

## Awards and Honours



### Awards and Honours

- The Indian National Academy of Engineering (INAE) Award for 2005 for best Doctoral Research Work.
- Research and Innovation in Energy Conservation Award for 2005 by Govt. of Kerala.
- Commendation of Govt. of Kerala for Technology popularization activity in Energy Conservation for 2007.
- One of the scientists availed NUFFIC Fellowship in the year 2006 by Govt. of Netherland.
- Best Course Director Award of the Directorate of Extension for the year 2006-07.
- One of our scientists received the Norman E. Borlaug International Agricultural Science and Technology Fellowship, awarded by USDA for the research on "Food safety and Quality".

### On-Going Externally Aided Projects

1. AICRP on Farm Implements and Machinery, funded by ICAR - from 1980 onwards
2. AICRP on Post Harvest Technology funded by ICAR
3. Precision Farming Development Centre (PFDC) sponsored by the National Committee on Plasticulture Applications in Horticulture (NCPAH)
4. Central sector scheme on Post Harvest Technology & Management funded by Govt. of India.
5. HRD creation of infrastructure facilities funded by Ministry of Food Processing Industries, Govt. of India - Total outlay Rs. 32.25 lakhs
6. Development of Innovative Farm Mechanization (DIFM) Package for Kerala - State Planning Board, Govt. of Kerala - 300 lakhs
7. Development of a rotary banana slicer- KSCSTE funded project - 2.64 lakhs
8. Development of Decision Support System Software for Cereals, Millets, Pulses and Tuber crops & establishment of an Agricultural Digital Information centre funded by Department of Scientific & Industrial Research, Technology, New Delhi - Total outlay Rs. 11.8 lakhs.
9. Strategies for sustainable watershed development for ErnadTaluk funded by Ministry of Rural Development - Total outlay Rs. 18.15 lakhs-completed.

10. Evaluation and Standardization of a micro sprinkler developed by Sri. Avaran funded by KSCSTE - Total outlay Rs. 2.85 lakhs-completed in 2010-11.
11. Adhoc research scheme FPM&E (3 Years) Rs, 300 Lakhs
12. Adhoc research scheme(18months) Rs, 2.64 Lakhs

#### Faculty contribution

The faculty has offered significant contributions to the agricultural sector of Kerala and to benefit the farming community .The members of the faculty are constantly in touch with the farming community to solve the problems associated with agriculture and allied fields. The services of the various faculty members are regularly made available to Govt., Cooperative, Public and private sector undertakings for solving their problems related to agriculture engineering.

Some of the highlights of the research achievements of the faculty are listed below.

- Introduced efficient and economical rice transplanter first time in India
- Introduced walk behind paddy reapers in Kerala
- Introduced and evaluated mini tillers for different climatic zones of Kerala
- Popularized Combine harvesters in Kerala

#### Developed technologies like:

1. An aerobic high rate reactor for energy production from Cassava Starch factory effluent
2. A solar cum biogas powered light trap
3. A tractor operated helical blade tool
4. A garden transplanting tool
5. A power tiller operated bed former
6. A Coconut Husking Tool
7. A Tender Coconut Punch
8. An Areca nut Husking Tool
9. A Soil Countersinking Attachment
10. A Cashew nut Decorticator
11. A Tender Coconut Splitter
12. A 'Jab-type' Dibbling Mechanism
13. A Black Pepper Thresher
14. An Improved Fruit Pluckier
15. A Papaya Plucker
16. A cryogenic grinder for pepper
17. A hand operated brush type ginger peeling machine
18. A black pepper decorticator
19. A power operated axial flow seed extractor
20. A power operated ash gourd seed extractor
21. A modified atmosphere storage technique for fruits using controlled ventilation system
22. An alternate material for Rubber rolls in rice milling industries
23. A multi fruit grader
24. Fabricated inclined draper for separating cereals based on roundness
25. Fabrication of a USG Applicator for rice fields
26. Mini reaper
27. Modified Tractor mounted 2.2 m paddy reaper
28. Paddy reapers for Mitsubishi and Kubota power tillers.

29. Two-dozen KAU paddy reapers were used in Kerala farms
  30. The Japanese Yanmar, Korean LG, Chinese Yanji riding type transplanters, Korean Tong Yong, Kukje and Asian walk behind transplanters were successfully evaluated/demonstrated first time in Indian fields.
  31. Self- propelled 8 row paddy transplanter was successfully demonstrated ever first in Indian fields.
  32. A low cost crank and oscillating link mechanism for delivering paddy seedling in paddy transplanter was successfully developed using a unique spring supported inertial mechanism.
  33. The IRRI 5 row and 6 row rice transplanters and power tiller mounted transplanters were developed/evaluated. The technique of raising mat seedlings for different soils and seasons was standardized.
  34. A technology for improving acid sulphate soils through controlled drainage was generated
  35. A technology for increasing the productivity and profitability of Kari Lands developed through different farming system integration.
  36. Pineapple peeler cum slicer, ash gourd seed extractor, fruit grader, axial flow tomato seed extractor, cassava peeler, cardamom polisher, KAU pepper thresher, potato slicer, nutmeg dryer, ginger peeler and KAU pepper cleaner cum grader.
  37. Technologies for preservation of banana and its products, products and value added products from rice, minimal processing of pineapple bits, production of dried oyster mushroom, RTE fabricated food and product diversification of jackfruit were developed.
  38. Strategies for sustainable watershed development for Ernad Taluk were formulated and it was a project funded by Ministry of Rural Development with a total outlay Rs. 18.15 lakhs.
  39. Evaluation and Standardization of a micro sprinkler developed by Sri. Avaran, a progressive farmer , funded by KSCSTE was done with a total outlay Rs. 2.85 lakhs
  40. The Precision Farming Development Centre (PFDC), sponsored by the National Committee on Plasticulture Applications in Horticulture (NCPAH) has already made pioneering studies on the use of Plastics in drip irrigation, mulching, low tunnel etc suitable to Kerala conditions.
  41. A Scientist of this college has written a book entitled "Wind Energy: Fundamentals, Resource Analysis and Economics"- Published by Springer Verlag, Germany
  42. Scientists of this faculty working on agricultural drainage have published a book entitled "Drainage Digest" a multi colour technical publication based on two decades of research at the Karumady Centre of the Kerala Agricultural University (200 Pages)
-