



**KERALA AGRICULTURAL UNIVERSITY
AGRONOMIC RESEARCH STATION
CHALAKUDY, THRISSUR – 680 307.**

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RE-TENDER NOTICE

Sealed tenders on competitive basis are invited for the **supply and installation of a solar-powered electric fencing system** around the boundary of the **Water Management Research Unit (WMRU), Vellanikkara**. The fencing is intended to prevent trespassing and protect the area from wild animals.

Project Specifications:

- **Project Location:** Water Management Research Unit, Vellanikkara
- **Total Fence Length:** 1300 m
- **Purpose:** Protection against trespassers and wild animals
- **Power Source:** Solar-powered system with backup battery
- **Height & Design:** As per recommended standards for animal and human deterrence
- **Required Features:**
 - Shock intensity within permissible safety limits
 - Alarm system for breach detection
 - Weather-resistant and durable components

Detailed Specifications

1. Aligning the fence in the field as per the direction of project Supervisor.
2. Fixing the corner posts at an approximate distance of 50 m or in sharp turning corner points in pits of size 30 cm x 30 cm x 60 cm in hard soil consolidated by ramming gravel and jungle stone pieces, supported by support post and provide stay support using 2 feet tangle as per requirement.
3. Fixing intermediate / Tangle post at an average distance of 5 meter by fixing in RCC upto 1.50 ft, drawing the conducting wire through PP reel insulator tied to the intermediate posts using binding wire and stretching to required strength by connecting the end to strain insulators tied to the corner post in 5 strands. The height of the posts aboveground should be around 1 Meter.
4. The bottommost line at an average of 10 cm from the ground and the other strands at 20 cm, 30 cm, 50 cm, 90 cm spacing respectively.
5. Fixing wire tighter in every strand at approximate Interval of 100 m.

6. Connecting tension spring in the topmost two conductors at approximate interval of 300m
7. Fixing the Earth rod by digging the pit and filled with earthing compound and then connecting earth rod to the fence earth conductor by means of lead out cable/ht and joining clamp at 150 m interval in fence line and 2 nos earth kit done nearest to energizer earth terminal.
8. Providing gate assembly at four points as decided by the project supervisors. Rope gate set fixed to corner post acting as gate posts by means of strain insulators at fixed end and conducting hook at the detachable end providing line connection at the gate point through lead out cable laid underground.
9. Energizing the live conductors of the fence by means of the energizer fixed at the suitable locations as per the discussion with project officers along the fence connected to the live wire, earth wire by means of lead out cable providing sufficient number of earth kits in the line to the earth wire
10. Connecting the tubular battery to the energizer through 2.5 mm² single core copper cable with required sockets and connecting the solar panel to the tubular battery by means of 2.5 mm² single core copper cable through charge control unit and fixing lightning diverter in the circuit at appropriate location to protect the energizer from lightning voltage.
11. Connecting fence fault alarm horn system having range up to 1.5 km to the fence energizer and battery system.
12. Fixing stand for the solar panel and metallic box for safe storage of energizer, charge controller and battery
13. Testing the circuit for required 9.8-10 KV fence voltage and commissioning the fence installation.

Required Components:

1. **Solar Power Unit** – High-efficiency solar panel with charge controller
2. **Fence Energizer** – Capable of handling 2,300m fencing with adjustable voltage output
3. **Battery Backup** – Sufficient capacity to ensure functionality during low sunlight conditions
4. **Fence Posts** – Strong, weatherproof poles at appropriate intervals
5. **Insulators** – High-quality UV-resistant insulators for durability
6. **High-Tensile Wire** – Galvanized steel wire with high conductivity
7. **Earthing System** – Proper grounding rods for safety and efficiency
8. **Warning Signboards** – As per regulatory requirements
9. **Monitoring System** – Optional feature for real-time alerts on fence status
10. **Installation & Maintenance Support** – Ensure long-term efficiency

Tender Submission Details:

- Kindly provide a **detailed cost estimate**, including materials, labor, taxes, and any additional charges.
- **Lead time** for supply and installation.
- **Warranty and after-sales service** details.
- Previous experience in similar projects (if any).

Terms and conditions:-

1. Tender should be submitted in the prescribed form which can be downloaded from the web link: www.kau.in/tenders. The cost of tender form Rs.0.2% PAC (Rounded to nearest 100/- , Minimum Rs.400/-) + 12% GST) A Demand Draft for the amount drawn in favour of Professor & Head, Agronomic Research Station, Chalakudy payable at State Bank of India, Chalakudy and should be enclosed along with the tender. The tender cost and GST amount should be specified while submitting the tender.
2. Earnest Money Deposit (EMD) @ 2.5% of the cost of items offered may be remitted by a separate DD drawn as detailed above.
3. Agreement on Kerala Stamp Paper for Rs.200.00 (Form of Agreement can be downloaded from the website <http://www.kau.in/tenders> under the related documents section.
4. Tenders received late or incomplete in any respect will be summarily rejected without notice and the decision of the undersigned on such matters will be final.
5. Successful tenders will have to execute an agreement and remit security deposit @5% of the value of the articles ordered, less the amount of EMD, drawn as DD or fixed deposit receipt.
6. The sealed cover containing the tender documents should be superscribed "Tender for Solar fencing" and sent to the Professor & Head, Agronomic Research Station, Chalakudy, Koodapuzha, -680307.
7. Supply some items immediately and others at a later period are not acceptable. The supply has to be made in a period of one week from date of placement of order. The lowest tender will be identified based on the lowest cumulative total of all the items taken together for the above said quantity.
8. The rate quoted should be inclusive of all charges including GST if any and also connected expenses if any the transportation cost also should be included in the rate.
9. The rate will be valid for the financial year 2025-26. The payment will be through invoice/credit bill system and by cheque only.
10. The tender should be in the sealed cover and to reach the undersigned on or before 10.03.2025 at 2.00 pm. Late tenders will be rejected.
11. The tender will be opened at 2.30 pm on the same day in the presence of those who are present at that time. The lowest rate will be accepted if reasonable.
12. The decision of the Professor & Head, Agronomic Research Station, Chalakudy, will be final and abiding.
13. The undersigned reserves the authority to accept or reject any or all the tenders without assigning any reason.
14. All office code rules of tenders will be applicable in this case too.

