TAMIL NADU AGRICULTURAL UNIVERSITY

O/o the Registrar TNAU, Coimbatore

No. TNAU /VC-Review/Dean, AEC &R I/ AMRC/2020-21/No.92-I / 2020 dt.30.11.2020

PROCEEDINGS

Sub: TNAU - Vice-Chancellor's review on 21.11.20 at AMRC, Dept. of Farm Machinery and

Power Engineering - Proceedings – issuance – regarding.

Ref: This office earlier proceedings No. 92 dt. 20.05.2020.

The Hon'ble Vice-Chancellor visited the Agricultural Machinery Research Centre, Department of Farm Machinery and Power Engineering along with Dr. B. Shridar, Dean (Agrl. Engg.) to witness the operation of the engine operated coconut tree climber on 21.11.2020.

- **A.** During the visit, the engine operated coconut tree climber and TNAU manually operated coconut tree climber were demonstrated. The following modifications were suggested to ensure the safety of the operator while using the engine operated coconut tree climber.
- i. Operators' seat support
- ii. Positions of the leg support
- iii. Position of the operating lever
- iv. Improvement of clutch mechanism
- v. Providing half helmet to the operator

The necessary modifications need to be carried out either in collaboration with M/s.Mabens Engineering Solutions, Shimoga, Karnataka, the supplier of the Engine operated tree climber or with the Agricultural Machinery Manufacturers Association (AMMA), Tamil Nadu Chapter after getting approval from the supplier.

The existing knob system for locking the tree climber to the tree has to be replaced with quick locking mechanism in the TNAU manually operated model coconut tree climber for easy mounting of the unit with the trees.

B. The following machinery/implements were displayed

Two row planter for tissue culture banana, mini tractor operated corn cob harvester, Self propelled corn cob harvester, mini tractor operated groundnut harvester, motorized knapsack sprayer boom attachment for fall army worm, battery operated variable rate granular applicator, pneumatic precision planter and 4WD riding type rice transplanter.

The video clippings on mechanized cultivation fields established by the Department were screened.

S. No.	Crop	Location
1	Sugarcane	Eastern Block, Coimbatore
2	Paddy and Groundnut	ARS, Bhavanisagar
3	Cotton	Department of Cotton, Coimbatore

- ❖ The CNC lathe transferred from AEC&RI, Kumulur was demonstrated.
- ❖ The preparation of drawings of the research prototypes in 3 D software was explained.

Remarks of the Vice-Chancellor

- The video clippings of mechanization of different crops may be screened with suggested modifications before the commencement of Scientific Workers Conference 2020 to the Director, Department of Agriculture and Chief Engineer, Agricultural Engineering Department, Tamil Nadu and Commissioner of Sugars for obtaining feedback (Action: Professor and Head, Dept. FM&PE and the Dean (Engg.)).
- Photos and videos may be taken by engaging the professionals for better quality.
- Intercultural operation in Banana field at College Orchard may be carried out by utilizing mini
 tractor operated weeder cum earthing up machinery (Action: Professor and Head, Dept.
 FM&PE).
- Similar to the demonstration of sugarcane machinery conducted at M/s.Kothari sugars and Chemicals Ltd., Trichy, demonstrations may be organized in collaboration with M/s. Bannariamman sugars Ltd., Sathyamangalam.
- Two units of motorized knapsack sprayer with boom attachment may be supplied to Maize Research Station, Vagarai and ARS, Bhavanisagar (Action: Professor and Head, Dept. FM&PE).
- Two Skilled Artisans Grade I (turners) from the scheme AICRP on FIM may be trained on the operation of CNC lathe for effective utilization of the same (Action: Professor and Head, Dept. FM&PE).

Action taken may be reported regularly.

(By order of the Vice-Chancellor)

To The Professor and Head, Dept. of Farm Machinery and Power Engineering

CC: The Dean, AEC&RI, TNAU, Coimbatore/Dean, HC &RI, Coimbatore / Director of Research / Professor and Head, Fruit Crops, HC & RI, Coimbatore

The TPO to VC for necessary follow up