

**GLOBAL TENDER
(RETENDER)**

FOR

SUPPLY, INSTALLATION AND COMMISSIONING

OF

EQUIPMENTS ON TURNKEY BASIS,

AT THE

**HIGH-TECH DAIRY FARM OF KLD BOARD,
KULATHUPUZHA, KOLLAM DISTRICT,
KERALA, INDIA.**



**KERALA LIVESTOCK DEVELOPMENT BOARD LIMITED
GOKULAM, PATTOM P.O
THIRUVANANTHAPURAM-695 004
KERALA, INDIA.**

Telephone: +91471 2440920, 2449138, Fax: +91471 2440673,
E Mail: kldboard@sancharnet.in ;
Website: www.livestockkerala.org

IMPORTANT DATES REGARDING TENDER

Date and time for Sale of Tender Form : **Up to 28.11.2009**
at 3.00PM (local time)
Last date for Receipt of tenders : **30.11.2009**
up to 11.00 AM (local time)
Date and time of opening of tenders : **30.11.2009**
at 3.00 PM (local time)

CONTACT ADDRESS:

Managing Director
Kerala Livestock Development Board Limited
Gokulam,
Pattom P.O
Thiruvananthapuram-695 004
Kerala,
India.
Telephone: +91471 2440920, 2449138,
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KERALA LIVESTOCK DEVELOPMENT BOARD LIMITED
“GOKULAM”, PATTOM. P.O., THIRUVANANTHAPURAM
KERALA STATE, INDIA

FILE NO. : 2008/2009/Pr/III

Name of the party in whose :
favour the Tender form has
been issued.

The Managing Director,
Kerala Livestock Development Board Ltd.,
“Gokulam”, Pattom.P.O.,
Thiruvananthapuram, Kerala.

(SEAL OF THE OFFICER)

Dear Sir,

1. I/We hereby submit our tender for the
2. I/We now enclosing herewith the Bank Guarantee/D.D. No.....
Dated For Rs..... drawn in favour of the Managing Director, KLD
Board Ltd., Thiruvananthapuram towards EMD. (TENDERS NOT ACCOMPANIED WITH EMD
ALONG WITH TECHNICAL BID SHALL BE SUMARILY REJECTED).
3. I/We hereby agree to all the terms and conditions, stipulated by Kerala Livestock Development
Board Ltd., in this connection including delivery, penalty etc. Quotations for each group are
being submitted under separate covers, and the sheets and shall be considered on their face
value.
4. I/We have noted that overwritten entries shall be deleted unless duly cut & re-written and
initialed.
5. Tenders are duly signed (No thumb impression should be affixed).
6. I/We undertake to sign the contract/agreement, if required, within 30 (Thirty) days from the
date of issue of the letter of acceptance, failing which our/my security money deposited may be
forfeited and our/my name may be removed from the list of suppliers at the Kerala Livestock
Development Board Ltd., Thiruvananthapuram.
7. I/We have gone through all terms and conditions of the tender documents before submitting the
same.

**NOTE: ALL TERMS & CONDITIONS SUCH AS TAXES ETC, HAS BEEN INDICATED IN THE
QUOTATIONS FAILING WHICH IT WILL BE PRESUMED THAT THE RATES ARE
INCLUSIVE OF ALL TAXES AND OTHER TERMS AND CONDITIONS ARE ALSO AS PER
YOUR REQUIREMENTS.**

Yours faithfully,

Signature
Tenderer(s) Full Address.

WITNESS.....
WITNESS.....

INVITATION TO BID

1.0 Instruction to Bidders

- 1.1 Bids in separate sealed covers for each equipment super scribed with the name and number of the tender are invited on behalf of the Kerala Livestock Development Board (KLDB) Ltd., “Gokulam”, Pattom P.O., Thiruvananthapuram 695 004, Kerala, India (hereinafter referred to as the ‘PURCHASER’) from established, reputed and bonafide manufacturers, authorized agencies or experienced firms for supply, satisfactory installation and commissioning of the equipments mentioned in the notification on turn key basis, at the High tech Dairy Farm of KLD Board at Kulathupuzha, Kollam District, Kerala, India, strictly in adherence to the technical specifications given in the Annexure H of the tender.
- 1.2 Bidders are invited to study the tender document and terms & conditions carefully. Submission of tender shall be deemed to have been done after careful study and examination of the tender document with full understanding of its implications.
- 1.3 The scope of work shall include Supply, Installation, Commissioning, & Satisfactory Demonstration. This will also include testing, packing, transportation, scheduling of transportation, transit insurance, delivery at sites, unloading, storage, job site storage, insurance, installation any other services associated with the delivery of the equipment and materials providing warranty of services and operation and maintenance of other related equipment / items required for complete installation. The successful bidder will assume full responsibility of the complete system until final acceptance.
- 1.4 It will be imperative on each bidder to fully acquaint themselves with all the local conditions and factors, which would have any effect on the performance of the system. No request for the change of price, or time, schedule of delivery of stores shall be entertained, after the purchaser on account of any local condition or factor accepts the offer.
- 1.5 The bidders are required to have a survey including a site visit before furnishing the tenders. They have to apply for permission in this regard to the Managing Director, KLD Board in this regard, who will give such permission in writing, but the expenses, in connection with visit and surveys, shall be borne by the bidders themselves.

2.0 Schedule of Tender

Sl. No.	Description of equipments	Quantity	EMD (INR)	Cost of tender form (INR)
I.	MILKING PARLOUR 2 x 6, Stationary Herringbone Milking Parlour, 45/50° stalling, suitably integrated with Herd Management Software, as detailed in the technical specifications, 1.1 to 2.3.	1 no.	1,00,000	16894

II.	AUTOMATIC ANIMAL IDENTIFICATION SYSTEM i) Consisting of neck transponders including Activity readers/meters and other necessary units, suitable for integration with Herd Management Software. ii) Plastic ear tags for animal identification	400 no's 100 no's	22,000 30	3717 338
III.	HERD MANAGEMENT SOFTWARE WINDOWS based software consisting of Program CD with suitable Data Processor for PC.	1 no.	20, 000	3379
IV.	AUTOMATIC FEEDING SYSTEM - i) Feed silos, 10 cubic meter capacity each, with provision for automatic loading and conveying the feed to the feed dispenser, suitable for integration with Herd Management Software. ii) Feeding stations controlled by Herd Management Software	2 no's 4 no's	60, 000	10136
V.	TOTAL MIXED RATION (TMR) WAGON Vertical / Horizontal with weighing and digital display facility, PTO powered, with joystick control and side dispensing type – 8,10 and 12 cubic meter capacities	1 no.	20, 000	3379
VI.	MANURE SCRAPPERS / BARN CLEANERS (Suitable for Slatted Flooring) i) Rope/Chain driven ii) Robotic	4 no's 2 no's	80, 000 50, 000	13515 8447
VII.	UNDERGROUND MANURE PUMP With Tube Type Drive Shaft having Self-Agitation System with all accessories. Electrical / Tractor Mounted - 22, 30 and 37 KW.	4 no's.	20, 000	3379
VIII.	SOMATIC CELL COUNTER Mobile with all accessories	1no.	3, 000	676
IX	DIGITAL SENSORS a) Digital thermometers. b) Humidity recorders / sensors – 3 Nos.	3 no's 3 no's	3, 000 3, 000	676 676
X.	PLATFORM TYPE AUTOMATIC WEIGHING BALANCE 1.5 MT capacity, with online data transfer with Herd Management Software	1 no.	500	338
XI.	COW BRUSHES All round, animal friendly, rotating speed cow brushes Wall Mounting as well as Post Mounting type.	8 no's	16, 000	2703

XII.	WATER BOWLS /WATER TROUGHS			
	Stainless Steel 304 make, regulated with automatic level control/float system with a minimum capacity of 10 liters/minute	100 no's	5,500	1239
	Alternatively , SS 304 make water troughs, float controlled, having approximately 75 liters holding capacity and 25 to 50 liters per minute flow rate	8 no's	2, 000	451

2.0 (a) The tenderer/s should consider the items (I) Milking Parlour, (II) Automatic Animal identification System, (III) Herd Management Software, (IV) Automatic Feeding System and (X) Platform Type Automatic Weighing Balance together while submitting tenders and the rate should be quoted collectively as well as separately for each of these items.

2.1 The non-transferable Tender Documents will be sold on payment of Tender Cost mentioned above by Demand Draft /Bankers Cheque (non-refundable) drawn in favour of **Managing Director, Kerala Livestock Development Board Ltd., payable at Thiruvananthapuram, Kerala, India.**

2.2 If any overseas tenderer wish to obtain the tender documents by courier an amount of Indian Rs.500/- shall be paid extra along with the cost of the tender documents.

2.3 The non-transferable Tender document can be obtained from the office of the **Managing Director, Kerala Livestock Development Board Ltd., on or before 28.11.2009.**

2.4 Tender forms can also be downloaded from the website **www.livestockkerala.org**, in which case, the cost of the tender form in the form of DD/Banker Cheque drawn in favour of **Managing Director, Kerala Livestock Development Board Ltd., payable at Thiruvananthapuram, Kerala, India** should be enclosed along with the Technical Bid of the tender.

2.5 The sealed tenders, duly filled will be received up to 11.00 AM (local time) only on 30.11.2009.

3.0 On Site Functional Assessment

On site functional assessment of the similar installation and equipment of the short listed Bidders will be undertaken, if felt necessary by the committee duly constituted by the Purchaser.

4.0 Purchasers Right to Vary Quantities at the time of Award

The purchaser reserves the right to vary the quantities and/or split the order among the selected Bidders.

5.0 Purchasers Right to Accept any Bid and to Reject any or all Bids

The Purchaser reserves the right to accept any bid, and to annul the tender process and reject all bids at any time, without assigning any reason. Prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Purchaser's action.

6.0 Bidder Qualification

The "Bidder" as used in the tender documents shall mean one who has signed the Bid Form. The Bidder may be either the manufacturer of the equipment/material for which prices are quoted on the Price Schedule or his duly authorized representative, in which case he shall submit a certificate of authority as per Annexure-D. All certificates and documents received hereby, shall, as far possible, be furnished by the manufacturer/representative of the firm.

Minimum eligibility criteria for bidder will be as follows:

- i) The bidder shall have executed at least one work of similar nature of value equal to the cost for the equipments during the past three years
- ii) Annual turnover of the bidder for each of the past three years should be twice the estimated cost of the equipments.

7.0 Earnest Money Deposit (EMD)

7.1 All the Tenderers shall be required to pay Earnest Money Deposit (EMD) **at the rates as shown in the schedule (clause 2.0) for each item being quoted**, in the form of Crossed Demand Draft / Bankers Cheque drawn in favour of the Managing Director, Kerala Livestock Development Board Ltd. and payable at Thiruvananthapuram or a Bond/Guarantee given by any Scheduled Bank in India for an equal amount in the prescribed form given at Annexure F.

7.2 The tenders accompanied by any other form instead of Demand Draft / Bankers Cheque/ Bank Guarantee towards Earnest Money will not be considered.

7.3 Any tender, which is not accompanied by EMD, shall be summarily rejected.

7.4 EMD of unsuccessful tenderers shall be retained by the purchaser up to a period of one year from the date of opening of the Bids or till the finalization of the tender, whichever is earlier. The EMD shall be refunded to the unsuccessful tenderers on written request.

7.5 The EMD of the successful tenderer will be released on submission of a performance guarantee.

7.6 No interest shall be paid for the Earnest Money for the period during which it (the earnest money) lies in deposit with the Kerala Livestock Development Board Ltd.

7.7 The validity of the EMD should be for one year from the date of opening of the tender.

7.8 The Earnest Money Deposit shall be forfeited:

- a) If, a bidder withdraws his bid during the period of bid validity specified by the Bidder; or
 - b) In the case of the finally selected Bidder, if the Bidder fails
 - i) to sign the Contract in accordance with Clause 17; or
 - ii) to furnish Performance Bank Guarantee in accordance with Clause 11.3; or
 - iii) if, at any stage, any of the information/declaration furnished by the Bidder is found false.
- 7.9 The Earnest Money in respect of the finally selected bidder(s) will be discharged upon the Bidder(s) executing the Contract, and furnishing the Performance Bank Guarantee, pursuant to clause 11.3.

8.0 Period of Validity of Bids

Bids shall remain valid for ONE year from the date of bid opening prescribed by the Purchaser. The Purchaser as non-response may reject a bid, valid for a shorter period.

9.0 Income Tax Clearance Certificate

- a) Unless otherwise exempted, the Bidder, if assessed under the Indian Income Tax Act, shall enclose with the Technical Bid, copies of the Income Tax Returns for the past three years. Without this the Tender is liable to be rejected.
- b) The current Sales Tax Clearance Certificate shall be submitted, if Sales Tax is applicable.

10.0 Terms and Conditions of Tendering Firms

Printed terms and conditions of the Bidder will not be considered as forming part of their Bids. In case, terms and conditions of the contract applicable to this invitation of tender are not acceptable to any Bidder, he should clearly specify deviation in his Bid.

11.0 Bid Requirements

11.1 The Bidder must quote for the equipment with all items and quantities as listed under the Technical Specifications Schedule.

11.2 Arithmetical errors will be rectified on the following basis:

If there is a discrepancy between the unit price and the total unit price as declared in the Price Schedule, the unit price shall prevail and the total price shall be corrected accordingly.

If there is a discrepancy between words and figures, the amount in words will prevail.

If the supplier does not accept the correction of the errors, his bid will be rejected.

11.3 The finally selected Bidder (s) will be required to furnish Contract Performance Bank Guarantee for 10% of the Contract Price, on award of the contract as per the proforma prescribed in Annexure G, from any Scheduled Bank in India, which shall be valid till the expiry of the warranty period. The Performance Bank Guarantee should be submitted to the purchaser within thirty days from the date of acceptance of the tender. Failure to furnish Performance Bank Guarantee in time would entail forfeiture of EMD.

11.4 The Bid Documents are not transferable and the cost of the documents is not refundable under any circumstances.

- 11.5 Bids from Bidders who have not paid the cost of the tender form purchased / downloaded or Bids not accompanied by EMD or Bids from representatives without letter of Authority from the manufacturers will be summarily rejected.
- 11.6 No telegraphic/telephonic/telex/fax/e-mail tender will be considered.
- 11.7 Bidders should enclose, along with the Technical Bid of their offers, the full details including proposed configuration of offers with full documentation, descriptive literature/brochure/leaflets supplementing the description and point out any special feature of their system. All documentation is required to be in English.
- 11.8 The Bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case the person or persons signing the bid shall initial such corrections.
- 11.9 All pages of the Bid being submitted must be signed and sequentially numbered by the Bidder.
- 11.10 All information in their offer must be in English. Information in any other language must be accompanied by its authentic translation in English. Failure to comply with this may render the offer liable to be rejected. In the event of any discrepancy between the offer in a language other than English and its English translation, the English translation will prevail.
- 11.11 The Bidders should submit a SOFT COPY of the technical specification submitted by them along with the tender.

12. Bid Prices

- 12.1 IN CASE OF IMPORT, THE BIDDERS ARE REQUESTED TO QUOTE CIF VALUE.
- 12.2 The bidder shall indicate on the Price Schedule attached to these documents, the Unit Prices and the Total Unit Prices of the goods it proposes to supply under the Contract, in the following manner.
 - i) Unit CIF price for each item.
 - ii) Customs duty on per unit CIF price
 - iii) Local levies, if any, on per unit price
 - iv) Other incidental charges, if any, on per unit price
 - v) Unit price for destination
 - vi) Total unit price, for destination. Excise duties, sales tax if any included should be explicitly specified.
- 12.3 The prices quoted by the Bidder and accepted by the Purchaser shall hold good till the completion of the works/satisfactory installation and no additional claims will be admissible on account of any price variation or fluctuation in market rates.
- 12.4 Payments made consequent to any notified change in Indian customs duties, excise duties and sales tax (both increase or decrease) shall be to the Purchasers Account. For such claims of variation, the Bidder shall produce the Government notification as documentary evidence. Price variation due to any other cause shall be on Bidders account.
- 12.5 The finally selected Bidder will have to apply to the proper Government authority for grant of requisite License/Foreign exchange for such items as required and the Purchaser will only tender such assistance, as considered necessary.
- 12.6 The firm has to provide the breakup expenditure of different quoted items as well as total expenditure clearly for the system.

- 12.7 The selected bidder should make all necessary arrangements for the clearance of goods shipped / transported wherever necessary observing all legal / Government procedures.

13 Contents of Bid

The Bid prepared by the Bidder shall comprise of the following two components:

13.1 TECHNICAL BID

The Technical bid should contain:

- a) Bidders Particulars (Annexure –A)
- b) Prescribed Tender Form duly signed and sealed (Annexure –B)
- c) Bidder Profile (Annexure – C)
- d) Manufacturers Authorization Form (Annexure – D)
- e) Duly filled and signed Proforma of Guarantee for supply of spares during the post warranty period (Annexure – E)
- f) Detailed Technical Specifications of the Equipments Offered
- g) Original brochure and literature supporting the Technical Specifications Offered
- h) Inventory of spares available with the Bidder
- i) Earnest Money Deposit (as per Clause 7.1)
- j) Cost of Tender Form (in case the same is downloaded from website and not purchased against payment)
- k) List (with full contact address, telephone numbers, etc) of installations/supplies made in India.
- l) Details of service facility available in India.
- m) Compliance to payment condition
- n) Delivery/Installation period
- o) Warranty
- p) Training Details, etc
- q) SOFT COPY of the technical specification submitted by them along with the tender

13.2 FINANCIAL BID

The Financial bid should contain

- a) Price of each equipment and its accessories (in Indian Rupees) to be submitted in the company's letterhead duly signed and sealed by their authorized signatory/ies.
(Separate cover is required for each equipment Sl. No's I to XII)
- b) AMC details
- c) Price list of essential spare parts
- d) Compliance to penalty conditions.

14 Procedure for Submission of Bids

- 14.1 A TWO-COVER system will be followed for this tender for each equipment Sl. No's I to XII.

- a) Technical Bid (2 copies) in one cover
- b) Financial Bid (2 copies) in one cover

- 14.2 Each copy of the Technical Bid should be covered in a separate sealed cover super scribing the wordings "TECHNICAL BID". Each copy should also be marked as "ORIGINAL" and "DUPLICATE". Both the copies should be put in a single sealed cover super scribing the wordings "TECHNICAL BID". The tender marked 'ORIGINAL' shall

alone be considered for the purpose of evaluation. PLEASE NOTE THAT PRICES SHOULD NOT BE INDICATED IN THE TECHNICAL BID. TENDERS SUBMITTED WITHOUT FOLLOWING THE TWO BID SYSTEM PROCEDURE WILL BE SUMMARILY REJECTED.

- 14.3 FINANCIAL BIDS SHOULD BE SUBMITTED SEPARATELY FOR EACH OF THE ITEMS INDICATED IN THE SCHEDULE (ITEM I TO XII) IN SEPARATE SEALED COVERS. *However, the tenderer/s should also consider the items (I) Milking Parlour, (II) Automatic Animal identification System, (III) Herd Management Software, (IV) Automatic Feeding System and (X) Platform Type Automatic Weighing Balance indicated in the schedule together while submitting tenders and the rate should be quoted collectively also for these items in a separate sealed cover with superscription.*

Each copy of the Financial Bid should be covered in a separate sealed cover super scribing the wordings, "FINANCIAL BID". Each copy should also be marked as "ORIGINAL" and "DUPLICATE". Both the copies should be put in a single sealed cover super scribing the wordings "FINANCIAL BID". The tender marked 'ORIGINAL' shall alone be considered for the purpose of evaluation. However if the amount of any item put to tender is at variance between the Original and Duplicate, the lowest will be considered for evaluation.

- 14.4 Both the Technical and Financial bid cover prepared as above are to be kept in a single sealed cover super scribed with Tender reference and the equipment/item quoted for. The outer cover should also indicate clearly the name and address of the bidder and bear the address of the Kerala Livestock Development Board Ltd. Only one tender (in Duplicate) should be kept in a cover. In case more than one tender is kept in the cover all tenders so kept shall be liable to be ignored.
- 14.5 Each copy of the tender should be a complete document and should be bound as a volume. Different copies must be bound separately.
- 14.6 The tenders shall be sent by Registered Post with acknowledgement due/Courier/Speed Post, so as to reach the Managing Director, Kerala Livestock Development Board Ltd "Gokulam, Pattom P.O., Thiruvananthapuram – 695 004, Kerala, India, **not later than 11.00 AM (local time) on 30.11.2009**. If the tenderers or their agents in India do not propose to send the tenders by Registered Post and if they wish to hand over the tenders personally, they may do so by personally handing over the tender to the Managing Director, Kerala Livestock Development Board Ltd; "Gokulam, Pattom P.O., Thiruvananthapuram – 695 004, Kerala, India, against an acknowledgement not later than the time and date specified above. The Purchaser will not be responsible for any loss / delay in receipt of tender.

15 Opening of Bids by Purchaser

- 15.1 The technical Bids will be opened on 30.11.2009, at 3.00 PM (local time). The bids will be opened in the presence of Bidders/Representatives who choose to attend on the date and time as mentioned. The Bidders/ representatives who are present shall sign a register evidencing their attendance. The Bidders/ representatives shall furnish letter of authority from their principals to attend the bid opening.
- 15.2 Financial bids of Bidders whose bids are found technically suitable, only will be opened. The Financial bids of the short listed bidders will be opened at the Office of the Managing Director, Kerala Livestock Development Board Ltd as the case may be in the

presence of their authorized representatives, if any.(the date of opening of Financial bids will be communicated to the technically successful bidders). The decision of the sub committee on technical suitability shall be final and shall not be open for discussion.

16 Award of Contract

Prior to the expiry of the period of validity, the Purchaser will notify the finally selected Bidder (s) in writing by registered letter or fax, to be confirmed in writing by registered letter, that its bid has been accepted. If a need for extension of the bid validity period arises, it should be extended by mutual agreement. The notification of award will constitute the formation of the Contract.

17 Signing of Contract

- 17.1 At the same time as the Purchaser notifies the finally selected Bidder (s) that its bid has been accepted, the finally selected Bidder (s) shall collect the supply order from the concerned office.
- 17.2 Within 30(Thirty) days of the receipt of the supply order, the finally selected bidder (s) shall sign the Contract with the Purchaser, at the Purchasers location mentioned at Clause 14.6 above. The finally selected Bidder (s) shall bring, along with him, the power of attorney, the contract performance bank guarantee as mentioned at Clause 11.3 and common seal, etc for signing the contract.
- 17.3 Without prejudice to any legal remedy, failure of the finally selected Bidder (s) to comply with the requirement of Clause 7.8 (a) or Clause 7.8 (b) shall constitute sufficient grounds for the annulment of the award and forfeiture of the EMD, in which event the Purchaser may make the award to the next lowest evaluated and acceptable Bidder or call for new bids, as deemed fit to him.

18 Inspection and Tests

The Purchaser shall have the right to inspect and/or test the equipment for conformity to the contract specifications.

- 18.1 In case any inspected or tested equipments fail to conform to the specifications, the Purchaser may reject them and the supplier shall either replace the rejected equipments or make all alterations necessary to meet specification requirements free of cost to the Purchaser.
- 18.2 The supplier shall provide the details of the standard tests for the performance assessment of individual equipments before the delivery of the system at site.
- 18.3 The supplier shall test each individual equipment and the complete system after installation at site and prepare a test report. This shall be compared with the factory test report to ensure that there is no deterioration in the equipment parameters during storage, transportation and installation.
- 18.4 Leaflets, manuals and literature should invariably be attached for ready reference along with complete documentation of all the measurements conducted during installation period, which shall be submitted by the supplier for future reference.
- 18.5 The technical problems if any faced during installation, testing and commissioning period and their solutions shall be submitted by the supplier at the time of handing over the completed works.

- 18.6 For the purpose of taking over the equipments/system supplied pursuant to this contract, an Acceptance test shall be carried out at the Purchaser/Consignee destination site, if required. The Purchaser shall only accept the equipments that meet the acceptance test.
- 18.7a) Acceptance test at site shall be conducted of individual equipment and complete system to ensure that individual equipment and complete system meets the technical specifications and other operational and technical requirements of tender.
- b) The Purchaser shall have the right to reject any individual equipment or complete system to ensure that individual equipments if in its opinion the same does not meet technical specifications, operational or technical requirements, The decision of the Purchaser in this regard shall be final.
- c) The delivery, installation or commissioning shall not be deemed to have been completed unless all the equipments and systems are accepted by the Purchaser.
- 18.8 Before the equipment is taken over by the Purchaser/Consignee, the Supplier shall provide manuals of the equipments/systems. This shall include the following:
- i) System Interface Drawings, Wiring diagrams
 - ii) System Interconnection and Block diagrams
 - iii) User Operation Manuals
 - iv) Equipment Maintenance Manuals
- 18.9 The language of the manuals/literature/leaflets should be invariably in English and units and measurements in metric system of standards

19 Spare Parts

- 19.1 The Supplier shall undertake that supplies of necessary maintenance equipment and spare parts will be made available for all items/equipments and the complete system for at least ten years on a continuing basis. However, this does not relieve the Supplier of any warranty obligations under the Contract.
- 19.2 The Bidder shall include in his tender, the details of essential spares, their quantity and unit prices as per schedule of requirements. Detailed explanation to confirm that quantity of spares quoted as per requirement of this Clause shall be given.
- 19.3 In addition to the essential spares, Bidder shall indicate additional recommended quantities of spares for efficient maintenance of the equipment and the system for a period of five (5) years after the completion of warranty period, to ensure that the quality and reliability objective is achieved. The details on which unit price and the total cost of recommended spares is based on shall be included in the tender as an option. However, the cost of such recommended spares shall not be considered for tender evaluation.

20 Warranty

- 20.1 The supplier shall provide comprehensive onsite warranty for a period of two (2) years from the date of final acceptance of the complete system after successful and complete installation and commissioning.
- 20.2 Incremental cost (if any) for up gradation, if required should form part of the contract for the Warranty period.
- 20.3 The Supplier (manufacturer) shall set up a maintenance base to provide maintenance

- service of the entire system being offered, at short notice during the warranty period. The technical maintenance personnel of the supplier responsible for supervision and maintenance shall be available to reach the site(s) within three days notice. Any losses / damages to the purchaser/equipments/system due to failure in offering the maintenance service as per this clause will have to be born by the supplier
- 20.4 If the performance of any individual equipment or system is not satisfactory, the same shall be replaced by the supplier free of cost.
- 20.5 If it is found that to meet the performance criteria, any extra equipment is required, the same will be provided free of cost by the Supplier.
- 20.6 All faults appearing and their rectification shall be periodically advised to the Purchaser/Consignee, the period being not more than a month.
- 20.7 Any lacuna or lacunae noticed in the functioning of the installation as a result of any design feature shall be rectified by the supplier free of cost.
- 20.8 The Supplier shall fully associate the officers and technicians of the Board during installation, testing, commissioning, operation and maintenance period.
- 21 After Sales Service and Maintenance Contract**
After sales services will be provided by the supplier, during and after the guarantee period of the equipment. Details along with the yearly maintenance charges for five (5) years after warranty shall be forwarded.
- 22 Previous Installations**
The names and address of the institutions/departments where the supplier has already installed/supplied the equipment indication the dates of installations may be given (in India) along with satisfactory after sales service reports from the users.
- 23 Delivery, Installation and Commissioning**
Delivery, installation and commissioning of the equipments/system shall be completed in accordance with the terms specified in the supply order, which shall be not more than **180 (One Hundred and Eighty) days** including holidays from the date of signing the contract.
- 24 Incidental Services**
- 24.1 The supplier is required to provide Hardware and Software up gradation from time to time, at mutually agreed terms. During warranty, all software updated version / up gradations are expected to be provided at free of cost to the Purchaser.
- 25 Site Preparation & Installation**
- 25.1 The site for installation of the equipment shall be provided by the purchaser as per the required specification and environmental conditions before the installation of the system.
- 25.2 Site Plan and System Layout Plan including civil/electrical work or other related works for installation of the equipments/system shall be prepared by the supplier.
- 25.3 Earthing arrangements for all the equipments shall be completed as per standard practice.
- 25.4 Wherever required, the supplier should work hand in hand with the civil contractor engaged by the Board, for the successful installation of the equipments/systems.

- 25.5 All electrical wirings/installations such as switch boards, panel boards etc. related to the various machineries supplied / installed shall be arranged by the suppliers as per the Electrical Inspectorate norms/rules.
- 25.6 All tools/kits/inspection instruments necessary for the operation of the machinery/equipments installed shall be supplied by the supplier free of cost.

26 Termination for default & Liquidated Damages

- The purchaser may without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, terminate the contract in whole or in part
- i) If the supplier fails to deliver or install system within the time period(s) specified in the contract
OR
- ii) If the supplier fails to perform any other obligation(s) under the contract

The Purchaser may also without prejudice to his right recover damages for breach of contract or damages occurred during installation of equipments. In case the supplier fails to deliver or install the system in full within the time period specified, a sum equivalent to 2% subject to a maximum of 10% of the order that the supplier has failed to commission and install within the period fixed, shall be recovered from the supplier.

27 Use of Contract Document & Information

The supplier shall not, without the purchasers prior written consent, disclose the contract or any provision thereof, or any specification, plan, drawing, pattern, sample of information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the Performance of the Contract.

28 Property Rights

The Supplier shall indemnify the Purchaser against all third party claims of infringement of patent, copyright, trademark, license of industrial design rights, software piracy arising from use of the goods or any part thereof in the Purchaser's country

29 Payment

Invoice should be prepared in 6 (six) sets and according to the working and the details of valid Import License and purchase order. The sets will be made out as may be intimated to the supplier. The above sets of invoices with shipping invoices should be air-lifted to the buyer immediately after the shipment; and the bill of lading and the original invoice should be in the name of the Indian Bankers through which letter of credit is opened.

Payment will be made as under and if required through letter of credit:

50% of the value will be paid upon receipt of evidence that complete shipment of the consignment has been effected. 30 % of the value shall be paid after satisfactory installation/commissioning at the destination specified by the purchaser. Balance 20% of

the value shall be paid after 4 calendar months from the date of satisfactory commissioning”.

“However, the balance 20% may also be released if so desired by the supplier provided he/she furnishes a Bank guarantee from a Bank acceptable to the purchaser for the 20% value in Indian Rupees valid for a period 6 Calendar months from the date of satisfactory commissioning”.

30 Packing and Marking

Best trade packing suitable for safe Road/Rail/Air/Sea transit shall be used subject to packing and marking being acceptable to the Inspecting Authority.

- a) The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the contract. The packing shall be sufficient to withstand without limitation, rough handling during transit and exposure to extreme temperature, salt and precipitation during transit and open storage. Packing case, size and weights shall take into consideration, where appropriate, the remoteness of the goods final destination and absence of heavy handling facilities at all points in transit.
- b) The packing marking shall show the description of quantity of contents, the name of the consignee and address, the gross weight and distinctive number of mark sufficient for purpose of identification.
- c) Each package shall contain:
 - i) A packing note quoting the name of the Purchaser
 - ii) The number and date of order
 - iii) Nomenclature of the goods

Notwithstanding anything stated in this clause, the supplier shall be entirely responsible for loss, damage, deterioration and depreciation of the goods due to faulty packing.

31 Preparation And Delivery of Tender

Tender documents must be signed by the tenderers in full along with their stamp.

32 Arbitration

In the event of any dispute in the interpretation of the terms of this contract agreement /purchase order or difference of opinion between the parties on any point in the purchase order arising out of, or in connection with the agreement/ accepted purchase order or with regard to performance of any obligation here under by either party, the parties here to shall use their best efforts to settle such dispute or difference of opinion amicably by mutual negotiations, other wise the dispute would have to be adjudicated by way of Arbitration as per the laws prevailing in the state of Kerala, and/ or India,

33 **Jurisdiction**

The courts at Kerala will have the jurisdiction to try any matter, dispute or reference between the parties arising out of the contract. It is specifically agreed that no court outside and other than Court shall have jurisdiction in the matter.

34 **Force Majeure**

The terms and conditions mutually agreed upon shall be subject to the Force Majeure clause. Neither the supplier nor the buyer shall be considered default in performance of its obligations hereunder, if such failure of omission or commission arises from an act of God, which shall include all acts of natural calamities such as fire, flood, earthquake, hurricane or any pestilence or from civil strikes, hostilities, revolution, civil commotion, strikes, epidemic, accident, compliance with any statute and/or regulation of the Government, lockouts and strikes, riots, embargo or from any

political or other reasons beyond the suppliers control including war (whether declared or not), civil war or state of insurrection, beyond the reasonable control of the party affected, provided that notice of occurrence of any event by either party to the other shall be given within two weeks from the date of occurrence of such an event which could be attributed to the Force Majeure conditions.

Should one or both the parties be prevented from fulfilling his/ their contractual obligations for a period of 6 (six) months, the two parties should consult with each other regarding the future implementation of the agreement/ purchase order.

The Purchaser reserves the right to accept or reject in whole or in part any or all the bids/tenders received without assigning any reasons thereof.

35 **Termination for Insolvency**

The Purchaser may at any time terminate the contract by giving written notice to the supplier, without compensation to the suppliers, if the supplier becomes bankrupts or otherwise insolvent (which events shall of themselves be a breach of the contract on the part of the supplier), provided such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Purchaser.

36 **Termination for Convenience**

The Purchaser, may by written notice sent to the supplier terminate the contract, in whole or in part, at any time for its convenience, The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of work under the contract is terminated becomes effective.

37 **Language of Contract**

The contract shall be written in the language of the Bid (English language) as specified by the Purchaser. All correspondence and other documents pertaining to the contract shall be in English.

38 **Operation**

The supplier should depute one technical staff / Engineer for a minimum period of 2 months or till such time the staff engaged by Purchaser is trained to handle the system satisfactorily whichever is earlier. The salary/other expenses of such staff deputed shall be born by the supplier.

MANAGING DIRECTOR

SPECIAL TERMS AND CONDITIONS FOR TENDER SUBMISSION

1. The tenderer should have been in this business for a minimum period of at least five years in the field in relation to the type of equipment for which the tenders are being submitted.
2. A proof ownership/partnership etc. shall be submitted along with verification of address, telephone & fax numbers.
3. The attested copies of latest income tax returns for the past three years and sales tax certificate, if applicable, should be submitted, in the absence of which tender is liable to be rejected.
4. The tenderer should submit statement of financial standing from their bankers. The name of the bank along with full address is to be furnished.
5. The supplier should submit a statement of overall turnover for the previous three years. If applicable a copy of the applicants annual report and accounts for each of the last three years should also be submitted.
6. The tenderer is also required to submit performance report from other similar organizations where the firm is registered for supply and erection of similar projects of equipments/system. He will also submit list of organizations where the system has been installed by the firm in the last two years.
7. The tenderer has to give a certificate that the firm has not been blacklisted in the past by any institution – Government/Private.
8. The tenderer is also requested to submit authority letter from manufacturers/principals of supplying equipment without which tender will not be considered.
9. The tenderer/supplier has to give an affidavit on a non-judicial stamp paper that there is no vigilance/CBI case pending against the firm/supplier.
10. If the tenderer gives a false statement on any of the above information the firm/supplier will not be considered and their tender shall be rejected and the security deposited shall be forfeited. In case of any loss incurred on this account by the Purchaser, suitable recovery proceedings will be initiated against the supplier and the loss sustained made good.
11. The Purchaser will have the right to reject any tender without assigning any reason.
12. The manufacturer should submit all the tenders directly or through their authorized distributor provided the manufacturer accepts responsibility for any lapse on the part of distributor and authorization certificate must be enclosed.
13. Quality assurance certification like ISO 9000 series should be enclosed wherever applicable.

MANAGING DIRECTOR

(To be enclosed with Technical Bid)

Annexure - A

BIDDER PARTICULARS

- 1. Name of the Bidder :
- 2. Address of the Bidder :
- 3. Name of the Manufacturer (s) :
- 4. Address of the Manufacturer :
- 2. Name and address of the person :

To whom all references shall be made regarding this tender inquiry :

Telephone :

Telex :

Fax :

e-mail address :

Witness:

Signature

Signature

Name

Name

Address

Designation

Company

Date

Date

(Company Seal)

(To be enclosed with Technical Bid)

Annexure - B

BID FORM

Dated:.....

To,
Managing Director
Kerala Livestock Development Board Limited
Gokulam,
Pattom P.O
Thiruvananthapuram-695 004
Kerala,
India.

Sir,

Having examined the Bidding Documents of Tender No..... the undersigned offer to supply, install and commission..... and we undertake, if our bid is accepted, to complete delivery of all the items specified in the contract within weeks calculated from the date of receipt of your Notification of Award and to complete the installation, testing commissioning

Signature and Seal

.....

(In the capacity of)

Only Authorized to sign bid for and on behalf of

(To be enclosed with Technical Bid)

Annexure - C

BIDDER PROFILE

A. General Information:

(i) Location of Corporate Headquarters :

(ii) Date and Country of incorporation :

(iii) Manufacturing Facility (S)
Location

Size

Capacity

(iv) No. of Service Facility (S) in India
Location

Strength

Area Covered

(v) Average yearly turnover for last three years:

(vi) Geographical Distribution of the Supplier:
No. of Offices

Locations

Staff strength

(vii) Total No. of installations of the system offered in India.

(viii) No. of Employees

Total No. Manufacturing R&D (If any)

Hardware Maintenance

Software

B. Reference of Major installation with similar products (attach documents in support, if available)

.....Sl.No.	
Customer Name, Address	Product Description
Telephone Fax Number	(No. of Machines installed year wise)
.....
.....

Signature and seal of bidder

Date.....

(To be enclosed with Technical Bid)

Annexure – D

PROFORMA FOR AUTHORITY FROM MANUFACTURERS

No.....

Dated.....

To
Managing Director
Kerala Livestock Development Board Limited
Gokulam,
Pattom P.O
Thiruvananthapuram-695 004
Kerala,
India.

Dear Sir,

Sub:- Tender No.....

We..... an established and reputed manufacturers of
..... having factories at
And office at M/s.....hereby authorize.....
(Name and Address of the Authorized representative) to represent us, to tender, negotiate and
conclude the contract on our behalf with you against Tender No.....

No company/firm or individual other than M/s.....
are authorized to represent us in regard to this business against this specific tender.

Yours faithfully,

Signature and seal

Name.....

For & on behalf of M/s.

.....
(Name of Manufacturer/s)

Note: This letter of authority should be on the letterhead of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the manufactures.

(To be enclosed with Technical Bid)

Annexure – E

PROFORMA OF GUARANTEE FOR SUPPLY OF SPARES DURING POST WARRANTY PERIOD

To
Managing Director
Kerala Livestock Development Board Limited
Gokulam,
Pattom P.O
Thiruvananthapuram-695 004
Kerala,
India.

Dear Sir,

In consideration of the (hereinafter referred to as “Purchaser” which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assignees) having awarded to M/s..... with its Registered/Head Office at (hereinafter referred to as the “Supplier” which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assignees), a contract by issue of the Purchaser’s letter of Award No..... dated entering into a formal contract to that effect with the Purchaser on vide agreement dated (hereinafter referred to as the contract).

We the supplier hereby give a guarantee for the supply of all necessary spares demanded for the routine and emergency maintenance of being supplied by us to for a period of not less than 5 years after the warranty period of 2 (two) years and life time spares thereafter in case asked for by the purchaser.

We further clarify that the first 2 years i.e. warranty period of 2 years, we are covered by the warranty clause as mentioned. For the remaining period of 5 years and thereafter for the life time, a detailed list of spares will be supplied to the purchaser for the purpose of enabling him to decide spares needed for routine and emergency maintenance.

Dated day of 2009

Witness:

(Name of manufacturers)

Signature and Seal

(Signature)

Name :

For & on behalf of M/s.

FORM OF BANK GUARANTEE

(as per clause no. 7.1)

(on non-judicial stamp paper)

This deed of guarantee executed this Day of2009 (Two thousand and nine) by (name and address of the Bank)(hereinafter referred to as the Bank which expression shall unless the counterpart otherwise admit include its legal representatives, successors and assigns) in favour of the Kerala Livestock Development Board Ltd., "Gokulam, Pattom P.O., Thiruvananthapuram -695 004, Kerala, India, (herein after referred to as the Board which expression shall unless repugnant to the context or meaning thereof include its legal representatives successors and assigns.)

Whereas the Board has invited Tenders for the supply, installation and commissioning of equipments by an advertisement letter No..... dated. And whereas M/s submitted their tender (here -in - after referred to as Tenderer) and have agreed to deposit to the Board an amount as shown in the schedule of tender (clause 2.0) as per the terms conditions of the tender and whereas the Board is also willing to accept a bank guarantee given by any Scheduled Bank in India in lieu of payment by Demand Draft of an account equivalent to the amount of earnest money required to be deposited by the Tenderer to the Board i.e., an amount equal to as shown in the schedule of tender (clause 2.0) for which guarantee will be kept valid up to one calendar year from the date of this guarantee.

In consideration of the Board having agreed to consider the tender proposals submitted by the tenderer without depositing the amount of earnest money and against this bank guarantee, we.....(Name and address of the bank) hereby undertake to make payment to the Board the amount of Earnest money deposit or any part thereof not deposited by the Tenderer to the Board at any time (time being the essence of the contract) when the Board asks for the same as for the terms and conditions of the tender within one calendar year from the date of guarantee. The Bank further undertakes not to revoke this guarantee during its currency except with the previous consent of the Board in writing and the guarantee shall be a continuous and irrevocable guarantee up to a sum of Indian Rs.....(Indian Rupees.....Only) provided always that any indulgence or relation on the part of the Board to the said tenderer, with or without the consent of the Bank shall not prejudice or restrict remedies against the bank nor shall the same in any event by a ground of defense by the Bank against the Board.

In case the Board puts forth a demand in writing on the Bank for the payment of amount in full or in part against this bank guarantee, the bank will consider such demand by itself as a conclusive evidence and proof that the tenderer has failed in complying with the terms and conditions stipulated by the Board in its tenders and payment will be made to the Board without raising any dispute regarding the reasons for such failure on the part of the Tenderer.

The bank shall not be discharged or released from this Guarantee by any arrangement between the Tenderer and the Board with or without the consent of the bank or any alterations in the obligation of the parties or by an indulgence, forbearance shown by the Board to the Tenderer.

This Guarantee shall be in addition to and without prejudice to any other securities or remedies which the Board may have or hereafter possess against the Tenderer and the Board shall be under no obligation to marshal in favour of the bank any such securities or fund or asset that the Board may be entitled to receiving or have a claim upon and Board at its absolute discretion may vary, exchange, renew, modify or refuse to complete or enforce or assign any security or instrument.

The Bank agrees that the amount hereby guaranteed shall be due and payable to the Board, on Board serving with a notice requiring the payment of the amount and such notice shall be served on the Bank either by actual delivery thereof to the bank or by dispatch thereof to the bank by registered post at the address of the said bank. Any notice sent to the bank at its address by Registered post shall be deemed to have been duly served on the bank notwithstanding that the notice may not in fact have been delivered to the bank.

In order to give full effect to the provisions of this guarantee, the bank hereby waives all rights inconsistent with the above provisions and which the bank might otherwise as a guarantor be entitled to claim and enforce.

Notwithstanding anything contained herein before, our liability under this guarantee is restricted to Indian Rs.....(Indian Rupees Only) being the amount of the Earnest money as shown in the schedule of tender (clause 2.0) and it shall remain in force until(date).

SIGNATURE OF THE BANKER

PLACE:

DATE:

FORM OF CONTRACT PERFORMANCE GUARANTEE

(as per clause no.11.3)

(on Non –judicial stamp paper)

This Deed of Contract Performance Guarantee executed this Day of2009 (Two thousand and nine) by (name and address of the Bank)(hereinafter referred to as the Bank, which expression shall unless repugnant to the context or meaning include its successors and assigns) in favor of and the Kerala Livestock Development Board Ltd., “Gokulam, Pattom P.O., Thiruvananthapuram –695 004, Kerala, India.(hereinafter referred to as the Board which Expression shall unless repugnant to the context or meaning include its successors and assigns).

Whereas the Board has placed its order bearing no..... dated on M/s.....(name and address of the party).....(hereinafter called the SUPPLIER which expression shall unless repugnant to the subject or context include its successors and assigns) for the supply, installation and commissioning of And whereas the supplier agreed to submit a contract performance guarantee issued by any scheduled bank in India in favour of the Board as per the terms and conditions of the agreement/ purchase order for an amount in Indian Rupee equivalent to 10% (Ten percent) of the value of the contract valid for a period of 24 months from the date of the bank guarantee and to get its validity period extended by such period as may be required to cover the period of 24 months from the date of satisfactory installation and commissioning at the specified destination in India.

In consideration of the Board having agreed to place the purchase order on the supplier, we.....bank (name) hereby guarantee, undertake, promise and agree with the Board, its successors and assigns that the within named (name of the party).....(hereinafter referred to as the supplier) their successors assigns will faithfully perform and fulfill everything in the within named agreement / purchase order on their part or parts to be performed or fulfilled, at the time (time being the essence of the contract) and in the manner there in provide and willfully and promptly do all obligations there under and we further undertake and guarantee to make payment to the Board a sum of Indian Rs.....(Indian Rupees) being 10% (Ten percent) of the order value, in case if the supplier, their successors and assigns do not faithfully perform fulfill everything in the within named agreement or purchase order on their part parts to be performed or fulfilled, at the time and in the manner therein provided and do not willfully and promptly do all obligations there under

In case the supplier fails to perform or to fulfill the agreement / purchase order as per the terms and conditions agreed upon, Board is entitled to demand an amount equal to 10% (Ten percent) of the order value from the bank and the demand made by the Board itself will be conclusive evidence and proof that the supplier has failed to perform or fulfill is obligations and neither the supplier nor the bank will be entitled to raise any dispute regarding the reasons for the failure of performance or fulfillment on any ground.

We..... do hereby undertake to pay the sum of Indian Rs(Indian Rupees.....) being the amount due and payable under this guarantee without any demur, merely on a demand from the Board stating that the amount claimed is due by way of non-performance of the contractual obligations as aforesaid by the supplier or by the reason of the suppliers failure to perform the said contractual commitments / purchase order. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this guarantee. However, liability under this guarantee shall be restricted to an amount not exceeding Indian Rs.... (Indian Rupees) being the amount equal to 10% (Ten percent) of the total order value.

We....., further agree with the Board that the Board shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement/ purchase order or to extend the time performance by the said supplier from time to time or postpone for any time or from time to time any of the powers exercisable by the Board against the supplier(s) and to forbear or enforce any of the terms and conditions relating to the said agreement/purchase order and we shall not be relieved from our liabilities under the purchase order by reason of any such variation or extension being granted to the said supplier(s) or for any forbearance, act or omission on the part of the Board to the said suppliers or for any such matter or thing whatsoever, which under the law relating to sureties would, but for this provision have the effect of so relieving us.

This guarantee shall be in addition to and without prejudice to any other securities or remedies which the Board may have or hereafter possess in respect of the goods supplied and intended to be supplied and the Board shall be under no obligation to Marshall in favour of the Bank any such securities or fund or asset that the Board may be entitled to receive or have a claim upon and the Board at its absolute discretion may vary, exchange, renew, modify or refuse to complete enforce or assign any security or instrument.

The Bank agrees that the amount hereby guaranteed shall be due and payable to the Board on serving us with a notice requiring the payment of the amount of such notice shall be deemed to have been served on the bank either by actual delivery thereof to the bank or by dispatch thereof to the bank by registered post at the address of the bank. Any notice sent to the bank at its address by registered post shall be deemed to have been duly served on the bank notwithstanding that the notice may not in fact have been delivered to the bank.

In order to give full effect to the provisions of this guarantee, the Bank hereby waives all rights inconsistent with the above provisions and which the Bank might otherwise as a guarantor be entitled to claim and enforce.

We..... LASTLY UNDERTAKE NOT TO REVOKE THIS guarantee during its currency except with the previous consent of the Board in writing and the guarantee shall be a continuous and irrevocable guarantee up to a sum of Indian Rs...(Indian Rupees.....only) provided always that any indulgence shown by the buyer to the said

supplier , with or without our consent, shall not prejudice or restrict remedies against us nor shall the same in any event be a ground of defense by us against the buyer.

Notwithstanding anything stated above, liability under this guarantee is restricted to Indian Rs..... (Indian Rupees only) our guarantee shall remain in force until the supplier performs and fulfils the entire obligation as per the agreement made with him and until the goods are, as per the terms and conditions, supplied to the Board.

SIGNATURE OF THE BANKER

Place:

Date:

Annexure - H

TECHNICAL SPECIFICATIONS FOR THE EQUIPMENTS (SL. NO. I TO XII)
AS PER RETENDER NO. 2008/2009/Pr/III DT. 30.10.2009

I. MILKING PARLOUR - Total Number of Animals: 200

Type of Milking Parlour /System: 2 x 6 Stationary Herringbone Milking Parlour 45 / 50 degree stalling suitably integrated with Herd management software

Description:

The milking parlour should be complete with 12 Milking units, Vacuum line, Milk line, Wash lines and Automatic milk measurement system for milk yield recording.

The milking parlour should also include Milk Transfer system, Programmable Automatic Cleaning System, One set of Entry & Exit gates, Pit ladders on entry and exit sides, Sorting Gate and pit edging with Vacuum controlled gate operation.

1.1. Parlour Frame

Milking Parlour Frame should be animal friendly, sturdy and suitable for 12 Milking Places on both sides with Hot dip Galvanized MS 40/50 mm Pipe having Semi- Staggered/Deported Rump Rail with Splash Guard and Adjustable Breast Railing with integrated indexing for perfect positioning of animals and complete with all fittings and with Vacuum Controlled Gates.

1.2. Vacuum Pump

The vacuum pump should be belt driven/direct coupled and should have a minimum of 1600 litre/min at 50 kpa / suitable capacity with necessary safety devices and should have Manual Vacuum Regulator/Servo controlled vacuum regulation device for stable vacuum to avoid vacuum fluctuations so as to provide accurate/stable vacuum. It must have all necessary fittings like Drain valve, connecting tubes and vacuum gauge for display.

1.3. Milking Clusters

The milking parlour should provide 12 numbers of individual milk control unit with digital display and milking cluster with claw piece (minimum 240 cc, non breakable, nonwetable polypropylene material) and cluster assembly. The cluster assembly should have minimum 10 (Ten) liters/minute milk flow rate and should be having automatic cluster removal control made of SS 304. Minimum 240 ml volume of claw and one set of suitable rubber / silicone liners, milk tubes, stainless steel shells, twin pulsation tubes and other accessories should be provided for the cluster. Rates for rubber and silicone liners should be quoted separately with number of milking possible from each type of liners.

1.4. Pulsation system

Individual electronic pulsators with adjustable pulsation rate and suitable pulsation system should be provided.

1.5 Milk meters

There should be 12 nos of ICAR approved milk meters with data transfer facility to the Herd management software. The milk meter should be designed for continuous in-line weighing of the milk. Weighing should provide high accuracy of 0.2% (+) / (-) and should be independent of the air contents in the milk with digital display. Each milk meter should have suitable sampling device also.

1.6 Milk Receiver

The milk receiver should be made of SS304 and having 70 litre capacity equipped with overflow trap and suitable sanitary type milk pump for conveying the milk to the Bulk milk cooler for storage.

1.7 Bulk Milk Cooler

Two closed stainless steel sanitary type direct expansion Bulk Milk Coolers of 5000 litres capacity with inbuilt agitators each capable of cooling milk to 4°C as milk storage tank, complete with float level control, overflow sanitary tap, ring milk line, sanitary type valve and suitable sanitary type milk pump for draining of milk from the cooler should be included. The Bulk Milk Coolers should be provided with Automatic Cleaning System and digital display for milk volume and temperature.

1.8 Milk Lines

Milk pipe lines should be 40 mm size and made of SS 304 type and should have sufficient length to transport the milk from the receiver to the Bulk milk cooler and should include all necessary fittings like SS union, valves and return line for CIP cleaning.

1.9 Cleaning system

Milking parlour should be provided with fully automatic cleaning system having features like programmable cleaning time, timer controlled programmable auto start, external heater element, alarm for low water temperature and facility for flushing with pulsation for improved efficient cleaning. The cleaning system should also be capable of Cleaning in Place (CIP) of the pipelines up to the inlet of the BMC. The system should also include automatic dosing of liquid detergents, all necessary pipelines, pumps, stainless steel tanks, valves and fittings.

2.0 Udder Washing System

Three (3) numbers of udder washing system suitable for the washing of udder with jet power spray of water in parlour pit should be provided.

2.1 Teat Spray

The milking parlour should have Teat spray system for spraying disinfecting solution after milking to prevent mastitis. A total of six (6) spray guns should be provided so that one spray gun is available for every two cows. The system should be complete with all necessary lines, tubing and should include all basic units and fittings.

2.2 Gates in the milking parlour

The Milking parlour should have one Crowd Gate and one Sorting Gate with one-way selection. The crowd gate should be electrically operated and having a minimum of 8meters

width and 12 meters length. The sorting gate is meant for segregation of normal / disease animal and should be vacuum controlled and operated by the Herd management software.

2.3 Cow Mats

Twelve numbers of cow mats for cow standing area in the parlour, made of virgin rubber with reinforcement having a thickness of 15-18 mm, 6 x 4 ft. dimension and maximum weight of 45-50 kg and wide grooves on the surface. Separate rate may also be quoted for the rubber mat of same specification of continuous length.

II. AUTOMATIC ANIMAL IDENTIFICATION SYSTEM

The cow identification system should consist of suitable neck transponders for the cows and ear tags for the calves and heifers. The animal identification system should also include Activity readers/ meters for identification of cows in heat. The identification system should be integrated with the Herd management software for storing all information like feeding, breeding, health care and milk related information. The Activity metering system should include all the necessary units (Activity receiver/antennae) for monitoring the activity of the cows in the sheds through out the day. Four hundred transponders cum activity meters and One hundred plastic ear tags meant for animal identification should be provided.

III. HERD MANAGEMENT SOFTWARE

The system must consist of **WINDOWS** based software consisting of Program CD with suitable data processor for PC. The system must be equipped to connect and interlink the Software to all possible mechanized/electronically controlled activities, which should be specified by the tenderer. The software should also export any data into an ISO file for use of data exchange with other software using the ISO interface. The system must be equipped with over-voltage protection and data back up which should also be specified by the tenderer.

IV. AUTOMATIC FEEDING SYSTEM

4.1 Feed Silo

Two (2) numbers of feeding silos made of galvanized iron, each having capacity of 10 cubic meter with provision for automatic loading of feed into the silo should be provided. A suitable mechanism for automatic conveying of the feed from the silo to the feed dispenser on either side should be made available. An outlet provision for loading the feed into the TMR Wagon should also be provided.

4.2 Feeding Station

Four (4) nos. of Automatic feeding stations capable of dispensing feed in pellet or powder form controlled by the Herd Management software is to be provided for feeding of 200 cows in loose housing system.

4.3 Feed Dispenser

The main frame of the Feed dispenser should be made of GI and the manger and the ambient parts in contact with the concentrate should be made of SS304.

V. TOTAL MIXED RATION (TMR) WAGON

Vertical / Horizontal Total mixed ration mixer wagon with weighing and digital display facility. The Wagon should be PTO powered with joystick control and side dispensing type. Rate may be quoted for 8, 10 and 12 cubic meter capacities.

VI. MANURE SCRAPPERS / BARN CLEANERS (Suitable for Slatted Flooring)

Four nos. of manure scrappers are to be provided. The scrappers may be rope/chain driven. Rates may be quoted separately for each type.

Alternatively, the rates for providing two numbers of Robotic manure scrappers may also be quoted. The manure alleys have a length of approximately 85 meters and 75 meters and a width of 2 meters.

VII. MANURE PUMP

Four (4) numbers of underground manure pump, Electrically operated/ Tractor mounted, preferably with Tube type drive shaft having self-agitation system, with all accessories including electrical and tractor mounting accessories. The pump should have an approximate discharge height of 20 meters. Separate rate should be quoted for electrical and tractor mounted pumps of capacities of 22, 30 and 37 KW.

VIII. SOMATIC CELL COUNTER

One (1) number of mobile Somatic Cell Counter, with all the accessories for detecting the somatic cell count of milk.

IX. DIGITAL SENSORS

- c) Digital thermometers – 3 Nos.
- d) Humidity recorders / sensors – 3 Nos.

Three numbers each of Digital indicators for sensing maximum/minimum temperature and Relative Humidity inside the barn. The data should be integrated with the Herd Management Software.

X. WEIGHING BALANCE

One (1) Platform type Automatic weighing scale of 1.5 Ton capacity, with on line data transfer with the herd management software.

XI. COW BRUSHES

Eight (8) numbers of All round, animal friendly, rotating, speed cow brushes with automatic on off switch for wall mounting as well as post mounting type.

XII. WATER BOWLS

One Hundred (100) numbers of Stainless Steel 304 type water bowl for adult cows regulated with automatic level control/float system having a minimum capacity of 10 liters per minute. Alternatively rate for 8 nos. of SS 304 make water troughs, float controlled having approximately 75 liters holding capacity and 25 to 50 liters per minute flow rate should also be quoted.

MANAGING DIRECTOR

