Additional Parameters will be preferred
3.2	Type	Ultrasonic principle-based Milk Analyzer for testing FAT, SNF & Added Water
		Measuring parameters:
		1) Fat-0.5% to 12% with accuracy +/-0.1%, with Resolution: 0.01%
		2) SNF -6% to 12% with accuracy +/-0.2%, with Resolution: 0.01%
		3) Added water-0% to 60% with accuracy +/-5%, with Resolution: 1%
		Measuring cycle -40 Sec per sample
		Average testing speed-70 samples/hr.
3.3	Operational abilities	Mode selection for type of milk-Cow, Buffalo, Mixed/single
		With Cleaning, Calibration, System error list etc.
3.4	Type	Ultrasonic Milk Analyzer for testing FAT, SNF & Added Water
	MOC for enclosure	Stainless Steel
3.5	Loose Accessories	• Holding bottom tray for spillage-1 No.
		• RS 232 Serial Cable-1 No.
		• AC Power cable with plug top-1 No.
		• Measuring mugs -2 No
		• Daily cleaning solution-No. Of Bottle 2 (Quantity minimum 200 ml or equivalent).
• Weekly cleaning solution-No. of Bottle 1 (Quantity minimum 200 ml or equivalent) or		
• Monthly cleaning solution-No. of Bottle1 (Quantity minimum 200 ml or equivalent)		
3.6	Manual	Operating Manual each in English & preferably Local language per

### 4.0 Electronic Weigh Scale:

<b>4</b>	<b>Electronic Weigh Scale</b>	
4.1	Functional Requirement	To Electronically weigh & digital display of milk quantity in litre in a container
4.2	Capacity	200 kg
4.3	Least Count	20 gm
4.4	Weight Accuracy	20 gm as per Standards of W&M Rules 1987 medium accuracy Class III
4.5	Certification & Stamping	Duly certified and stamped by W&M Dept. and confirming to IS:9281 (pt1 & 2) 1979, IS:9281:1981 and IS:9281 (Pt.4) 1983 as amended up-to-date
4.6	Display Resolution	1/10,000, (accuracy class III)
4.7	Load Cell	Single, IP 67 grade SS of certified and approved make
4.8	Overload & shock load protection	250% to take impact of loading, with audio (beep) visual indication
4.9	Platform Size	Suitable for placing 2 Cans each of 40 Litre.
4.10	Platform MoC	AISISS 304 1.6 mm thick, 150 grit top plate
4.11	Platform under frame material I Design	Cold rolled mild steel box of adequate size. Hot dip galvanized after fabrication
4.12	Indication in display EWS unit	Quantity-7 Segment RED LED, 6 digits, minimum 13 mm height, display for mode of operation-zero, tare, kg/litre, by default KG
4.13	Display unit mounting	• Pole mounted type with sturdy base and 38 mm dia. Pipe-1.2 m high
		• MS Powder Coated / ABS enclosure, Tactile switch keys with feedback response, auto calibration & auto span with drift correction.
		• RS 232 serial port (Full Duplex)
4.14	Calibration protection & Sealing Arrangement	• Special arrangement to house PCB & seal in arrangement.
		• Password protection at user end.
4.15	Load cell Cable	Load cell cable from platform to display unit with reinforced heavy duty PVC conduit
4.16	Battery for working on power failure	Inbuilt, 6V capacity minimum for 12 hrs.
4.17	Power Supply	Minimum 1 m power cable with plug top AC/DC

4.18	Model Approval Certificate	Manufacturer to have model approval certificate of regulatory authority I Govt. of India (Weight & Measure Unit)
4.19	Stamping	EWS should be supplied duly stamped by Dept. of Weights and Measures

### 5.0 REMOTE DISPLAY UNIT (RDU)

S. No.	REMOTE DISPLAY UNIT (RDU)	
	Functional Requirement	To display pourer members milk collected & milk testing and other Selected parameters in English/ Local Language
5.1	Type	Wall mounted type
5.2	Display Parameters-	The digital display should be able to display the following: Members Code, Litre, FAT, SNF, Amount & etc. generally to meet the need of the users.
5.3	Interface	RS-232 / USB Host
5.4	Display Type	7 Bright segments Red LED of 0.56" height (or suitable to meet the requirements)
5.5	Environment	Dusty Humid, preferably housing to be with IP55 or equivalent protection rust proof powder coated metallic.
5.6	Connecting Cables	Minimum 3m Power cable with plug top with connector at both ends, Minimum 3m Data cable with connector at both ends

### 6.0 Ultrasonic Milk Sample Stirrer

6.1	Functional Requirement	To remove air from fresh milk sample by vibrations created in the milk before testing of milk.
6.2	Type	Table top, Ultrasonic Stirrer
6.3	Stirrer for Ultra sonic Stirrer	Ball type
6.4	Ultrasonic Frequency	20-25 KHz (Variable)
6.5	Timer	Suitable fixed timer for degassing a raw milk sample
6.6	Environment	Suitable for dusty/ humid village environment operating temperature-5 to 50 Degree C
6.7	Connecting Cables	Minimum 1.5 m Power cable with plug top.

6.8	Complete ready to use	Item complete in all respect with required electric/ electronic parts, ready for use at site.
6.9	MoC for body	MS Powder Coated
6.10	Operating Voltage	230 Volts+/-10, AC, 50 Hz or 12 Volts DC

### 7.0 Power Back-up Solution:

S. No.	Particulars	Specification
7.1	Functional Requirement	The Power Back-up system for Data Processor Milk Collection Units (DPMCU) is required to install in rural areas at milk collection points. This system consisting with battery must be able to run the entire system on battery when Grid Power goes off for minimum 2 hours in a shift.
7.2	Average Output Power load	300 Watts minimum approx.
7.3	Back up time (Full Load)	<b>2-hrs minimum (in one shift)</b>
7.4	Output sockets	Suitable number of sockets as required for the respective components of DPMCU.

7.5	Min. Battery Size	1 x 100 Ah
7.6	Battery Charging	• Grid Charging: At 110 & 300 V AC with SMPS charger
		• Boost charging at minimum 7A Approx.
		• Battery overcharge protection
	Battery Type	Industrial Tubular low maintenance battery
	Battery feature	Battery level indicator
	Battery Rating	12 V, 100 Ah.
	Battery units	1 No.
	Charging Indicator	Battery charging indicator plus low battery/ fault indicator to be provided
Leads for Connection	Suitable connecting cables required for the respective items of DPMCU.	
7.7	Operating Environment	Temp 5-50 Deg. C; RH-85% non-condensing, Dusty Environment

**JABALPUR SAHAKARI DUGDHA SANGH MARYADIT, JABALPUR**

**(To be submitted along with the offer)**

**Form —B PART -II**  
**Breakup Price Bid**

<b>S. No.</b>	<b>DESCRIPTION</b>	<b>Make</b>	<b>Brief of Specification</b>	<b>RATE for DPMCU</b>  (FOR Destination & Inclusive of P&F, Freight, Taxes applicable & all other charges such as installation, commissioning, trial run etc.)  (In Rs.) IN WORDS
1	DPU			
2	Dot Matrix Printer			
3	Milk Analyzer			
4	Electronic Weigh Scale			
5	Remote Display Unit			
6	Ultrasonic Stirrer			
7	Power Back-up solution			

**Please fill detailed technical specifications in Technical Bid**

**Date:**

**Place:**

**शुद्धता का संकल्प**

**Signature of authorized Signatory of the Unit**

**JABALPUR SAHAKARI DUGDHA SANGH MARYADIT, JABALPUR**

**(To be submitted along with the offer)**

**Form —B PART -I**

**Price Bid**

**FOR DPMCU**

**Tender Ref No: 014 /Pur-137/JSDSM/ 2022/Jabalpur**

**Date:-17.05.2022**

<b>S. No.</b>	<b>DESCRIPTION</b>	<b>QUANTITY</b>	<b>RATE FOR DPMCU (FOR Destination &amp; Inclusive of P&amp;F, Freight, Taxes applicable &amp; all other charges such as installation, commissioning, trial run etc.) with complete job (In Rs.) IN WORDS</b>
A.	Supply , Erection, Installation & Commissioning of DPMCU	1 Set ( as per technical specifications)	

**Date:**

**Place:**

**Unit**

**Signature of authorized of the**

**(With Seal)**

**शुद्धता का संकल्प**