**Tamil Nadu Agricultural University**
Coimbatore – 641 003

Dr. M. Rajavel, Ph.D.,
Public Relations Officer
Mobile: 97903 47444

Phone: 0422 - 6611302
Fax: 0422 – 2431821
E-mail: pro@tnau.ac.in

To

The Editor,

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Sir,

I request that the following message may kindly be published in your esteemed daily:

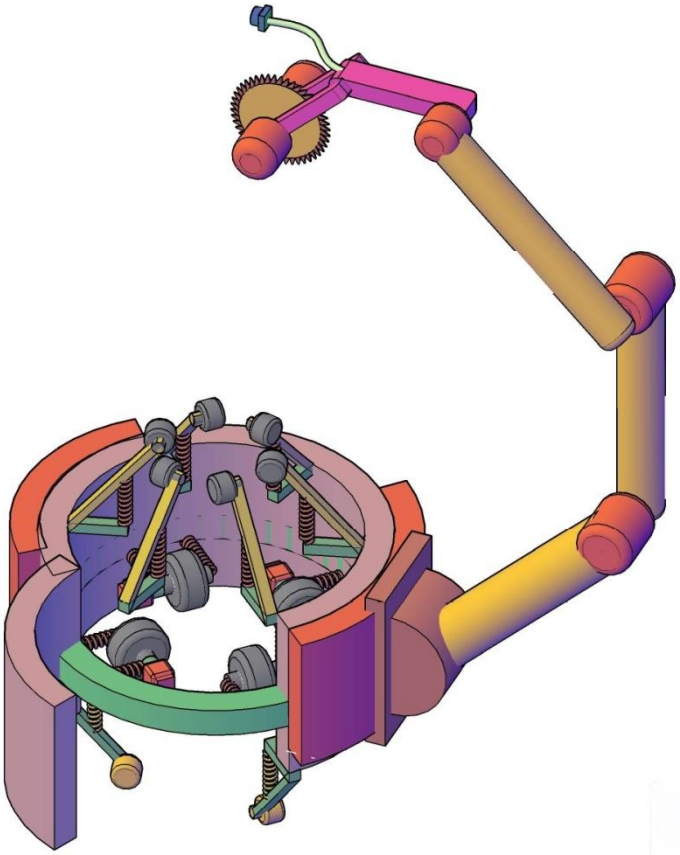
## TNAU receives a design patent for

## Remote control operated tree climber and harvester

A design patent for **remote control-operated tree climber and harvester** has been granted to the Tamil Nadu Agricultural University. The Office of the Controller General of Patents, Designs and Trademarks under the Union Ministry of Commerce and Industry granted it.

The Vice-Chancellor, TNAU expressed appreciation for the efforts made by the patentees to obtain this patent and gave the patent certificates to patentees in the presence of Dr N. Senthil, Dean (SPGS), Dr A. Raviraj, Dean (Agricultural engineering), Dr N. Natarajan, Co-Ordinator (Patent Cell), Dr N.O.Gopal, Professor and Er. G. Vanitha, Assistant Professor, Office of the Dean, School of Post Graduate Studies.

This invention consists of tree climbing and harvesting. The climbing unit consists of a circular frame to which rubber wheels are attached with exclusively designed telescopic spring which helps in adjustment of the unit according to the girth of the tree. The wheels are driven by DC stepper motor to operate with more torque. Guide wheels are provided above the drive wheels for additional support and stable climbing. A braking system is provided in the climbing part with ratchet mechanism. The harvesting unit consists of three linkage arm which is operated by servo motors to provide high stall torque. The circular saw blade and camera module are attached at the end of the arm. A circular saw blade is used for cutting the fruit bunch. A camera module is provided to view the Coconut/Palmyra for its maturity and position. The power source for all the motors is from rechargeable Lithium-ion battery. A wireless interface is used to control the system with a remote. The signal is transmitted through the RF (Radio Frequency) transmitter to the climber and received via a RF receiver mounted on the climber. The microcontroller processes the signal which controls climbing followed by harvesting.



**Public Relations Officer**