

43rd Annual Report

(2013 - 2014)



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COIMBATORE - 641 003

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Introduction



1. INTRODUCTION

Tamil Nadu Agricultural University is focusing its activities in six major domains such as; Agricultural Education, Agricultural Research, Agricultural Extension Education, Agri business Development, supporting youth by Open and Distance Learning Programmes to attract and retain them in agriculture and Agricultural Policy support to meet the Global challenges of food production. The major initiatives are; (1) Promoting sustainable increase in agricultural production through soil quality assessment and management, (2) Weather and price information based decisions by farmers on crop choices and crop husbandry activities to make agricultural production to be market driven and cost efficient to stand competition, (3) Use of integrated crop management practices such as; Integrated Nutrient Management, Integrated Pest Management, Integrated Weed Management to make agriculture sustainable, (4) Mechanization of farm operations, (5) Integrated Farming System and Organic Farming to augment income of farmers and conserve natural resources particularly in fragile areas such as; dry lands and eroded soils and hill areas and (6) ramping up agricultural extension for quick, inclusive and effective reach of information on technology and farmer assistance development programmes.

Agricultural Education

At National level, Tamil Nadu Agricultural University is recognized as one of the premier institutes among the Agricultural Universities. The courses, structured considering the changing scenario, the growth needs and the

scientific developments, are offered through its 11 constituent colleges and nine affiliated colleges.

Three new private Agricultural Colleges were established during 2013-14, at Thuraiyur, Namakkal and Boothalur (Thanjavur) with affiliation to Tamil Nadu Agricultural University. Tamil Nadu Agricultural University has offered 13 Under Graduate programmes, 35 Masters degree and 26 Doctoral degree programmes.

During the year, 2013, i) M.Sc.(Ag.) in Molecular Plant Breeding, ii) Integrated Ph.D. in 26 disciplines, iii) External Ph.D. in Agronomy, Agricultural Entomology, Genetics, Soil Science and Microbiology were started. B.Tech in Food Science and Technology was started at Indian Institute of Crop Processing Technology (IICPT), Thanjavur with affiliation to Tamil Nadu Agricultural University.

During the year 2013-14, the number of Students admitted to Under graduate, Postgraduate and Doctoral programmes were; 1921, 449 and 135, respectively.

The Directorate of Students' Welfare (DSW) of the Tamil Nadu Agricultural University (TNAU), Coimbatore, is the hub providing career counseling and job placement for students. TNAU has an "Overseas Employment Unit" to facilitate graduates to get placement in organisations abroad. A state-of-the-art 'Communication Laboratory' is also available to improve the soft skills and employability of the graduates.

This Directorate facilitated students by providing coaching on Graduate Record Examination (GRE), Test of English as Foreign



Language (TOEFL) and International English Language Testing System (IELTS) and guidance to pursue higher studies abroad. During 2013-14, 112 students were placed in Agro Industry, Seed Industry, Food Industry, Fertilizer Industry, Non Government Organisations, Plantations and Banking sector.

Tamil Nadu Agricultural University is offering many correspondence courses through the Directorate of Open and Distance Learning. At present, one Diploma programme, five Postgraduate diploma programmes, three Postgraduate degree programmes, 16 Certificate courses besides, one Bachelor degree - B. F. Tech. (Bachelor of Farm Technology), to benefit farmers and rural youth are offered. The number of candidates enrolled in 2013-14 is; 392 in certificate courses, 60 in Postgraduate degree programmes and 12 in Postgraduate diploma programmes besides, 253 in B.F. Tech course.

In TNAU Library, a total of 7.80 lakh pages of valuable documents (rare books, theses, back volumes, annual reports, etc.) have been digitalized for the use of students and scientists, through the NAIP-ICAR Project on Strengthening of Digital Library and Information Management (e-Granth). All these contents are made available in the Digital Repository of Krishikosh and could be referred by anybody at any time.

Agricultural Research

Newly released Varieties / Hybrids and Farm machinery

In the year 2014, Tamil Nadu Agricultural University through the research work carried out at 11 constituent colleges and 38 research stations and On farm testing, Assessment and

Refinement of technologies through its 14 Krishi Vigyan Kendras has released; (A) four varieties / hybrids viz., (1) Rice TPS 5, Blackgram MDU 1, Fodder sorghum Co 31, Butter pear Ooty 1 and (B) one agricultural implement, viz., (1) Tractor operated single row / two row cassava harvester for the benefit of farming community.

The National Variety Release Committee has notified the release of following six crop varieties at National Level during 2013 (as per the information received recently); (1) Maize hybrid COH (M) 7, (2) Maize hybrid COH (M) 8, (3) Maize hybrid COH (M) 9, (4) Maize hybrid COH (M) 10, (5) Kodomillet variety TNAU 86 and (6) Guinea grass CO (GG) 3.

The Food Processing Research and Training Institute was established at Chettinad in Sivagangai district during January 2014.

New technologies developed for increased yields

In groundnut, seed treatment with Sulphur Oxidizing Bacterial (SOB) inoculant @ 1 kg/ha with Rhizobium @1kg/ha was standardized. This along with basal application of gypsum @ 400 kg/ha and soil application of SOB @ 5 kg / ha on 45th day after sowing enhanced the yield upto 21.0%. Development and standardization of rooting mixture for raising sugarcane chip bud seedling under Sustainable Sugarcane Initiative (SSI) technique were made. Standardization of nursery techniques for quality seedling production in 'White Kadamba' tree was made. Mini clonal technology for mass multiplication of Casuarina was developed. Mixed inoculants like Azophos and Azophosmet for supply of N, P and growth hormones were standardized for application to different crops. Formulation, dosage, method of application



and feeding schedules of liquid biofertilizer were developed for precision farming system. Nutrient management for cotton under drip fertigation system was standardized. Long term experiment on STCR-IPNS technology revealed that yield increase over blanket recommendation was 25.0 per cent and 21.8 per cent during Kharif and Rabi season, respectively, in rice – rice cropping system. Irrigating groundnut with micro-sprinkler registered the maximum yield of 2844 kg/ha followed by sub-surface drip irrigation method (2655 kg/ha). Application of NPK at 17:34:51 kg /ha with 50 per cent P and K as basal as straight fertilizer and the balance P and K and full N as water soluble fertilizer registered increased pod yield (2685 kg/ha). Sub-surface drip fertigation system in maize - cotton - maize sequence was standardized. Pruning for high density planting in Alphonso mango, cashew, cocoa and defoliation in palmyra were standardized. Advanced rice breeding lines (ASD 16, ADT 43 and IR 64) expressing pro-vitamin A, are in the developmental stage. Precision production technology package for jasmine, marigold and carnation such as; spacing, enriched media consortia, fertigation schedules, spraying of bio-stimulants and micro nutrients, integrated and eco-friendly pest and disease management were standardised. Rice varieties Co 43 and ASD 16 were improved for bacterial leaf blight and drought resistance. 'High solid content fixed dome' type biogas plant for power generation in dairy units was developed. Pod breaker (capacity 230 kg/hr and at a cost of Rs. 5,000), drier for cocoa, cassava harvester and paddy seeder were developed. Farm machineries such as; weeder for maize and cotton, centrifugal dehuller for

small millets, combine harvester for groundnut and tractor operated fertilizer dibbler for ratoon sugarcane were developed.

During the year 2013-14, four inventions were filed for patent rights.

Agricultural Extension

Transfer of Technology programmes were taken up through the 14 Krishi Vigyan Kendras. Totally, 71 On Farm Testing (OFT), 174 Front Line Demonstrations (FLD) of newly released varieties and technologies were conducted, besides, 4281 trainings to extension officers, rural youth and SHG members and 13413 farm advisory were issued.

The National Initiative on Climate Resilient Agriculture (NICRA) project has been sanctioned to Villupuram, Nagapattinam and Ramanathapuram Krishi Vigyan Kendras.

The TNAU Agri-Tech portal holds around six lakh pages in Tamil and English with multimedia content. The Portal <http://agritechportal.tnau.ac.in>) has been dedicated for the benefit of field extension officials, farmers and other stakeholders. During the past three years, the portal was used by 21.59 lakh users. During the year 2013-14, the daily users ranged from 2783 – 5126. New users numbered between 1340 and 2550, a day. The e-mail queries received were 65,000. Through the 'e-Velanmai' programme the field problems of Tamil Nadu farmers were addressed. Field Co-coordinators facilitated the technology transfer between scientists and farmers using photos, ICT tools such as; computers, internet and mobile phones. During the year, 6700 beneficiaries received 11279 advisory on their crop problems.



For the first time, Regional Agricultural Melas were conducted at Agricultural College and Research Institute, Madurai on 07.12.2013, Agricultural College and Research Institute, Killikulam on 02.01.2014 and Tamil Nadu Rice Research Institute, Aduthurai on 10.01.2014. Totally, 10,500 farmers visited the exhibitions and participated in the intreractions and seminars organised in these Melas. For the first time, Farmer-Teacher awards were instituted in these Melas and 8 progressive farmers were honoured. For the use of farmers visiting Tamil Nadu Agricultural University, Coimbatore, battery operated two wheelers were introduced in January 2014 for the mobility inside the campus and to see the various facilities and demonstrations laid.

Weather and Market Price related technological advisories

The Agro Climate Research Centre (ACRC) is making medium range forecast on the basis of weather parameters obtained from the Automatic Weather Stations for the benefit of farmers of Tamil Nadu to take crop husbandry decisions under weather based farming. Yield increase in different crops ranged between 8 - 15 % and farm income increased by 10 – 18 % by practicing weather based farming.

The Domestic and Export Market Intelligence Cell (DEMIC) provides forecasts of prices of agricultural produces before sowing and prior to harvest. This helps farmers to decide the area of cultivation and take decisions on whether to store the produce or sell immediately.

Seed production

Tamil Nadu Agricultural University is involved in the production and distribution of

various classes of seeds in varieties of principal crops. Breeder seeds are utilized for further multiplication in seed supply chain as foundation and certified seeds by the Government and private agencies which takes two years and distributed to farmers. Similarly, the foundation seeds are produced and multiplied as certified seeds within a year and distributed.

During 2013-14, a total quantity of 1598 quintals of breeder seeds in 108 varieties, 4155.23 quintals of foundation seeds in 53 varieties, 3189.08 quintals of certified/TFL seeds in 108 varieties of principal crops and 26.46 lakh planting material for various crops were produced and distributed.

In order to facilitate the consumers easy access of the flower crops / vegetables crop seeds round the clock, an “Automatic Seed Vending Machine” (ASVM) was installed in January 2014 at Tamil Nadu Agricultural University, Coimbatore.

Bio inputs and Plant growth promoters

To enhance crop yields, production and supply of bio-control agents such as; *Trichoderma viride*, *Pseudomonas fluorescence*, crop growth boosters such as; coconut tonic, maize maxim, pulse wonder, groundnut rich, cotton plus, sugarcane tonic were taken up to increase the farm productivity.

National Agricultural Development Programme

Tamil Nadu Agricultural University, during the year 2013-14, implemented the following five projects with an outlay of Rs.360 lakhs through the National Agricultural Development Programme:



- Demonstration of synchronized maturing pulses varieties with key technologies and mechanisation for higher productivity
- Promotion of quality seed production in green manures
- Enhancement of productivity and quality in grapes through Hi- tech management practices
- Demonstration of Direct Seeded Rice (DSR) in dry and puddled conditions to enhance productivity in selected districts of Tamil Nadu.
- Establishment of back office at Tamil Nadu Agricultural University to interface with e-Resource division of Agro Marketing Intelligence and Business Promotion Centre, Trichy.

Under Part-II Plan schemes, six schemes including, enhancing the productivity and value addition of millets and establishment of an Insects Museum with a total outlay of Rs. 153.27 lakh were taken up with the State budget.

The World Bank funded TN-IAMWARM project has been implemented in 63 river basins with an outlay of Rs. 905.29 lakh. During 2013-14, System of Rice Intensification (1030 ha), Semi dry rice (60 ha), Groundnut (110 ha) Precision farming (86 ha) and Maize production technology (150 ha) were demonstrated. Rice fallow pulses demonstration was taken up in 1020 ha.

Opening of new buildings (Rs.783.39 lakhs) and laying of foundation stones (Rs.1121.20 lakhs) for new buildings at various research stations of Tamil Nadu Agricultural University was made through video conferencing by the Hon'ble Chief Minister of Tamil Nadu on 19.02.2014.

The various activities and achievements of Tamil Nadu Agricultural University during the year 2013-14 are compiled and presented in this Annual Report in eight chapters.



University Administration



2. UNIVERSITY ADMINISTRATION

Chancellor	His Excellency the Governor of Tamil Nadu Thiru K.Rosaiah 01.04.2013 to 31.03.2014
Pro-Chancellor	Hon'ble Minister for Agriculture, Government of Tamil Nadu Thiru S. Damodaran 01.04.2013 to 31.03.2014
Vice-Chancellor	Dr. K. Ramasamy Vice-Chancellor 01.04.2013 to 31.03.2014

University Officers

S.No.	Designation	Name	Period	
			From	To
1.	Registrar (i/c)	Dr. P. Kalaiselvan	01.04.2013	30.06.2013
		Dr. R. Rabindran	01.07.2013	31.03.2014
2.	Dean,	Dr. A. Rajarajan	01.04.2013	30.06.2013
	Agricultural College and Research Institute, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr. S. Mahimairaja Dean (i/c)	01.07.2013	31.03.2014
3	Dean, School of Post Graduate Studies, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr. C. Udayasooriyan	01.07.2013	31.03.2014
		Dr.S. Mohan Dean (i/c)	01.04.2013	30.06.2013
4.	Dean, Horticultural College and Research Institute, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr. N. Kumar	01.07.2013	31.03.2014
		Dr. S. Mariappan Dean (i/c)	01.04.2013	30.06.2013
5.	Dean, Agricultural Engineering College and Research Institute, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr. S. Santhana Bose	01.07.2013	31.03.2014
		Dr. C. Divakar Durairaj, Dean (i/c)	01.04.2013	30.06.2013
6.	Dean (i/c), Agricultural College and Research Institute, Madurai – 625 104.	Dr. SP. Sundaram	01.07.2013	31.07.2013
		Dr. C. Chinnusamy,	01.08.2013	31.03.2014



7.	Dean, Home Science College and Research Institute, Madurai – 625 104.	Dr. P. Banumathi	01.04.2013	30.06.2013
		Dr. G. Pushpa Dean (i/c)	15.07.2013	31.03.2014
8.	Dean, Agricultural Engineering College and Resarch Institute, Kumulur, Tiruchirappalli – 621 712.	Dr. A. Tajuddin	01.04.2013	30.06.2013
		Dr.K. Ramasamy Dean (i/c)	01.07.2013	31.03.2014
9.	Dean (i/c), Agricultural College and Research Institute, Killikulam, Vallanadu, Thoothukkudi - 628 252.	Dr.M. Ariyavanam katha Pillai	01.04.2013	30.06.2013
		Dr. V. Subramanian	01.07.2013	31.03.2014
10.	Dean, Horticultural College and Research Institute, Periyakulam – 625 604.	Dr. V. Ponnuswamy	01.04.2013	30.06.2013
		Dr.R.Sankaranarayan Dean (i/c)	01.07.2013	31.03.2014
11.	Dean, Anbil Dharmalingam Agricultural College and Research Institute, Tiruchirappalli – 620 009.	Dr. V. Jayabal	01.04.2013	30.06.2013
		Dr. P. Pandiyarajan Dean (i/c)	01.07.2013	31.03.2014
12.	Dean, Forest College and Research Institute, Mettupalayam – 641 301.	Thiru P. Durairasu,	01.04.2013	31.03.2014
13.	Director of Research (i/c), Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr. M. Maheswaran	01.04.2013	31.03.2014
14.	Director (i/c), Crop Management, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr. K. Velayutham	01.04.2013	31.03.2014
15.	Director, Centre for Plant Breeding and Genetics, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr. K. Thiyagarajan	01.04.2013	30.04.2013
		Dr. AR. Muthiah Director (i/c)	01.05.2013	30.06.2013
		Dr. C.R. Ananda Kumar Director (i/c)	01.07.2013	31.03.2014
16.	Director, Centre for Plant Molecular Biology and Bio-technology, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr. P. Sivasubrmanian	01.04.2013	30.06.2013
		Dr.R. Chandrababu, Director (i/c)	01.07.2013	31.03.2014



17.	Director, Centre for Agricultural and Rural Development Studies, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr. N. Ajjan	01.04.2013	30.06.2013
		Dr. M. Chinnadurai Director (i/c)	01.07.2013	31.03.2014
18.	Director, Water Technology Centre, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr. S. Chellamuthu	01.04.2013	30.06.2013
		Dr. B.J. Pandian, Director (i/c)	01.07.2013	31.03.2014
19.	Director, Agri Business Development, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr. P. Sivasubramanian	01.04.2013	30.06.2013
		Dr. R. Murugesan Director (i/c)	01.07.2013	31.03.2014
20.	Director of Extension Education (i/c), Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr. K.A. Ponnusamy	01.04.2013	31.03.2014
21.	Director of Students Welfare, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr. T. Rathakrishnan	01.04.2013	30.06.2013
		Dr. N.Ragupathi Director (i/c)	01.07.2013	31.03.2014
22.	Director (i/c), Open and Distance Learning, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr. P. Santhy	01.04.2013	31.03.2014
23.	Director, Planning and Monitoring, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr. G. Kathiresan	01.04.2013	30.06.2013
		Dr. M. Chandrasekaran Director (i/c)	01.07.2013	31.03.2014
24.	Director, Tamil Nadu Rice Research Institute, Aduthurai – 612 101.	Dr. T. Jeyaraj	01.04.2013	30.06.2013
		Dr.R.Rajendran Director (i/c)	01.07.2013	31.03.2014
25.	Controller of Examinations, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr. A. Chandrasekaran	01.04.2013	30.06.2013
		Dr.K. Illamurugu Director (i/c)	01.07.2013	31.03.2014
26.	Comptroller, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Tmt. A.R. Rajalakshmi	01.04.2013	31.07.2013
		Th.V. Shanmugam	31.07.2013	16.10.2013
		Tmt. R. Poongothai	17.10.2013	31.03.2014



27.	Estate Officer (i/c), Tamil Nadu Agricultural University, Coimbatore – 641 003.	Er. D. Kalaiselvan	01.04.2013	31.03.2014
28.	Special Officer (i/c), Directorate of NRM Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr. R. Natesan	01.04.2013	30.06.2013
		Dr. V.P. Duraisamy	01.07.2013	31.03.2014
29.	Special Officer (i/c), Seed Centre, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr. M. Baskaran	01.04.2013	06.01.2014
		Dr. K. Ramamoorthy	07.01.2013	31.03.2014
30.	Special Officer, Horticultural College and Research Institute for Women, Tiruchirappalli – 620 009.	Dr. T.N. Balamohan	01.04.2013	31.03.2014

BOARD OF MANAGEMENT

List of Board Members during the year 2013-2014

S.No.	Chairman and Members	From	To
Chairman			
1	Dr. K. Ramasamy, Ph.D., Vice-Chancellor, Tamil Nadu Agricultural University, Coimbatore – 641 003.	01.04.2013	31.03.2014
Members			
2	Thiru. Sandeep Saxena, I.A.S., Agricultural Production Commissioner and Principal Secretary to Government, Agriculture Department, Secretariat, Chennai - 600 009.	01.04.2013	31.03.2014
3	Thiru V. Arun Roy, I.A.S., Joint Secretary, Finance Department, Secretariat, Chennai-600 009.	01.04.2013	31.03.2014
4	Thiru Satyabrata Sahoo, I.A.S., Commissioner of Horticulture and Plantation Crops, Agriculture Complex III Floor, Chepauk, Chennai-600 005.	01.04.2013	31.03.2014



5	Dr. M. Rajendran, I.A.S., Commissioner of Agriculture, Department of Agriculture, Chepauk, Chennai-600 005.	01.04.2013	31.03.2014
6	Thiru M. Senthil, M.E.(Ag.) Chief Engineer (Agricultural Engineering) i/c, Agricultural Engineering Department, 487, Anna Salai, Nandanam, Chennai-600 035.	01.04.2013	31.03.2014
7	Thiru. Gautam Dey, I.F.S., Principal Chief Conservator of Forests, Tamil Nadu Forest Department, No.1, Jeenis Road, Panagal Building, Saidapet, Chennai-600 015.	01.04.2013	31.03.2014
8	Dr. N.V. Nair, Ph.D, Director, Sugarcane Breeding Institute, Coimbatore – 641 007.	01.04.2013	31.03.2014
9	Dr. P.P. Ramaswami, Ph.D., 3/66, 'S' Block, 19 th Street, Anna Nagar, Chennai-600 040.	01.04.2013	31.03.2014
10	Thiru K. Pari, 18-B, Luz Avenue, Mylapore, Chennai - 600 004	01.04.2013	31.03.2014
11	Thiru P. Gopal, Ex-M.L.A., 5/151, F-4, Dr. Subbrayan Nagar, Mettur Dam - 636 401, Salem District.	01.04.2013	31.03.2014
12	Thiru. Kumar J. Pandian, M.B.A., Managing Director, Pandyan Coffee Curing Works (P) Ltd., 14, Main Road, K.K.Nagar, Madurai-625 020.	01.04.2013	31.03.2014
13	Tmt. Geetha @ Kodiarasi W/o. G. Balathandayuthapani D Block 55, Thozhilalar Illa paguthi Mettur-636 401, Salem District	01.04.2013	31.03.2014
14	Thiru. Pon Muthuramalingam, M.A., B.L., No.13, Thomas Street, Narimedu, Madurai-625 002	01.04.2013	31.03.2014



15	Th. M.K. Muthukaruppanasamy, M.L.A., (Pollachi Constituency), Mettupaavi Post, Vadasithur Via, Pollachi Taluk – 641 202, Coimbatore District	01.04.2013	31.03.2014
16	Thiru K.R. Arjunan, Ex. M.L.A. Old No.8/182, New No.9/132, Ketti Village, Ketti (P.O), The Nilgiris-643 215	01.04.2013	31.03.2014
Member - Secretary			
17	Dr. P. Kalaiselvan, Ph.D. Registrar (i/c) Tamil Nadu Agricultural University, Coimbatore - 641 003.	01.04.2012	30.06.2013
	Dr. R. Rabindran, Ph.D. Registrar (i/c) Tamil Nadu Agricultural University, Coimbatore 641 003.	01.07.2013	31.03.2014

Meetings of the Board of Management held during the year 2013-14

The Board of Management meetings of Tamil Nadu Agricultural University were convened three times during the year 2013-14:

- 165th Meeting held on 08-04-2013 at Chennai.
- 166th Meeting held on 12-11-2013 at Chennai.
- 167th Meeting held on 26-12-2013 at Coimbatore.

Important decisions of the Board of Management

Decisions of the Board of Management at the 165th Meeting (08.04.2013):

1. Approved the proposal for offering Diploma Course in Horticulture at Horticultural Research Station, Pechiparai instead of Diploma course in Agriculture.
2. Approved the proposal for establishment of a new 'Department of Sustainable Organic Agriculture' at Directorate of Crop Management, TNAU, Coimbatore.

3. Approved the proposal for amending the provision in the Regulations of TNAU- Appendix XIV: (Sl.No.15) Financial Powers to the University Officers, Comptroller, Estate Officer and Heads of Departments/ Research Stations of TNAU as given below.

Item (15) “Maintenance, running charges, repairs and replacement charges on University vehicles”.					
Deans / Directors / Registrar / Comptroller		Heads of Departments / Research Stations		Estate Officer	
Existing financial power	Proposed financial power	Existing financial power	Proposed financial power	Existing financial power	Proposed financial power
Upto Rs. 5,000/- at a time.	Upto Rs. 10,000/- at a time.	Upto Rs. 2500/- at a time.	Upto Rs. 5000/- at a time.	Upto Rs. 10,000/- at a time.	Upto Rs. 20,000/- at a time.

Decisions of the Board of Management at the 166th Meeting (12.11.2013):

1. Approved the proposal of Indian Institute of Crop Processing Technology (IICPT) for starting of M.Tech. programme in Food Science and Technology at IICPT, Thanjavur.
2. Approved the implementation of G.O. Ms. No. 29, Finance (Pension) Department, dated 31-01-2013 issuing orders to sanction family pension to unmarried, widow and divorced daughters of deceased Pensioners / Family Pensioners of Tamil Nadu Agricultural University.
3. Approved the proposal for amending the provision in the Regulations of TNAU – Appendix XIV: (Sl. No. 5 (a) & (i), 7(b), 18, 28 and 31) Financial Powers to the University Officers, Comptroller, Estate Officer and Heads of Departments/ Research Stations, TNAU as given below.



Nature of power	Financial power to the University Officers & Registrar		Financial power to the Estate Officer & Comptroller		Financial power to the Heads of Departments / Research Stations	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
5 (a) Purchase of apparatus, Lab equipment, electric and electronic instruments, farm machinery and other stores, aprons, laboratory towels and repairs to equipments and machinery [Except purchase of Computer, Lap tops, I pads, Computer Note books and accessories]	25000/- at a time	50000/- at a time	10000/- at a time	20000/- at a time	10000/- at a time	20000/- at a time
	Except Registrar					
5 (a) (i) Computer, Lap tops and I pads, Computer Note books and accessories	25000/- at a time	25000/- at a time	10000/- at a time	10000/- at a time	10000/- at a time	10000/- at a time
	Except Registrar					
7 (b) Repairs of furniture of Office, Laboratory and Rest house	5000/- at a time	10000/- at a time	2500/- at a time	5000/- at a time	2500/- at a time	5000/- at a time
18. Purchase of electrical goods, water supply and Sanitary material	5000/- at a time	10000/- at a time	5000/- at a time	10000/- (E.O. only)	2500/- at a time	5000/- at a time
28. Games, sports and physical exercise, provision maintenance of games, courts and atheletic fields	10000/- at a time	50000/- at a time	--	--	--	5000/- at a time
	(Deans of Colleges only)					(for Diploma course)
31. Refreshment charges, supply of refreshment during meeting, seminars, conferences and visit of VIPs working lunch and other such charges.	5000/- per annum	5000/- at a time	--	--	1000/- per annum	1000/- at a time



Decisions of the Board of Management at the 167th Meeting (26.12.2013):

1. Approved the conferment of degrees for 1105 candidates at the 34th Annual Convocation i.e. 812 Graduands in-person and 293 Graduands in-absentia as per the Register of Graduates for conferring the respective Degrees on them.
2. Approved and ratified the action of the University in having invited Dr.J.S.Sandhu, Agriculture Commissioner, Ministry of Agriculture, Government of India as Chief Guest and deliver the 34th Annual Convocation address.
3. Approved the conferment of Doctor of Science (*Honoris causa*) to Prof. Ravendra Naidu, Professor, Chief Executive Officer and Managing Director, Centre for Environmental Risk Assessment and Remediation, University of South Australia and Prof. Dr. S. Chelliah, Former Director of TRRI / Director of Research, TNAU, Coimbatore, in the 34th Annual Convocation of TNAU, Coimbatore.

**MEMBERS OF THE ACADEMIC COUNCIL**

Sl. No.	Name and Designation	Period	
		From	To
Ex-officio Chairman			
1	Dr. K. Ramasamy, Vice-Chancellor, Tamil Nadu Agricultural University, Coimbatore - 641 003.	01.04.2013	31.03.2014
Ex-officio Secretary			
1	Dr. P. Kalaiselvan, Registrar i/c Tamil Nadu Agricultural University, Coimbatore - 641 003.	01.04.2013	30.06.2013
2	Dr. R. Rabindran, Registrar i/c Tamil Nadu Agricultural University, Coimbatore - 641 003.	01.07.2013	31.03.2014
MEMBERS			
1	Thiru. Sandeep Saxena I.A.S. Agricultural Production Commissioner & Principal Secretary to Government, Agriculture Department, Secretariat. Chennai – 600 009.	01.04.2013	31.03.2014
2.	Dr. T.R. Gopalakrishnan, Director of Research. Kerala Agricultural University Vellanikara, Thrissur, Kerala.	01.04.2013	19.09.2013
3.	Dr. V.K. Raju, Director of Research. Kerala Agricultural University Vellanikara, Thrissur, Kerala.	20.09.2013	21.11.2013
4.	Dr. S.K. Chakrabarti, Director, Central Tuber Crops Research Institute, Thiruvananthapuram, Kerala	22.11.2013	31.03.2014
5	Dr. H.V. Nanjappa, Dean of Post Graduate Studies, University of Agricultural Sciences, Bengaluru -560 065.	01.04.2013	21.11.2013



6	Dr. M.L.N. Reddy, Dean (PGS), Dr.Y.S.R. Horticultural University, Venkataramannagudem, Andhra Pradesh		22.11.2013	31.03.2014
7	Dean, Agricultural College and Research Institute, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr.A.Raja Rajan,	01.04.2013	30.06.2013
		Dr. S. Mahimairaja, Dean i/c	01.07.2013	31.03.2014
8	Dean (SPGS), Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr.C.Udayasooriyan,	01.04.2013	30.06.2013
		Dr.S. Mohan, Dean (i/c)	31.03.2014	01.07.2013
9	Dean, Horticultural College and Research Institute, Tamil Nadu Agricultural University, Coimbatore - 641 003.	Dr. N.Kumar,	01.04.2013	30.06.2013
		Dr. S. Mariappan, Dean (i/c)	01.07.2013	31.03.2014
10	Dean, Agricultural Engineering College and Research Institute, Tamil Nadu Agricultural University, Coimbatore - 641 003.	Dr.S.Santhana Bosu,	01.04.2013	30.06.2013
		Dr. C. Divakar Durairaj, Dean (i/c)	01.07.2013	31.03.2014
11	Dean (i/c), Agricultural College and Research Institute, Tamil Nadu Agricultural University, Madurai – 625 104	Dr.SP.Sundaram,	01.04.2013	31.07.2013
		Dr.C. Chinnusamy,	01.08.2013	31.03.2014
12	Dean (i/c), Agricultural College and Research Institute, Killikulam, Vallanadu Post – 628 252, Thoothukudi.	Dr. M. Ariyavanam katha Pillai	01.04.2013	15.10.2013
		Dr. V.Subramanian,	16.10.2013	31.03.2014
13	Dean, Anbil Dharmalingam Agricultural College and Research Institute, Navalur Kuttapattu, Tiruchirapalli – 620 009	Dr. V. Jayabal	01.04.2013	30.04.2013
		Dr. P. Pandiyarajan Dean (i/c)	01.05.2013	31.03.2014



14	Dean , Horticultural College and Research Institute, Periyakulam – 625 604.	Dr.V.Ponnuswami,	01.04.2013	30.06.2013
		Dr.R.Sankaranarayan Dean (i/c)	01.07.2013	31.03.2014
15	Dean, Agricultural Engineering College and Research Institute, Kumulur – 621 712, Tiruchirappalli District.	Dr.A.Tajuddin	01.04.2013	30.06.2013
		Dr.K. Ramasamy, Dean (i/c)	31.03.2014	01.07.2013
16	Dean, Forest College and Research Institute, Mettupalayam – 641 301.	Thiru P. Durairasu, I.F.S	01.04.2013	31.03.2014
17	Dean, Home Science College and Research Institute, AC&RI Campus, Madurai - 625 104.	Dr.P.Banumathi	01.04.2013	30.06.2013
		Dr.G. Pushpa Dean (i/c)	15.07.2013	31.03.2014
18	Controller of Examinations, Tamil Nadu Agricultural University, Coimbatore - 641 003.	Dr.A.Chandrasekaran	01.04.2013	30.06.2013
		Dr.K. Illamurugu Controller of Examinations (i/c),	01.07.2013	31.03.2014
19	Director of Research (i/c) Tamil Nadu Agricultural University, Coimbatore - 641 003	Dr. M. Maheswaran,	01.04.2013	31.03.2014
20	Director, Centre for Plant Molecular Biology and Bio-technology, Coimbatore - 641 003	Dr. P. Sivasubramanian	01.04.2013	31.05.2013
		Dr. R. Chandrababu Director (i/c)	31.05.2013	31.03.2014
21	Director, Centre for Agricultural and Rural Development Studies, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr.N.Ajjan	01.04.2013	30.06.2013
		Dr. M. Chinnadurai Director (i/c)	01.07.2013	31.03.2014
22	Director (i/c), Directorate of Extension Education, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr.K.A. Ponnusamy	01.04.2013	31.03.2014
23	Director, Centre for Plant Protection Studies, Tamil Nadu Agricultural University, Coimbatore - 641 003.	Dr. E.I.Jonathan	01.04.2013	30.06.2013
		Dr. K.Ramaraju Director (i/c)	16.07.2013	31.03.2014



24	Director, Water Technology Centre, Tamil Nadu Agricultural University, Coimbatore- 641 003	Dr. S.Chellamuthu	01.04.2013	31.05.2013
		Dr. B.J. Pandian Director (i/c)	01.06.2013	31.03.2014
25	Director (i/c), Crop Management, Tamil Nadu Agricultural University, Coimbatore – 641 003	Dr.K. Velayutham	01.04.2013	31.03.2014
26	Director, Centre for Plant Breeding and Genetics, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr. K.Thiyagarajan	01.04.2013	30.04.2013
		Dr. AR. Muthiah Director (i/c)	01.05.2013	30.06.2013
		Dr. C.R. Ananda Kumar Director (i/c)	01.07.2013	31.03.2014
27	Director (i/c), Open and Distance Learning, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr.P. Santhy	01.04.2013	31.03.2014
28	Director, Students Welfare, Tamil Nadu Agricultural University, Coimbatore - 641 003.	Dr. T.Rathakrishnan	01.04.2013	30.06.2013
		Dr. N.Ragupathi Director (i/c)	01.07.2013	31.03.2014
29	Director, Planning and Monitoring, Tamil Nadu Agricultural University, Coimbatore - 641 003	Dr. G. Kathiresan	01.04.2013	30.06.2013
		Dr. M.Chandrasekaran Director (i/c)	01.07.2013	31.03.2014
30	Director, Agri-Business Development, Tamil Nadu Agricultural University, Coimbatore - 641 003.	Dr. P.Sivasubramanian	01.04.2013	30.06.2013
		Dr. R. Murugesan Director (i/c)	01.07.2013	31.03.2014
31	Director, Tamil Nadu Rice Research Institute, Aduthurai – 612 101, Thanjavur District.	Dr.T.Jayaraj	01.04.2013	30.06.2013
		Dr.R.Rajendran Director (i/c)	01.07.2013	31.03.2014
32	Dean, Pandit Jawaharlal Nehru College of Agriculture and Research Institute, Nedungadu (Post), Karaikal – 609 603	Dr. V. Chellamuthu	01.04.2013	31.03.2014



33	Dean (i/c), Adhiparasakthi Agricultural College, G.B. Nagar, Kalavai – 632 506, Vellore District.	Dr.S. Nanthakumar	01.04.2013	31.03.2014
34	Dean (i/c), College of Agricultural Technology, Kullapuram, Vaigaidam Theni – 625 562	Dr. K. Sivasubramanian	01.04.2013	31.03.2014
35	Dean (i/c), Vanavarayar Institute of Agriculture, Manakkadavu, Pollachi - 642 103.	Dr. V. Rajendran	01.04.2013	31.03.2014
36	Dean (i/c), PGP College of Agricultural Sciences, Namakkal	Dr. A. Vadivel	22.07.2013	12.11.2013
		Dr. K. Prabhakar	13.11.2013	31.03.2014
37	Dean (i/c), Imayam Institute of Agriculture and Technology Thuraiyur Trichy District	Dr. K. Vairavan	01.08.2013	08.12.2013
		Dr. T. Arumugam	19.12.2013	31.03.2014
38	Dean (i/c) RVS Agricultural College, Thanjavur	Dr. P. Balasubramaniyan	01.04.2013	31.03.2014
39	Dean (i/c), Thanthai Roever Institute of Agriculture and Rural Development, Perambalur – 621 212.	Dr. A.R. Mohamed Haroon	01.04.2013	31.03.2014
40	Professor and Head, Department of Spices and Plantation Crops Horticultural College and Research Institute, Periyakulam - 625 604	Dr. L.Jeevajothi	01.04.2013	03.09.2013
41	Professor and Head, Department of Vegetable Crops, Horticultural College and Research Institute, Periyakulam - 625 604	Dr. D. Sarala Devi	06.09.2013	31.03.2014



42	Professor and Head, Department of Human Development Home Science College and Research Institute, Madurai - 625 104	Dr.S.Amutha	01.04.2013	31.03.2014
43	Professor and Head Department of Bio-energy Agricultural Engineering College and Research Institute, Tamil Nadu Agricultural University, Coimbatore – 641 003.	Dr.S.Kamaraj	01.04.2013	31.03.2014
44	Professor and Head, Department of Farm Management, Tamil Nadu Agricultural University, Coimbatore - 641 003.	Dr. K. Velayutham	01.04.2013	30.06.2013
45	Professor and Head, Department of Soil Science and Agricultural Chemistry, Agricultural College and Research Institute, Killikulam - 628 252.	Dr. V. Subramanian	01.07.2013	14.10.2013
46	Professor and Head, Department of Agrl. Economics TNAU, Coimbatore - 641 003.	Dr. R. Balasubramanian	15.10.2013	31.03.2014
47	Professor and Head, Department of Soils and Environment, Agricultural College and Research Institute, Madurai – 625 104.	Dr. T. Chideswari	03.04.2013	15.04.2013
48	Professor and Head, Department of Crop Physiology, TNAU Coimbatore - 641 003.	Dr. C.N. Chandrasekar	02.07.2013	31.03.2014
49	Professor and Head Department of Tree Breeding, Forest College and Research Institute, Mettupalayam – 641 301.	Dr. K.T. Parthiban	01.04.2013	31.03.2014



Academic Council meetings held during the year 2013-2014

The Academic Council met four times during the academic year 2013-14 and the following important decisions were taken.

120th Academic Council Meeting (06.04.2013)

- Starting of an Integrated Ph.D programme from the academic year 2013-14.
- Starting of new M.Sc. (Ag.) programme in Molecular Plant Breeding under Public Private Partnership mode.
- Starting of a new M.Tech programme in Food Science in Technology at IICPT, Thanjavur from the academic year 2013-14.
- Starting of Master of Business Administration in Banking and Finance Management in ODL mode.
- Starting of M.Sc. (Hort.) in Vegetable Science at Horticultural College and Research Institute, Periyakulam from the academic year 2013-14.
- Establishment of new 'Department of Sustainable Organic Agriculture' at the Directorate of Crop Management, TNAU, Coimbatore.
- For offering Diploma Course in Horticulture instead of Diploma in Agriculture Course at Horticultural Research Station, Pechiparai, Kanyakumari District.

121st Academic Council Meeting (30.10.2013)

- Renewal of MOU between TNAU and Dalhousie Dual Degree program for another five years.
- Introduction of Yoga Course on "Yoga for Human Excellence" to the Undergraduate final year students.

122nd Academic Council Meeting (26.12.2013)

Special Meeting to take decision on 34th Convocation.

123rd Academic Council Meeting (25.03.2014)

- Setting up of a separate Department of Differently Aabled Studies at Home Science College and Research Institute, Madurai.
- Introduction of "Trimester system for PG programmes" from the academic year 2014-2015.
- Offering M.Tech. (Ag. Engg.) in Soil and Water Conservation Engineering at Agricultural Engineering College and Research Institute, Kumulur instead of at AEC&RI, Coimbatore from academic year 2014-15.
- Starting of Master of Farm Technology (M.F. Tech) through ODL Mode.
- Starting of M.Sc. (Ag.) in Plant Breeding and Genetics and Agricultural Entomology at Anbil Dharmalingam Agricultural College and Research Institute, Trichy from academic year 2014-15.
- Starting of M.Sc. (Horticulture) in Vegetable Science at Agricultural College and Research Institute, Madurai from academic year 2014-15.
- The Directorate of Planning and Monitoring to serve as the 'Repository of Information' from 01.04.2014.

Important tour programmes of the Vice-Chancellor

- Attended the Meeting convened by the Agricultural Production Commissioner and Hon'ble Minister for Agriculture, Government of Tamil Nadu regarding Agricultural Policy and Announcements for the year 2013-2014 at Secretariat, Chennai on 04.04.2013.



- Participated in the Tamil Nadu Legislative Assembly session in which the Demand for Grants to Agriculture Department for the year 2013-2014 was presented at Secretariat, Chennai on 05.04.2013.
- Chaired the 165th Board of Management Meeting of TNAU at Chennai on 08.04.2013.
- Participated in the ICAR Selection Committee Meeting of Dr. C. Subramaniam Award for outstanding Teachers-2012 at Krishi Bhavan, New Delhi on 10.05.2013.
- Participated in the IAUA – Vice-Chancellor’s Conference at New Delhi on 18.05.2013.
- Participated in the Expert Advisory Committee Meeting of TANSA, Chennai on 24.05.2013.
- Participated in the State Variety Release Committee Meeting at Secretariat, Chennai on 29.05.2013.
- Participated in the Steering Committee Meeting of US – India Consortium for Development of Sustainable Advanced Ligno-Cellulosic Bio-fuel systems at Ooty on 12.06.2013.
- Attended the Governing Body Meeting of National Agro Federation, Taramani, Chennai on 14.06.2013.
- Presided over the Confederation of Indian Industries (CII), Tamil Nadu Chapter – Stakeholders meeting on Banana at Agricultural College and Research Institute, Killikulam on 21.06.2013.
- Participated in the meeting convened by Agricultural Production Commissioner on Peri-Metro Vegetable Production, Organic Policy and Crop Advisories held at Office of the Commissioner of Agriculture, Chepauk, Chennai on 03.07.2013.
- Participated in the Review meeting of Chief Secretary at Chennai on 09.07.2013.
- Participated in the second meeting of Task Force on Biological Agents for Agriculture held at TERI, Bangalore on 15.07.2013.
- Participated in the ICAR 85th Foundation Day and Annual Ceremony at New Delhi on 16.07.2013.
- Attended the review meeting of Chief Secretary on the Implementation of schemes of Department of Agriculture at Chennai on 17.07.2013.
- Participated in the Indian National Science Academy Committee meeting at New Delhi on 23.07.2013.
- Participated in the District Land Use meeting and Demonstration at Tiruvarur on 29.07.2013.
- Attended the Vice-Chancellor’s review meeting at Governor Secretariat, Raj Bhavan, Chennai on 31.07.2013.
- Attended the meeting convened by the Secretary (DST) at CLRI, Guindy, Chennai on 04.08.2013.
- Meeting with Dr.M.S.Swaminathan, Chairman, MSSRF, Chennai on 07.08.2013.
- Discussion Meeting with Dr. Yashino, Country Representative, University of Tokyo, Japan
- Participated in the DBT 3rd Task Force Meeting at Bangalore on 22.08.2013.
- Launch of Tree Insurance Scheme by the Vice-Chair-Person, State Planning Commission at FC & RI, Mettupalayam on 11.10.2013.
- Participated in the Indo- Mexican Project review meeting at National Chemical Laboratory, Pune on 7th to 9th October 2013.
- Participated in the Decentralised Budget Committee Meeting at Secretariat, Chennai on 22.10.2013.



- Meeting on Muthupettai Lagoon Eco-System and discussion with the District Collector and JDA, Thiruvarur on 25.10.2013.
- Attended the 40th Foundation Day of Agricultural Scientists Recruitment Board at B.P. Auditorium, IARI, New Delhi on 01.11.2013.
- Discussion with faculty and students of Agricultural College and Research Institute, Madurai on 04.11.2013.
- Attended the monthly review meeting convened by Hon'ble Minister for Agriculture at Chennai on 08.11.2013.
- Discussion with Chairman, National Bio-diversity Board, Chennai on 08.11.2013.
- Attended the Meeting on convergence of MGNREGS with line Departments, TNCDW Building, Chennai on 11.11.2013.
- Chaired the 166th Board of Management meeting of TNAU held at Chennai on 12.11.2013.
- Delivered Key Note Address in the Annual Conference of the Department of Bio-Science and Technology, VIT, Vellore on 14.11.2013.
- Participated in the first ICAR Committee Meeting on recognition of Dual Degree Programme at ICAR, New Delhi on 18.11.2013.
- Attended the University Innovation Cluster meeting (BIRAC-DBT) at New Delhi on 22.11.2013
- Delivered the Presidential Address in the Horticultural Crop Production – Students – Farmers Interaction meet at Theni on 26.11.2013
- Discussion with Agricultural Production Commissioner and Principal Secretary to Government and Director of Agriculture at Chennai on 29.11.2013
- Participated in the ICAR Adaptive Strategy Research Project meeting, Ministry of Agriculture (Crops), New Delhi on 3rd and 4th December, 2013
- Participated in the IARI – Selection Committee meeting for selection of Deputy Director General (Education) at IARI, New Delhi on 5th December, 2013.
- Participated in the CII – Uzhavar Thiruvizha at Agricultural College and Research Institute, Madurai on 06.12.2013
- Participated in the Regional Agriculture Mela at Agricultural College and Research Institute, Madurai on 07.12.2013
- Participated in the review meeting called by Hon'ble Minister for Agriculture for all Heads of Departments at Secretariat, Chennai on 10.12.2013
- Meeting with Deputy Director General (Crop Sciences), New Delhi on 11.12.2013.
- Presided over the Valedictory function of Dinamalar Agri Expo 2013 at Thanjavur on 22.12.2013.
- Attended XII Science Congress on “Sustainable Livelihood Security of Smallholder Farmers held at New Delhi on 31.12.2013
- Attended the 73rd Finance Committee Meeting at Secretariat, Chennai on 07.01.2014.
- Attended the inauguration of the Vice-Chancellors' Conference, ICAR Directors and Progressive Farmers at GD Madgulkar Hall, Vidyanagari, Baramati, Pune on 19 - 20.01.2014.
- Attended the State Planning Commission workshop on “Solar energy for Sustainable Agriculture held at IIT, Chennai on 03.02.2014.
- Attended State Planning Commission workshop on “Millets to Combat Diabetes



on 6.2.2014 held at Conference Hall, SPC, Chennai on 06.02.2014.

- Attended ASRB Selection Committee meeting at PUSA, New Delhi on 28.02.2014.
- Participated in the South Indian Agri Fair – 2014 as a Chief Guest at KAU, Thirur on 06.03.2014.
- Attended meeting of the Accreditation Board of ICAR – NASC Complex, New Delhi on 11.03.2014.
- Participated in the Norman Borlaug Birth Centenary Dialogue at MSSRF, Chennai on 13.03.2014.
- Attended the TNSLUB – On-going studies review meeting of State Planning Commission at Ezhilagam, Chennai on 21.03.2014.

Details of Foreign Trainings / Conferences / Symposia, etc., attended by the Scientists

1. Dr. K. Prabakar, Professor (Plant Pathology), Dr.T.Raguchander, Professor (Plant Pathology) Dr.D.Saravanakumar Assistant Professor (Plant Pathology) attended the 17th International Reinhardtbrunn Symposium on modern fungicides and antifungal compounds from 21.04.2013 to 25.04.2013 at Fridrichroda, Germany.
2. Dr.A.Gurusamy, Associate Professor (Agronomy), Dr.P.P.Mahendran Professor (SS&AC), Dr.P.Paramasivam, Dr.R.Balasubramanian Dr.D.Suresh Kumar Professors (Agricultural Economics) attended the 2nd International Conference on Agricultural and Environment Systems on 23-24.04.2013 at Pattaya, Thailand.
3. Dr.P.Sivasubramanian, Director (ABD)

attended the 27th International Conference on Business Incubation at Miami from 07.04.2013 to 10.04.2013 and at Boston, U.S.A. from 11.04.2013 to 12.04.2013.

4. Dr.S.Santhana Bosu, Dean (Engineering), and Dr.R.Visvanathan, Professor and Head, Post Harvest Technology Centre under went training on “e-content development” from 17.07.2013 to 19.07.2013 at Kansas State University, Manhattan, U.S.A.
5. Dr.K.Arulmozhiselvan, Professor (SS&AC), Dr.M.Kumar, Professor (PB&G), Directorate of Research, TNAU, Coimbatore, participated in the exposure visit to Germany from 27.05.2013 to 31.05.2013.
6. Dr.P.Pretheep Kumar, Assistant Professor (Agricultural Entomology), FC&RI, Mettupalayam attended the International Conference on Agriculture and Food Engineering from 10.10.2013 to 11.10.2013 at Batam, Indonesia.
7. Dr.K.Bhuvaneshwari, Professor (Agricultural Entomology) availed the Erasmus Mundus Scholarship programme and participated in the Joint Master in Quality in Analytical Laboratories 2012-2013 and visited University of Cadiz and University of Algarve, Portugal for a period of four weeks from 2nd week of June, 2013 to 1st week of July, 2013
8. Dr.Eraivan Arutkani Aiyathan, Professor (Plant Pathology) participated in the collaborative mutual research on “Functional genomics on plant diseases” between TNAU and West Virginia State



- University, U.S.A. from August, 2013 to October, 2013 at West Virginia State University, U.S.A.
9. Dr.V.Saravanakumar, Assistant Professor (Agricultural Economics) attended the workshop on "Policy analyses for environmental economics" From 19.05.2013 to 22.05.2013 at Bangkok, Thailand.
10. Dr.N.Manivannan, Professor (PB&G) and Dr.B.Meena Kumari, Assistant Professor (PB&G) attended the training programme on Integrated breeding multi-year course (IB-MYC)-Year 2 from 01.07.2013 to 12.07.2013 at Zaragoza, Spain.
11. Dr.S.Mohan, Professor (Agricultural Entomology), Dr.S.Chitra Srivastava, Dr.S.Subramanian attended the Australia-India Strategic Research Fund (AISRF) joint workshop during the last week of May, 2013 at Brisbane, Australia.
12. Dr.S.Mohankumar, Professor (Biotechnology) attended the Technical Committee Meeting of Integrated Pest Management-Innovation Lab from 04.07.2013 to 08.07.2013 at Manado, North Sulawesi, Indonesia.
13. Dr.G.Karthikeyan, Professor (Plant Pathology) attended the Annual Meeting of the American Society of Horticultural Sciences from 22.07.2013 to 25.07.2013 at Palm Desert, California, U.S.A.
14. Dr.K.Ilamurugu, Prof. (Agricultural Microbiology) went on a study visit to All Russia Science Research Constructive and Project Technology Institute of Organic Manures and Peat during the last week of June, 2013 at Vladimir Region, Vyatkino, Russia.
15. Dr.R.Balasubramanian, Professor (Agricultural Economics) attended the 26th Biannual Research and Training Workshop of SANDEE from 19.06.2013 to 23.06.2013 at Bangkok, Thailand.
16. Dr.K.Ramaraju, Professor (Agricultural Entomology) attended the Agricultural Acarology Summer training programme from 01.07.2013 to 12.07.2013 at Ohio State University, U.S.A.
17. Dr.A.Kalaiselvan, Assistant Professor (Home Science) attended the workshop on "Packaging and labeling standards for organic agrifood products from 08.07.2013 to 17.07.2013 at Manila, The Philippines.
18. Dr.N.Kumar, Professor (Horticultural) attended the XVII International Plant Nutrition Colloquium and also visited the University of Leibniz Universitat Hannover of Germany from 19.08.2013 to 22.08.2013 at Turkey and from 23.08.2013 to 26.08.2013 at Germany.
19. Dr. V. K. Ravichandran, Professor (Agronomy) on deputation as TNAU Specialist in MDPU Office, TN IAMWARM Project, Chennai attended the Irrigated Agriculture Improvement Project Pre-Appraisal Mission at Vietnam from 17.07.2013 to 29.07.2013.
20. Dr.R.Balasubramanian, Professor and Head, Dr.P.Paramasivam, Professor (Agricultural Economics), Dr.D.Suresh Kumar, Professor (Agricultural Economics), Dr.V.Geethalakshmi, Professor (Agronomy) and



- Dr.A.Lakshmanan Professor (Environmental Sciences) attended the AgMIP Project Regional Research and Coordination mid-term workshop from 02.07.2013 to 26.07.2013 at Kathmandu, Nepal.
- 21.Dr.R.Jagannathan, Professor (Agronomy) attended the Grid point statistical interpolation (GSI) data assimilation system community tutorial and workshop from 05.08.2013 to 08.08.2013 at Maryland, U.S.A.
- 22.Dr.M. Jawaharlal, Professor and Head, Department of Floriculture and Landscaping, visited Malaysian Biotechnology Corporation, Malaysia from 24.07.2013 to 25.07.2013.
- 23.Dr.R.Rabindran, Registrar i/c visited Kuala Lumpur, Malaysia, IRRI, Philippines and China from 24.07.2013 to 02.08.2013 accompanying the Hon'ble Minister for Agriculture to study research programmes and scope for adoption.
- 24.Dr.K.A.Ponnusamy, Director of Extension Education i/c, Thiru R.Venkatachalam, Assistant Professor (Horticultural) Dr.N.Anandaraja, Assistant Professor (Agricultural Extension) and Dr.N.Sriram, Assistant Professor (Agricultural Extension) visited Illinois, U.S.A. to formulate the Memorandum of Understanding jointly by TNAU and University of Illinois, U.S.A. from 18.08.2013 to 24.08.2013.
- 25.Dr.P.Jeyakumar, Professor (Crop Physiology) attended the XVII International Plant Nutrition Colloquium (IPNC 2013) From 19.08.2013 to 22.08.2013 at Istanbul, Turkey.
- 26.Dr.M.K.Shivaa, Professor (Forestry) attended the International workshop on sustainable industrialization and commercialization of non-timber forest products from 25.08.2013 to 13.09.2013 at Lin'an, Hangzhou, Zhejiang Province, China.
- 27.Dr.A.S.Krishnamoorthy, Professor (Plant Pathology), attended the International medicinal mushroom conference, 2013 and to discuss about R&D collaborative schemes on medicinal mushroom from 24.08.2013 to 29.08.2013 at Beijing, China and From 30.08.2013 to 04.09.2013 Kuala Lumpur, Malaysia.
- 28.Dr.M.Prasanthrajan, Assistant Professor (Environmental Science) attended the International Conference on Agriculture and Food Engineering from 10.10.2013 to 11.10.2013 at Batam, Indonesia.
- 29.Dr.D.Malathi, Professor (Food Science) and Dr.N.Varadharaju, Professor (Agricultural Processing) attended the Conference of American Association of Cereal Chemists International, 2013 from 29.9.2013 to 02.10.2013 at New Mexico, U.S.A.
- 30.Dr.S.Senthilnathan, Assistant Professor (Agricultural Economics) attended the 2nd CORDEX South Asia Science Workshop From 27.08.2013 to 30.08.2013 at Kathmandu, Nepal.
- 31.Dr.R.Balasubramanian, Professor and Head, participated in the 6th South Asia Economic Summit as a Panelist from 02.09.2013 to 04.09.2013 at Colombo.



32. Dr. R. Venkatram, Professor (ARM) attended the International German Alumni Summer School from 03.11.2013 to 15.11.2013 at University of Kassel, Germany
33. Dr. N. Natarajan, Professor (SST) Dr. G. J. Janavi, Professor (Horticulture), Dr. R. Kailappan, Professor (Agricultural Processing), Dr. G. Thiribhuvanamala, Assistant Professor (Plant Pathology) and Dr. A. Subbiah, Assistant Professor (Horticulture) attended the short term training at University of Guelph, Canada from 12.11.2013 to 22.11.2013.
34. Dr. U. Sivakumar, Professor (Agrl. Micro.), attended the International Symposium on Enzymes and Bio-catalysis From 25.04.2014 to 28.04.2014 at Dalian, China.
35. Dr. P. Paramasivam, Professor (Agrl. Economics) Dr. K. Mahendran, Professor (ARM) and Dr. V. Geethalakshmi attended the Fourth annual AgMIP Global Workshop at Columbia University in New York City, U.S.A. and also the annual meeting of the American Society of Agronomy at Tampa, Florida from 21.10.2013 to 25.10.2013, 28.10.2013 to 30.10.2013 and 02.11.2013 to 07.11.2013.
36. Dr. M. Senthil Professor (Biotechnology) participated in the SNP marker assisted training and update meeting related to the joint collaborative research programme from 21.10.2013 to 29.10.2013 at IRRI, Philippines.
37. Dr. P. Doraisamy, Professor (Environmental Sciences) and Dr. M. Maheswari, Professor (Environmental Sciences) attended the World Biodiversity Congress (WBC 2013) from 26.11.2013 to 30.11.2013 at Chiang Mai, Thailand.
38. Dr. R. Santhi, Professor (SS&AC) attended the 11th International Conference of the East and South East Asia Federation of Soil Science Societies from 02.10.2013 to 24.10.2013 at Bogor, Indonesia.
39. Dr. P. Paramaguru, Professor (Horticulture) and Dr. V. Jegadeeswari, Assistant Professor (Horticulture) attended the exposure training on cocoa breeding from 06.11.2013 to 08.11.2013 at CEPLAC, Bahia, Brazil and from 11.11.2013 to 15.11.2013 at Cocoa Research Institute, University of West Indies, Trinidad.
40. Dr. V. Ponnuswami, Professor (Horticultural) attended the International Conference on Biotechnology for Better Tomorrow (BBT) Between 09.11.2013 and 14.11.2013 at Mauritius.
41. Dr. N. Manikanda Boopathi, Assistant Professor (Biotechnology) and Dr. S. Rajesh, Assistant Professor (Biotechnology) participated in the Resistance Screening Workshop related to the global research project from 25.11.2013 to 06.12.2013 at AVRDC-The World Vegetable Center, Taiwan.
42. Dr. M. Maheswar, Professor (Environmental Sciences), participated in the workshop on Best Practices in Green Productivity in Agriculture from 07.12.2013 to 11.12.2013 at Tehran, IRAN.
43. Dr. C. Jayanthi, Professor (Agronomy) attended the Multicountry observations study mission on Innovative farm management practices to enhance



- agricultural productivity from 18.11.2013 to 22.11.2013 at Tokyo, Japan.
44. Dr. K. Sara Parwin Banu, Professor (Environmental Sciences) participated in the Training on “Training of Trainers and consultants in Green Productivity” From 11.11.2013 to 6.12.2013 at Kuala Lumpur and Johorbahru, Malaysia.
45. Dr. C. Durairaj, Professor (Agricultural Entomology) attended the “Workshop on Monitoring and management of Tuta absoluta” from 26.11.2013 to 28.11.2013 at Addis Ababa, Ethiopia.
46. Dr. K. R. Karunakaran, Professor (Agricultural Economics) attended the Workshop on Food Value-Chain Analysis: Tools and Applications from 04.12.2013 to 08.12.2013 at Bangkok and also for personal visit from 09.12.2013 to 13.12.2013.
47. Dr. S. Suresh, Professor (Agricultural Entomology) attended the meeting to provide accurate information about cassava crop in India from 20.1.2014 to 22.1.2014 at Phnom Penh, Cambodia.
48. Dr. R. Chandra Babu, Director i/c, CPMB&B, attend the International Seminar on “Prospects for research etc. from 04.02.2014 to 08.02.2014 at the University of Tokyo, Japan.
49. Dr. S. Senthivel, Professor (Agronomy) attended the International Seminar on “Prospects for research etc. from 02.02.2014 to 09.02.2014 at the University of Tokyo, Japan.
50. Dr. P. Paramasivam, Professor (Agricultural Economics) attended the AIMIP Finish Line Workshop from 30.01.2014 to 04.02.2014 at Arusha, Tanzania.
51. Dr. R. Venkatram, Professor (A&RM) attend the International German Alumni Summer School from 16.03.2014 to 24.03.2014 at Chiang Mai University, Thailand.
52. Dr. S. Pugalendhi, Professor (Bio-Energy) attended the International Scientific Conference on “Renewable energy and water resources conference” from 05.03.2014 to 07.03.2014 at London.
53. Dr. S. Ganapathy, Professor (Agricultural Processing) attended the Multicountry observational study mission on “Regional business partnership etc. from 24.02.2014 to 28.02.2014 at Tokyo, Japan.
54. Dr. N. Varadharaju, Professor (Agricultural Processing) and Dr. D. Malathi, Professor (Food Science) attended the 6th Six monthly review meeting of IDRC Canada Project from 19.02.2014 to 23.02.2014 at Colombo, Sri Lanka.
55. Dr. K. S. Subramanian, Professor (SS&AC), Dr. K. Soorianatha Sundaram, Professor (Horticulture), Dr. K. Prabakar, Professor (Plant pathology), Dr. N. Varadharaju, Professor (Agricultural Processing), Dr. K. Gunasekaran, Professor (Nano Science & Technology) and Dr. C. Sekar, Professor (Agricultural Economics) attended the Interim Review and Monitoring Meeting related to IDRC Nano Film Project from 22.4.2014 to 24.4.2014 at the University of Guelph, Canada.
56. Dr. R. Suresh, Assistant Professor (PB&G) attended the Hybrid Rice Development Consortium From 18.03.2014 to 21.03.2014 at IRRI, The Philippines.
57. Dr. S. Nakkeeran, Professor (Plant



Pathology) was on a consultancy assignment on commercial production of *Trichoderma* with M/s. Swiss Contact from 08.03.2014 to 15.03.2014 at Dhaka, Bangladesh.

58. Dr. K. Ganesamurthy, Professor (PBG) attended the TLII (Phase 3) Stakeholder Consultation Planning Meeting (related to ICRISAT-TLII (Phase-2) project)

from 17.03.2014 to 22.03.2014 at Nairobi, Kenya.

59. Dr. S. Pazhanivelan, Professor (Agronomy) attended the 2nd Rice technical workshop from 24.3.2014 to 26.3.2014 at IRRI, The Philippines.

60. Dr. M. Jegadeesan, Assistant Professor (Agricultural Extension) took up the Visiting Research Fellowship at Research Institute in Humanities and Nature for a period of five months from 15.04.2014 to 14.09.2014 at Kyoto, Japan.

61. Dr. M. Raveendran, Professor (Biotechnology) attended the Global Rice Science Partnership workshop on Rice Roots From 15.05.2014 to 16.05.2014 at Agropolis International, Montpellier, France.

34th Annual Convocation, 2013

The 34th Convocation of the Tamil Nadu Agricultural University was held on 26th December 2013 at 12.15 pm in a grand manner at the Tamil Nadu Agricultural University Campus, Coimbatore. His Excellency, the Governor of Tamil Nadu and Chancellor of TNAU, Dr. K. Rosaiah, Presided over the convocation and awarded 43 prizes and medals to the outstanding UG, PG and Ph.D graduates. In this convocation, totally, 1105

students (812 in person and 293 in absentia) have been awarded various degrees. Thiru. S. Damodaran Hon'ble Minister for Agriculture, Government of Tamil Nadu and Pro-Chancellor, TNAU, instituted Endowment Prizes and Medals. Dr. Gurbachan Singh, Chairman, Agricultural Scientist Recruitment Board, New Delhi was the Chief Guest of the occasion and delivered the Convocation Address.

Dr. K. Ramasmy, Vice-Chancellor delivered the Welcome Address. During the convocation, Doctor of Science (*Honoris Casa*) was conferred upon to Prof. Ravendra Naidu, Chief Executive Officer and Managing Director, CRC CARE, University of South Australia, University Parade, SA and Prof. Dr. S. Chelliah, former Director, Tamil Nadu Rice Research Institute, Aduthurai and Former Director of Research, TNAU, Coimbatore.

Endowments Instituted during 34th Convocation

1. Former Registrar, Dr. P. Subbian Award

For the best Ph.D Thesis in Rice Agronomy

2. Prof. Dr. M. Premsekhar & PG Scholars Award

For the best Ph.D Research in Agronomy on Organic Farming / Water Management

3. Dr. S. Subramanian Award

For the Best Ph.D Crop Research in Agronomy

4. Thiru H.L. Dorai Award

For the best Ph.D student in Bio-Energy

5. Thiru. S. Kondas Award

For the best M.Sc. student in Forestry



6. Tmt. Leela Kondas Award

For the best Undergraduate student in Forestry

7. Dr.S.Sundaresan Award

For the best Ph.D student in Biotechnology / Crop Physiology / Agricultural Microbiology / Environmental Sciences in the field of Hetero cycle and agriculture.

8. V.Venkatram Chettiar, Kothagiri – Memorial Award

For the Best Undergraduate student in all tree breeding courses.

9.Seshasayee Paper and Boards Limited Award

For the best Ph.D student in Forestry.

10.Dr. V. Prakasam Award

For the best M.Sc. (Ag.) student in Plant Pathology courses.





3. EDUCATION

3.1. SCHOOL OF POST GRADUATE STUDIES

List of Masters and Doctoral Programs 2013-14

Sl. No.	Name of the Masters Degree
I	Agriculture
1	Agricultural Economics
2	Agricultural Entomology
3	Agricultural Extension
4	Agricultural Microbiology
5	Agronomy
6	Crop Physiology
7	Plant Breeding and Genetics
8	Plant Genetic Resources
9	Molecular Plant Breeding
10	Plant Nematology
11	Plant Pathology
12	Seed Science and Technology
13	Soil Science and Agricultural Chemistry
14	Geoinformatics
15	Biotechnology
16	Environmental Science
17	Master of Business Administration
18	Sericulture
19	Agricultural Meteorology and Climatology
20	Agricultural Nanotechnology
II	Horticulture
21	Fruit Science
22	Vegetable Science

23	Spices, Plantation, Medicinal and Aromatic Crops
24	Floriculture and Landscape Gardening
III	Agricultural Engineering
25	Farm Power and Machinery
26	Bio-Energy
27	Food and Agricultural Process Engineering
28	Soil and Water Engineering
29	Environmental Engineering
IV	Home Science
30	Food Science and Nutrition
31	Family Resource Management and Ergonomics
32	Human Development and Family Dynamics
33	Textile and Apparel Merchandizing
34	Extension Communication and Entrepreneurial Development
V	Forestry
35	Forest Business Management
36	Tree Breeding and Biotechnology
37	Silviculture and Agroforestry
38	Forest Ecology and Environment
39	Wild Life Management



Sl. No.	Name of the Doctoral Degree
I	Agriculture
1	Agricultural Economics
2	Agricultural Entomology
3	Agricultural Extension
4	Agricultural Microbiology
5	Agronomy
6	Crop Physiology
7	Plant Breeding and Genetics
8	Plant Nematology
9	Plant Pathology
10	Seed Science and Technology
11	Soil Science and Agricultural Chemistry
12	Biotechnology
13	Environmental Science
14	Master of Business Administration
15	Sericulture
16	Agricultural Meteorology and Climatology
17	Molecular Plant Breeding

II	Horticulture
18	Fruit Science
19	Vegetable Science
20	Spices, Plantation, Medicinal and Aromatic Crops
21	Floriculture and Landscape Gardening
III	Agri. Engineering
22	Farm Power and Machinery
23	Bio-Energy
24	Food and Agricultural Process Engineering
25	Soil and Water Engineering
IV	Home Science
26	Food Science and Nutrition
V	Forestry
27	Forestry
VI	Integrated Ph.D. programme
VII	External Ph.D. programme

Newly started courses during 2013 – 14

Sl. No.	Name of the Newly started courses in Masters Degree	Year of start
1.	Molecular Plant Breeding	2014

Sl. No.	Name of the Newly started courses in Doctoral Degree	Year of start
1.	Integrated Ph.D.	2014
2.	External Ph.D.	2014

Admissions during 2013-14

Number of students admitted in Masters and Doctoral programmes in Tamil Nadu Agricultural University

Degree Programme	General			SC/ST			Total		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
M.Sc.	143	160	303	49	28	77	192	188	380
Ph.D.	71	63	134	25	15	40	96	78	174
Total	214	223	437	74	43	117	288	266	554



Number of other state / other country students admitted 2013-14

Degree Programme	Other country Students			NRI students			Other state students		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
M.Sc.	4	2	6	-	-	-	37	33	70
Ph.D.	-	1	1	-	-	-	10	13	23
Total	4	3	7	-	-	-	47	46	93

Foreign students admitted for Postgraduate programmes during the academic year 2013 - 14

Sl. No.	Department	Country	No. of students admitted
1.	Agricultural Economics	Afganistan	1
2.	Soil and Water Conservation Engineering	Rwanda	2
3.	Vegetable Science	Rwanda	2
4.	Soil Science and Agricultural. Chemistry	Rwanda	1
5.	Plant pathology	Sudan	1
	Total		7

Fee details for Self supporting Postgraduate programmes

Degree Programme	Year of Start	Number of Students admitted	Students Fee Rs./semester
Business Administration	2005	20	30000
Bio-Technology	2005	13	30000

Scholarships availed by Postgraduate students

S.No.	Particulars	Number of students	Scholarship amount (Rs.)
1	Backward community	41	102389
2	Most backward community	24	67774
3	SC/ST post-matric	2	36840
4	SC/ST higher education special scholarship	39	312000
5	AICTE-GATE	1	192000
6	UGC-RGNF	13	1111487
7	CSIR-UGC-NET	3	207386
8	ASPEE	2	15329
9	Indian Council of Agricultural Research	61	4852151
10	Council of Scientific and Industrial Research	3	751074
11	Indian Council of Social Science Research	3	521344
12	Pioneer Hybrid International	1	214608
13	DARE	9	1436084



14	INSPIRE	20	4612382
15	Ganga Orthopedic Research and Education Foundation	1	208516
16	Cheminova Private Limited	1	80000
17	Monsanto Beachell Borlaug International	1	64789
18	TNAU Merit Scholarship	6	37905
19	TNAU Research Assistantship	6	120215
	Total	237	14944273

Students Enrollment in Colleges

Masters Programme 2013-14

Sl. No.	Campus / Department	No. of candidates enrolled	No. of candidates Passed out	Total No. of other state students enrolled	No. of students enrolled under self supporting programme
I.	AC&RI, Coimbatore				
1	Agricultural Economics	12	6	4	2
2	Agricultural Entomology	17	17	6	3
3	Agricultural Extension	11	14	4	1
4	Agricultural Microbiology	6	3	1	0
5	Agricultural Meteorology	7		3	1
6	Agronomy	10	15	2	0
7	Biotechnology	13	12	7	1
8	MBA	20	18	1	14
9	Crop Physiology	8	4	0	0
10	Environmental Sciences	6	8	1	0
11	Plant Breeding and Genetics	13	14	4	1
12	Plant Nematology	5	1	0	0
13	Plant Pathology	7	17	4	2
14	Seed Science and Technology	9	17	1	0
15	Soil Science and Agricultural Chemistry	10	10	2	1
16	Sericulture	4	5	1	0
17	Nano Science and Technology	4	2	0	0
18	Plant Genetic Resources	5	0	0	1
19	Remote sensing and Geoinformatics	3	0	0	0
20	Molecular Plant Breeding	2	0	0	0
	Total	172	123	41	27



II.	HC&RI, Coimbatore				
21	Fruit Science	7	5	2	-
22	Floriculture	11	12	4	2
23	Spices	11	7	1	-
24	Vegetable Science	10	14	3	-
	Total	39	38	10	2
III.	AEC&RI, Coimbatore				
25	Bio Energy	11	3	1	-
26	Farm Power and Machinery	7	4	1	-
27	Food and Agricultural Processing	10	12	2	-
28	Soil and Water Conservation	9	9	5	1
29	Environmental Engineering	3	6	-	-
	Total	40	34	9	1
IV.	Dual degree				
30	Food Process and Marketing	-	2	-	-
31	Biotechnology and Business Management	-	3	-	-
	Total	-	5	-	-
V.	HC&RI, Periyakulam				
32	Vegetable Science	8	-	-	-
33	Floriculture	-	1	4	2
	Total	8	1	4	2
VI.	AC&RI, Killikulam				
34	Soil Science and Agricultural Chemistry	5	-	1	-
35	Agronomy	4	-	-	-
36	Agricultural Entomology	5	-	-	-
37	Plant Breeding and Genetics	-	2	-	-
	Total	14	2	1	-
VII.	ADAC&RI, Trichy				
38	Soil Science and Agricultural Chemistry	5		-	-
	Total	5		-	-
VIII.	AEC&RI, Kumulur				
39	Agricultural Entomology	-	1	-	-
40	Agronomy	-	8		
41	Plant Breeding and Genetics	-	4	-	-
42	Soil Science and Agricultural Chemistry	-	4	-	-
	Total	-	17	-	-
IX.	AC&RI, Madurai				
43	Agricultural Economics	5	4	-	-



44	Agricultural Entomology	10	6	-	1
45	Agricultural Extension	6	5	-	-
46	Agricultural Microbiology	5		-	-
47	Agronomy	7	9	-	-
48	Plant Breeding and Genetics	5	12	-	-
49	Plant Pathology	6	7		
50	Seed Science and Technology	7	5	-	-
51	Soil Science and Agricultural Chemistry	7	4	-	-
	Total	58	52	-	1
X	HSC & RI, Madurai				
52	Food Science and Nutrition	7	4	1	-
53	Human development and family dynamics	3	-	-	-
	Total	10	4	1	-
XI	FC&RI, Mettupalayam				
54	Forestry		19		
55	Forestry Business Management	1		-	-
56	Forest Ecology and Environment	5	-	-	1
57	Silviculture and Agroforestry	6	-	2	1
58	Tree breeding and Biotechnology	4	-	-	-
59	Wild life management	3	-	1	1
	Total	19	19	3	3
	Grand Total	351	293	68	36

Doctoral Programme (2013-14)

Sl. No.	Campus / Department	Total No. of students enrolled	No. of candidates Passed out	No. of students enrolled under self supporting programme
I.	Agriculture College and Research Institute, Coimbatore			
1	Agricultural Economics	4	11	-
2	Agribusiness and Development Management	0	10	-
3	Agricultural Entomology	12	13	1
4	Agricultural Extension	2	8	-
5	Agricultural Microbiology	5	4	-
6	Agronomy	8	11	2
7	Biotechnology	3	1	-
8	Agricultural Meteorology	0	5	-
9	Sericulture	3	5	-



10	Crop Physiology	0	4	-
11	Environmental Sciences	2	0	-
12	Plant Breeding and Genetics	9	8	3
13	Plant Nematology	0	3	-
14	Plant Pathology	7	8	-
15	Seed Science and Technology	4	10	-
16	Soil Science and Agricultural Chemistry	7	5	-
17	Integrated Ph.D.	2	0	-
18	External Ph.D.	6	0	-
	Total	74	106	6
	Horticulture			
19	Floriculture and Medicinal Crops	4	7	1
20	Fruit Science	3	2	1
21	Spices and Plantation Crops	4	2	-
22	Vegetable Science	5	4	-
	Total	16	15	2
	Agri. Engineering			
23	Bio Energy	5	2	-
24	Farm Power and Machinery	3	1	-
25	Food and Agricultural Processing	5	5	--
26	Soil and Water Conservation	5	2	-
	Total	18	10	
II.	AC&RI, Madurai			
	Agriculture			
1	Agricultural Entomology	7	0	-
2	Agronomy	5	0	-
3	Plant Breeding and Genetics	5	0	-
	Total	17	0	-
III.	HSC & RI, Madurai			-
1	Food Science and Nutrition	2	3	-
IV	FC&RI, Mettupalayam			-
1	Forestry	7	3	-
	Grand Total	134	137	8

Special Lectures Delivered

Sl. No.	Date	Name and designation of the Speaker	Title of lecture
1	03.10.2013	Dr. K.K.Singh, Head, Agromet Services, IMD, New Delhi	Application of seamless weather forecasting in farm decision making



2	13.11.2013	Dr. S.K. Nanda, Project Co-ordinator, PHT (ICAR), Ludhiana.	National Assessment of quantitative harvest and post harvest losses of major crops and livestock produce in India
3	29.11.2013	Dr. Pat Collins, School of Biological Sciences, The University of Queensland Australia.	Fumigation and grain storage
4	06.12.2013	Dr. Deepak Arora, Senior Manager (Quality Control) Learning & Development, TAJSATs, Mumbai.	Quality and Food Safety in Airline Foods.
5	10.12.2013	Dr. Kapildeo Narayan Singh, Professor and Head Dept. of PMB and GE, Kumaragal, Faizabad.	Enhancing the nutritional value in the grain / food crops.
6	27.12.2013	A.K. Saxena, Head, Division of Microbiology, Indian Agricultural Research Institute, New Delhi-110012	Prospecting extreme environments for microbial diversity and genes for abiotic stress tolerance.
7	03.02.2014	Mr. Isaya Vincent Sijali, Co-ordinator, Irrigation, Nairobi.	Kenyan Irrigation System and Agriculture Scenario

Trainings / Seminars conducted

Sl. No.	Date/ Duration	Name of the Seminar	Budget (Rs.)	Funding source	Participants
1	(2 days)	May 2-3, 2013 1 st Agricultural Science Graduates Conference	7 lakhs	P.G. Students	Totally 435 students participated

Trainings / Seminars attended

Sl. No.	Name of the Training	Date/ Duration	Organiser and Address	Name and Designation of participants
1	Recent Advances in Stored Product Insect Pest Management	Nov. 13, 2013 – Dec. 03, 2013	Dept. of Agrl. Entomology, TNAU, Coimbatore -3	Dr.S.Mohan Dean (SPGS)



3.2. UNDER GRADUATE EDUCATION

List of campuses offering Under Graduate Programs (2013-14)

Sl. No.	Name of the Under Graduate Degree	Campuses in which offered
1	B.Sc. (Agriculture)	Coimbatore, Madurai, Killikulam and Tiruchirapalli
2	B.Sc. (Horticulture)	Periyakulam and Tiruchirapalli
3	B.Sc. (Forestry)	Mettupalayam
4	B.Tech. (Agricultural Engineering)	Kumalur
5	B.Sc. (Home Science)	Madurai
6	B.Sc. (Sericulture)	Mettupalayam
7	B.Tech. (Biotechnology)	Coimbatore
8	B.Tech. (Bioinformatics)	
9	B.Tech. (Horticulture)	
10	B.Tech. (Food Process Engineering)	
11	B.Tech. (Energy and Environmental Engineering),	
12	B.Tech. (Agricultural Information Technology	
13	B.S. (Agribusiness Management)	

Students Admission – Degree-wise (2013-14)

S. No.	Degree	General		ICAR		Self supporting		Total		
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Total
1	B.Sc. (Agriculture)	89	271	11	11	-	-	100	282	382
2	B.Sc. (Horticulture)	25	91	-	6	-	-	25	97	122
3	B.Sc. (Forestry)	28	12	1	2	-	-	29	14	43
4	B.Tech. (Agricultural Engineering)	28	37	3	1	-	-	31	38	69
5	B.Sc. (Home Science)	3	28	-	-	-	-	3	28	31
6	B.Sc. (Sericulture)	5	28	-	-	-	-	5	28	33
7	B.Tech. (Biotechnology)	-	-	-	-	8	38	8	38	46
8	B.Tech. (Bioinformatics)	-	-	-	-	8	16	8	16	24
9	B.Tech. (Horticulture)	-	-	-	-	12	21	12	21	33
10	B.Tech. (Food Process Engineering)	-	-	-	-	18	38	18	38	56
11	B.Tech. (Energy and Environmental Engineering),	-	-	-	-	21	30	21	30	51



12	B.Tech. (Agricultural Information Technology)	-	-	-	-	10	15	10	15	25
13	B.S. (Agribusiness Management)	-	-	-	-	15	28	15	28	43
Total		178	467	15	20	92	186	285	673	958

Quota wise Student Admission (2013-14)

Sl. No.	Category	General		Self supporting		Total		
		Boys	Girls	Boys	Girls	Boys	Girls	Total
1	Open Competition	1	19	5	8	6	27	33
2	Back ward Class	76	271	42	111	118	382	500
3	Back ward Class Muslims	7	8	4	8	11	16	27
4	Most Back ward Class	54	101	25	29	79	130	209
5	Denotified Notified Class	1	2	-	-	1	2	3
6	Scheduled Caste	35	58	11	25	46	83	129
7	Scheduled Caste - Arunthathiyinar	1	10	3	4	4	14	18
8	Scheduled Tribe	2	4	2	1	4	5	9
9	Indian Council of Agricultural Research	16	14	-	-	16	14	30
Total		193	487	92	186	285	673	958

Campus wise Students Admission (2013-14)

S. No.	College	General		ICAR		Self supporting		Total		
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Total
1	B.Sc. (Agriculture), AC&RI, Coimbatore	16	77	4	4	-	-	20	81	101
2	B.Sc. (Agriculture), AC&RI, Madurai	22	74	2	5	-	-	24	79	103
3	B.Sc. (Agriculture), ADAC&RI, Tiruchirapalli	23	66	3	2	-	-	26	68	94
4	B.Sc. (Agriculture), AC&RI, Killikulam	28	54	2	-	-	-	30	54	84
5	B.Sc. (Horticulture), HC&RI, Periyakulam	25	52	-	4	-	-	25	56	81
6	B.Sc. (Horticulture), HC&RI(W), Tiruchirapalli	-	39	-	2	-	-	-	41	41
7	B.Sc. (Forestry), FC&RI, Mettupalayam	28	12	1	2	-	-	21	6	27



8	B.Tech. (Agricultural Engineering), AEC&RI, Kumulur	28	37	3	1	-	-	31	38	69
9	B.Sc. (Home Science), HSC&RI, Madurai	3	28	-	-	-	-	3	28	31
10	B.Tech. (Biotechnology), AC&RI, Coimbatore	-	-	-	-	8	38	8	38	46
11	B.Tech. (Horticulture), HC&RI, Coimbatore	-	-	-	-	12	21	12	21	33
12	B.Tech. (Bioinformatics), AC&RI, Coimbatore	-	-	-	-	8	16	8	16	24
13	B.Tech. (Food Process and Engineering), AEC&RI, Coimbatore	-	-	-	-	18	38	18	38	56
14	B.Tech. (Energy and Environmental Engineering), AEC&RI, Coimbatore	-	-	-	-	21	30	21	30	51
15	B.Tech. (Agricultural Information Technology), AC&RI, Coimbatore	-	-	-	-	10	15	10	15	25
16	B.Sc. (Agribusiness Management), AC&RI, Coimbatore	-	-	-	-	15	28	15	28	43
17	B.Sc. (Sericulture), AC&RI, Coimbatore	5	28	-	-	-	-	5	28	33
	Total	178	467	15	20	92	186	285	673	958

Year wise students' strength for each of the UG programme 2013-14

Name of the Degree programme: B.Sc. (Agriculture)

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	100	282	382
2.	Second year	115	224	339
3.	Third year	106	209	315
4.	Fourth year	110	249	359

**Name of the Degree programme: B.Sc. (Horticulture)**

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	25	97	122
2.	Second year	37	89	126
3.	Third year	27	80	107
4.	Fourth year	24	47	71

Name of the Degree programme: B.Sc. (Forestry)

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	29	14	43
2.	Second year	36	13	49
3.	Third year	21	13	34
4.	Fourth year	21	6	27

Name of the Degree programme: B.Tech. (Agricultural Engineering)

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	31	38	69
2.	Second year	39	23	62
3.	Third year	21	31	52
4.	Fourth year	26	24	50

Name of the Degree programme: B.Sc. (Home Science)

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	3	28	31
2.	Second year	10	18	28
3.	Third year	3	24	27
4.	Fourth year	3	19	22

Name of the Degree programme: B.Sc. (Sericulture)

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	5	28	33
2.	Second year	4	24	28
3.	Third year	10	19	29
4.	Fourth year	-	-	-


Name of the Degree programme: B.Tech. (Biotechnology)

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	8	38	46
2.	Second year	13	38	51
3.	Third year	20	45	65
4.	Fourth year	12	39	51

Name of the Degree programme: B.Tech. (Bioinformatics)

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	8	16	24
2.	Second year	8	20	28
3.	Third year	8	22	30
4.	Fourth year	7	20	27

Name of the Degree programme: B.Tech. (Horticulture)

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	12	21	33
2.	Second year	9	26	35
3.	Third year	9	28	37
4.	Fourth year	9	20	29

Name of the Degree programme: B.Tech. (Food Process Engineering)

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	18	38	56
2.	Second year	17	38	55
3.	Third year	18	35	53
4.	Fourth year	8	23	31

Name of the Degree programme: B.Tech. (Energy and Environmental Engineering)

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	21	30	51
2.	Second year	21	31	52
3.	Third year	22	28	50
4.	Fourth year	14	20	34

**Name of the Degree programme: B.Tech. (Agricultural Information Technonology)**

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	10	15	25
2.	Second year	8	20	28
3.	Third year	3	22	25
4.	Fourth year	5	21	26

Name of the Degree programme: B.S. (Agri-business Management)

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	15	28	43
2.	Second year	12	26	38
3.	Third year	11	25	36
4.	Fourth year	6	16	22



3.2.1. Agricultural College and Research Institute, Coimbatore

Degree wise Students Admission (2013-14)

S. No.	Name of the Degree	General		ICAR		Self supporting		Total		
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Total
1	B.Sc. (Agriculture), Coimbatore	16	77	4	4	-	-	20	81	101
2	B.Tech. (Biotechnology), Coimbatore	-	-	-	-	8	38	8	38	46
3	B.Tech. (Bioinformatics), Coimbatore	-	-	-	-	8	16	8	16	24
4	B.Tech. (Agricultural Information Technology), Coimbatore	-	-	-	-	10	15	10	15	25
5	B.Sc. (Agribusiness Management), Coimbatore	-	-	-	-	15	28	15	28	43
6	B.Sc. (Sericulture), Coimbatore	5	28					5	28	33
	Total	21	105	4	4	41	97	66	206	272

Year wise Students Strength for each of the UG Programme (2013-14)

Name of the Degree programme: B.Sc. (Agriculture)

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	20	81	101
2.	Second year	28	92	120
3.	Third year	32	63	95
4.	Fourth year	26	75	101

Name of the Degree programme: B.Tech. (Bio-technology)

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	8	38	46
2.	Second year	13	38	51
3.	Third year	20	45	65
4.	Fourth year	12	39	51

**Name of the Degree programme: B.Tech. (Bioinformatics)**

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	8	16	24
2.	Second year	8	20	28
3.	Third year	8	22	30
4.	Fourth year	7	20	27

Name of the Degree programme: B.Tech. (Agricultural Information Technology)

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	10	15	25
2.	Second year	8	20	28
3.	Third year	3	22	25
4.	Fourth year	5	21	26

Name of the Degree programme: B.Sc. (Agribusiness Management)

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	15	28	43
2.	Second year	12	26	38
3.	Third year	11	25	36
4.	Fourth year	6	16	22

Name of the Degree programme: B.Sc. (Sericulture)

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	5	28	33
2.	Second year	4	24	28
3.	Third year	10	19	29
4.	Fourth year	-	-	-



Details of scholarships availed by students (2013-14)

S. No.	Particulars			No. of students availed	Scholarship amount (Rs.)
1.	Scheduled Caste (SC)/ Scheduled Tribe (ST) Fresh and Renewal	1	20,720	10	1,83,745
	Scheduled Tribe Scholarship	9	1,63,025		
2.	BC/MBC/DNC Scholarship (General)	101	4,09,460	171	6,99,522
		69	2,81,932		
3.	SC/ST Higher Educational Special Scholarship			2	15,000
4.	Tamil Nadu Chief Minister Award Scholarship (SC/ST)			9	27,000
5.	SC/ST Government of India Scholarship			4	24,000
6.	Vedavalli Endowment Scholarship (General)			3	21,000
7.	National Talent Scholarship			4	40,000
8.	Others (if any please use additional rows) i.Pachiappa Foundation Scholarship			1	10,000
	Total			204	10,20,267

Study Tour (2013-14)

S. No.	Nature of Tour	Period	Places Visited	Number of Students
1	Study Tour	23.11.2013	ARS, Bhavanisagar	102
2	Study Tour	19.11.2013 & 20.11.2013	ARS, Bhavanisagar	74
3	Field Visit	18.02.2014	Ukkadam / Valankulam / Singanallur / Sular tank	34
4	Study Tour	20.02.2014 & 24.02.2014	Sular Water Pond	34
5	Exposure Visit	22.04.2014	Visit to CETP and polluted sites (Orathupalayam Dam)	112
6	Study Tour	25.06.2014, 27.06.2014 & 30.06.2014	Thondamuthur Block of Coimbatore District	97
7	Study Tour	26.06.2014	Ooty, UPASI, Coonoor and KPS Cold Storage Unit at Kallar	28
8	Study Tour	16.06.2014	Private Nursery at Thudiyalur	20
9	Study Tour	21.06.2014	Agricultural Research Station, Bhavanisagar and near by Farmers' field	40
10	Study Tour	23.06.2014	Visit to Food Processing Industry at M/s. Vinzi Sperri, Coimbatore	70

**Details of Students Placement**

S.No.	Institution category	Name of the company	Number of Students
1.	Agro industries	Godrej Agrovet Ltd.	4
		S.P.Y Agro Industries Ltd	1
		Reliance Fresh	6
		Chrysalis Agro Biolife LLP	4
		African firm	1
		Mansanto	2
		ITC	2
		Cadbury	1
		Shand Group of Companies	15
		Ekgaon	4
		Green earth fresh produce Ltd	5
		Sathyam Bio P Ltd	20
		James Warren Tea Ltd	7
		Deejay farms	4
		Nature Bio foods	6
2.	Seed industries	Shriram Bioseed Genetics	1
		Rasi seeds	4
3.	Banks	HDFC	2
		Karur Vysya Bank	16
		Federal Bank	3
		Central Bank	1
		Indian Overseas Bank	1
		Canara Bank	1
		Syndicate Bank	2
		Syngenta Bank	1
4.	Others	Zifo Technologies	5
		Point Perfect Transcription Services	3
		Dhan Foundation	25
		Hand in Hand	4
Total			151



Sports / Games and Prize Winners

S.No.	Name of the event	Organizer	Place and Date	Winners	Rank	
1	15 th All India Inter University Games and Sports meet	Assam Agricultural University	Jorhat, Assam 24.03.2014 to 28.03.2014.	WOMEN		
				M. Nandhini	800M 1500M	II Place II Place
				K. Niraimathy M. Nandhini SangeethaPriya Monica	4*100 m Relay	I Place
				SangeethaPriya	Long Jump	II Place
				SangeethaPriya	Shot Put	III Place
				MEN		
				S. Ubendra B. Manoj Kumar S. Gugan D. Manavaboosan	4*100m Relay	II Place
2	Inter Collegiate Tournament for the year 2014	ADAC&RI, Trichy	Trichy 23.02.2014 to 28.02.2014	Individual Championship for women : M.Nandhini, III B.Sc. (Agri), TNAU, Cbe		
				Men Cricket - Winners Hockey - Winners Football – Winners Badminton – Runners Ball badminton – Runners		
				Women Volleyball – Winners Basketball – Winners Kho-kho – Winners Ball badminton – Runners		
				MEN		
				S .Ubendra	100M 200M	II Place II Place



			A.Loganathan	110 M Hurdles	II Place
			Muthupandiyar.S	1500M	I Place
			S.Ubendra Manivannan Maturi Purnasai Sivaram Reddy Samsilas	4*400M Relay	II Place
			S.Ubendra Prince Manova Kiruba Shankar Jayaraj	4*100M Relay	II Place
			WOMEN		
			K. Niraimathy	100M 200M	III Place III Place
			S.Bharani	100M	II Place
			M.Nandhini	400M 800M 1500M	I Place I Place I Place
			M.Nandhini K.Niraimathy S.Bharani M.Suganya	4*100M	II Place
			M.Anusuyadevi	Shot Put	II Place
			R.Naveena	Discus Throw	II Place

Students Functions

S. No.	Date	Name of the Function
1	08.01.2014	Pongal Vizha
2	26.01.2014	65 th Republic day
3	01.02.2014 & 02.02.2014	5 th Transpire programme of III & IV Year B.Tech. (Agricultural Information Technology) students
4	27.03.2014 & 28.03.2014	Muthamizh Vizha 2014
5	03.04.2014	103 rd Annual Sports Meet
6	06.04.2014	Hostel day function



3.2.2. Agricultural College and Research Institute, Madurai

Degree wise Students Admission (2013-14)

Sl. No.	Degree	General		ICAR		Self Supporting		Total		
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Total
1.	B.Sc. (Agriculture)	22	74	2	5	-	-	24	79	103

Year wise Students Strength for each of the UG Programme (2013-14)

Name of the Degree programme: B.Sc. (Agriculture)

Sl. No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	24	79	103
2.	Second year	45	47	92
3.	Third year	29	58	87
4.	Fourth year	25	69	94
	Total	123	253	376

Details of scholarship availed by students 2013-2014

S. No.	Particulars	No. of students availed (UG & PG)	Scholarship Amount (Rs.)
1.	Adi-Dravidar Welfare Scholarship (Fresh & Renewal)	74	1494370
2.	BC and MBC Scholarship (Fresh & Renewal)	231	2131579
3.	SC/ST Higher Education Special Scholarship	57	456000
4.	Chief Minister Award (UG)	26	78000
5.	Periyar Endowment & KGH Endowment Scholarship	2	12000
6.	ICAR National Talent Scholarship	30	300000
7.	Cheminova Research Fellowship	1	80000
8.	Chikkammal – Kamala Endowment Scholarship (PG)	1	6500
9.	Chikkammal – Kamala Endowment Scholarship (UG)	1	6500
10.	ESFT Trust Scholarship	2	34000
11.	Gandhi Memorial Award for SC&ST students	1	2000
12.	GOI-DST Inspire Fellowship	1	263427



13.	Prize Money scholarship to Adi-Dravidar Students	13	66000
14.	Teachers Welfare Scholarship	2	10000
15.	TNAU – Merit scholarship (PG)	2	20000
16.	TNAU – Merit scholarship (UG)	4	4000
17.	TNAU – Research Assistantship	2	30000
18.	TNAU Corpus fund scholarship	1	10000
19.	TNSC&ST Program Project Scheme Fund	3	30000
20.	Tuition fee concession to first graduate students	126	465720
21.	UGC – Rajiv Gandhi National Fellowship	4	848097
	Total	584	4428151

Study Tours

S. No.	Nature of Tour	Period	Places Visited	Number of Students
1.	All India Study tour	04.10.2014 - 20.10.2014	<p>Hyderabad - Directorate of Rice Research, Maize Research Station, Sorghum Research Centre, Oil Palm Research Center, Dryland Research Center, MANAGE</p> <p>New Delhi – Plant Molecular Biology Research Centre, Directorate of Maize Research.</p> <p>Dehradun – Indian Long Term Vision Research Station, Forest Research Station, Mushroom Research Station, Solan, Potato Research Station, Simla.</p> <p>Ludhiana – Post Harvest Technology Centre, Punjab Agricultural University.</p>	79

Details of Students Placement

S. No.	Name of Agency	Number of Students
1.	Indian Overseas Bank	1
2.	Indian Administrative Service	1



Sports / Games and Prize Winners

S.No.	Name of the event	Organizer and Date	Winners	Place		
1	Tamil Nadu Agricultural University, Inter Collegiate Tournament	ADAC&RI, Tiruchirapalli	<i>பெண்கள்</i>			
			Monica, J.S.	100 m	First place	
			Monica, J.S.	200 m	First place	
			Sowbackiyam, A.	800 m	Second place	
			Sowbackiyam, A.	1500 m	Second place	
			Sowbackiyam, A.	3000 m	First place	
			Hemavathy, M.		Third place	
			Vanaja, P.	Javelian throw	First place	
			Vanaja, P.	Long jump	First place	
			Monica, J.S.	Triple jump	First place	
			Monica, J.S.	4x100 m relay	First place	
			Sowbackiyam, A.			
			Sangavi, G.			
			Mahima shree, A.			
			Monica, J.S.	4x400 m relay	First place	
			Sowbackiyam, A.			
			Ragasudha P.V.			
			Hemapriya. S.			
					Boys	
			Karthik, P.	200 m atheletics	Third place	
			Karthik, P.	1500 m atheletics	Second place	
			Karthik, P.	5000 m atheletics	Third place	
			Rajeshkumar, A.	Javelian throw	Second place	
Rajeshkumar, A.	Short put	Third place				
Rajeshkumar, A.	Disc throw	First place				
Sridhar, S.	Chain throw	First place				
Karthik,	High jump	Second place				
Karthik,	Triple jump	First place				

Students Functions

S. No.	Name of the Function	Date
1	14.01.2014	Pongal Vizha
2	26.01.2014	65 th Republic Day
4	08.03.2014 & 09.03.2014	Muthamil vizha 2014
5	17.4.2014.	103 rd Sports day
6	21.04. 2014	Hostel day



3.2.3. Agricultural College and Research Institute, Killikulam, Vallanadu, Thoothukudi

Degree wise Students Admission (2013-14)

Name of the Degree	General		ICAR		Total		
	Boys	Girls	Boys	Girls	Boys	Girls	Total
B.Sc.(Agri.)	28	54	02	00	30	54	84
M.Sc.(Agri.)	11	12	00	00	11	12	33

Year wise Student's Strength (2013-14)

Sl. No.	B.Sc (Agri)	Number of students		
		Boys	Girls	Total
1	First year	30	54	84
2	Second year	39	40	79
3	Third year	32	30	62
4	Fourth year	31	51	82
	Total	132	175	307

Details of Scholarships availed by Students (2013-14)

S. No.	Name of the Scholarship	No. of Students	Amount Receipt (Rs.)
1.	BC/MBC/DNC Scholarship	187	13,84,460
2.	SC/ST Post metric Scholarship	64	13,29,035
3.	Higher Education Special Scholarship	18	1,44,000
4.	Chief Minister Awards	18	54,000
5.	ICAR National Talent Award	23	2,30,000
6.	Prize Money Award Scholarship	02	12,000
	Total	312	31,53,495

Study Tour

S. No.	Nature of Tour	Period	Places Visited	Number of Students
1	Study tour – II	16.09.2013 10.09.2013 –	Namakkal, Paiyur, Bhavanisagar, Aliyarnagar, Coimbatore	62
2	Irrigation Management	22.10.2013	Vaigai Dam	79
3	Weed Management	23.10.2013	AC&RI, Madurai and nearby farmers fields	79
4	Principles of Agronomy and Agricultural Heritage	12.11.2013	Regional Research Station, Aruppukottai	85



5	Study tour – I	15.02.2014 – 20.02.2014	Ramnathapuram, NPRC vamban, Tiruchirapalli, IMTI Tiruchirapalli, AICRP, Madurai, Kodaikanal, Sirugamani, Srivilliputhur	79
6	UG Study Tour – I	14.02.2014 – 20.02.2014	Various Research Stations, Colleges and KVK in Southern Agro-Climatic Zones of Tamil Nadu	79
7	Exposure Study tour	02.08.2013	Centre for Plant Molecular Biology, TNAU, Coimbatore Nano Science Centre, Dept. of Nano Science & Technology, TNAU	84
8	Industry and Institutional Tour	20.08.2013 – 02.09.2013	South India (Kerala, Karnataka Andhra Pradesh)	82
9	Industry and Institutional Educational Tour	02.10.2013 – 17.10.2013	North India (Delhi, Rajasthan, Himachal Pradesh, Chandigarh, Punjab, Haryana)	82
10	Educational Tour in Entomology Department	15.04.2014 – 18.04.2014	Central Institute for Cotton Research (ICAR), Coimbatore Sugarcane Breeding Institute Coimbatore, Toxicological Laboratory and Bio Control Unit in Department of Entomology, TNAU, Coimbatore	4

Details of students' placement

S. No.	Name of Agency	Number of Students
1.	Sathyam Bio (P) Ltd	8
2.	Deejay Farm	1
3.	ABT Pvt. Ltd	3
	Total	12

Sports / Games and Prize Winners

S.No.	Name of the event	Organizer	Date	Winners	Rank
1	Tamil Nadu State Judo championship Judo – 68 kg category	Tamil Nadu Judo Association, Madurai Wing	15.06.2013 & 16.06.2013	G.Rudhradevi, II B.Sc. (Ag.)	I



2	Cricket (Men)	TNAU, Inter Collegiate Tournament held at ADAC&RI, Trichy	22.02.2014 to 28.02.2014	Men team	II
3	Chess (Men)			P. Akilesh	II
4	400 m hurdles (Men)			M. Vinod	II
5	Javelin (Women)			K. Prabhavathi	II
6	100 m hurdles (Women)			K. Ponnarasi	I
7	100 m Dash (Men)			L. Kanakarasu	III
8	Shot put (Men)			Nadeem Ahamed	II
9	Discus Throw (Men)			G. Vaiyapuri	II
10	400 m hurdles (Women)			K. Ponnarasi	III
11	4 x 400 m Relay (Men)			Jeevakumar L. Kanagarasu Raghupathi Vinod	III

Students Functions

S. No.	Name of the Function	Date
1	NSS special camp at Erattai Thiruppathi	27.05.2013 – 02.06.2013
2	Independence day celebration	15.08.2013
3	NSS day celebration at AC&RI, Killikulam	24.09.2013
4	Gandhian week celebrations and International Non-violence Day observance with various competitions	02.10.13 – 08.10.13
5	Training session on Yoga for students	12.10.2013
6	In campus Cleaning of Garden	26.10.13
7	Eye camp conducted in collaboration with Vasan Eye Care Hospital	28.11.2013 - 29.11.2013
8	Republic Day celebration	26.01.2014
9	Students Club Inauguration	31.01.2014
10	Muthamil Vizha	05.03.2014 - 6.03.2014
11	Acofun 2014	19.03.2014 - 21.03.2014
12	Sports Day	02.04.2014
13	Club Day and College Day	03.04.2014
14	Hostel Day	04.04.2014



3.2.4. Anbil Dharmalingam Agricultural College and Research Institute, Navalur Kuttappattu, Tiruchirappalli

Degree wise Students Admission (2013-14)

S.No.	Name of the Degree	General		ICAR		Total		
		Boys	Girls	Boys	Girls	Boys	Girls	Total
1.	B.Sc. (Agriculture)	23	66	3	2	26	68	94
	Total	23	66	3	2	26	68	94

Year wise Students Strength (2013-14)

Sl. No.	B.Sc. (Agriculture)	Number of students		
		Boys	Girls	Total
1.	First year	26	68	94
2.	Second year	18	55	73
3.	Third year	23	48	71
4.	Fourth year	21	60	81
	Total	88	231	319

Details of scholarships availed by students (2013-14)

S. No.	Particulars	No. of students availed	Scholarship amount (Rs.)
1.	SC/ST Fresh and Renewal	41	8,82,330
2.	SC/ST Higher Educational Special Scholarship	41	3,28,000
3.	Tamil Nadu Chief Minister Award Scholarship (SC/ST)	1	3,000
4.	Periyar Endowment Scholarship	1	6,000
5.	SC/ST Government of India Scholarship	4	24,000
6.	National Talent Scholarship	28	2,80,000
	Total	116	15,23,330

Study Tour

S. No.	Nature of Tour	Period	Places Visited	Number of Students
1	Short Tour (2010-11 Batch)	29.07.2013 to 11.08.2013	Aruppukottai, Kovilpatti, Madurai, Vagarai, Udumalpet, Ooty, Coonor, Mettupalayam, Anthiyur, Dharmapuri, Paiyur and Yethapur.	81



2	All India Study Tour (2010-11 Batch)	14.09.2013 to 29.09.2013	Andrapradesh N G Renga Agrl. University, Directorate of Rice Research, Hyderabad, National Academy of Agricultural Research Management, Directorate of Oilseed Research, PAU, Ludhiana, IARI, New Delhi, National Agricultural Science Museum, New Delhi, Remote Sensing Institute and Forest Research College at Dehradun, Rajasthani Kings Dynasty, Rock gardens and Agra Mughal gardens.	81
3	Study tour (2011-12 batch) V semester	15.07.2013 to 21.07.2013	Aduthurai, Annamalai University, Vridhachalam, Yethapur, Yercaud, Sandhiyur, Papparpatty, Paiyur, Bhavanisagar, Coimbatore, Mettupalayam, Coonoor, Ooty, Aliyarnagar and Vagarai.	69
4	Study tour (2012-13 batch) IV semester	10.02.2014 to 16.02.2014	Vedasanthur, Vagarai, Kodaikanal, Thadiyankudisai, Periyakulam, Vaigaidam, Srivilliputhur, Kovilpatti, Pechiparai, Thovalai, Killikulam, Ambasamudram, Ramanathapuram, Paramakudi, Madurai, Chettinad, Vamban.	70

Details of students' placement

Sl. No.	Name of Agency	Number of Students
1.	Banking	2
2.	Agricultural Marketing	4
3.	Junior Research Fellow	1
	Total	7

Sports / Games and Prize Winners

S. No.	Name of the event	Organizer	Place and Date	Winners	Rank
1.	Shot-Put	Tamil Nadu Agricultural University Inter collegiate Sports, ADAC&RI, Trichy	Trichy 23.02.14 to 28.02.2014	Preethi, B	I



Students Functions

S. No.	Date	Name of the Function
1	23.08.2013	Orientation Day
2	29.11.2013	Inauguration of Students Club – 2013-14
3	07.01.2014 -08.01.2014	Pongal Vizha – “Uzhavar Pattimandram” and students cultural programmes coverage for Pothigai Channel of Doordharshan Kendra, Chennai.
4	05.02.2014 – 06.02.2014	KONDATTAM – Intra Collegiate Cultural, Literary and Arts events
5	23.02.2014 to 28.02.2014	Inter Collegiate Tournament
6	18.03.2014	Sports Day
7	19.03.2014 – 20.03.2014	Muthamizh Vizha
8	21.03.2014	College Day and Hostel Day

**3.2.5. Horticultural College and Research Institute, Coimbatore****Degree wise Students Admission (2013-14)**

S.No.	Name of the Degree	Self supporting		ICAR		Total		
		Boys	Girls	Boys	Girls	Boys	Girls	Total
1	B.Tech (Hort.)	12	21	-	-	12	21	33
	Total	12	21	-	-	12	21	33

Year wise Students Strength (2013-14)

Sl. No.	B.Tech (Horticulture)	Number of students		
		Boys	Girls	Total
1	First year	12	21	33
2	Second year	9	26	35
3	Third year	9	28	37
4	Fourth year	9	20	29

Details of Scholarships availed by Students (2013-14)

S. No.	Particulars	No. of students availed	Scholarship amount (Rs.)
1.	SC/ST Fresh and Renewal	17	3,36,080
2.	BC/MBC/DNC Scholarship (General)	50	5,52,130

Study Tour

Sl. No.	Nature of Tour	Period	Programme	Number of students
1	Study tour	16.09.2013	Lakshmi Seva Sangham, Gandhigram, Dindigul; M/s. Maharaja Masala, Theni; Muthuraj Masala, Theni	35
2	Study tour	17.09.2013	M/s. Eastern Condiments, Theni District.	
3	Study tour	18.09.2013	ICRI, Myladumpara, Cardamom Research Station, Pampadumpara, Puthadi e-auction centre, Spice Park Processing Units of Pepper and Cardamom	
4	Study tour	19.09.2013	Rubber Research Institute at Kottayam Rubber Industries, Kottayam	



5	Study tour	20.09.2013	Coconut Development Board, Spices Board, Directorate of Cashew and Cocoa, Cochin	
6.	Study tour	21.09.2013	Akay Flavours & Aromatics Pvt.Ltd, Ernakulam S.B.Pharmaceutical Laboratories, Chittoor, Cochin	
7.	Study tour	22.09.2013	Nagarjuna Herbal Concentrates Ltd., Thodupuzha, Kochi	

Sports / Games and Prize Winners

S.No.	Sports / Games	Winner	Location and Date	Rank
1	Agronova '13	V.Shobana, I B.Tech (Hort.)	Agricultural College and Research Institute, Coimbatore	I
2		R.Madhubala, IV B.Tech (Hort.)		II
3		Sayam Batiya, I B.Tech (Hort.)		III
4	Cassatta	Nandhini . M, IV B.Tech (Hort.)	Agricultural College and Research Institute, Coimbatore	I
5		Monisha Reshma, IV B.Tech (Hort.)		I
6		P. Anantha Giri, III B.Tech (Hort.)		I
7	Foot ball	Mamman Thomas, II B.Tech (Hort.)		II
8		Sayam Batiya, I B.Tech (Hort.)		II
9	Ball badminton	D. Selvakumar, IV B.Tech (Hort.)	Agricultural College and Research Institute, Madurai	II
10	Table Tennis	R. Madhubala, IV B.Tech(Hort.)		I
11		R. Sruthilaya, IV B.Tech (Hort.)		I
12		M. Suganthi, I B.Tech (Hort.)		II

Students Functions

S. No.	Date	Name of the Function
1	29.08.2013	Club day Inauguration
2	06.12.2013 & 07.12.2013	Sangamithra



3.2.6. Horticultural College and Research Institute, Periyakulam

Degree wise Students Admission (2013-14)

S. No.	Name of the Degree	General		ICAR/Andaman		Self supporting		Total		
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Total
1	B.Sc.(Horticulture)	25	52	-	4	-	-	25	56	81

Year wise Students' Strength (2013-14)

B.Sc. (Horticulture)	Number of students		
	Boys	Girls	Total
First year	25	56	81
Second year	37	47	84
Third year	28	42	70
Fourth year	23	50	73
Total	113	195	308

Details of Scholarships availed by Students (2013-14)

S. No.	Particulars	No. of students availed	Scholarship amount (Rs.)
1.	SC/ST Fresh and Renewal	49	770875
2.	BC/MBC/DNC Scholarship (General)	167	124433
3.	SC/ST Higher Educational Special Scholarship	31	32000
4.	Tamil Nadu Chief Minister Award Scholarship (SC/ST)	5	15000
5.	National Talent Scholarship	8	80000
	Total	260	10,22,308

Study Tour

S. No.	Nature of Tour	Period	Places Visited	Number of Students
1	Industry and institutional Educational Tour	19.08.2013 to 25.08.2013	Coimbatore, Mettupalayam, Salem, Dharmapuri, Hosur, Trichy, Virudhachalam, Madurai, Thirunelveli, Thoothukudi, Nagarkovil	71
2	All India Study Tour	13.10.2013 to 30.11.2013	Bangalore, Hyderabad, Pune, New Delhi, Jaipur, Shimla, Chandigarh, Amritsar,	71



3	Study tour – I	17.03.2014 to 23.03.2014	Srivilliputhur, Pechiparai, Killikulam, Madurai	84
4	Study tour - II	15.07.2013 to 21.07.2013	Coimbatore, Trichy, Virudhachalam	68

Students Functions

S. No.	Date	Name of the Function
1	27.08.2013	24 th Club day inauguration and Orientation day programme
2	13.03.2014 - 14.03.2014	Muthmizh vizha function
3.	30.04.2014	24 th Club day and College day function



3.2.7. Horticultural College and Research Institute for Women, Tiruchirappalli

Degree wise Students Admission (2013-14)

S.No.	Name of the Degree	Self supporting		ICAR		Total		
		Boys	Girls	Boys	Girls	Boys	Girls	Total
1	B.Tech (Hort.)	-	39	-	2	-	41	41
	Total	-	39	-	2	-	41	41

Year wise students strength (2013-14)

Sl. No.	B.Tech (Horticulture)	Number of students	
		Girls	Total
1	First year	41	41
2	Second year	42	42
3	Third year	37	37
4	Fourth year	-	-
	Total	120	120

Details of Scholarships availed by Students (2013-14)

S. No.	Particulars	No. of students availed	Scholarship amount (Rs.)
1.	Scheduled Caste Scholarship	17	2,87,980
2.	Scheduled Tribe Scholarship (General)	2	33,880
3.	Back Ward Class Scholarships	48	5,26,040
4.	Most Back Ward Class Scholarships	25	2,75,220
5.	First Graduate Scholarship	28	2,25,570
	Total	120	13,48,690

Study Tour

S.No	Period	Places of Visit
1.	05.01.2013 to 11.01.2013	(1) State Horticulture Farm, Courtallam (2) HRS, Pechiparai (3) State Horticulture Farm, Kanyakumari (4) Floriculture Research Station, Thovalai



		<p>(5) AC&RI, Killikulam</p> <p>(6) P.S.S. Krishnamurthi Exports, Tuticorin</p> <p>(7) Regional Research Station, Aruppukkottai</p> <p>(8) AC&RI, Madurai</p> <p>(9) Agricultural Research Station, Paramakudi</p> <p>(10) Coastal Salinity Research Centre, Ramanathapuram</p> <p>(11) Government Horticulture Farm, Uchipuli</p> <p>(12) HRS, Kodaikanal</p>
2	15.7.2013 to 21.7.2013	<p>(1) TRRI, Aduthurai</p> <p>(2) RRS, Vridhachalam</p> <p>(3) RRS, Paiyur, Mango Processing unit</p> <p>(4) Santhakumar Nursery</p> <p>(5) ARS, Aliyarnagar</p> <p>(6) TNAU, CBE</p> <p>(7) Arecanut farm, Thudiyalur</p> <p>(8) Encee Aromatics, Mettupalayam</p> <p>(9) FCRI, Mettupalayam</p> <p>(10) RRS, Bavanisagar</p> <p>(11) HRS, Ooty</p> <p>(12) SRS, Sirugamani</p>
3	02.03.2014 to 08.03.2014	<p>(1) State Horticulture Farm, Courtallam</p> <p>(2) HRS, Pechiparai</p> <p>(3) State Horticulture Farm, Kanyakumari</p> <p>(4) AC & RI, Killikulam</p> <p>(5) Regional Research Station, Aruppukkottai</p> <p>(6) Agricultural Research Station, Paramakudi</p> <p>(7) Coastal Salinity Research Centre, Ramanathapuram</p> <p>(8) HRS, Kodaikanal</p>
4	28.01.2014 to 03.02.2014	<p>(1) HRS, Yercaud</p> <p>(2) Internship Course - Coffee Training</p>
5	16.03.2014 to 22.03.2014	<p>(1) UPASI, Conoor</p> <p>(2) Internship in Plantation – Tea Training</p>



Sports / Games and Prize Winners

- HC&RI (W) Women team participated in the TNAU Inter-Collegiate Tournament held at ADAC & RI, Tiruchirappalli from 23.02.2014 to 28.02.2014.
- Intramural Matches for I, II, and III year students for Volleyball, Ball badminton, Badminton and Kho-Kho were conducted on 10.03.2014 to 14.03.2014.
- Intramural Athletics Meet for I, II, and III year students were conducted on 15.03.2014 to 17.03.2014.
- Annual Sports Meet was conducted on 18.03.2014 for the year for 2013-2014.
- Sports Activities were held in Kallikudi village on 30.05.2014 during the NSS Campaign.
- Special competition on athletic events for I and II year was successfully held on 1st June, 2014.
- Evening sports activity classes for I, II, and III year students are regularly conducted from 5.15 to 6.15 p.m. on Tuesdays and Thursdays.
- Athletic events and games were practiced on week days from 5.00 to 6.30 p.m.

Students Functions

S. No.	Date	Name of the Function
1	27.08.2013	Orientation Day
2	01.01.2014	New year Celebrations
3	15.01.2014	Pongal vizha



3.2.8. Agricultural Engineering College and Research Institute, Coimbatore

Degree wise Students Admission (2013-14)

S. No.	Degree	Admission Details					
		Self supporting			Total		
		Boys	Girls	Total	Boys	Girls	Total
1.	B.Tech.(Food Processing Engineering)	18	38	56	18	38	56
2.	B.Tech.(Energy and Environmental Engineering)	21	30	51	21	30	51

Year wise Students Strength (2013-14)

S.No.	Year	Number of students		
		Boys	Girls	Total
1.	First year	39	68	107
2.	Second year	38	69	107
3.	Third year	40	64	104
4.	Fourth year	23	42	65
	Total	140	243	383

Details of Scholarships availed by the Students (2013-14)

S.No.	Particulars	Number of students availed	Scholarship amount (Rs.)
1	BC /MBC Scholarship	115	1282450
2	SC Scholarship	43	845460
3	ST Scholarship	2	43450
4	SC Chief Minister Award	3	9,000
5	Periyar Endowment Scholarhsip	2	10000
	Total	115	2190360

Study Tour

S.No.	Nature of Tour	Period	Places Visited	No. of students
	B.Tech (Food Process Engineering)			
1.	Rural Agro Industrial Programme tour	11.03.2014 - 20.03.2014	Permbalur, Navalurkuttappattu, Trichirappalli.	31
2.	All India study tour	19.02.2014 - 05.03.2014	Goa, Mumbai, Ahmadabad,, Jaipur, Haridwar, Dehradun, Amritsar and New Delhi.	31



3.	Short tour	21.02.2014 - 27.02.2014	Salem, Chennai, Tiruchirappalli, Namakkal and Thanjvanur	53
4.	Short tour	22.07.2014 - 29.07.2014	Dindigul, Tirunelveli and Kanyakumari.	53
B.Tech (Energy and Environmental Engineering)				
1.	All India study tour	11.03.2014 - 20.03.2014	Goa, Mumbai, Jaipur, Gurgon, Agra, Haridwar, Dehradun, Amritsar and New Delhi	34
2.	Rural Energy and environmental exposure visit	19.02.2014 - 05.03.2014	Sirugamani & Aliyar	34
3.	Short tour	21.2.2014 - 27.2.2014	Salem, Chennai, Tiruchirapalli, Namakkal and Thanjavur	42
4.	Short tour	22.7.2014 - 29.7.2014	Dindigul, Tirunelveli and Kanyakumari.	42

Campus Interviews and Placement

Degree	Number of students
B.Tech. (EEE) Placement	16
B.Tech. (EEE) Higher studies	07
B.Tech. (FPE) Placement	16
B.Tech. (FPE) Higher studies	04

Students Functions

S. No.	Date	Name of the Function
1.	Food Explore 2013	20.09.2013 - 21.09. 2013
2.	Ecofest 2013	26.07.2013 - 27.07.2013

3.2.9. Agricultural Engineering College and Research Institute, Kumalur**Degree wise Students Admission (2013-14)**

S.No.	Name of the Degree	General		ICAR		Total		
		Boys	Girls	Boys	Girls	Boys	Girls	Total
1	B.Tech (Agrl. Engg.)	28	37	3	1	31	38	69
	Total	28	37	3	1	31	38	69

Year wise Student's Strength (2013-14)

Sl. No.	B.Tech (Agricultural Engineering)	Number of students		
		Boys	Girls	Total
1	First year	31	38	69
2	Second year	38	23	61
3	Third year	21	31	52
4	Fourth year	25	23	48
	Total	115	115	230

Details of Scholarships availed by Students (2013-14)

S. No.	Particulars	No. of students availed	Scholarship amount (Rs.)
1	BC/MBC/DNC Scholarship (General)	107	12,42,170
2	SC/ST Fresh and Renewal	39	8,15,260
3	SC/ST Higher Educational Special Scholarship	33	2,64,000
4	Tamil Nadu Chief Minister Award Scholarship(SC/ST)	1	3,000
5	Periyar Endowment Scholarship	2	10,000
6	Indian Council of Agricultural Research Scholarships	9	90,000
7	National Talent Scholarship	9	90,000
	Total	200	25,14,430

Study Tour

S. No.	Nature of Tour	Period	Places Visited	Number of Students
1	Industrial Internship Programme	28.11.2013 to 30.02.2014	Salem, Bangalore, Anandhpur, Jalgaon	42
2	Industry & Institutional Tour Programme I	10.02.2014 to 19.02.2014	Coimbatore, Gobichettipalayam, Kanyakumari, Madurai, Virudhunagar	42
3	All India Study Tour	19.03.2014 to 05.04.2014	Bangalore, Pune, Mumbai, Bhopal, Agra, Jaipur, Haridwar, Dehradun, Ludiana, Delhi, Chennai	42

**Campus Interviews and Placement**

S. No.	Name of Agency	Number of Students
1.	Mahindra & Mahindra	2
2.	Texmo Industries	3
3.	Gomathi Industries	1
4.	Sonalika Tractors	1
5.	VST Tillers	1
6.	Devi Irrigations	1
7.	Proscape, Dubai	1
8.	Roots Irrigation	1
9.	Netafim Irrigations	1
Total		12

Sports / Games and Prize Winners

S. No.	Name of the event	Organizer	Date	Name of the event	Rank
1.	Tamil Nadu Agricultural University –	Anbil Dharmalingam Agricultural College and Research Institute, Trichy	23.02.14 to 28.02.14	Chess (Men)	Winner
2.	Inter Collegiate Tournaments 2013-14			Long Jump	Gold Medal
3.				High Jump	Silver Medal

Students Functions

S. No.	Date	Name of the Function
1.	19.08.2013	Students Club activities - Organised Tamil debate on “Samacheer Kalvi –Padhagama sadhagama” by Tamil Literary Club
2.	20.08.2013	Awareness programme was conducted for students to prepare for competitive examinations (CAT, ABM, GATE) by the TIME Institute, Tiruchirapalli
3.	21.08.2013	Students activities - Organised English debate on “Environmental degradation-Whom to blame Government Public” by English Literary Club
4.	22.08.2013	College Fresher’s Day
5.	05.09.2013	Teachers’ Day
6.	20.09.2013	Club Inauguration Day
7.	29.11.2013	Students seminar on “Emerging trends in Agricultural Engineering ETAE 2013”
8.	14.03.14 - 15.03.14	Personality Development Workshop
9.	09.04.2014	Hostel Day
10.	10.04.2013	Annual Sports Day
11.	10.04.2013	Club Day
12.	22.04.2014	Farewell Function



3.2.10. Forest College and Research and Institute, Mettupalayam

Degree wise Students Admission (2013-14)

S.No.	Name of the Degree	General		ICAR		Total		
		Boys	Girls	Boys	Girls	Boys	Girls	Total
1.	B.Sc (Forestry)	28	12	1	2	29	14	43

Year wise Students Strength (2013-14)

Sl. No.	B.Sc. (Forestry)	Number of students		
		Boys	Girls	Total
1.	First year	29	14	43
2.	Second year	35	14	49
3.	Third year	20	14	34
4.	Fourth year	21	6	27
	Total	105	48	153

Study Tour

S. No.	Nature of Tour	Places Visited	Number of Students
1.	Industry, Institutional and Educational Tour	South India	27
2.	Industry, Institutional and Educational Tour	North India	27
3.	Study tour to Northern Tamil Nadu	Northern Tamil Nadu	49
4.	Study tour to Southern India	Southern India	34
5.	Study tour to Southern Tamil Nadu	Southern Tamil Nadu	43

**3.2.11. Home Science College and Research Institute, Madurai****Degree wise Students Admission (2013-14)**

S.No.	Name of the Degree	General		Total		
		Boys	Girls	Boys	Girls	Total
1.	B.Sc (Home Science)	3	28	3	28	31
	Total	3	28	3	28	31

Year wise Students Strength (2013-14)

Sl. No.	B.Sc. (Home Science)	Number of students		
		Boys	Girls	Total
1.	First year	3	28	31
2.	Second year	10	18	28
3.	Third year	3	24	27
4.	Fourth year	2	19	21
	Total	18	89	107

Details of Scholarships availed by Students (2013-14)

S. No.	Particulars	No. of students availed	Scholarship amount (Rs.)
1.	BC/MBC/DNC Scholarship (General)	60	4,88,801
2.	SC/ST Fresh and Renewal	28	4,70,810
3.	SC/ST Higher Educational Special Scholarship	19	1,52,000
4.	Periyar Endowment Scholarship and Ms. Kokilavani, Ms. Gayathri and Ms. Hemalatha Endowment Scholarship (General)	1	10,000
5.	Others (if any please use additional rows) TNSCST (IFRS) Scholarship	1	3,00,000
	Total	109	14,21,611

Study Tour

S. No.	Nature of Tour	Period	Places Visited	Number of Students
1.	Short Tour	12.08.2013 to 18.09.2013	Southern Tamil Nadu	21
2.	All India Tour	04.09.2013 to 26.09.2013	Bangalore, Hyderabad, Mumbai and Delhi	20



Details of Students Placement

S. No.	Name of Agency	Number of Students
1	Junior Research Fellow, Tamil Nadu Agricultural University	10
2	Assistant Professor, Subject Matter Specialist	2
3	Senior Research Fellow, Tamil Nadu Agricultural University	2
	Total	14

Sports / Games and Prize Winners

S. No.	Name of the event	Organizer	Place and Date	Winners	Rank
1.	Printing Techniques	Sardhar Vallabai Patel International School of Textiles and Management, Coimbatore	26.09. 2013 – 27.09.2013	P. Anandhan	II Prize
2.	Face Painting	Sardhar Vallabai Patel International School of Textiles and Management, Coimbatore	26.09. 2013 – 27.09.2013	P. Anandhan	III Prize

Students Functions

S. No.	Date	Name of the Function
1.	13.11.2013	Children's Day Celebration in the laboratory crèche. Dean Home Science, faculty and staff participated in the programme
2.	22.10.2013	World Food Day
3.	11.04.2014	Dental health camp, Ultra Best Dental College, Madurai
4		All other students' functions are jointly organized with AC&RI Madurai



3.3. DIRECTORATE OF STUDENTS WELFARE

The mandates are Placement, Career Counseling and Higher education. The activity of the Directorate of Students Welfare revolves around promoting capacity building and employability of agricultural graduates. The Under Graduate and Post Graduate students of TNAU are facilitated and guided

for their better placement and higher studies in domestic and overseas institutions. The Vision of the Directorate is to build confidence and competence among agricultural graduates to enable them to compete globally and get jobs at national and international levels.

Placement (2013-14)

S. No.	Institution	Number of TNAU students placed			
		No. of General category candidates placed	No. of BC/MBC candidates placed	No. of SC/ST candidates placed	Total no. of persons placed
1	Agro industry	12	52	18	82
2	Seed industry	-	5	-	5
3	Banks	3	23	1	27
4	Others	3	31	3	37
5	Off campus				36
	Total	18	111	22	187
Higher education					
6	Post Graduates in TNAU				188
7	Post Graduates outside TNAU				109
8	Post Graduates abroad				9

Placement Details of Diploma in Agriculture Students

Sl. No.	Industry category	Total number
1	Plantations	5
2	Food related industries	9
3	Agro industries	71
4	Non Governmental Organisations	15
5	Seed industries	20
6	Input industries	20
	Total	140



Overseas Employment Unit

Overseas Employment Unit (OEU) was established in October, 2005 with a view to provide opportunities for TNAU graduates in the international arena. Campus recruitment is through telephonic interviews or videos

conferencing or campus interviews. Graduates have been placed under overseas employment predominantly in Middle-East (Dubai, Muscat, Kuwait, and Madagascar) and African Countries.

Number of Students Placed Overseas

Sl. No.	Country	Number of students employed until 2012-13	Number of students employed during 2013-14	Total Number of students employed up to 2013-14
1.	Middle East and Africa	77	3	80
2.	America	13	-	13
3	Canada	4	-	4
4	England	12	2	14
5	Germany	1	-	1
6	Rwanda	4	-	4
7	Singapore	2	-	2
8	Srilanka	1	-	1
9	Australia	1	-	1
10	Ivory coast	-	1	1
11	Other countries	4	-	4
	Total	119	6	125

Seeking Placement Information

The Director and the placement officers of DSW directly contact various multi - national Agro based companies, Banking sectors and NGO's and appraise the activities and also request the company officials for campus

interviews in addition to correspondence made through different media. These tie-ups pave way for demand driven production of farm graduates.

Education Abroad

Dual Degree Program

TNAU with Dalhousie University, Canada offers Dual Degree Program for students of B.Sc. (Ag.), B.Sc. (Horti.) and B.Tech. (Horti.) in B.Tech (Environmental

Landscape Horticulture). The program was started in the year 2009-10. Number of students admitted in this program up to 2014 is furnished below.



Name of the Degree	Total Number of students admitted (upto 2012-13)	Number of students admitted during 2013-14	Number of students passed out during 2013-2014
B.Tech (Environmental Landscape Horticulture).	23	3	3

Higher Education

Coaching classes are conducted for GRE, TOEFL, IELTS and BEC by the faculty of this Directorate as well by outsourced faculty. They are also guided on higher education opportunities. A similar coaching class for Civil Service Examination is being offered to Agriculture graduates of TNAU by outsourcing faculty.

Global Network

To facilitate the aspiring students who would like to pursue their higher education abroad, the Directorate has created a group ID called The Green Group tnausw2006@yahoo.groups.co.in which enables the prospective students and the TNAU alumni who are working or studying abroad interact with each other on the latest information on admission procedure, visa, etc. There are 850 members in this Special Interest Group. These include, TNAU alumni studying or working in USA, U.K, Canada, Australia, New Zealand, Japan, Netherlands, South Korea, Germany, France and Singapore. The Directorate also maintains a separate database of TNAU alumni who are studying or working in these countries with a view to build up global network. At present the database of 250 members is maintained.

Advanced Digital Language Laboratory

The Directorate has established an Advanced Digital Language Laboratory in 2007 with an objective of grooming the soft skills of the students for placement, higher education in India and abroad, and English language learning by means of self-learning packages. Students use the lab regularly to improve English language learning and soft skills. The lab is equipped with a Hi-Class net work software which enables the teacher to facilitate several classroom interactions. It has a good amount of authentic CDs on career skills/soft skills, competitive examinations and English language learning. The study centre while has printed material on such themes, the Advanced Digital Language Laboratory supports them in the form of software.

Career Guidance

The students are motivated to pursue careers in various spheres of life. The following special lectures were arranged at the Directorate of Students Welfare.



S.No	Topic	Date	Speaker
1	Be Ambitious	12.08.2013	Dr. C. Sylendra Babu, ADGP, CSG, Chennai
2	Goal Setting	17.09.2013	Dr. D. Srinivasan, Director, Department, of Psychological Medicine, KMCH, Coimbatore
3	Higher Education	17.09.2013	Ms. Tina Jacob Joseph, Education Advisor, Campus France, French Embassy, Espace, Chennai.
4	Online Coaching	17.09.2013	Mr. Austin. P. M, Students Support Executive & CEO, Max Value Online, Chennai
5	TNAU – Dalhousie Dual Degree Programme	07.10.2013	Dr. B. Prithviraj, Assoc. Prof. (Marine Biology), Dalhousie University, Canada
6	Higher Education Abroad to GRE/BEC	08.10.2013	Mr. R. Veeraragavan. R & Ms. Mary Jency, Study Overseas -Global
7	Preparation for Competitive Examinations	18.12.2013	Mr. P. Velusamy, Project Executive, CPCL-CBR, Chennai organized at AC & RI, Madurai
8	Study Well	29.01.2014	Mr. Vijay Mahagoankar, Head, Brooklyn Institute, Bombay, organized at Killikulam
9.	Preparation for Civil Service Examinations	08.02.2014	Th. Sundaresh Babu, IAS, Additional Collector, Belgaum, Karnataka
10.	Enter into action	19.03.2014	Dr. C. Sylendra Babu, ADGP, CSG, Chennai

Model Examinations Conducted for Competitive Examination

S.No	Date	Exam	Number of participants
1.	25.09.2013	Civil Services Aptitude Test Paper I	105
2.	26.09.2013	Civil Services Aptitude Test Paper II	91
3.	04.12.2013	IBPS Model Examination	52

Soft Skill Development Programme

Personality Development Workshop titled “Personality Development for Employability” for all the final year students of the main campus was conducted for all the Agriculture and Horticulture degree programmes on 04.03.2014

and 05.03.2014. For the final year B.Sc., Bio Technology and III year B.Tech. Engineering students, the workshop was conducted on 20.03.2014 and 21.03.2014.

**Number of students who have passed in the following Competitive Examinations (2013-14)**

Name of the Competitive examination	No. of Students
UGC-CSIR- ICAR NET	145
SET	2
Indian Civil Service	6
GRE	5
TOEFL	5
CAT	11
IFS	5
IRS	1
IELTS	4
ICAR-JRF	23
GATE	12
JNU New Delhi	10
Prime Minister Fellowship	4
UGC - Rajiv Gandhi Fellowship	7
Moulana Abulkalam Azad Ali Fellowship	1
Inspire Fellowship	2
ARS Service	27
Total	158



3.4. DIRECTORATE OF PUBLICATIONS AND PUBLIC RELATIONS

University Library

The TNAU Library is functioning under the Directorate of Publications and Public Relations. There are six constituent College Libraries at;

1. Agricultural College and Research Institute, Madurai,
2. Agricultural College and Research Institute, Killikulam,
3. Anbil Dharmalingam Agricultural College and Research Institute, Tiruchirapalli,
4. Horticultural College and Research Institute, Periyakulam,
5. Agricultural Engineering College and Research Institute, Kumalur and
6. Forest College and Research Institute, Mettupalayam.

The University Library of Tamil Nadu Agricultural University caters to the information needs of teachers, students, research

scholars, extension personnel and farmers. The TNAU Library holds a unique position by contributing to the academic excellence and research competence in all segments of the University's academic structure. During 2013-14, the library received a grant of Rs. 24 lakh from Indian Council of Agriculture Research, New Delhi as a special component to procure text books in agriculture and allied sciences and subscription to e-Books for the benefit of teachers and students. As per the academic regulation, the library is offering a compulsory course on "Library and Information Services 501 (0+1)" for the first year Post Graduate and first year Ph.D students. For the benefit of users, the library subscribed many online journals and databases and also provides a facility to access the CeRA Consortium journals and krishiprabha online thesis databases. At present, the Library has crossed 1,78,281 books and back volumes

Newly added books

Sl. No.	Particulars	Numbers
1	Books	2174
2	Journals	1339
3	News Letters	353
4	Reports	48
5	Magazines	882
	Total	4796

e - Journals received

Sl. No.	Particulars	Journals
1	Consortium for e- Resources in Agriculture (CeRA)	3425
2	Directory of Open Access Journal (DOAJ)	2061
	Total	5486

**e-Books collections**

SI. No.	e-Books collections (Package)	No. of Title
1	Wiley Publication Books	23

Online databases

S. No.	Database
1	Commodityindia.com
2	Delnet.nic.in
3	Krishiprabha doctoral theses database

Library membership

Under Graduate and Post Graduate students, Research Scholars, Scientists, Teachers and Staff are members of the University library.

Usage of library resources (Multiple uses)

S. No.	Particulars	Numbers
1	Under Graduate Student	15853
2	Post Graduate Student and Research Scholars	24321
3	Staff	5339
4	Visitors from other Institutes	1058
5	CeRA - Journals	12702
6	Digital Library	2233
	Total	61506

Library book Circulation

S. No.	Particulars	Numbers
1	Books Issued	21634
2	Books Returned	21524
3	Books Consulted	465710
4	Over Due Charges Collected	Rs.1,09,158
5	Outside Users Consultation Charges	Rs. 6,700

University library collection

S. No.	Particulars	Numbers
1.	Books	120777
2.	Back Volumes	51431
3.	Theses / Dissertations	5985



Strengthening of Digital Library and Information Management

A novel project sponsored by NAIP – ICAR named; Strengthening of Digital Library and Information Management under NARS (e-Granth) was handled at University library during the year 2013-14. KOHA, an Open Source Advance Library Management Software was installed to bring libraries on common standard platform and to improve digital experiences for the users. Through this project, TNAU Library users are facilitated to refer the digital materials of all ICAR Institutes' Libraries in our desks with a budget of Rs.9,60,000/-. In this project 2 SRFs were posted to accomplish the major objectives of this project. One Dell server and 2 numbers of client systems were purchased. Two workshops were conducted on the titles 'Koha Professional Training' and 'Bringing Library resources at user's desk' for all the TNAU and other Agricultural University Library staff and students. About 117 delegates participated and benefitted.

ICAR Development Grant for Library Strengthening

During the year 2013-14, ICAR Development Grant was allocated for strengthening the University library in TNAU main campus. A book exhibition was conducted for three days from 11.02.2014 to 13.02.2014 and 2500 titles were selected. About 38 Staff and 146 Students participated and selected the books. The list of selected titles were sent to the various subject matter specialists, librarian, Special Officer (P&PR) and Dean (Agri.) for short listing based on the need and scope for the students education books. Based on the opinions of the experts, 581 Books and 23 e-books were purchased.

TNAU Printing Press

The TNAU Printing Press of this Directorate is printing all University Publications. This press is equipped with all Modern Printing Machineries. The following Publications were printed during the period under report.

Publications printed at TNAU Press

Sl. No.	Particulars	No.
1	Books and Booklets	31730
2	Brochures, Pamphlets and Leaflets	32800
3	Certificates	3014
4	Journals	3300
5	Covers	67950
6	Standard Wrapper and Invitations	6220
7	Scribbling Pads	610
8	Letter Heads	13000
9	Greetings	1350
10	Miscellaneous	1281151
	Grand Total	1441125



3.5. DIRECTORATE OF OPEN AND DISTANCE LEARNING

Distance Learning Programmes

The Directorate of Open and Distance Learning, is offering distance learning programmes, viz., Certificate Courses, B.F.Tech Degree programme, PG Diploma programmes, Diploma and PG Degree programmes for the benefit of various segments of the farming community, entrepreneurs, self help groups and other learners who aspire for correspondence education and interested in establishing agro based industries in rural areas. The details of various programmes offered are furnished below.

Certificate Programme

A total of 16 certificate course are offered as follows.

- Sugarcane Production Technology
- Vegetable Seed Production
- Nursery Techniques and Propagation of Horticultural Plants
- Mushroom Production
- Preservation of Fruits and Vegetables
- Wasteland Development
- Bee Keeping
- Vermicomposting
- Repair and Maintenance of Farm Equipments and Machineries
- Coconut Cultivation Technology
- Cotton Cultivation Technology
- Landscaping and Ornamental Gardening
- Modern Irrigation Management
- Bakery and Confectionary Products
- Medicinal Plants
- Flower Cultivation

B. F. Tech. (Bachelor of Farm Technology) (3 years – 6 semesters)

Bachelor of Farm Technology (B.F.Tech.) is a three years degree programme exclusively being offered for the farmers since 2010. It is a pioneering attempt and first of its kind in the world. B.F.Tech. degree programme has been structured in such a way that farmers who enroll have the privilege of being a degree holder, and also an expert in scientific agriculture with utmost self-confidence thereby gaining recognition in the society. The eligibility criteria for admission is 10th standard appeared. Age limit is 27 years and above.

PG Diploma Programmes

- Production and Quality Control in Medicinal Plants
- Food Science and Processing
- Energy Management

PG Degree Programmes

- Master of Business Administration (MBA)
- M.Sc. (Environmental Management)
- M.Sc. (Sugarcane Technology)

List of Candidates Enrolled during the year 2013 – 14 under various Programmes

SI. No.	Course	No. of candidates enrolled
I	PG Degree	
	MBA	28
	M.Sc. (Environmental Management)	15
	M.Sc. (Sugarcane Technology)	25
II	PG Diploma	
	Production and Quality Control in Medicinal Plants	-
	Food Science & Processing	2
	Energy Management	6
III	B. F. Tech. Degree	105
IV	Certificate Programme	392

Details of Awareness Campaigns Conducted

Date	Place	Programme
19.04.2013	Vanavarayar Agricultural College and Research Institute, Pollachi	Awareness campaign about ODL programmes
18.05.2014	AC & RI, Madurai and HSC & RI, Madurai	Awareness campaign about ODL programmes
23.05.2013	KVK, Sandhiyur	Awareness campaign about ODL programmes
06.09.2013	AC & RI, Trichy	A lecture on various activities of ODL
24.09.2013	Krishi Vigyan Kendra, Tindivanam	Farmers Day Celebration – Interactive meeting on the various activities of ODL.
23.12.2013	Farmers Day Function	Awareness campaign about ODL programmes
07.02.2014 – 09.02.2014	V.O.C Park, Coimbatore	Farmers Day 2014 – Puthiya Thalaimurai TV Meeting on the various activities of ODL
26.03.2014 – 27.03.2014	Educational Fair – The Hindu	Stall installation with display boards of ODL activities and explanation on various programmes to the audience.

Research Projects Operated

A scaling up project on Seed Technology funded by Canadian International Development Agency (CIDA) and University of Guelph, Canada was operated with TNAU as the Nodal Centre in coordination with three private NGOs with a financial outlay of Rs.33 lakhs with (Dr. P. Santhy PI and Dr. G. Jothi, Co-PI). Around 4000 farmers of three districts of Tamil

Nadu were benefitted by this scheme. The farmers from three districts, viz., Madurai, Dindigul and Theni were trained on seed production in paddy, sorghum, vegetables, pulses and forage crops. The final report both technical and financial were prepared and sent to the Project Director at CIDA, Canada.



3.6. CONTROLLERATE OF EXAMINATIONS

Controllerate of Examinations is vested with the responsibility of conducting and monitoring the examination related activities of 13 undergraduate programmes in 28 colleges, 30 Masters, 25 Doctoral, 2 Diploma and 5 Open and distance learning programmes. The major activities include; question paper setting, scheduling and conducting final theory and qualifying examinations, evaluation of answer paper scripts, issuing statement of marks, class grade charts, transcript cards and awarding degree to the completed students of various degree programmes.

In order to accomplish the examination tasks, the office has five sections *viz.*, Undergraduate, Masters, Doctoral, Diploma and Open and Distance Learning programmes. All the examination related activities are computerized to facilitate the students with examination process. Details on the activities carried out by the Controllerate of Examinations during the academic year 2013-14 are furnished below.

Reforms made

- Question bank system is introduced to improve the standard of question papers wherein an expert committee has been formed to develop question bank for the offered courses.
- New eco-friendly non tearable polypropylene paper is introduced for preparing transcript cards
- New report cards and statement of marks with unique QR code, candidates' photograph, gold foil stamp, UV images, etc., as security features are introduced

- Answer paper booklets of specific size (American A4) with university emblem and lines in the background as water mark and center stitching was introduced for uniqueness and security.
- Through the newly introduced system of paperless examination (Exampad), the students, teachers and parents are facilitated to view the answer scripts using passwords
- Trimester system of education was introduced at Master and Doctoral level to have wider knowledge on the required special subjects.

Introduction of Paperless Examination (Exampad) System

The paperless examination system (ExamPad) is first-of-its-kind in the world, innovative, eco-friendly technological solution has been launched during 2013-14 which aimed at eliminating the necessity of paper in the entire process of conducting University Examinations. This system has been introduced initially with four affiliated colleges *viz.*, TRIARD, Perambalur, APAC, Kalavai, IIAT, Thuraiyur and CAT, Theni during 2013 and spanned to other colleges in a phased manner. With this system, the entire process of conducting examination, right from authoring questions to scheduling of examinations, evaluating the responses and declaring results have been accomplished digitally, thereby eliminating the necessity of paper in the entire process.

This system has the following special features.

- The ExamPad Writer specially designed for writing examinations enables to conduct



digital descriptive examinations anywhere.

- All Internal tests and semester examinations can be conducted digitally, without any major infrastructural changes to the entire examination administration process.
- Access to the ExamPad Writer device is controlled through biometric fingerprint authentication which ensures that only the right candidate takes the examination.
- The device also has a built-in camera that captures the student's photograph, at the examination center for subsequent verification and validation against the student's photograph available in the database.

Undergraduate Students Performance

During the academic year 2013-14, a total number of 9742 students have registered for thirteen undergraduate degree programmes covering 1356 courses under Odd and Even

semesters. A total of 3193 Question Papers were set subject wise and the examinations were conducted during May- July 2013, August, 2013, October – November, 2013 and December-January 2013 for regular, re-appearance and special semesters respectively, under 1999, 2003, 2007 and 2011 syllabus. A total of 93648 answer scripts were evaluated and the results were declared for 725 students who have successfully completed their course work. The transcript cards were distributed to the students. Through the newly introduced paperless (ExamPad) system, examinations were conducted in four affiliated colleges for 15 courses. Totally, 2484 students attended and the answer scripts were evaluated. The details on number of students passed out in various undergraduate programmes during the academic year 2013- 14 are furnished in Table 1.

Table1. Number of Students Passed out in Undergraduate Courses (2013-14)

Sl. No.	Name of the course	Campus	Number of students passed out
1	B.Sc.(Agri)	Agricultural College and Research Institute, Coimbatore	94
		Agricultural College and Research Institute, Madurai	97
		Agricultural College and Research Institute, Killikulam	98
		Anbil Dharmalingam Agricultural College and Research Institute, Trichy	93
		Pandit Jawaharlal Nehru College of Agriculture (PAJANCOA), Karaikkal	38



		Adhiparasakthi Agricultural College, Kalavai	106
		Thanthai Roever Institute of Agriculture and Rural Development (TRIARD), Perambalur	66
		Vanavarayar Institute of Agriculture, Pollachi	74
2.	B. Sc. (Horti.)	Horticultural College and Research Institute, Periyakulam	80
		Adhiparasakthi Agricultural College, Kalavai	30
3.	B. Sc. (Home. Sci.)	Home Science College and Research Institute, Madurai	33
4.	B.Sc.(Forestry)	Forest College and Research Institute, Mettupalayam	30
5.	B.S. (ABM)	Agricultural College and Research Institute, Coimbatore	22
6.	B.Tech. (Bioinfo.)	Agricultural College and Research Institute, Coimbatore	28
7.	B. Tech. (Biotech.)	Agricultural College and Research Institute, Coimbatore	47
8.	B. Tech. (Horti.)	Horticultural College and Research Institute, Coimbatore	29
9.	B.Tech. (Agrl. Engg.)	Agricultural Engineering College and Research Institute, Kumulur	58
10.	B.Tech. (FPE)	Agricultural Engineering College and Research Institute, Coimbatore	33
11.	B.Tech. (EEE)	Agricultural Engineering College and Research Institute, Coimbatore	37
12.	B.Tech. (AIT)	Agricultural College and Research Institute, Coimbatore	22
		Total	1090

Masters degree Programmes – Students Performance (2013-14)

In the 30 Post Graduate degree courses, 996 students were registered for various M.Sc. (Agri.), M.Tech. and MBA programmes during the academic year 2013-14. A total of 560 examinations were conducted for the students in I and II semester and the results were

declared. A total of 142 transcript cards and 466 mark lists were prepared and issued to the students during the academic year. Discipline wise passed out post graduate students details are presented in Table 2.

**Table 2. Number of Students Passed out in Postgraduate (Masters) Courses**

Sl. No.	Name of the course	Campus	Number of students passed out
1.	M.Sc. (Ag.) - Sericulture	SPGS, Coimbatore	5
2.	M.Sc. (Ag.) - Agricultural Economics	SPGS, Coimbatore	10
		AC & RI, Madurai	5
3.	M.Sc. (Ag.) - Agricultural Entomology	SPGS, Coimbatore	18
		AC & RI, Killikulam	1
		AC & RI, Madurai	7
		PAJANCOA, Karaikkal	5
4.	M.Sc. (Ag.) - Agricultural Extension	SPGS, Coimbatore	15
		AC & RI, Madurai	5
5.	M.Sc. (Ag.) - Agricultural Microbiology	SPGS, Coimbatore	5
6.	M.Sc. (Ag.) - Agronomy	SPGS, Coimbatore	15
		AC & RI, Killikulam	8
		AC & RI, Madurai	9
		PAJANCOA, Karaikkal	4
7.	M.Sc. (Ag.) - Crop Physiology	SPGS, Coimbatore	5
8.	M.Sc. (Ag.) - Plant Breeding and Genetics	SPGS, Coimbatore	16
		AC & RI, Killikulam	7
		AC & RI, Madurai	10
		PAJANCOA, Karaikkal	4
9.	M.Sc. (Ag.) - Plant Nematology	SPGS, Coimbatore	2
10.	M.Sc. (Ag.) - Plant Pathology	SPGS, Coimbatore	21
		AC & RI, Madurai	6
11.	M.Sc. (Ag.) - Seed Science and Technology	SPGS, Coimbatore	20
		AC & RI, Madurai	5
12.	M.Sc. (Ag.) - Soil Science and Agricultural Chemistry	SPGS, Coimbatore	12
		AC & RI, Killikulam	4
		AC & RI, Madurai	4
13.	M.Sc. (Hort.) - Fruit Science	SPGS, Coimbatore	10
14.	M.Sc. (Hort.) - Vegetable Science	SPGS, Coimbatore	16
		PAJANCOA, Karaikkal	5
15.	M.Sc. (Hort.) - Floriculture and Landscape Gardening	SPGS, Coimbatore	15
16.	M.Sc. (Hort.) - Spices, Plantation, Medicinal and Aromatic Crops	SPGS, Coimbatore	11
17.	M.Sc. - Agricultural Meteorology and Climatology	SPGS, Coimbatore	1
18.	M.Sc. - Biotechnology	SPGS, Coimbatore	17
19.	M.Sc. - Environmental Sciences	SPGS, Coimbatore	9



20.	M.Tech. -Agricultural Nanotechnology	SPGS, Coimbatore	2
21.	M.Tech. - Agricultural Processing and Food Engineering	SPGS, Coimbatore	14
22.	M.Tech. - Bio-Energy	SPGS, Coimbatore	2
23.	M.Tech. - Environmental Engineering	SPGS, Coimbatore	6
24.	M.Tech. - Soil and Water Conservation Engineering	SPGS, Coimbatore	11
25.	M.Tech. -Farm Power and Machinery	SPGS, Coimbatore	9
26.	Master of Business Administration	SPGS, Coimbatore	26
27.	M.Tech. - Biotechnology and Business Management	AEC & RI, Coimbatore	1
28.	M.Sc. - Forestry	FC & RI, Mettupalayam	21
29.	M.Sc. - Food Science and Nutrition	HSC & RI, Madurai	6
30.	M.Tech. - Food Process Engineering	I.I.C.P.T, Thanjavur	10
		Total	420

Doctoral Programmes – Students Performance

A total of 195 students have registered in 25 different disciplines in Agriculture, Horticulture, Food Science and Nutrition, Agricultural Engineering and Forestry covering 215 courses under odd and even semesters. A total of 251 question papers were prepared and semester examinations were conducted for the above courses. The answer scripts

numbering 2170 were evaluated and the results were declared. The students were issued with transcript cards along with mark lists for the completed semesters. Discipline wise passed out Ph.D. students details are presented in Table 3.

Table 3. Number of Students Passed out in Postgraduate (Doctoral) Courses

Sl. No.	Name of the course	Campus	Number of students passed out
1.	Plant Breeding	Coimbatore and Madurai	8
2.	Soil Science	Coimbatore	7
3.	Vegetable Science	Coimbatore	4
4.	Agri-Business Development	Coimbatore	11
5.	Microbiology	Coimbatore	4
6.	Agricultural Economics	Coimbatore	9
7.	Soil and water conservation	Coimbatore	2
8.	Fruit science	Coimbatore	2
9.	Spices	Coimbatore	3
10.	Agronomy	Coimbatore and Madurai	12
11.	Entomology	Coimbatore and Madurai	12
12.	Crop Physiology	Coimbatore	5



13.	Agricultural Processing	Coimbatore	6
14.	Floriculture	Coimbatore	5
15.	Sericulture	Coimbatore	5
16.	Agricultural Extension	Coimbatore	8
17.	Plant Pathology	Coimbatore	8
18.	Food Science	Coimbatore	6
19.	Nemetology	Coimbatore	4
20.	Seed Science	Coimbatore	10
21.	Meteorology	Coimbatore	5
22.	Bio-energy	Coimbatore	2
23.	Forestry	Mettupalayam	1
24.	Farm Machinery	Coimbatore	1
25.	Biotechnology	Coimbatore	2
		Total	142

Diploma Programmes

Diploma (Agri) programmes are offered in 14 institutes including 8 constituent and 6 affiliated institutes. Diploma (Hort.) Programme is offered at two affiliated institutes. A total of 2528 students have registered for the Diploma (Agriculture) and 422 students for Diploma (Horticulture) programmes. Totally 86 exams

were conducted and 15519 answer scripts were evaluated. Out of 2950 students registered 494 students completed the courses and were awarded with certificates. The details of the students passed out from various institutes are furnished in Table 4.

Table 4. Number of Students Passed out in Diploma Courses

Sl. No.	Name of the course	Campus	Number of students passed out
1.	Diploma (Agri)	Ramakrishna Mission Vidyalaya, Coimbatore	54
2.	Diploma (Agri)	Sagayathottam Institute of Agriculture and Rural Development (SIARD), Takkolam	87
3.	Diploma (Agri)	Thanthai Roever Institute of Agriculture and Rural Development, Perambalur- Agriculture	60
4.	Diploma (Horti)	Thanthai Roever Institute of Agriculture and Rural Development, Perambalur – Horticulture	32
5.	Diploma (Agri)	C. Subramaniam Institute of Agriculture (CSIA), Tindivanam	59
6.	Diploma (Agri)	M. S. Swaminathan Institute of Agriculture, Bhavanisagar	54
7.	Diploma (Agri)	Institute of Agriculture, Rice Research Station, Ambasamudram.	26



8.	Diploma (Agri)	Institute of Agriculture, Regional Research Station, Aruppukottai.	22
9.	Diploma (Agri)	Vanavarayar Institute of Agriculture, Pollachi	36
10.	Diploma (Agri)	Institute of Agriculture, Kovilpatti	15
11.	Diploma (Agri)	Adhiparasakthi Agricultural College, Kalavai	29
12.	Diploma (Horti)	Institute of Agriculture, Horticultural Research Station, Pechiparai.	20
Total			494

Open and Distance Learning Programmes

Three PG degree courses, viz., Masters in Business Administration, Sugarcane Technology and Environmental Management and two PG Diploma courses viz., Energy Management and Food Science and Processing were offered. A total of 379 students

had enrolled and results were declared for 36 students. Final theory examinations were conducted for 97 courses and 750 answer papers were evaluated. The details of the students passed out from various PG degree and diploma programs are furnished in Table 5.

Table 5. Number of Students passed out in ODL courses

Sl. No.	Name of the course	Campus	Number of students passed out
1.	M.Sc. (Environmental Management)	TNAU, Coimbatore	9
2.	MBA	TNAU, Coimbatore	4
3.	M.Sc. (Sugarcane Technology)	TNAU, Coimbatore	14
4.	PG Diploma in Energy Management	TNAU, Coimbatore	3
5.	PG Diploma in Food Science and Processing	TNAU, Coimbatore	4
Total			34

Table 6. Details of activities carried out

Sl. No.	Particulars	Number					
		UG	PG	Ph.D.	Diploma	ODL	Total
1	Number of students registered	9742	996	195	2950	379	14262
2	Examinations conducted	18837	560	261	86	97	19841
3	Question papers set	472	-	251	52	0	775
4	Papers evaluated	93648	6476	2170	15519	750	118563
5	Results declared	725	311	142	496	36	1710
6	Mark lists prepared and issued	12114	466	147	888	131	13746
7	Transcript cards issued	699	142	131	0	0	972
8	Degree awarded	725	311	142	495	36	1709



Research



4. RESEARCH

4.1. NEW CROP VARIETIES AND FARM MACHINERIES RELEASED

Rice TPS 5

- Average grain yield is 6301 Kg/ha which is 14 per cent increase over ASD 16.
- Highest yield obtained 11,567 Kg/ha with a duration of 118 days
- Moderately resistant to stem borer, leaf folders and hoppers
- Grain is short, bold having good milling quality with intermediate amylose which means suitable for cooking.
- Suitable for first season (Kar) and late planting in second season (Pishanam) in Southern districts of Tamil Nadu especially in Kanyakumari district.

Blackgram MDU 1

- High yield of 790 kg/ha with good batter quality.
- Duration 70 - 75 days.
- Highest yield obtained was 1679 Kg/ha at Virinjipuram
- Increase in Grain yield is 15% over Co(Bg) 6 and 13% over Vamban 6 varieties.
- Moderately resistant to YMV and pod borer and resistant to Leaf crinkle Virus.
- Suitable for cultivation in all the districts of Tamil Nadu except Nilgris, Kanyakumari, Thanjavur and Tiruvarur districts.

Fodder Sorghum CO 31

- High tillering variety with broad leaves and increased green fodder yield of 190 t/ha/year.
- Enhanced seed yield due to intact seeds with superior ratooning ability renders 6-7 harvests per year.

- Low HCN (172 ppm) and crude fibre (19.8 %)
- High crude protein (9.86%) and dry matter yield (49.73 t/ha/yr)
- Highly palatable, preferred by milch cattle, goat and sheep
- Fodder yield increase over CO (FS) 29 fodder sorghum is 14.9%
- Suitable for cultivation in all the districts of Tamil Nadu.

Butter Pear OOTY 1

- The mean yield is 97.13 kg/ tree/ year and suitable for planting during June-Nov in hilly zones.
- Soft and sweet fruits with very good market value as the harvest coincides with Summer (April - May) season.
- Suitable for preparation of value added products like squash, jam and pickle possessing excellent flavor, taste and quality.
- Very good nutritive value and rich in Ca (41.71 mg/100g), Sodium (43.92 mg/100g), Potassium (85.71 mg/100g), Phenols (42.70 mg/100g), Antioxidant activity (129.56 µg/g), Carbohydrate (86 %) and Fibre (1.50 %).
- Moderately resistant to aphids and fire blight disease caused by *Erwinia amylovora*.
- Suitable to high and middle elevations of Nilgiris and similar areas above 1800 m MSL.
- Suitable for organic farming.



Tractor Operated Single Row / Two Row Cassava Harvester

- To dig cassava tubers in single/two rows.
- 50 Hp tractor can be used as Power source.
- Harvesting capacity: 0.7 ha/day if single row planting and 0.7-1.0 ha/day under two row planting is done.
- Saving in time, labour and cost of harvesting.
- The present cost of the machine is Rs. 32,000/-



4.2. SALIENT RESEARCH FINDINGS

Seeds and seedlings fortification/treatment

- In groundnut, seed treatment with Sulphur Oxidizing Bacterial (SOB) inoculant @ 1 Kg/ha with Rhizobium @1Kg/ha was standardized. This along with basal application of gypsum @ 400 Kg/ha and soil application of SOB @ 5 Kg /ha on 45th Day after sowing enhanced the yield upto 21.0%.
- Rooting mixture for raising sugarcane chip bud seedling under Sustainable Sugarcane Initiative (SSI) technique was development and standardized.
- Standardization of nursery techniques for quality seedling production in 'White Kadamba' tree was made.
- Mini clonal technology for mass multiplication of *Casuarina* was developed.

Bio-inputs

- Mixed inoculants like Azophos and Azophosmet for supply of N, P and growth hormones were standardized for application to different crops.
- Formulation, dosage, method of application and feeding schedules of liquid biofertilizer were developed for precision farming system.

Plant nutrition

- Nutrient management for cotton under drip fertigation system was standardized.
- Long term experiment on STCR-IPNS technology revealed that yield increase over blanket recommendation was 25.0 per cent and 21.8 per cent during *Kharif* and *Rabi* respectively, in rice – rice cropping system.

Irrigation mangement

- Irrigating groundnut with micro-sprinkler registered the maximum yield of 2844 kg/ha followed by sub-surface drip irrigation method (2655 kg/ha). Application of NPK at 17:34:51 kg /ha with 50 per cent P and K as basal as straight fertilizer and the balance P and K and full N as water soluble fertilizer registered increased pod yield (2685 kg/ha).
- Sub-surface drip fertigation system in maize - cotton - maize sequence was standardized.

Crop mangement

- Pruning for high density planting in Alphonso mango, cashew, cocoa and defoliation in palmyra was standardized.
- Advanced rice breeding lines (ASD 16, ADT 43 and IR 64) expressing pro-vitamin A, are in the developmental stage.
- Precision production technology package for jasmine, marigold and carnation such as; spacing, enriched media consortia, fertigation schedules, spraying of bio-stimulants and micro nutrients, integrated and eco-friendly pest and disease management were standardised.

Pest and disease management

- Rice varieties Co 43 and ASD 16 were improved for bacterial leaf blight and drought resistance. These are under testing.
- Management of rust disease in pearl millet with foliar application of Hexaconazole @ 0.1% immediately after the observation of rust symptoms and second spray at 15 days after the first spray was found to be effective in reducing the rust severity.



- Management of cocoa pod rot and bacterial leaf blight disease of mulberry was standardised.

Agricultural Engineering / Farm machinery

- Briquetting technology studies of forest plantation residues and wood based industrial residues have been taken up.
- 'High solid content fixed dome' type biogas plant for power generation in dairy units was developed.
- Pod breaker (capacity 230 kg/hr and at a cost of Rs. 5,000), drier for cocoa, cassava harvester and paddy seeder were developed.
- Farm machineries such as; weeder for maize and cotton, centrifugal dehuller for small millets, combine harvester for groundnut and tractor operated fertilizer dibbler for ratoon sugarcane were developed.

Post Harvest technology

- Processing methods for broken rice, moringa, banana, curry leaf, tomato, sago, sorghum, amla and palmyra were developed.

Health and nutrition

- Community based approach for prevention of anaemia among young rural women was taken up.
- Drudgery reducing technologies for tribal families in Sirumalai hill areas of Dindigul district were propagated.



4.3. DIRECTORATE OF CROP MANAGEMENT

Mandate

Coordinating Crop Management research, training and knowledge transfer in the disciplines of Agronomy, Agricultural Meteorology, Crop Physiology, Farm Management, Sustainable Organic Agriculture and Veterinary and Animal Sciences. Identifying and solving field problems as inter – disciplinary approach in different agro climatic regions of Tamil Nadu to bring out location specific soil and crop management technologies.

Objectives

- To undertake basic and applied research that will contribute to the development of strategies for improving the productivity of crops
- To generate integrated crop management technologies for enhancing farm production and income to farmers.
- To minimize abiotic stress and weather based crop production risk by planning and management of agricultural resources and agro-advisory service.
- To develop eco-friendly technologies for sustaining soil health, conservation of eco system and promotion of organic farming through technical capacity building.

Department of Agronomy

Mission

To plan, undertake, promote and co-ordinate education, research and its applications in Agronomy and to facilitate accelerated dissemination of improved crop production technologies, knowledge and information.

Research Programmes taken up

- Evaluation of water soluble fertilizers under drip fertigation system for Tissue

Culture Banana (Grandnaine)

- Evaluation of water soluble fertilizers under drip fertigation system on cane yield and quality of sugarcane.
- Bio-efficacy of Penoxsulam 21.7% SC on weed control in Transplanted and Direct seeded Rice and residual effect on succeeding crops.
- Residue studies of Halosulfuron methyl and its combinations with Chlorimuron ethyl and Metribuzin in Sugarcane crop.
- Studies on herbicide persistence in water.
- Testing of persistence of herbicides in the farmers' field (Soil and crop produce).
- Studies on metabolites of herbicides.
- Herbicide residues in conservation agriculture.
- Herbicide residues in crops and cropping systems.
- Evaluation of the efficacy of the PSO 6 liquid manure from anaerobically digested poultry litter on the growth, yield and quality of Banana.
- Response of pre-released grain sorghum genotypes to different fertility levels.
- Improving Nitrogen-use efficiency through method and time of N application
- Prioritisation of inputs in Kharif sorghum.
- Yield maximization in pigeonpea.
- Studies on flower drop and pod set under variable environmental conditions in pigeonpea.
- Studies on drought mitigation in pigeonpea.
- Root studies in redgram
- Growth regulator/ nutrient solution and pesticide interaction studies on redgram
- Demonstration of synchronized maturing pulses varieties with key technologies and



mechanization for higher productivity.

- Response of advanced genotypes of small millets to different levels of nitrogen under rainfed condition
- Effect of crop geometry and weed management practices on rainfed finger millet
- Screening of small millets for problematic soils
- Evolving drought management practices in rainfed finger millet to mitigate climate change
- Response of pearl millet advance, medium and late – hybrid and varietal entries to N levels
- Optimization of nutrients for pearl millet production under assured moisture available condition.
- Integrated Weed Management in pearl millet
- Nutrient Management through organic and inorganic sources for major and trace elements in pearl millet
- Response of pearl millet advance, medium and late hybrid and varietal entries to levels of N.
- Integrated nutrient management for pearl millet hybrids under optimum management in zone B.
- Remote sensing techniques for large scale quantification of nitrogen and water stress in crops
- Evaluation of Clomazone 50 EC for bio-efficacy, phytotoxicity and residues in sugarcane and on succeeding crops
- Permanent herbicide trial in transplanted lowland rice - rice cropping system
- Long- term trial on weed management in rice based conservation agriculture system
- Evaluation of integrated weed management with pre and post emergence herbicides in

turmeric (*Curcuma longa*)

- Herbicides combinations for control of complex weed flora in transplanted rice.
- Herbicides combinations for control of complex weed flora in drum seeded rice (puddled).
- Studies on time of application of Imazethapyr and its ready mix combination with Imazamox (Odyssey) against weeds in blackgram.
- Integrated Weed Management in cotton.
- Evaluation of new herbicide molecules for rice in Coimbatore region.
- Nitrogen response trials on selected AVT -2 rice cultures under high and low N management.
- Evolving sturdy rice seedlings amenable for machine transplanting.
- Selective mechanization for enhancing the productivity and profitability of rice.
- Yield maximization of rice through site specific nutrient management.
- Climate resilient management practices in rice and rice based cropping systems.
- Impacts of conservation agriculture on rice based cropping systems
- Long term nutrition on SRI vis-a-vis conventional flooded rice on soil fertility and sustainability.
- Agronomic requirements of pre-release cotton genotypes in relation to spacing and fertilizers.
- Bio-efficacy and phytotoxicity evaluation of herbicides viz., F7121 and F8032 for the control of weeds in soybean and its residual effect on succeeding crops
- Long term trial on tillage in different cropping systems.
- Management of major weeds and insect-pests of soybean through herbicides -insecticide combinations.



- Economic analysis of predominant farming system in Western zone of Tamil Nadu.
- Carbon dynamics and nutrient budgeting under Integrated Farming Systems in irrigated uplands.
- Nutrient dynamics and budgeting in intensive cropping systems of irrigated uplands as influenced by different tillage and planting management practices.
- Monitoring soil health and crop productivity of intensive cropping systems under organic farming in irrigated uplands.
- Influence of mulching and anti-transpirants spray on growth and yield of soybean.
- Evaluation of Real-Time Nitrogen Management Technique in Aerobic Rice under Integrated Nutrient Supply System.
- Studies on the effect of pre emergence and post emergence herbicides on weed control in irrigated greengram.
- Integrated crop management in Urdbean / blackgram (*Vigna mungo* L.).
- Planting pattern and weed management studies under urd bean + maize intercropping system.
- Weed management in rice fallow urd bean relay cropping.
- Identification of appropriate bio-intensive complementary cropping systems for the Western zone of Tamil Nadu.
- Development of innovative farming practices to mitigate the effects of climate change.
- Evaluation of Integrated farming system involving crop-dairy-goat rearing for irrigated upland.
- Development of organic farming package for chillies – cowpea-baby corn cropping sequence.
- Effect of Lipo Chito Oligosaccharides (LCO) based products in maize and blackgram under stress conditions.
- Integrated Nutrient management in Sunflower based cropping system
- Development of Management practices for yield maximization in TNAU SFH CO2 Sunflower
- Integrated weed management in sunflower.
- Bio-efficacy evaluation of Penoxsulam 21.7% SC on transplanted rice.
- Performance of Cumbu Napier hybrid grass CO(CN)4 as influenced by micronutrients under irrigated conditions
- Bio-efficacy of Fomesafen 25% SL (CCP-0025) and a Coded product CCP1203 on weed control in soybean and residual effect on succeeding crops

**Private Agency Schemes / Projects operated**

Sl. No.	Name of the scheme	Budget (Rs.)
1.	Private Agency scheme - IFFCO Endowment Chair	259000
2.	Private Agencies - Bio-efficacy evaluation of Flumioxazine 50% SC for weed control in soybean and their effect on succeeding crops	321578
3.	Private Agencies - Bio-efficacy and phytotoxicity evaluation of herbicides viz., F7121 and F8032 for the control of weeds in soybean and its residual effect on succeeding crops	416300
4.	Private Agencies - Evaluation of new plant growth promoter Ralligold granules in sugarcane	450800
5.	Private Agencies- Evaluation of Water Soluable Fertilizers under drip fertigation system on cane yield and quality in Sugarcane	381000
6.	Private Agencies- Evaluation of Water Soluable Fertilizers under drip fertigation system for Tissue Culture Banana (Grandnaine)	392100
7.	Private Agencies- Evaluation of Clomazoe 50 EC for bio-efficacy, Phytotoxicity and residues in sugarcane and on succeeding crops	526700
8.	Private Agencies - Bio-efficacy and phytotoxicity evaluation of Quizalofop ethyl 5% EC for weed control in groundnut and onion and their effect on succeeding crop	167900
9.	Private Agencies - Evaluation of herbicides Clomazone 50 (FMS) 50 EC and Sulfentrazone 48% F for the control of weeds in Soybean	130000
10.	Private Agencies-Bio-efficacy evaluation of Bensulfuron methyl 60% DF on phytotoxicity, soil physico-Chemical and biological properties in rice and their residual effect on succeeding crops	317400
11.	Private Agencies - Bio-efficacy and residue of Halosulfuron methyl along with its combination on weed control in sugarcane	307250
12.	Private Agency - Bioefficacy Evaluation of Humic Granules (Pasumai gold granules) on Productivity and Quality of Irrigated Transplanted Rice	181700
13.	Private Agencies - Bio-efficacy and Phytotoxicity of Halosulfuron methyl 75% WG its combination with Chlorimuron ethyl in sugarcane	521817
14.	Private Agencies-Residue studies of Halosulfuron methyl and its combinations with chlorimuron ethyl and metribuzion in Sugarcane crop	347300
15.	Private Agencies-Bio-efficacy of Fomesafen 25% SL and a coded product CCP 1203 on weed control in soybean and residual effect on succeeding crops	708400
16.	Private Agencies-Bio-efficacy of Penoxsulam on weed control in transplanted and direct seeded rice and residual effect on succeeding crops	709550
17.	Private Agencies-Evaluation of low cost drip tape systems for irrigation in sweet corn	240000



18.	Effect of lipo chito Oligosaccharides (LCO) and coded products ratchet & Torque - RTA on maize and blackgram under stress condition	488429
19.	Evaluation of efficacy of the PSO7 liquid manure from anaerobically digested poultry litter on the growth, yield and quality of banana	441912

Trainings / Seminars conducted

Sl. No.	Name of the Training/ Seminar	Category of participants	Period	Number participated	
				Male	Female
1.	CAFTA - Training Programme on Recent Advances in Micro Irrigation and Fertigation	Scientists from all over India	04.09.2013 - 24.09.2013	15	1
2.	One day seminar on "Hi-tech cultivation of sugarcane and tissue culture banana"	Officials from Sugar Mills and progressive farmers	29.10.2013	80	25
3.	CAFTA - Training programme on Organic Farming: Approaches and Applications	Scientists from all over India	22.01.2014 - 11.02.2014	12	-
4.	Awareness in weed control	Students Quiz	06.01.2014	15	10
5.	Training on Redgram production technologies	Farmers of Perur	10.01.2014	25	15
6.	Diversified farming activities for improving the livelihood of tribal farmers in Tamil Nadu	35 tribal farmers	30.01.2014 - 31.01.2014	10	25
7.	NADP-Synchronised maturing pulses varieties	Farmers around Coimbatore	25.02.2014	12	20

Trainings / Seminars attended

Sl. No.	Name of the Training	Period	Organiser and Address	Name of the participant
1.	Taking forward Herbicide Tolerant GM Crops: Opportunities and Challenges.	02.05.2013	BCIL, New Delhi and ISWS Jabalpur	Dr. C. Chinnusamy, Professor (Agronomy)
2.	CAFTA - Directors workshop on the theme ICT for Capacity Building in Agricultural Education	25 - 29.07.2013	ICAR (Edu. Division)	Dr. N. Asoka Raja Professor & Head (Agronomy)
3.	National Conference on Emerging trends in Weed management	15 - 17.02.2014	ISWS & DWSR, Jabalpur, ICAR and NABARD	Dr. N. K. Prabhakaran, Professor (Agronomy)



				Dr. N. Sakthivel, Asst. Professor (Agronomy) Dr. P. Janaki, Asst. Professor (SS&AC)
4.	TSP training on Diversified Farming activities.	30.01.2014 - 31.01.2014	ICAR- CAZRI	Dr. K. Srinivasan Professor (Agronomy)
5.	Systematic Approach to Training organized for the Director's of CAFTA	25.03.2014 - 01.04.2014	ICAR	Dr. P. Devasenapathy Professor (Agronomy)

Department of Agro Climate Research Centre

Mandate

To carry out basic and applied research, quality education, effective extension and outreach activities on agricultural meteorology including climate change for enhancing farm profits by minimizing the climate and weather based crop production risks.

Research Schemes

- Establishing crop weather relationship including micro-meteorological interventions.
- Climate and weather data archiving for different stakeholders.
- Analysis of monsoon rainfall for re-visiting cropping pattern and assessing the periodicity of extreme agro-meteorological events.
- Developing agro-climes for profitable crop planning and suitable technology transfer.
- Seamless weather forecasting and providing weather based agro advisories for farm decision making using inputs from crop, pest- weather calendar
- Physiological intervention for weather resilient agriculture.
- Application of remote sensing in agricultural meteorology for reducing crop production risks and yield estimation.

- Developing precise and precious weather based protocols for crop insurance.
- Integration of climate, crop, hydrological and economic models for assessing the weather and climate impact and developing adaptation and mitigation strategies
- Linking National and International Institutes and Organizations for improved teaching, research and extension to keep pace with global needs

Research Schemes in operation

- Augmenting lead crops productivity / activities through sustainable agriculture
- Seasonal climate forecasts to improve food security in Indian ocean RIM Countries in a variable and changing climate?
- Integrated assessment of climate change impact on principal crops and farm household incomes in Southern India
- Yield forecasting for Rice, Maize and Groundnut in Western zone of Tamil Nadu using Space, agro-meteorology and land based observation.
- Formulation of weather based crop insurance index for selected major crops of peninsular India (AP, Karnataka, Kerala and Tamil Nadu): Application of crop weather model as a tool



- FIST- Infrastructure Development of Agro Climatic Research Centre at ACRC, Coimbatore
- Climate change and assessing impacts and developing strategies for agriculture in Tamil Nadu
- Clima-Adapt: Adaptation to climate change: An integrated science-stakeholder approach to develop Adaptation framework for Water and Agriculture sectors in Andhra Pradesh and Tamil Nadu states of India
- Weather based agro-advisory services for farm decision making for Western zone of Tamil Nadu
- Water harvesting technology to cope with climate variability in dry land agriculture in Tamil Nadu
- Expansion of automatic weather station network in 73 blocks of Tamil Nadu
- Expansion of automatic weather station network in 88 blocks of Tamil Nadu
- Development of agro advisory services using AWS data at block level in Tamil Nadu
- District level Medium Range Weather Forecasts for five days along with agro advisories were given on every Tuesday and Friday for Coimbatore, Erode and Triupur districts to reduce crop production risks.
- Seasonal Climate forecast both for South West monsoon and North East monsoon was given for 32 districts of Tamil Nadu for taking weather based farm decisions in advance of the season.
- Under NABARD scheme, exposure visit was arranged for farmers of five villages (Kunnadur, MPC palayam, Masakkaoundan chettyalayam, Pachapalayam and Narayanapuram) to Bhavanisagar to expose them to the latest agricultural technologies development. Training on redgram, greengram, blackgram, turmeric, banana, brinjal, IFS, Vermicomposting, Apiculture and Weather awareness programme was given to the farmers. Also, demonstration, value addition coaching was given to women farmers on pulses and vegetables products to enhance their livelihoods.

Extension activities

- The Centre provided needed weather / climate data to the clients for the development of agriculture in Tamil Nadu.

**Trainings conducted**

Sl. No.	Date	Title	Place	Number of Participants
Afghan Government				
1	26.08.2013 - 06.09.2013	International Training on climatic changes and applications	Agricultural Climatic Research Centre	3 (Ministry of Agriculture, Afghan Government)
National Agriculture Development – Clima rice II Scheme				
2	20.09.2013 - 06.12.2013 30 Trainings	Workshop on Climate based Agriculture to Extension officials and progressive farmers	29 Districts	1500
Clima Adapt Scheme				
3	30.01.2014 - 06.02.2014	Roll of green manures in rice	1. Suriyampalayam, Erode 2. Ponnியaru dam, Tiruchirapalli	100
4	07.02.2014 - 10.02.2014	System of rice intensification	1. Karungalpalayam, Erode. 2. Pudumaniyaram patti, Tiruchirapalli	100
5	13.02.2014- 15.02.2014	Rice nursery management	1. Vairaa palayam, Erode 2. Ponnியaru dam, Tiruchirapalli	100
6	17.02.2014 - 19.02.2014	Integrated nutrient and micro nutrient management in rice	1. Thanneer Pandhal palayam, Erode 2. Kalathupatti, Tiruchirapalli	100
7	22.02.2014 - 24.02.2014	Integrated pest management in rice	1. Vairaa palayam, Erode 2. Periyaanaikarai patti, Tiruchirapalli	100
8	27.02.2014	Direct sown rice management technologies	Thanneer Pandhal palayam, Erode	50

Inputs distributed

Sl. No.	Inputs	Quantity distributed (kg)	Value of inputs (Rs.)
1	Paddy seeds	1728	38,473
2	Sunnhemp seeds	500	35,000
3	Daincha seeds	100	7,000



4	<i>Trichoderma viride</i>	250	18,750
5	<i>Pseudomonas fluorescense</i>	250	18,750
6	Vermicompost	1000	6,000
7	Nutrient mixture for rice	200	9,000

Department of Crop Physiology

Research programmes

- Technologies for abiotic stress tolerance in crops.
- Commercialization and popularization of technologies especially PGR consortia for different crops
- Technologies for identifying and amelioration of nutritional and physiological disorders in Agri – Horticultural Crops.
- Postharvest physiology of fruits and vegetables.
- Design and development of hormone based nutrient formulation for major crops.
- Emerging areas of research needs in rice - Climate change: Heat tolerance and C4 rice and Nutrient Use Efficiency in Aerobic rice

Schemes / Projects operated

Sl. No.	Name of the scheme	Budget (Rs.)
1	UGC- Special Assistance Programme (SAP) Departmental Research Support- Level 1	5700000
2	DST- FIST (Fund for improvement of S & T infrastructure in higher educational institutions)	4850000
3	Oxidative stress tolerance to develop saline tolerant lines through screening of EMS rice mutants	1070800
4	Root Zone technology for bio-removal of heavy metals and other toxic contaminants of factory effluents of Tirupur Hosiery units, using grass species under wetland ecosystem.	827800
5	Shelf life and quality improvement in banana and mango fruits using 1-mcp technology	1125800
6	Crop response studies on climate change with particular reference to elevated carbon di-oxide and interaction with temperature in black gram	764500
7	Physiological and molecular characterization of soybean (<i>Glycine max</i>) Genotypes under phosphorus stress	1105800
8	Physiology of weeds in rice ecosystem	380000
9	Physiological changes due to Nativio 75 WG (Trifloxystrobin 25% + Tebuconazole 50%) in onion, groundnut and chillies	1008500

**Trainings / Seminars attended**

Sl. No.	Name of the Training	Duration	Organiser and Address	Name of participants
1	National Conference on Current Trends in Plant Biology Research.	Four days - 13-16 December 2013	Directorate of Groundnut Research, Junagadh (ICAR) and Indian Society for Plant Physiology, New Delhi	Dr. H. Vijayaraghavan Dr. S. Vincent Dr. P. Boominathan Dr. A. Senthil
2.	17 th International Plant Nutrition Colloquim	Four days 19-22, August, 2013	Sabancı University Istanbul, Turkey	Dr. P. Jeyakumar

Department of Sustainable Organic Agriculture**Mandate**

To undertake research, teaching and extension activities on sustainable organic agriculture through inter-disciplinary approach and to involve in production and quality assessment of bio-inputs and organic products.

Research Schemes in operation

Department of Sustainable Organic Agriculture was established in the year 2013-14. It is currently operating the following schemes.

Network Project on Organic Farming (NPOF)

Long Term Organic Manurial Experiment in Rice based cropping system (LOMER)

Trainings conducted

Sl. No.	Duration	Name of the Training/ Seminar, etc.	Budget (Rs.)	Venue	Category of participants
1.	Five one day trainings (27.12.2013, 08.01.2014, 22.01.2014, 05.02.2014 17.02.2014)	Tribal Sub Plan (TSP) -Cluster based capacity building cum livelihood generation programme	1,00,000	Manar village, Karamadai block, Coimbatore district	30 Tribal farmers
2.	30.12.2013	State level organic farmers interactive meet	25,000	DSOA, TNAU, Cbe-3	28 Organic farmers of Tamil Nadu



Trainings / Seminars attended

Sl. No.	Name of the Training	Duration	Sponsors	Name of participants
1.	Training on ITK's for Sustainable Organic Agriculture.	29.07.2013 to 02.08. 2013	National Institute of Rural Development, Hyderabad	Dr. R. Rajasekaran, Dr. R. Parimaladevi
2.	National Programme on Climate change, Carbon sequestration and Carbon Trading in Agriculture.	23.08.2013 to 05.09.2013	Indian Institute of Soil Science, Bhopal	Dr. M. Mohamed Yassin Dr. K. Ganesan
3.	Agro-ecological approaches towards sustainable agricultural production.	01-21.10.2013	Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur	Dr. M. P. Sugumaran
4.	National Symposium on Emerging trends in Ecofriendly Insect Pest Management.	22-24 Jan 2014	Dept. of Agricultural Entomology, TNAU, Coimbatore.	Dr. K. Ganesan

Inputs distributed

Sl. No.	Name of the input	Quantity of inputs distributed	Value of Inputs distributed (Rs.)
1.	Simarouba tree saplings (No.)	40	600
2.	Aseel bird chicks (No.)	60	5400
3.	Vermicompost (kg)	1291.5	7749
4.	Others	30 (ploughing twice)	24050
	i. Land development (Acres)		
	ii. Soil sample analysis (No.)	12	1800
	iii. Manar Vanadesa Iyarkai Vivasaijal Sangam organized (30 farmers)	Certification charges	2550
	iv. Manar Vanadesa organic farmers society organized (30 farmers)	Group certification charges	6200

Department of Farm Management

Mandate

Facilitation of students for earning while learning the agricultural technologies. Conducting technology demonstrations, besides, imparting trainings and providing quality seeds to farmers.

Objectives

- Facilitating Post Graduate students, Ph.D., scholars and researchers for carrying out their research activities
- Offering Earn while You Learn programme for under graduate B.Sc (Agri.) students
- Demonstration of advanced crop



- management technologies to the farmers
- Production and supply of rice, maize and green manure seeds to cater the requirement of farmers
 - Conducting training to Agricultural Supervisors for their promotion as Junior Agricultural Officers
 - Quality vermicompost production and supply

Ongoing schemes

S.No.	Title and project No.	Sponsor	Budget (Rs. in lakhs)
1	Venture Capital – V60DV - Production and sale of seeds, seedlings, fodder and animals	TNAU	3.00
2	Venture Capital – V60EG - Commercial production of quality organic manure from all bio-degradable wastes	TNAU	3.00
3	Revolving Fund - ICAR Fully Financed Scheme “Seed Production in Agricultural Crops”.	ICAR	2.50

Trainings conducted

S.No.	Date	Name of the training / Field demonstration	Beneficiaries	Number
1	05.06.2013	Root feeding techniques in coconut and production technologies in maize	NABARD Farmers Club	50
2	13.09.2013	Integrated Farming System-planning & implementation	Extension functionaries of Tindivanam	50
3	18.10.2013	Procedure for fertilizer purchase	Assistant Professors in the research stations and KVKs of TNAU	50
4	03.12.2013	Importance of Direct Sown Rice	Farmers of Kottur and Pollachi	50
5	12.12.2013 20.12.2013 21.12.2013	Nutrient and Weed Management in Direct Seeded Rice (DSR)	Farmers of Sadivayal, Thondamuthur, Chinna Mathampalayam and Aliyar.	150
6	28.01.2014 & 29.01.2014	Nutrient and Weed Management in Direct Seeded Rice (DSR)	Farmers of Thondamuthur and Pilchinnampalayam villages.	100
7	29.01.2014	Garden land Integrated Farming System	Farmers of Aliyar	50



8	31.01.2014	TSP training – Integrated Farming System for Hilly region	Farmers of Bejeletti tribal village	50
9	05.02.2014 25.02.2014 28.02.2014 04.03.2014 07.03.2014	Integrated Farming System for drylands	Farmers of Sadivayal Village, Thondamuthur	250
10	07.02.2014 08.02.2014 10.03.2014 11.03.2014	TSP training – Vermicompost production technology	Farmers of Thondamuthur Village, Ariyalur district farmers	200
11	21.02. 2014	Seed treatment technologies	Farmers of Aliyar	50
12	19.03.2014	Nutrient and Weed Management in Direct Seeded Rice (DSR)	Farmers of Aliyar Pilchinnampalayam Village	50

Training, Seminar, Symposia etc. participated by the scientists

Scientists Name	Programme	Duration and date	Venue	Sponsor
Dr. C. Jayanthi Professor and Head	Multi country observational study mission on Innovative farm management practices	18.11.2013 to 22.11.2013	APO, Tokyo, Japan	APC, New Delhi
Dr. A. P. Sivamurugan Asst. Professor	Winter school on Drudgery reduction technologies useful for farm women and farm workers	06.11.2013 to 26.11.2013	AMRC, TNAU, Coimbatore	ICAR

Department of Veterinary and Animal Sciences

Mandate

To impart basic education about livestock and poultry production to the undergraduate students. To maintain modern livestock and

poultry farms. Motivate and assist the post graduate students of Agriculture towards the animal oriented research.



4.4. CENTRE FOR PLANT MOLECULAR BIOLOGY AND BIOTECHNOLOGY

This centre comprises of the Departments of Plant Biotechnology, Plant Molecular Biology and Bioinformatics and Biochemistry.

Research

Research activities of the centre are focused on development of improved varieties of major crops *viz.*, rice, maize, cotton, mungbean, soybean, etc., possessing tolerance against biotic and abiotic stresses, enhanced nutritional quality through genetic transformation, marker assisted breeding and application of bioinformatics tools.

Research Achievements

- Consistent grain yield QTL under drought stress mapped using rice local landrace, Norungan on chromosome 6, *DTY6.1* was fine mapped from ~3.0 Mb to 94.0 kb.
- IR20 NILs introgressed with QTLs for deep and thick root from CT9993 have been developed using MAB and evaluated for root growth and plant production under drought in TPE. NILs with higher grain yield under drought stress were identified.
- Efforts have been made to improve popular rice varieties of Tamil Nadu for salinity tolerance, submergence tolerance and drought tolerance through Marker Assisted Breeding. Submergence tolerant CO 43 (CO 43+Sub1), salinity tolerant Improved White Ponni (IWP+saltol) and high yielding, drought tolerant rice lines with superior grain quality are developed and are being evaluated under MLT.
- Genes conferring drought and salinity tolerance were isolated from diverse

plant sources to engineer abiotic stress tolerance in rice and other major crops.

- Attempts have been made to incorporate resistance genes for blast (*Pi54*, *Pi9*), bacterial blight (*xa5*, *xa13*, *Xa21*, *Xa33*, *Xa38*) and gall midge (*Gm1*, *Gm4*) in to popular rice varieties CO43, ADT 43, ADT 47 and ASD16. Improved ADT 43, ADT 47 and ASD 16 with three bacterial blight resistance genes are in multi-location trial.
- Promising two gene (*Gm1*, *Gm4*) pyramided line, CB011043 and four gene (*Gm1*, *Gm4*, *Xa21*, *Pi54*) pyramided line CB011020 are proposed to MLTIII -2014. Two rice cultures, CORG 15 & CORG 24 with *Gm1* gene are resistant to gall midge in ACRIP GMS 2013 and are forwarded for retesting in 2014.
- Novel Bt genes (such as *cry2Ax1*) have been isolated from indigenous isolates and are used for genetic transformation. Cotton lines expressing this gene showed remarkable level of resistance to target pests.
- A traditional therapeutic rice variety "Kavuni" is being characterized at biochemical and molecular level.
- Rice varieties, ASD16 and ADT43 expressing genes involved in beta carotene biosynthesis and enhanced level of iron are being developed.
- Soybean varieties (CO3, JS335) have been introgressed with Phytophthora and powdery mildew resistance genes through marker assisted backcross breeding.
- To engineer resistance against virus in banana, RNAi technology is being employed. Banana lines exhibiting resistance to viral diseases have been



developed and their efficacy is being tested under controlled conditions.

- Towards Identification of molecular targets for management of crop pests using RNAi approach, genes encoding chemosensory proteins in *Spodoptera litura* and *Nilaparvata lugens* are cloned.
- Genetic variation in populations of storage pests viz., *Tribolium* and *Rhizopertha* with reference to phosphine resistance has been studied.

- With a view to developing dihaploid lines in tomato and cocoa, anther culture studies are being carried out.
- Research in Bioinformatics focus on developing databases for TNAU released varieties/hybrids of rice, millets and pulses. A tool for comparative codon usage analysis has been developed. Structural bioinformatics strategies are aimed to explore host-pathogen interaction in crops.

Research Schemes obtained

S. No.	Title of the scheme	Funded by	Investigators	Amount (Rs. in lakhs)
1.	Marker assisted selection for phytophthora and powdery mildew resistance and effective nodulation in soybean (<i>Glycine max</i> L.Merr.)	DBT	Dr. J. Ramalingam	27.05
2.	Bioprospecting of coumarins obtained from medicinal plants and their synthetic derivatives for the anti microbial, anti feedant and anti cancer activity.	DBT	Dr. V. P. Santhanakrishnan Dr. P. Balasubramanian Dr. V. Balasubramani	16.17
3.	Towards developing nutrient rich anti-diabetic rice genotypes through molecular breeding	DBT	Dr. R. Valarmathi, Dr. M. Raveendran,	32.00
4.	Comparative transcriptomics between rice and resurrection plants and exploitation of novel genes for dehydration tolerance for improvement of drought tolerance in rice		Dr. S. Robin Dr. M.Raveendran	36.51
5.	Development of insect resistance technology for crop plants through cry2Ai gene	Bioseed Research India, Hyderabad	Dr. V. Udayasuriyan, Dr. D. Sudhakar , Dr. N. Balakrishnan, Dr. V. Balasubramani, Dr. S. Mohankumar	59.15



6.	Standardization of <i>in vitro</i> techniques through somatic embryogenesis for propagation of elite coconut cultivars	Coconut Development Board	Dr. R. Renuka Dr. R.Gnanam Dr. Mohanalakshmi	35.85
7.	University Innovation Cluster in Biotechnology	BIRAC, DBT, New Delhi	Dr. R. Chandrababu Dr. V. Udayasuriyan	214

Trainings/Seminars attended

S. No.	Faculty	Training / Seminar	Organized by	Period
1.	Dr. D. Sudhakar, Professor and Head, DPB Dr. S. Mohankumar, Professor, DPB Dr. R. Gnanam, Professor, DPB Dr. E. Kokiladevi, Assistant Professor, DPB Dr. L. Arul, Professor, DPB Dr. N. Balakrishnan, Assistant Professor, DPB Dr. R. Renuka, Assistant Professor, DPB Dr. B. Rajagopal, Assistant Professor, DPB	GMO awareness meeting	BCIL and TNAU at Coimbatore	02.08.2013
2.	Dr. V. P. Santhana krishnan, Assistant Professor, DPB	Micronutrient Analysis Training for Wheat and Rice Bio-fortification	Punjab Agricultural University, Ludhiana	26.08.2013 - 27.08.2013
3.	Dr. E. Kokiladevi, Assistant Professor, DPB	Workshop on " Application of Genetic Engineering in Grain Legumes and its Translation"	ICRISAT, Hyderabad	18.11.2013 - 27.11. 2013
4.	Dr. R. Renuka Assistant Professor	Frontier technologies in the area of biotechnology on gene isolation, characterization and breeding with reference to abiotic stress related genes	NRCPB, Pusa Campus, New Delhi	10-30 December, 2013



4.5. DIRECTORATE OF NATURAL RESOURCE MANAGEMENT

The Directorate of Natural Resource Management is functioning in TNAU, Coimbatore from April, 2010. The Directorate coordinates activities of the Departments of Soil Science and Agricultural Chemistry, Agricultural Microbiology, Environmental Science, Nano Science and Technology and Remote Sensing and Geographic Information System.

The Scientists of this Directorate are serving with an overall objective to conserve and manage the soil, water and microbial resources to enhance agricultural productivity and improve soil fertility by developing cutting edge technologies.

Department of Soil Science and Agricultural Chemistry

Schemes / Projects operated

- To teach Soil Science and Agricultural Chemistry subjects.
- To disseminate the technologies through State Extension functionaries.

Research Schemes

- Micro and Secondary Nutrients and Pollutant Elements in Soils and Plants
- To study the influence of soil compaction on soil health in intensively mechanized farming as compared to conventional operation farming.
- To assess the influence of soil compaction on crop yield in rice, sugarcane, cotton and pulse cropping systems.

Soil Test Crop Response

- To establish significant relationship between soil test values and crop response

to fertilisers and from the results thus obtained to provide calibration for fertilizer recommendations.

- To derive a basis for fertilizer recommendation for desired yield targets
- To evaluate the extent to which fertilizer needs of crops can be reduced in relation to conjoint use of organic manure and inorganic fertilizers.
- To test verify the fertilizer prescription equation for various crops and cropping sequence
- To popularize the STCR-IPNS technology among the tribal farmers

Micro and Secondary Nutrients and Pollutant Elements in Soils and Plants

- To reassess and delineate micro and secondary nutrient deficient or toxic areas using GPS/GIS and updating soil fertility maps.
- To forecast emerging micro and secondary nutrient disorders through nutrient indexing and develop suitable decision support system under different soil-cropping-management systems.
- Refinement of critical values of micro and secondary nutrients in soils and standardization of soil test methods
- To develop suitable techniques for increasing nutrient-use-efficiency including inorganic, organic manures, sewage, sludge added for ameliorating the MSN deficiencies in crops and improve the productivity of soils.
- Evaluation / standardization of AB-DTPA-a multi-nutrient extractant for analysis of major (P K) secondary (S) and micronutrients cations (Fe, Mn, Zn, Cu)



with established standard methods.

- Study on secondary and micronutrient in soil-plant-animal-human continuum
- Effect of phasing of Zn application on fate of Zn pools in different soils and rice- rice cropping system.
- Effect of phasing of B application on fate B pools in different soils and maize-sunflower cropping system
- To monitor heavy metal pollution and trace element toxicities in soil, plant, animal and human health.
- Frontline demonstrations on effective technologies generated by the centre.
- Long Term Fertiliser Experiments.
- Preparation of GPS and GIS based Soil Fertility Maps of Selected Districts of Tamil Nadu.
- Demonstration of yield enhancement in maize and rice through Nutriseed Pack technique and designing prototype machineries for industrial production of Nutriseed Packs

- Crop and Genotypic Variation-A tool to enhance Phosphorus use Efficiency for sustainable cropping in low Phosphorus soils
- Fertilizer potential of seaweed saps on different crops were studied.

Other Research Schemes

- Enhancing the productivity of textile and dye industry polluted soils of Noyyal river basin, Tamil Nadu
- Dynamics of N under different crop establishment methods and residue management
- Bio-efficacy studies- Evaluation of Agrinos green technology products for groundnut and cotton crops
- Evaluation of Humic Acid Granulated (HAG) Black Urea for major crops of Tamil Nadu

MoUs signed during 2013-14

Sl.No.	Name of the co-ordinating Scientist / Department	Details of MoU	Budget (Rs. in lakhs)	Collaborating Agency
1	Dr. R. Rajendran, Director, TRRI Aduthurai Dr. P. Malarvizhi, Professor Dr. P. Parasuraman, Professor (Agronomy)	Dynamics of N under different crop establishment methods and residue management	11.45	International Rice Research Institute, Philippines
2	Dr. M. Elaiyaranjan Asst.Professor (SS&AC)	Evaluation of humic acid granulated (HAG) black urea for major crops of Tamil Nadu	8.08	M/s.Ayya Foods Life Care, Theni



3	Dr. S. Mani, Prof. (SS&AC) Dr. V. P. Duraisami, SO (DNRM) Dept. of Soil Science and Agrl. Chemistry	Fertilizer potential of seaweed saps on different crops	66.424	Central Salt and Marine Chemicals Research Institute, Bhavnagar, Gujarat
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Trainings / Seminars conducted

Sl. No.	Date	Name of the Training	Venue	Funding source
1	10-26 Sept. 2013 [8-one day trainings]	Precise Crop Production by Nutriseed Pack Technique	Dept. of Soil Science and Agrl. Chemistry, TNAU, Coimbatore	GOI-DST, New Delhi

Trainings / Seminars attended

Sl. No.	Name of the Training	Period	Organisers	Participants
1	Concluding Workshop of GPS and GIS Project	16.04.2013 - 17.04.2013	DAC, New Delhi IISS, Bhopal	Dr. R. Santhi, Professor (SS&AC) and Dr. K. M. Sellamuthu, Asst. Professor (SS&AC)
2	Workshop on GM crops	02.08.2013	BCIL and TNAU Seminar Hall, KVK, TNAU	T. Chitdeshwari, Professor (SS&AC)
3	National Training on "Climate change, Carbon sequestration and Carbon trading in Agriculture"	23.08.2013 - 05.09.2013	IISS, Bhopal ICAR, New Delhi	Dr. K. M. Sellamuthu, Asst. Professor (SS&AC)
4	11 th International Conference of The East and South East Asia Federation of Soil Science Societies	21.10.2013- 24.10.2013	ESAFS, ISSS, IUSS and Bogor Agrl. University Bogor, Indonesia	Dr. R. Santhi, Professor (SS&AC)
5	78 th Annual Convention of ISSS & National seminar on 'Developments in Soil Science-2013"	23.10.2013- 26.10.2013	Indian Society of Soil Science, New Delhi, Central Arid Zone Research Institute, Jodhpur	D. Muthumanickam, Professor (SS&AC) Dr. M. Elayarajan Assistant Professor (SS&AC)



6	Model Training course on "Increasing nutrient use efficiency through Agronomical measures for major crops of India"	12.11.2013 - 19.11.2013	Ministry of Agriculture, Dept. of Agriculture & Co-operation, New Delhi at Indian Institute of Soil Science, Bhopal	Dr. P. Malarvizhi, Professor (SS&AC)
7	Technologies in Rural Development	17.02.2014	Shree Krishna College of Engg. & Tech, Kuniamuthur	M. R. Latha, Assistant Professor (SS&AC)
8	National Mission on Sustainable Agriculture - Workshop	04.03.2014	Technology Park, TNAU	M. R. Latha, Assistant Professor (SS&AC)
9	27 th Biennial workshop on All India Coordinated Research Project on Micro and Secondary nutrients in soils and plants	07.03.2014 - 09.03.2014	ICAR-AICRP- Micronutrients Dr.PDKV, Akola, Maharashtra	P. Stalin, Professor (SS&AC) D. Muthumanickam, Professor (SS&AC) P. Malathi, Asst.Professor (SS&AC)
10	National Workshop on bringing library resources to user desk	26.03.2014 - 27.03.2014	NAIP-ICAR e - Granth TNAU, Coimbatore	Dr. D. Vasanthi, Professor (SS&AC) Dr. S. Meena, Professor (SS&AC) Dr. S. Maragatham, Asst.Professor (SS&AC)

Department of Agricultural Microbiology

- Scheme for starting of Bio Fertilizer Production and Quality Control Unit.
- To assess the impact of soil management practices on diversity of microorganisms involved in key microbial functions and soil health using genomic tools.
- To survey the diversity of arbuscular mycorrhizal fungi in different agro-ecological zones of Tamil Nadu.

Department of Environmental Sciences Schemes / Projects operated

- Studies on Eco-monitoring of the land application of biomethanated distillery Spentwash on Crop Production, Soil Health and Sustainable Environment.
- Strategic Environmental Assessment of cocoa cultivation in Tamil Nadu.
- Eco friendly utilization of Seshasayee paper mill effluent and solid wastes and monitoring its impact on soil and ground water.
- Strengthening the analytical advisory unit of the Department of Environmental Sciences.



- Bioprospecting Marine Actinomycetes for therapeutic enzymes.
- Standardization and value addition of IWMUST-Municipal Solid Waste Compost for its quality and effect on soil and crops.
- Surface modification of nano Zero valent Iron for improved reactivity and performance against ground water contaminants.
- Integrated Remediation for improving and managing polluted soils and waters in Tirupur, Coimbatore, Erode and Karur districts.

Trainings / Seminars attended

Sl. No.	Name of the Training	Duration	Organiser	Participants
1	National Conference on Ecotechnologies for wastewater treatment: Present challenges and future horizons (NCEWT-2014)	21-22, January 2014	Environmental Sciences, Bharathiar University, Coimbatore	P. Thangavel, Professor (ENS)
2	World Biodiversity Congress (WBC 2013) at Chiang Mai, Thailand	26 th to 30 th November 2013	Global Scientific research Foundation, Bangalore	M. Maheswari, Professor
3	Workshop on Best Practices in Green Productivity in Agriculture at Tehran, IR Iran	7 th to 11 th December, 2013	Asian Productivity Organization, Japan	M. Maheswari, Professor
4	XXIII Biennial workshop All India Coordinated Research Project on management of Salt Affected Soils and Use of saline Water in Agriculture at UAS, Raichur	20.06.2013 to 22.06.2013	University of Agricultural Sciences, Raichur (Karnataka)	Dr. P. Dhevagi, Assistant Professor
5	Training on Improving nutrient use efficiency through agronomic measures for major crops of India	12.11.2013 to 19.11.2013	IISC, Bhopal	R. Jayashree Assistant Professor



Department of Remote Sensing and Geographic Information System

Remote Sensing and Geographic Information System Department was established in 2010.

Mandate

- To teach applications of Remote Sensing and Geographic Information System in agriculture to the students and research scholars
- To generate and assemble geo-spatial data on natural resources
- To provide geo-spatial data on natural resources for the research teams and extension personnel
- To support Human Resource Development in various agricultural applications of Remote Sensing and Geographic Information System.

Schemes / Projects operated

- Monitoring agricultural drought using multisensor remote sensing data for Tamil Nadu

Trainings / Seminars conducted

Sl. No.	Date/ Duration	Name of the Training	Venue	Number of participants
1.	09.05.2013 to 13.05.2013 (5 days)	Geoinformatics	AEC&RI, TNAU	32
2.	(14.05.13 to 21.05.13) 8 days	Geoinformatics	Department of Remote Sensing and GIS, TNAU	26

- Hyperspectral radiometry for detection and estimation of damage caused by pests in brinjal
- Water Requirement Satisfaction Index (WRSI) as a tool to assess soil-crop-water balance in Tamil Nadu using remotely sensed data.
- Region based recommendation to improve coconut production through remote sensing and GIS
- Creating GIS database of soil nutrient status and generating nutrient maps with cadastral base in selected six blocks of Tamil Nadu
- Determination of soil colour through Hyperspectral Remote Sensing Technique
- Developing spectral library and spectral indices for early prediction of crop nutrient deficiencies



4.6. WATER TECHNOLOGY CENTRE

Water Technology Centre (WTC) at Tamil Nadu Agricultural University (TNAU), one among the three centres of India, was established in 1982 to cater to the needs of the Southern region on India in relation to research, extension and teaching

Mandate

- Assessment of the available resources of water and economic utilization for maximizing agricultural production with suitable on-farm water management practices developed for different situations.
- To study the water requirement of crops and recommend suitable irrigation methods.
- To develop strategies to overcome drought.
- To enhance the utilization of poor quality water.
- Over the years, the centre has grown in terms of infrastructural facilities, staff position, research and training activities and it stands foremost among the institutions devoted for water management issues.

The Water Technology Centre encompasses five inter-disciplinary units viz., Agronomy, Soil Science, Agricultural Engineering, Crop Physiology and Agricultural Economics which are involved in developing package of practices for different crops with the main focal theme on increasing Water Use Efficiency (WUE) with simultaneous increase in crop production.

Some of the major thrust areas given due recognition are: cropping system and scarcity water management, micro irrigation and fertigation, watershed management,

conjunctive use, water quality and waste water recycling, crop water stress management, agricultural drainage and water policy. Besides, the Centre is handling State Government aided plan schemes, international collaborative schemes, Government of India schemes, ICAR schemes and Private Agency funded schemes.

An Advanced Training Centre presently known as Centre of Excellence for Training (CET) for dissemination of water management technologies at State / National / International level is also functioning as a part of the Water Technology Centre. It is offering short term and long term training programmes on subjects of current interest both at National and International levels.

Ongoing Research

All India Co-ordinated Research Project on Water Management

This project is implemented at WTC with the ARS, Bhavanisagar and ARS, AC&RI, Madurai as its sub-centres. The Soil and Water Management Research Institute (SWMRI) at Thanjavur has also become an integral part of Water Technology Centre. The Research Projects on water management which are now being carried out at other agricultural research stations and out-reach stations are also being monitored by the Directorate of Water Technology Centre.

Achievements

ICAR-AICRP on Groundwater Utilization

Ground water utilization studies were taken up in the Parambikulam-Aliyar-Palar and Amaravathi basin with a cost estimate



of 33 lakhs. A three day capacity building programme was organized for improving the water management skills of the tribal farmers of Bellathy village in Manjur Taluk of Ooty. 30 tribes were benefited. Two check dams were constructed at Mutturai village of Ooty taluk in collaboration with the Tamil Nadu Agricultural Engineering Department at a cost of Rs.9.60 lakhs under ICAR-AICRP-TSP funds.

ICAR –NWP – National Initiative on Climate Resilient Agriculture

Eight observation bore wells were installed at a cost of Rs.5.90 lakhs at Panapatti village of Kinathukkadavu block to assess the recharge pattern of the rain water harvesting structures under ICAR-NICRA funds. A check dam was also constructed at the same village at a cost of Rs.12.10 lakhs in collaboration with the Tamil Nadu Agricultural Engineering Department. Research to find out the possibilities of recharging in hard rock areas were taken up. Drip fertigation in aerobic rice was studied.

Tamil Nadu Irrigated Agriculture Modernization and Water Bodies Restoration and Management (TN-IAMWARM) Project

During 2013-14, SRI demonstrations were conducted in 870 ha in different sub-basins of Tamil Nadu. Similarly, demonstrations on rice fallow pulses, semi dry rice, maize, cotton, ground nut, garden land pulses, chillies and vegetables were also conducted to popularize the integrated production technologies in 640 ha. The cost estimate for the scheme is 408 lakhs.

Sustainable Sugarcane Initiative for increasing the Water Productivity in Sugarcane – NABARD

Under the NABARD sponsored SSI demonstration, 60 plots were laid with SSI demo and wide awareness was created among the farmers. Twelve farmers were developed as entrepreneurs for producing the Sugarcane seedlings thereby the availability of seedling. For popularizing the technology, five capacity building programmes to extension and field officials of Sugar Industries and seven programmes for the farmers were imparted. Totally, 210 participants got benefitted. The cost estimate for the scheme was 30.8 lakhs.

ICAR-NAIP Project on ‘A Novel Food chain using milling industry by-products for enhancing nutritional security’.

Three value added products were developed from the rice bran and pulse by-products were popularized among the public, farmers and entrepreneurs. Large scale manufacturing of these products as self employment venture was promoted by TNAU by organizing a series of EDP workshops at WTC and other KVKs of TNAU. Around 450 farmers including rural youth were trained on production and marketing of these value added products. Sensitization workshops were also held for realizing the value of the by products from milling industries.

Memorandum of Understanding signed during the year 2013-14

Tamil Nadu Agricultural University has signed a Memorandum of Understanding with the Central University at Tiruvarur, to train on Water management. Accordingly, 34 rural youths passed the certificate course through the Water Technology Centre during 2013-14.



4.7. CENTRE FOR PLANT PROTECTION STUDIES

The Centre for Plant Protection Studies Co-ordinates activities of the Department of Agricultural Entomology, Plant Pathology and Nematology.

Research Mandate

- To conduct research on the management of pests and diseases of crop plants.
- To conduct research on chemical control of pests and diseases.
- To study the residual effect of pesticides and fungicides used on crops.
- Biological control of crop pests and diseases using natural enemies, parasites and parasitoids, spiders and birds, etc.
- Develop strategies to manage rats, birds and wild animals damaging the crops.
- Monitoring and surveillance of insects and forecast farmers on out break of pests and diseases.

Research programmes taken up during 2013-14

Department of Agricultural Entomology

- Pigeon pea genotypes resistant to *Helicoverpa armigera* and IPM were found.
- Blackgram and greengram genotypes found resistant to stemfly infestation were identified.
- Cotton cultures were screened for resistance to jassids, pink boll worm and spiraling whitefly with higher seed cotton yield.
- Research on thrips control in small onion was taken up.
- Pesticide residue studies in grapes and rice were taken up for minimum disease incidence, maximum yield and for any phytotoxic effect.
- Effective pesticides against mango hoppers and tomato sucking pests without producing any phytotoxic effect in mango and tomato were observed with 5 days waiting period in tomato.
- Twenty five accessions and eight varieties were screened for rice leaf mite damage.
- Studies on biology of yellow mites (*Polyphagotarsonemus latus*) on chilli entries regarding the fecundity of egg laying, susceptibility, the longest oviposition period, short developmental periods such as larval development, quiescent period and total life cycle were observed.
- Research on red spider mite incidence in organically grown tomato crop was carried out.
- Five new eriophyid mite species were recorded in different host plants of Western ghats biosphere.
- Evaluation of Biointensive IPM module against cassava whitefly *Aleurodicus disperses* was done.
- In the large scale field demonstration of BIPM package for the management of key pests of tomato, it was noticed BIPM was superior to farmers practice by recording lower population of aphids, thrips, leafhoppers, whiteflies and lower incidence of fruit borer.
- The papaya mealybug parasitoids *Acerophagus papayae* were also recovered from the neighbouring villages of the released sites. After the introduction of parasitoids, spectacular success was achieved in the control of papaya mealybug in Tamil Nadu on papaya,



tapioca, mulberry, cotton, teak, jatropha and many other host crops.

- Nematode control in castor, gourds, carrot and crossandra were studied.
- Pesticide residue and toxicology studies, studies on spiders, biological control of pests, Integrated Pest Management, virus disease affecting the honey bees in Kanyakumari district and their management were taken up.

Department of Plant Pathology

Mandate

- To conduct research on various aspects of Plant Pathology including development of integrated disease management strategies for major diseases in Agricultural and Horticultural crops.
- Breeding for disease resistance, disease forecasting and biological control of diseases.
- Research on mushroom cultivation and develop strategies to enhance mushroom yield.
- Identification and control of seed and soil borne pathogens and their management.

- Post harvest Pathology.
- To provide plant clinic service to farmers.
- To impart training to Agricultural extension functionaries on disease surveillance, management of crop diseases and IPDM

Research achievements

- Research on rust disease and downey mildew disease management in Pearl millet was taken up.
- Tobacco Streak Virus (TSV) infecting cotton was isolated and characterized. The Coat protein gene of TSV was sequenced and deposited in Gene Bank.
- Standardisation of techniques for the yield increase and management of Leaf blight in *Gloriosa superba* was made
- Pigeonpea entries showing resistance to root rot of redgram were identified.
- Research on management of powdery mildew in red gram, blast in ragi and diseases in onion were carried out.
- Tomato Spotted Wilt Virus (TSWV) infecting cut flower Chrysanthemum in India was reported for the first time.

Trainings / Seminars conducted

Sl. No.	Date/ Duration	Name of the Training/ Seminar, etc.	Male	Female
1.	24.02.2013 to 10.03. 2013 (14 days)	NAIP National Training on "Fascinating Microbial Molecules for Plant and Human health"	8	7
2.	13.03.2013	University level Meeting on NSS Programme planning	12	6
3	05.07.2013 to 05.03.2014	One day Mushroom training Programme on Cultivation of Oyster mushroom (9)	754	210
4	06.05.2013 to 10.05.2013 and 23.09.2013 to 27.09.2013	Five days Mushroom training Programme (2)	11	04



Department of Nematology

- Identification of nematode problems in crops and their management.
- To identify and map out the nematode fauna and their frequency of occurrence with particular reference to economically important crops.
- Identification of resistance sources of Musa genotypes against banana nematodes.
- Collection and isolation of *Fusarium oxysporum* and other *Fusarium* species and testing of virulence for nematodes.
- Understanding the molecular mechanism in elicitation of defense.
- Development of *Bacillus subtilis* aqueous formulation
- Molecular characterization of *Engyodontium araneorum* and biological mode of action against root knot nematode.
- Ecofriendly management of plant parasitic nematodes associated with noni.

Trainings / Seminars participated

Sl. No.	Name of the Training	Period	Organiser	Name and Designation of participants
1.	Identification of nematode problems in crops and their management.	2.4.2014 at Chettipalayam 4.4.2014 at Vadamandurai 9.5.2014 at Govindapuram, Kinathukadavu block, Coimbatore.	Department of Agriculture	Dr. S. Ramakrishnan, Professor Dr. K. Poornima, Professor Dr. K. Devrajan, Professor



4.8. CENTRE FOR PLANT BREEDING AND GENETICS

Centre for Plant Breeding and Genetics, is a major Centre in TNAU comprising of various departments like; Paddy, Millets, Pulses, Oilseeds, Cotton, Forages and Plant Genetic Resources.

Department of rice

Research Mandate

- To undertake research on nutritional genomics for the development of nutritive and medicinal rice varieties.
- To develop high yielding rice varieties of different duration groups through Inter-Disciplinary approach in collaboration with International Rice Research Institute, The Philippines and Directorate of Rice Research, Hyderabad.
- To synthesize modern rice hybrids with superior grain quality which are capable of yielding beyond the yield plateau using three and two-line breeding systems
- To create and characterize new genes of temperature sensitive genic male sterility through induced mutagenesis.
- To integrate practical molecular breeding tools with classical approaches in creating new drought, salt and submergence tolerant rice cultivars.
- To provide a high quality phenotyping platform for drought tolerance and aerobic rice.
- To study the diversity of pathogens and pests and, pyramid genes responsible for major biotic stresses
- To study the divergence in pests and pathogen population in rice in Tamil Nadu and pyramiding genes for imparting durable resistance against major pests and disease.
- To impart modern technical skills in rice cultivation, production of hybrid rice seeds

through customized training programmes and front line demonstrations.

- To support the supply chain of the seeds of improved varieties and hybrids through maintenance breeding.

Research Achievements

- CR1009 Sub1 and CB 05022 (CO 43/ADT 39) cultures were approved for release during 2014.
- CB 09123 (BPT 5204 / CO 50) and TNRH 243 (COMS 24A/CB 243R) Cultures/hybrids have been identified superior and are tested under Adoptive Research Trial / On-farm Trial during 2013-14

Department of Millets

Research Mandate

- Collection, maintenance, evaluation and utilization of germplasm resources
- Development of hybrids/composites/ varieties suited for rainfed and irrigated situations
- Resistance breeding for biotic and abiotic stress conditions
- Diversification of male sterile sources
- Technologies for yield maximization under rainfed and irrigated systems
- Management of pests and diseases through chemical and bio control agents
- Nucleus and breeder seed production of released varieties/parental lines of the hybrids
- Popularization of the varieties/hybrids and other management technologies to maximize the productivity
- Organizing training for farmers' regarding seed production technologies, yield maximizing technologies and value added products of millets.



Newly released varieties / hybrids / Technologies

Crop	Variety/Hybrid	Parentage	Duration (days)	Yield Potential (Kg/ha)
National release				
Maize	CoH(M) 7	UMI 1210x UMI 1220	110	7918
	CoH(M) 8	UMI 1201x UMI 1230	90-95	7079
	CoH(M) 9	UMI 1205 x UMI 1230	90-95	6279
	CoH(M) 10	(UMI 1200 x UMI 1210) x UMI 1230	90-95	7168
Kodomillet	TNAU 86	Pure line selection from IPs 85		2709
State release				
Ragi	CO 15	CO 11 x PR 202 946.	120	3043

Salient findings presented in the Scientific Workers Conference – For adoption.

Maize Hybrids proposed for Central Release

- Two single cross late maturity hybrids viz., CMH 08-282 (8982 Kg/ha) for Zone 4 and CMH 08-287 for Zone 3 (8254 Kg/ha) and Zone 4 (9553 Kg/ha) were proposed for central release for Rabi season.
- Three late maturity hybrids viz., CMH 08-381 for Zone 3 &4 and CMH 08-381(G) and CMH 09-464 for Zone 3 were proposed for central release for kharif season.

Varieties / Hybrids identified for state release during 2014

Sorghum

A high yielding dual purpose sorghum culture TKS_V 0809 is developed for the winter rainfed tracts of Tamil Nadu. It is a hybrid derivative of the cross SPV 772 x S 35 – 29. This culture matures in 95 days and found to be photo-insensitive. It has recorded an average grain yield of 3219 kg/ha over 126 locations of various yield trials which is 19.1% increase over K 8 (2702 Kg/ha) and 33.0% increase

over CSV 17 (National check) (2421 kg/ha). Similarly the culture TKS_V 0809 has recorded higher straw yield of 12-13 tonnes than the check K 8 (8-8.5 t/ha) and CSV 17 (7.4 t/ha). This culture is moderately resistant to shoot fly and stem borer. This culture was identified for release during 2014.

Pearl Millet

The pearl millet composite UCC 32 recorded an average yield of 2798 kg/ha which is 14 and 18 percent increased yield over the check Co(cu) 9 (2454 Kg/ha) and ICMV 221 (2577 Kg/ha) respectively. The ear heads are compact and have bold grains. This composite is resistant to downy mildew disease.

Schemes / Projects operated during 2013-14

- Enhancing the productivity and value addition in millets
- All India Coordinated Maize Improvement Project
- All India Coordinated Sorghum Improvement Project
- All India Coordinated Pearlmillet Improvement Project



- All India Coordinated small millets Improvement Project
- Developing guide lines for conduct of test for Distinctiveness, Uniformity and Stability in Small millets, (finger millet, foxtail millet, kodo millet, little millet, barnyard millet and proso millet).
- Development of waxy and non-waxy foxtail millet genotypes suitable for Assam and Tamil Nadu and preparation of value added food products and Molecular breeding for exploitation of heterosis in genetic improvement of maize under water limited environments
- Development of high culm strength, bold seeded and compact plant type genotypes in Kodo millet suitable for mechanical harvesting, Identification of major downy mildew resistance QTLs in maize inbreds / RILs and development of downy mildew resistant single cross hybrids suitable for commercial cultivation.
- Identification of high beta carotene pearl millet lines (Golden Millet) to enhance the nutritional security
- Marker assisted introgression of major QTLs conferring resistance to sorghum downy mildew in maize
- Identification of QTLs for drought tolerance in sorghum
- Evaluation of NIAS Gene Bank Sorghum Genetic Resources (mini core accessions)
- Upscaling popularization of Little millet in Javadu hills of Thiruvannamalai district, Tamil Nadu for enhancing the livelihood of tribal farmers
- Evaluation of high yielding and nutrient rich Oat variety suitable for value addition.

Trainings / Seminars conducted

- Six training programmes on “Millet production and value addition technologies” were conducted at TNAU, Coimbatore, KVK, Papparapatti, Dharmapuri and Maize Research Station, Vagarai, Dindigul from 07.01.2014 to 20.03.2014. A total of 371 participants including farmers, house wives, and entrepreneurs got benefitted by the training programme.

Trainings / Seminars attended

Sl. No.	Name of the Training	Date	Organiser and Address	Name of participants
1.	Third International Training Course on Pearl Millet Hybrid Parents Improvement and Seed Production	10.09.2013 to 19.09.2013	ICRISAT, Patancheru, Hyderabad	Dr. P. Sumathi Professor
2.	Management of Plant Genetic Resources	16.08.13 to 25.08.13	NBPGR, New Delhi	Dr. R. Ravikesavan, Professor Dr. A. Subramaniam, Assistant Professor



Department of oilseeds

Research Mandate

Groundnut

- Development of high yielding bunch/ semi spreading groundnut varieties.
- Development of high yielding groundnut varieties with tolerance and resistance to drought and foliar diseases, respectively.
- Genetic enhancement of groundnut varieties for oil content and quality through recombination breeding.

Sesame

- Development of high yielding sesame varieties and hybrids.
- Genetic enhancement of sesame varieties for resistance to important diseases.

Sunflower

- Development of high yielding sunflower hybrids.
- Development of high yielding sunflower hybrids with resistance to important diseases.
- Genetic enhancement of sunflower hybrids for oil content and quality through recombination breeding.

Extension activities

- Promotion of promising varieties / lines with high yield and high oil content with enhanced O/L ratio for enhancing production and quality of groundnut oil in drought prone environments to boost the income of small and marginal groundnut farmers in India.
- Development of cost effective production technologies for sunflower varieties and hybrids through front line demonstrations to enhance the productivity.

Department of Pulses

Research Mandate

- Utilizing BSR 1 redgram as a donor in crop improvement programmes for evolving long duration varieties.
- Exploring the genotypic responses for redgram transplantation and establishing the differences between the transplanted redgram and seed sown redgram.
- Evolving short duration redgram varieties with synchronous maturity.
- Intensifying research in virology and bacteriology for containing the diseases in pulses. and to screen the entries for MYMV resistance in the hotspot.
- Screening blackgram materials for powdery mildew resistance and synchronized maturity under rice fallow situation.
- Evolving of high yielding blackgram varieties with resistance to MYMV.

Department of Cotton

Research Mandate

- Exploitation of male sterile lines for developing high yielding hybrid cotton
- Development of high yielding cotton varieties with bollworm resistance
- Attempting physiological manipulations for more boll load with synchronous boll development and boll bursting.
- Development of compact genotypes for high density planting system and mechanical picking
- Development of high yielding tetraploid cotton varieties and hybrids with boll worm resistance



4.9. AGRICULTURAL ENGINEERING

Department of Bio-Energy

Research programmes

1. Value added bio-digested solid and slurry as sustainable organic manure
2. Algae as a potential biofuel, an Indian scenario

Algal cultivation systems were validated under Indian conditions for commercialization of algal fuels. Bio-prospecting of fresh and marine water samples of Tamil Nadu was undertaken. The suitability of different growth media for various microalgal isolates was configured. The department stocks potential hyperlipid (22-40 per cent) producing micro-algae.

3. Solar hot air generation system (shags) for natural rubber drying

Agricultural Machinery Research Centre

Machineries developed

- Automatic nursery tray seeder for SRI
- Power weeder for weeding on ridges and furrows

Front Line demonstrations conducted

Sl. No.	Month	Implement	Crop	Area (ha)
1	May 2013	Inclined plate planter	Cotton and Maize	5.2
2	July 2013	Inclined plate planter	Green gram	1.6
3	August 2013	Inclined plate planter	Cotton and maize	5.2
4	September 2013	BCS power weeder	Cotton Sunflower	1.2 0.5
5	October 2013	Raised bed planter for groundnut	Groundnut	0.75
6	November 2013	BCS power weeder	Groundnut	0.75
7	December 2013	BCS power weeder	Maize	0.4
8	December 2013	BCS reaper binder	Kuthiraivali and Ragi	0.4 0.3
9	January 2014	BCS reaper binder	Paddy	0.5
10	January 2014	Tractor operated fodder harvester	Fodder Sorghum	0.5

- Development of a tractor operated fertilizer dibbler for ratoon sugarcane
- Design and development of a self propelled groundnut combine harvester
- Development of tractor operated Cassava harvester

The following new projects are under process

- Design and development of a self propelled groundnut combine harvester
- Design and development of transplanter for SSI Sugarcane
- Design and development of sugarcane harvester
- Design and development of turmeric planter



Training programmes / short courses conducted

Sl. No	Date	Topics	Venue
1.	06.11.2013 to 26.11. 2013	Drudgery reduction technologies useful for farm women and farm workers.	Agricultural Machinery Research Centre, Agricultural Engineering College and Research Institute, TNAU, Coimbatore

Following implement/ machinery were tested and test certificates were issued

1. Andreas STIHL pvt. Ltd, STIHL paddy weeder (2 row)
2. Sri Andal Agro, Tractor PTO operated shredder
3. Sri Andal Agro, Tractor PTO operated shredder cum pulveriser
4. Escorts Limited, Three row Paddy power weeder
5. Escorts Limited, Five row Paddy power weeder
6. Tractor and Farm Equipments, TAFE Rotary tiller- 615 C (36 blades single speed chain drive)
7. Tractor and Farm Equipments, TAFE Rotary tiller- 615 V (36 blades multi speed gear drive)
8. Tractor and Farm Equipments, TAFE Rotary tiller- 718 V (42 blades multi speed gear drive)
9. Kisanraft machine tools pvt ltd., Brush cutter KK- SBC- 4302
10. Kisanraft machine tools pvt ltd., Brush cutter
11. Gomadhi Engineering Services, Tractor PTO operated Round baler: Gomathi AB Series
12. E-one India, E-one HM 16A (Battery operated Knapsack sprayer)
13. Gomadhi Engineering Services, Gomadhi AS series (Tractor drawn shredder)
14. Sree Amman Mills, Kartar-2236 (Tractor drawn trash shredder)
15. Farm Implements (I) Pvt. Ltd., TAKAKITA RB-510 (Tractor PTO operated round baler)
16. Maha Engineerings, ME/40C (36 blades chain drive with single speed gear box)
17. Maha Engineerings, ME/40MSC (36 blades chain drive with multi speed gear box)
18. Maha Engineerings, ME/60MSC (42 blades chain drive with multi speed gear box)
19. Dharanee Agrovator, DA36 MS Spice GD (36 blades multi speed gear drive)
20. Dharanee Agrovator, DA36 SS Spice CD (36 blades single speed chain drive)
21. Dharanee Agrovator, DA42 MS Leva GD (42 blades multi speed gear drive)
22. Dharanee Agrovator, DA 42 SS Spice CD (42 blades single speed chain drive)
23. Himalaya Agro-Tech, Tractor PTO operated Farm Waste Shredder – Power Plus

Visitors to the Department

During the year 2013-14, on various days 1723 farmers and 132 students have visited the department and got benefitted.



Post Harvest Technology Centre Research

Projects implemented with Government funding

1. Revalorizing small millets: Enhancing the food and nutritional security of women and children in rain fed regions of South Asia
2. Post harvest technology and value addition of cashew apple
3. Impact of climate change and globalization on safety of fresh produce – governing a supply chain of uncompromised food sovereignty
4. Economic impacts of informal food supply system in Tamil Nadu
5. Evaluation of probiotic efficacy of Xylo-Oligosaccharides and its food application
6. Indian Muskmelon varieties for the high beta carotene quality traits and development of superior muskmelon hybrids for commercial cultivation”
7. Ecotourism and its External Impacts on Agriculture, Socio-economics, Natural Resources and the Environment.

8. Processing of curry leaves powder and its stability during storage

TNAU funded projects

1. Standardization and Evaluation of Bakery products with Xylo - Oligosaccharides (XOS)
2. Standardization and Evaluation of Value added products from Small Millets
3. Effect of pre-treatment of growth regulator on yield and quality of orange fleshed sweet potato (*Ipomoea batatas* (L) Lam) var CO-5.
4. Evaluation of quality parameters of cashew apple during processing and MAP storage
5. Suitability of brown rice and broken rice for the development of extruded and bakery products

Trainings Conducted

S. No	Date	Name of the training
1.	14.03.2013 - 15.03.2013, 05.02.2014	Training on Commercial production of RTS beverages
2.	27.03.2013 - 28.03.2013	Training on Processing of Vegetables
3.	09.04.2013 -10.04.2013 18.06.2013 - 19.06.2013 21.11.2013 - 22.11.2013	Training on Value added Amla products
4.	17.04.2013 - 08.04.2013	Training on Commercial production of fruit products
5.	19.06.2013	Training on Commercial production of squashes
6.	26.06.2013 - 07.06.2013	Training on Preparation of ready to use foods



7.	27.11.2013 - 28.11.2013 26.12.2013 - 27.12.2013 26.02.2014 - 27.02.2014	Training programme on commercial production of fruit and vegetable products
8.	17.12.2013 - 18.12.2013	Training on Dehydration of fruits and vegetables
9.	29.01.2014 - 30.01.2014	Training programme on preparation of ready to use products
10.	13.12.2013 - 10.01.2014	EDP training on bakery and confectionery
11.	12.02.2014	Introduction on value added products from fruits and vegetables
12.	13.02.2014	Hands on training on value added products from fruits and vegetables
13.	21.02.2014	Food Processing
14.	13 .03.2014	Training programme on commercial production of spice powders and extruded products
15.	26.03.2014 - 27.03.2014	Preparation of spice powders and pickles
16.	19.03.2014 - 20.03.2014	Value added tomato and papaya products



4.10. CENTRE FOR AGRICULTURAL AND RURAL DEVELOPMENT STUDIES

The Centre for Agricultural and Rural Development Studies (CARDS) was established in 1978 as the first multi-disciplinary Centre of the Tamil Nadu Agricultural University to carry out research in socio-economic issues concerning agricultural and rural development. The Centre comprised of four departments viz., Agricultural Economics, Agricultural Extension and Rural Sociology, Agricultural and Rural Management and Trade and Intellectual Property.

Mission

The mission of CARDS is to acquire and transmit new socio-economic knowledge to stakeholders concerned at various levels to support well informed decision making. The main activities of the centre are given below.

Activities of the Directorate

- To provide a broad range of educational programs in social sciences which contribute to the development of human capital in the field of Agricultural and Rural Development;
- To coordinate and support research that improves understanding of economic and community development issues, problems and opportunities;
- To provide policy support to state and central government on problems confronting rural development;
- To foster inter-institutional collaboration at regional, national and international levels for research, training and development in select areas; and
- Imparting knowledge with respect to patent system, plant varieties registration and other forms of IPRs and trade issues

through educational activities which are necessary for students.

Policy Support

- As the primary mandate of CARDS is to contribute for informed debate on agricultural and rural development policy-making in Tamil Nadu, the Centre is engaged in research and extension activities to generate data and information on agricultural and rural development perspectives and priorities.
- One of the major ongoing research projects in this directorate is the Comprehensive Scheme on Cost of Cultivation of Principal Crops in Tamil Nadu, fully funded by the Government of India. The data on various aspects of crop production are collected, computerized and analyzed for assisting the Government of India in fixing support prices for major crops.
- The State Agricultural Marketing Board has instituted a Professorial Chair in the Department of Agricultural Economics since 1983 to strengthen education, research and training in agricultural marketing.
- To disseminate real time price information and domestic and export market intelligence on agricultural commodities through radio, television and newspapers for better scientific decision-making by farming community, traders, firms and researchers.
- Department of Trade and Intellectual Property, CARDS is playing a facilitative role for filing patent application for TNAU scientists, private inventors, NGOs and farmers in the patent office, Chennai. The status of inventions filed for patent, request for seeking first examination report and



other formalities are also executed by this department.

Department of Agricultural Economics Mandate

The Department has been undertaking triple functions such as education, research and policy support on the issues concerning economic aspects of agriculture and rural development besides capacity building. The Department helps the Central and State Governments in formulating agricultural policies.

Specific objectives

- To develop a strong academic programme in agricultural economics and to impart education to U.G., P.G., and Doctoral Programmes in agricultural economics,
- To study the economics of production and marketing of major crops and to help central and state governments in fixing Minimum Support Price and Procurement Price,
- To study the economics and issues in use of land, agricultural labour, water and other natural resources and formulate relevant policy options for managing them,
- To analyze and quantify the impact of climate change on agriculture and specify relevant policy alternatives for adaptation
- To assess the impact of agricultural and rural development programmes on growth, equity and sustainability issues and
- To foster inter-institutional collaboration at regional, national and international level, for teaching, research and training in issues related to agricultural economics.

Schemes / Projects operated

- GOI Scheme on Study of Cost of Cultivation of Principal Crops in Tamil Nadu
- Institution of Endowment Chair in Agricultural Marketing
- Evaluating the Causes and Consequences of Credit Gap in Tamil Nadu – An Economic Analysis
- Climate Change and Groundwater Dynamics: A Hydro-Economic Analysis of Impacts and Adaptation in South India.
- Study on Marketing Practices and Utilization Pattern of Groundnut.
- Commodity Potential in Tamil Nadu Agriculture – Vision 2023
- Integrated Assessment of Climate Change Impacts on Principal Crops and Farm Household Incomes in Tamil Nadu
- TL II- Phase 2: Enhancing Legume Productivity.
- Impact of combined harvester on rice and rice fallow pulses
- Climate Variability and Tank Irrigation Management in Tamil Nadu: An Economic Inquiry into Impacts, Adaptation, Issues and Policies
- Conduct of Baseline Survey to Study the Vulnerability, Production Risk and Farm Technology Adoption in Climate Change Prone Irrigated Ecosystem in Coimbatore District of Tamil Nadu
- Regional Crop Planning for Improving Resource use Efficiency and Sustainability
- Preparation of Human Development Report and schemes under State Balanced Growth Fund for Coimbatore District
- Developing computer based model for Impact Assessment of Watershed Development and Building Capacity in Tamil Nadu



- Adapting to Climate Change in urbanising watersheds
- Impact evaluation of Educational Infrastructure Projects supported under NABARD-RIDF in Tamil Nadu
- Study on value chain analysis for pearl millet and chickpea in Andhra Pradesh and Tamil Nadu
- Identification of strategies for increasing the production and productivity of small and marginal farmers in Tamil Nadu.
- To quantify the impact of energy crisis on Irrigation'
- Estimating cost of cultivation of major crops in Tamil Nadu

Special Lectures delivered

Sl.No.	Date	Name and designation of the lecturer	Title of lecture
1.	04.06.2013	Dr. M. Chandrasekaran Professor (Agrl. Econ)	Supply Chain Management for crops in the Workshop on Market led Extension and Farmer Producer Organizations.
2.	06.09.2013 & 25.10.2013	Dr. K. M. Sivakumar, Assoc. Professor (Agrl. Econ)	"Future Growth Potentials for Commodity Derivative Markets : India & International Perspective"
3.	20.09.2013 & 27.09.2013	K. Mani Professor (Agrl. Econ)	Preparation of Proposals for and Evaluation of Agri Business Projects
4.	10.10.2013	K. Mani Professor (Agrl. Econ)	Production, Marketing and Credit Linkage including Crop Insurance -
5.	21.10.2013	Dr. R. Balasubramanian	Marketing of Organic Manure in Tamil Nadu: Prospects and Issues
6.	26.11.2013	Dr. K. R. Ashok Professor (Agrl. Econ)	DHDR preparation for Coimbatore district-A Presentation of the draft made to the District Collector and the working groups
7.	18.12.2013 to 20.12.2013	Dr. R. Balasubramanian	Agricultural Research and Extension in India.

Trainings / Seminars conducted

Totally, 31 Capacity Building Training Programmes on Market Led Agriculture and Entrepreneurship Development were conducted.

Trainings / Seminars attended

Sl. No.	Name of the Training	Period	Organiser and Address	Name and Designation of participants (AP,etc)
1	South Asia Regional Work Plan meeting- TL2- P2	27.05.2013 to 29.05. 2013	ICRISAT, Hyderabad	Dr. K. R. Karunakaran Professor (Agrl. Econ)



2	Workshop cum Training Programme for Implementation of State Balanced Growth Fund	06.06.2013 to 08.06.2013	State Institute of Rural Development, Chennai	Dr. K. R. Ashok Professor (Agrl. Econ)
3	First Stakeholder Consultative Meeting on Banana at Killikulam organized by CII, Chennai and served as Group facilitator on Marketing and Export of Banana	21.06. 2013	Confederation of Indian Industry, Chennai	Dr. M. Chandrasekaran Professor (Agrl. Econ)
4	ISCB workshop on Socio-economic research	01.08.2013	ISCB at New Delhi	Dr. K. R. Ashok Professor (Agrl. Econ)
5	NSS Orientation Programme for NSS programme officer	24.09.2013 to 30.09.2013	Avinashilingam university	S. Varadha Raj Asst. Professor (Agrl. Econ)
6	Training Of Trainers on Life Skills And Peace Building for NSS programme officer at Shreyas training centre, Sulthan Bathery, Wayanad, Kerala.	26.11.13 to 30.11.2013	Rajiv Gandhi National Institute for Youth Development	S. Varadha Raj Asst. Professor (Agrl. Econ)
7	Adoption of Impact Assessment of Research & Development Project	27.11.2013 to 30.11.2013	IMP, ICRISAT, Hyderabad	K. R. Karunakaran Professor (Agrl. Econ)
8	e-Brainstorming Workshop on Inclusive value chains.	02.12.2013 to 04.12.2013	ICRISAT, Hyderabad	Dr. R. Balasubramanian Professor (Agrl. Econ)
9	Small Farmers Valu chains & Market Linkages	02.12.2013 & 03.12.2013	IMP, ICRISAT	K. R. Karunakaran Professor (Agrl. Econ)
10	Sustainable food value chain analysis; tools and application	04.12.2013 to 08.12.2013	IRRI, at Bangkok	K. R. Karunakaran Professor (Agrl. Econ)
11	The 7 th Biennial Conference of the Indian Society of Ecological Economics, and chaired a panel discussion on climate change economics.	05.12.2013 to 07.12.2013	Indian Society of Ecological Economics, Tezpur University, Assam	Dr. R. Balasubramanian Professor (Agrl. Econ)



12	The 73 rd Annual Conference of the Indian Society of Agricultural Economics from 18-12-2013 to 20-12-2013, and delivered keynote address on Agricultural Research and Extension in India.	08.12.2013 to 20.12.2013	NAARM, Hyderabad	Dr. R. Balasubramanian Professor (Agrl. Econ)
13	Attended and presented a paper at the National Groundwater Conference (NGWC 2013) held at Water Technology Centre, TNAU, Coimbatore,. Also co-chaired a session on Groundwater Policy and Management Options	09.12.2013 to 11.12.2013	Water Technology Centre, TNAU, Coimbatore	Dr. R. Balasubramanian Professor (Agrl. Econ)
14	ISCB Project network consultation meeting at CTCRI, Thiruvananthapuram	19.01.2014 & 20.01.2014	Indo-Swiss Collaboration on Biotechnology	Dr. K. R. Ashok Professor (Agrl. Econ)
15	AgMIP Regional Research and Coordination Team Finish Line Workshop for Sub-Saharan Africa and South Asia Teams at Arusha, Tanzania	30.01.2014 to 04.02.2014	AgMIP Regional Research and Coordination Team	Dr. P. Paramasivam Professor (Agrl. Econ)
16	TLII- Real time tracking -workshop	03 - 04.03.2014	IMP, ICRISAT	K. R. Karunakaran Professor (Agrl. Econ)
17	Natural Resource Valuation seminar	07.03.2014	UAS, Bangaluru	K. R. Karunakaran Professor (Agrl. Econ)
18	National workshop on Dendro biomass based power generation	20 - 21.03.2014	Forest College and Research Institute, Mettupalayam	S. Varadha Raj Assistant Professor Agrl. Econ)

Department of Trade and Intellectual Property

TNAU has established Intellectual Property Rights (IPR) Cell on 26.04.2008 under the ICAR grant at the Directorate of CARDS with the following objectives:

- To constitute Intellectual Property Management Counsel to facilitate TNAU scientists, farmers, students and other stakeholders.



- To identify agricultural products for registration under Patents and Geographical Indications.
- To organize IPR awareness and public outreach programmes in order to expand the Intellectual Property Rights related activities of the Cell.
- The Department of Trade and Intellectual Property was established in 01.04.2010. Till now, seven patents were obtained and 65 patent applications were filed through this Department. The teaching, research, patenting services and other extension activities of the Department carried out are summarized below.

Research projects

- Evaluation of Rockefeller Foundation Research and Technology Transfer Projects on Drought Tolerant Rice.

- Impact Assessment of IPM.
- Dissemination of Improved Tapioca Production Technologies and Value Addition Techniques among SC&ST Tapioca Growers for their Economic Upliftment in Salem District of Tamil Nadu.
- A Study on the Domestic and Export Potential of Organic Tender Coconut in Coimbatore District of Tamil Nadu.

The Department of Trade and Intellectual Property facilitates scientists and students of TNAU, entrepreneurs and inventors from other institutions by providing patenting services which include preparation and filing of patent applications. The details on four patents filed through the Department during 2013-14 are given below

Patents filed during 2013 - 14

Sl. No.	Name and address of the Inventor	Title of invention	Date of Filing
1.	Dr.R.Murugesan, Professor, Agricultural Microbiology	Mass Multiplication Technique for Pink Pigmented Facultative Methylootrophs (PPFM)	2641/CHE/2013 Date of filing: 18.06.2013
2.	Dr.P.Kamaraj, Assistant Professor of Farm Machinery	Hand Operated Farm Tool for Removing Mother Shoots of Sugarcane Crop	3037/CHE/2013 Date of filing: 08.07.2013
3.	Dr.R.Thiyagarajan, Assistant Professor of Farm Machinery	Multipurpose Machine for Roto Tilling and Bush Cutting	3653/CHE/2013 Date of filing: 16.08.2013
4.	Dr.P.Srimathi, Professor of Seed Science and Technology	Noni based Agroceutical Formulation for Seed Priming and Foliar Spray and its Method of Preparation	4027/CHE/2013 Date of filing: 10.09.2013



Department of Agricultural Extension and Rural Sociology

Ongoing Research Projects

- Training needs of extension workers for effective Implementation of extension reforms operated under ATMA Extension Reforms Programme - Dr. P.Balusubramaniam.
- Impact of Farm School Operated under ATMA Extension Reforms Programme - Dr.S.Kalaivani .
- A study of 'Exposure Visits under ATMA –Stakeholders feed back' operated under ATMA Extension Reforms Programme - Dr.R.Premavathi.
- Promoting women entrepreneurship through gender analysis - Dr.R.Premavathi.
- Impact of Land use change on the livelihoods of farmers in Coimbatore and Dharmapuri Districts of Tamil Nadu - Dr.S.Kalaivani.
- Soil Health management Behaviour of Farmers in Tamil Nadu- Dr.S.Kalaivani.

Short course conducted

S.No	Programmes	Venue	Scientists	Date
1.	Summer School on Information and Communication, Technology (ICT), Initiative for Inclusive Agricultural Development	Department of Agrl. Extension and Rural Sociology, TNAU, Coimbatore	Dr. Ravi Kumar Theodore Professor and Head Dr. P. Balasubramaniam Professor (Agrl. Extension)	03.07.2013 - 23.07.2013

Training / Seminar participated by the scientists

S.No.	Particulars	Scientist	Venue	Date
1.	Stakeholders awareness meeting and education seminar on agribusiness and commodities, price risk management	Dr. V. Ravichandran Dr. S. Palaniswamy Dr. P. Balasubramaniam Dr. M. Asokhan Dr. R. Premavathi	Hindu Business Line, Coimbatore	03.04.2013
2.	Awareness Workshop on Issues related to (GM crops) Genetically modified crops	Dr. P. Sumathi	Directorate of CPMB, TNAU, Coimbatore	02.08.2013
3.	Training on Research Methodology and Documentation for Extension Personnel	Dr. P. Sumathi	MANAGE, Rajendranagar, Hyderabad.	02.12.2013 - 06.12-2013
4.	Workshop on e-granth and e-resources	Dr. P. Sumathi	Directorate of Public Relations and Publications, TNAU, Coimbatore	26.03.2014 - 27.03.2014

Department of Agricultural and Rural Management

This Department functions to address the agricultural development processes in the country by developing efficient human resources through quality education and capacity building programmes.

Research programmes

1	Innovative Water-Saving Irrigation and Investment Priorities for Food Security and Water Sustainability in India
2	Impact of Climate Change and Globalization on Safety of Fresh Produce – Governing a Supply Chain of Uncompromised Food Sovereignty
3	Gender Equity, capacity building and research in IPM

Schemes / Projects operated

Sl. No.	Name of the scheme	Funding agency	Major scheme Head	Budget
1.	Innovative Water-Saving Irrigation and Investment Priorities for Food Security and Water Sustainability in India	Private Agency	International Food Policy Research Institute (IFPRI) , Washington, D.C. USA	13.50
2.	Impact of Climate Change and Globalization on Safety of Fresh Produce – Governing a Supply Chain of Uncompromised Food Sovereignty	Private Agency	European Union	42 .00
3.	Gender Equity, capacity building and research in IPM	Private Agency	USAID, Virginia Tech, USA	10.00

Trainings / Seminars conducted

Sl. No.	Date	Name of the Training	Budget (Rs in lakhs)	Number participated			
				Male	Female	SC/ST Male	SC/ST Female
1.	5.11.2013 to 16.11.2013 and 21.01.2014 to 29.01.2014	Communication and analytical skill	0.90	7	6	3	-
2.	All Sundays of March and April , 2014	Personality Development and career counseling	1.80	9	22	4	3
3.	January and February, 2014.	Communication and Analytical skill	0.66	6	14	-	2



4.	23-25 January, 2014	Case writing workshop	2.40	5	7	1	1
5.	13.12.2014 and 14.12.2014	National Management Meet	2.80	67-UG 103 MBA			

Trainings / Seminars attended

Sl. No.	Name of the Training	Date / Duration	Organizer and Address	Name and Designation of participants
1.	Agribusiness Management and Market Intelligence	01.07.2013 to 21.07.2013	IABMI, Anand Agricultural University, Anand	Dr.P. Balaji, Assistant Professor and Dr. S. Moghana Lavanya, Assistant Professor



4.11. FORESTRY

Forest College and Research Institute at Mettupalayam is handling 25 externally funded projects which are obtained in a competitive mode from Central and State Governments and other private agencies. Studies are taken up to elucidate information on improved species and plantation materials, evolving cost effective nursery, cultivation and agroforestry practices, usage of effluents in forest tree cropping and evaluation of biofuel crops. The research projects handled by all the departments are as follows:

Schemes/Projects operated

1. NAIP – A Value Chain on Industrial Agroforestry in Tamil Nadu Establishment of lucrative industrial wood plantation with improved short rotation clones/genotypes through contract farming.
2. Agronomical and Genetic evaluation studies in grain amaranthus and rice bean
3. AICRP-Agroforestry
4. A networking project on Survey, Documentation and Value addition of selected NTFPs in Tamil Nadu.
5. Evaluation of whole pea flour and protein-rich pea fractions as a biopesticide for the management of insects attacking seeds of trees during storage
6. National Network project on Integrated Development of *Jatropha* and *Karanja*
7. Collection, Evaluation and Genetic Improvement of Mahua for High Yield, Oil content as well as superior oil quality.
8. JATROPT- Breeding strategy towards a sustainable crop for Biomaterials and Biofuels- *Jatropha curcus*: “Applied and Technological Research in Plant traits”
9. Design and development of Urban Forestry Models to Combat Environmental Pollution in Tamil Nadu
10. Vermicompost / Vermicasting production under Bamboo Plantations
11. Developing Water Management Strategy and Action Plan in Protected Areas / Elephant Reserves in Dharmapuri Division
12. Developing Water Management Strategy and Action Plan in Protected Areas / Elephant Reserves in Coimbatore Division
13. Review of historic data and information on large mammal movement
14. Baseline survey of biodiversity in critical habitats prior to removal of alien species Sathyamangalam Forest Division
15. Genetic Enhancement of Pulp wood species through Breeding and Biotechnology
16. Promotion and Popularization of Renewable Energy in Tamil Nadu in Association with Auromira Bio-Energy.



Trainings / Seminars conducted

Sl. No.	Name of the Training	Category of participants
1.	Training on Industrial wood Plantation	260 Virudhunagar District farmers 54 Villupuram District farmers
2.	Tree Insurance Launch Programme	300 farmers from 29 districts of the state
3.	Stake Holders Meeting	75 farmers from various districts of Tamil Nadu.
4.	One day Training on Vermi Composting	165 farmers from various places participated



4.12. HOME SCIENCE

Home Science College and Research Institute is functioning at Madurai from the year 2000 onwards. Bachelors, Masters and Doctoral programmes besides research work in Home Science are being undertaken.

Schemes / Projects operated

- Designing safe and ergo friendly kitchen for elderly persons.
- Drudgery reducing technologies for tribal families in Sirumalai Hill areas of Dindigul district.
- Promoting occupational health and safety of women workers employed in small scale sea food processing units.
- Standardization of selected ethnic fermented foods and beverages by rationalization of Indigenous knowledge.
- Development of technology for resistant / modified starch substitutes cereal/ millet and pulse blended bakery & pasta products
- Value added products from yeast fermented heat stabilized defatted rice bran.
- Optimization of Technology for Millets and Pulse blended Low Glycemic functional Pasta foods for metabolic disorders.
- Study on the dietary antioxidant consumption among the adults and the effect of cooking and processing on the activity of antioxidants
- Study the phytochemical and antioxidant properties of wild fruits and development of value added products from the selected wild fruits
- Economic empowerment of SC & ST women on processing of *Moringa oleifera* leaves and its products as a income generating activity.
- Formulating value added products from minor tubers for food and industrial use.
- Development of functional capabilities of rural women on sustainable agro processing technologies for income generation by developing marketing network
- Formulation of probiotic millet fruit bar

Trainings / Seminars conducted

Sl. No.	Period	Name of the Training/ Seminar	Budget (Rs. in lakhs)	Category of participants
1	17.09.2013	Workshop on "Designs for elderly persons"	0.25	Members of Builders Association of India-Madurai center
2	2.16.12.2013 to 21.01.2014	Women entrepreneurs skill development programme (WESDP) on value addition on millet.	1.71	Farmers, entrepreneurs, self-help groups and unemployed youth.
3.	21.12.2013 to 27.01.2014	Women entrepreneurs skill development programme (WESDP) on processing of fruits and vegetables.	1.71	Farmers, entrepreneurs, self-help groups and unemployed youth



4.	13.03.2014 & 14.03.2014	National seminar on Emerging Technology in Processing and Value Addition of Millets for Better Utilization	1.70	Scientist, Students, Research Scholars, Entrepreneurs
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Trainings / Seminars attended

Sl. No.	Name of the Training	Period	Name and Designation of Participants
1.	Training on filling online application for UG degree programme at TNAU, Coimbatore	16.4.2013	Dr. R. Vijayalakshmi, Assistant Professor
2.	All India University Tamil Teachers Association (AIUTTA)	May 2013	Dr. P. Vellaichamy, Professor
3.	Ainthamizh Aivalar Mandram (ATRA)	May 2013	Dr. P. Vellaichamy, Professor
4.	State level stakeholders meet on Traditional agro products.	19.06.2013 to 22.06.2013	Dr. G. Hemalatha, Professor
5.	Agri-Tech investors	17.07.2013 to 20.07.2013	Dr. S. Kanchana, Professor
6.	Workshop on promotion of coconut technologies	02.07.2013	Dr. S. Amutha, Professor and Head
7.	E – learning course for Home Scientists.	26.08.2013 to 29.08.2013	Dr. S. Kanchana, Professor Dr. M. Ilamaran, Assistant Professor
8.	Workshop on Role of Governance in Promotion of Small Millets as Nutritious and Healthy diet	14. 9.2013	Dr. S. Amutha, Professor and Head
9.	E– course training programme	7.11.2013 to 8.11.2013	Dr. S. Kanchana, Professor
10.	Teaching seminar for Experiential learning courses	5.11.2013 to 6.11.2013	Dr. G. Hemalatha, Professor
11.	Recent advances in apparel manufacturing and designing	26.12.2013 to 15.1.2014	Dr. S. Arokiamary, Asst. Professor
12.	Workshop on “Emerging Technology in processing and value addition of millets for better utilization”	13.03.2014 & 14.03.2014	All staff members of HSc&RI, Madurai

Laboratory services given

Sl. No.	Name of the analysis	Number of samples analysed	Amount charged	Category of the beneficiary
1.	Moisture, protein and fat, acidity, pH analysis in milk products	3	5000	Entrepreneur



2.	Moisture, vitamin-C, acidity, TSS and pH in amla candy	4	3350	Entrepreneur
3.	Moisture, protein and fat analysis in paneer	1	2000	Entrepreneur
4.	Total sugar, reducing sugar and ash content in honey	2	1200	Students
5.	Carbohydrate, protein, energy, TSS, Brix, acidity %, beta carotene, total sugar analysis in Mango RTS beverages.	1	950	Students
6.	Moisture, vitamin- C, total carotenoids, carbohydrates, total Anti-oxidant activity, total phenols and iron in <i>Pisonia grandis</i> (lechakottai) leaves	5	7750	Students
7.	Calcium, fibre and tannin in <i>Pisonia grandis</i> powder	1	1850	Students
8.	Analytical charges for lemon and mango	2	5250	Entrepreneur



4.13. SEED CENTRE

Tamil Nadu Agricultural University Seed Centre was established during the year 2006.

Vision

- Facilitation for enhancing the Seed Replacement Rate (SRR) of major crops to increase the productivity through Department of Agriculture.
- Enhancing the status of seed industry of Tamil Nadu / India, a globally competitive one.

Mission

- Ensure timely availability of quality seeds of improved varieties and hybrids to the farmers of Tamil Nadu by way of production and distribution of high quality seeds of various classes in all major crops.
- To increase the productivity of major crops by enhancing the Seed Replacement Rate (SRR).
- Contribution for integrated approach towards the availability of high quality seeds of improved varieties.

Activities

- To produce quality seeds in major crops based on the indent and ensure adequate quantity is supplied in time.
- Lead and engage in downstream programme on seed science and quality regulation.
- Disseminate the values of seed production and availability of high quality seeds to the need of State and National seed community.
- To generate basic information on seed certification standards including seed health.

- To disseminate information and impart training on seed production processing, storage, quality control and seed health.
- Identify potential regions of the State for better quality seed production of major crops.
- Encourage partnership mode and to provide technological interventions for quality seed production.
- To produce adequate quantity of nucleus, breeder and various classes of high quality seeds as per national requirements.
- To conduct research on various aspects of seed and develop seed production technology including post harvest handling, value addition, etc.

Innovative seed delivery system - Installation of Automatic Seed Vending Machine

Automatic Seed Vending machine was installed and operationalized to make available TNAU hybrids and varieties of vegetable and flower seeds for the benefit of consumers from January 2014 onwards at TNAU, Coimbatore to encourage kitchen and roof garden.

Department of Seed Science and Technology

Ongoing Research

From the inception, the Department has been actively involved in research encompassing seed biology, seed production, processing, testing, storage, seed health and seed enhancement techniques in agricultural, horticultural, forage and silvicultural crops with various research projects funded by National, International and Private organizations. So far,



70 research schemes have been completed. At present, one scheme funded by PPV & FRA, two by UGC, one by State Government and one VCS scheme (totally five schemes) are functioning. TNAU's Research Agenda encompasses seven theme areas on Seed Research viz., Seed Development Biology,

Seed Quality Enhancement, Seed Production and Quality Regulation, Seed Physiology, Genetics and Biotechnology, Post Harvest Technology and Seed Health. Under each theme area the focused activity plans are being drafted to meet the seed demand of the State for another 10 years.

Seed Production

Breeder / Foundation / TFL Seed Indent and Supply during the year 2013-2014

(in Quintals)

Crop	Breeder seed		Foundation / TFL Seed		Total	
	Demand	Supply	Demand	Supply	Demand	Supply
Seeds						
Paddy	1148	1035	10201	10571	11349	11606
Millets	5	5	95	115	100	119
Pulses	173	156	1136	1176	1309	1332
Oilseeds	566	400	66	71	632	471
Cotton	2	3	4	5	6	8
Forage crops	2	0	149	183	151	183
Vegetable Crops	1	2	48	49	49	51
Green manure	0	0	500	342	500	342
Total	1897	1601	12199	12512	14096	14112
Planting Material						
Sugarcane (MT)	-	-	80	96	80	96
Turmeric (MT)	-	-	10	34	10	34
Total	-	-	90	130	90	130

Vegetative Propagules / Seedlings

Sl. No.	Details	Produced and distributed
1	Other Planting material (Nos.)	2558094
2	Coconut seedlings (Nos.)	131326

Seeds distributed through Automatic Vending Machine

Sl. No.	Crop / Variety	No. of Packets sold	Total quantity (kg)	Value of Seeds sold (Rs.)
1.	Vegetables and Fruits	12300	120	123000



Extension

Various HRD programmes are being organized regularly for the benefit of personnel and officials involved in seed industry. During 2013-14, 25 trainings have been organized for the scientists of various SAUs and ICAR Institutes, officials of Dept. of Agriculture, seed producers and farmers. In addition under the

scheme NADP and Part – II Plan scheme on Seed production in Green manure crops, 36 trainings and under NADP scheme on Foundation seed production in pulses, 384 trainings at 28 different seed production centres were coordinated for the benefit of farmers.



4.14. DIRECTORATE OF PLANNING AND MONITORING

The Planning and Monitoring Directorate of TNAU functions as an independent Directorate since January 2003. The major focus of this directorate is on planning, monitoring of various development programmes and activities of the Tamil Nadu Agricultural University. As a liaison unit between the university and Government departments, this Directorate processes new research scheme proposals for getting funds for infrastructure development from the Government and takes steps for facilitating implementation of various schemes for the benefit of the farming community.

This Directorate is also involved in preparing and reporting the monthly progress of various schemes funded by Government of Tamil Nadu. The preparation of Governor's Address, Budget Speech, Citizen's Charter, Policy Note, submission of proposal for announcements, follow up action on announcements made by His Excellency Governor of Tamil Nadu, Hon'ble Chief Minister of Tamil Nadu, Hon'ble

Minister for Agriculture, reports for review are also carried out by this Directorate.

The Directorate of Planning and Monitoring shoulders the responsibility of preparing the Annual Report of the university both in Tamil and English and send it to the Government of Tamil Nadu for placing on the Table in the Budget Session of Legislative Assembly, every year. Various day to day activities of the University are published for the information of the stakeholders by way of TNAU News Letter, every month.

In addition to the above, during year, the Research Priority Setting, Monitoring and Evaluation Cell has been established in this Directorate. Also, an International Cell to look after the student placement at UG level and fellowship programmes and the TNAU Repository for documenting different events have been created in this Directorate.



4.15. DIRECTORATE OF AGRI-BUSINESS DEVELOPMENT

The Directorate of Agri-business Development was established in the year 2007.

Mandate

- To provide single window access for all agri-business related activities within TNAU, through consultancy, consortia and incubation programmes.
- To Commercialize TNAU products and technologies.
- To Provide market linkages to growers, processors, domestic distributors,

exporters and importers and reinforce their capacity to meet market demand

- To undertake capacity building programs for enabling farmers, SHGs and others to take up agribusiness ventures
- To conduct seminars and workshops on agribusiness development so as to recommend policies for the consideration of the government

Recently formed units

Sl. No.	Name of the Unit	Date of start	Budget (Rs. In lakhs)
1	ABD Unit at Agricultural College and Research Institute, Madurai	09.07.2010	9.61
2	ABD Unit at Agricultural College and Research Institute, Tiruchirappalli	08.08.2013	2.00
3	ABD Unit at Horticultural College and Research Institute, Periyakulam	08.08.2013	2.00

Commercialization of Technologies / Products

Through the Business Planning and Development unit established under the National Agricultural Innovation Project (NAIP-BPD) three technologies were commercialized in the year 2013-14, namely; Vasambu based Herbal Insect Repellent, Hybrid seed production of Rice Hybrid CORH3 and TNAU

stored grain insect removal bin. Following technologies namely; Liquid Biofertilizer Production Technology, Glory Lilly Pod Thresher, Insect trap technology and Jasmine Export Technologies will be commercialized in due course of time.

MSME Scheme on Business Incubation

S.No	Name of the Incubatee	Business Idea	Amount Sanctioned (Lakhs)
1	Mr. K. Prabhusankar	Batch type Dielectric Dehydration unit for Cardamom	6.25
2	Dr. P. Sathiyamoorthi	Ready to serve Natural Fruit Juice	6.25



3	Mr. C.S. Aswin Kumar	Neuroprotective Nutraceutical Products from <i>Withania</i> (Aswagandha) and <i>Mucuna</i> (Velvet Bean)	6.25
4	Mr. T. Muthukumar	Hydraulically operated Mobile Coconut Harvester	6.25
5	Mr. Ashok Rajappan	Nutraceutical Drink	5.27
6	R. Palaneeswar	System for Recording Traceable Farm Activities and Commodity Production	5.75
7	Mr. Neethala Mittu	A buoyant, low cost machine to remove aquatic weeds	6.25
8	Mr. A.Thangaraja	Starch clay nano Urea	5.25

Technology Business Incubator (TBI) Activities

A Technology Business Incubator (TBI) was established at Tamil Nadu Agricultural University funded by the Department of Science and Technology (DST), Government of India to the tune of Rs 192.87 lakhs. An Agri-business Incubation Society (ABI) was registered and renewed every year. About 219 business enquiries were attended on various aspects such as desiccated coconut powder, tender coconut water, pulp chips, ice cream, herbal products, jasmine storage technology, mushroom business details, snack products, banana fiber products, popcorn, peanuts, areca

leaf plate details, millet products and millet biscuits and provided agribusiness services.

There are 16 incubatees who are registered Members in this Directorate.

Seed Consortium

Totally, 19 companies have been registered as seed consortium members in DABD since 2007. One company was registered in the financial year 2013-14. M/s. Tierra Seed Science Pvt. Ltd, Malaxmi court yard, Khajaguda, Hyderabad – 500 008 joined as member in the consortium and paid the fee of Rs.1,00,000/- on 13.11.2013.

Royalty Received and Licensing Technology

S.No	Name of the Licensing company	Technology licensed	Amount (Rs. in lakhs)
1	M/S Arunai Agrotech., Thiruvannamalai	Vasambu based Herbal Insect Repellent to the states other than Tamil Nadu	3.00
2	M/s Rasi Seeds Pvt. Ltd	Hybrid seed production of Rice Hybrid CORH3	5.00
3	M/s S2 Associates, Guwahati, Assam	TNAU stored grain insect removal bin	1.00

**Schemes / Projects operated**

Sl.No.	Name of the Scheme	Budget	Period
1.	Establishment of Business Planning and Development Unit	48,68,820	01.04.2013 to 31.03.2014
2.	Establishment of a Technology Business Incubator – Agri Business Incubation Society	31,35,000	01.04.2013 to 31.03.2014

Special Lectures delivered

Date	Participants	Title of lecture	No. of farmers visited
12.11.2013 to 28.11.2013	Farmers from Veedur village, Tindivanam Taluk	Business incubation activities of DABD	121
15.02.2014	Mushroom Production Trainees	Mushroom Production	10
22.03.2014	Sericulture Inspector –Trainees	Enology class wine Production from Mulberry fruit and grape fruit	48
26.03.2014	Food Processing – PHTC Trainees	Agri Incubation	25

Trainings / Seminars attended

S. No.	Training / Seminar / Conference	Date	Organized by	Name and designation of the participants
1	Guest Lecture on Biofertilizer Production and Marketing	23.08.2103	PSGR Krishnammal College for Women, Coimbatore.	Dr. R. Murugesan, Director (ABD)
2	Guest lecture for Agri-Clinics and Agri-Business training	31.08.2013	MANAGE, Hyderabad	Dr. R. Murugesan, Director (ABD)
3	Food Security and Sustainable Agriculture Symposium	September 2013	Confederation of Indian Industries (CII)	All Scientists of DABD
4	To attend the first orientation programme of BPD units in ICAR system and SAU's	24.10.2013 - 26.10.2013	NAARM, Hyderabad	Dr.S.Ganapathy, Professor A.V.Gnanasambandam, Business Manager Dr.C.Muralidharan, Asst. Professor
5	ISBA, AGM & ISBA 2014 Annual Conference	23.03.2014 - 24.03.2014	ISBA & DST at Bangalore	Dr.S.Ganapathy, Professor A.V.Gnanasambandam, Business Manager



Directorate of Extension
Education



5. DIRECTORATE OF EXTENSION EDUCATION

Directorate of Extension Education

The Directorate facilitates the transfer of agricultural technologies generated from the University for the benefit of farmers and extension workers. The technologies are disseminated in an innovative and simple manner enabling the farmers for better comprehensibility.

Krishi Vigyan Kendras

There are 30 Krishi Vigyan Kendras functioning in Tamil Nadu. Out of these, 14 Krishi Vigyan Kendras namely; Cuddalore, Dharmapuri, Kanyakumari, Madurai, Nagapattinam, Pudukkottai, Ramanathapuram,

Salem, Thiruvallur, Tiruvarur, Trichy, Vellore, Villupuram and Virudhunagar are functioning under Tamil Nadu Agricultural University. Under the Tamil Nadu Veterinary and Animal Sciences University, three Krishi Vigyan Kendras are functioning at Kancheepuram, Namakkal and Sivagangai. In the rest of 11 districts in Tamil Nadu, the KVKs are functioning under Private organizations. Coimbatore and Dindigul Krishi Vigyan Kendras are under Deemed Universities. All the 30 Krishi Vigyan Kendras are functioning with the technical support of Tamil Nadu Agricultural University.

Activities of Krishi Vigyan Kendras under the control of Tamil Nadu Agricultural University

Trainings Conducted

Trainings	No. of trainings conducted					No of Farmers benefitted		
	On campus	Off campus	Vocational	Rural Youths	Sponsored	Male	Female	Total
Cuddalore	109	205	11	68	10	3989	1679	5668
Dharmapuri	10	24	-	7	56	3127	995	4122
Kanyakumari	39	43	9	23	6	1411	1641	3052
Madurai	81	26	1	16	56	3970	2449	6419
Nagapattinam	5	14	7	18	1098	2413	996	3409
Pudukkottai	56	36	2	11	1	2113	1441	3554
Ramanathapuram	8	12	5	4	-	352	242	594
Salem	54	43	2	3	8	2980	740	3720
Thiruvallur	78	56	6	28	10	4514	1548	6062
Tiruvarur	24	27	4	1	40	4146	1003	5099
Tiruchirappalli	46	23	11	16	43	1538	974	2512
Vellore	38	08	04	03	43	1895	461	2356
Villupuram	163	141	6	15	47	10600	1038	11638
Virudhunagar	35	18	11	5	17	1050	835	1885
Total	746	676	79	218	1435	44098	16042	60090

**Demonstrations Conducted**

Trainings	No. of OFT/FLD and other activities conducted					Number of Farmers benefitted		
	Name of the KVK	OFT	FLD	Precision Farming	Exhibitions/ Field days	Other Extension activities	Male	Female
Cuddalore	4	9	08	70	1188	15201	8888	24089
Dharmapuri	2	16	-	13	2169	13074	1876	14950
Kanyakumari	4	16	-	11	527	2620	2256	4876
Madurai	4	12	-	13	12807	10809	2144	12953
Nagapattinam	4	13	-	20	1665	4666	911	5585
Pudukkottai	3	15	-	14	3540	3091	1975	5046
Ramanathapuram	6	14	-	6	471	681	289	970
Salem	5	37	80	18	417	3204	527	6020
Thiruvallur	4	15	-	47	2981	3965	1716	8681
Tiruvarur	6	13	28	34	2412	10851	2153	13004
Tiruchirappalli	5	14	7	18	1098	2413	996	3409
Vellore	3	12	18	10	1175	6178	2120	8298
Villupuram	4	11	-	31	1492	6256	727	6983
Virudhunagar	4	17	14	22	539	1412	522	1934
Total	49	187	148	289	29718	77342	25193	107804

Training Division**Mandate**

- Imparting need based trainings to extension functionaries on latest technologies.
- Improving skill and expertise of extension functionaries through trainings.
- Improving the efficiency of the transfer of technology based on the information obtained from the extension system through research interventions.
- Strengthening of transfer of technology initiatives through organizing training programmes on various methods of technology transfer.
- In addition, training programmes are imparted to Deputy Collectors, Registrars of Cooperatives and other extension functionaries who are directly or indirectly involved in agricultural development.

During the year, 2013-14, through this division 12 training programmes were conducted and 365 trainees were benefitted.

Trainings Conducted

Sl. No.	Date	Name of the Training/ Seminar	Number participated	
			Male	Female
1.	24.06.2013 to 28.06.2013	PGDAEM First Semester contact classes.	51	35
2.	19.08.2013 to 08.09.2013	Field Experience Trainings for ARS Scientist Probationers of 98 th FOCARS for NAARM.	16	4
3.	11.09.2013 to 13.09.2013	TNAU and NIAM, Collaborative Training Programme on MARKET – Led Extension.	18	9
4.	23.09.2013	Interaction meeting with Editors of daily and monthly magazines.	18	6
5.	24.09.2013	Interaction meeting with Political parties	8	-
6.	05.11.2013 to 06.11.2013	Two days workshop on “Fostering TNAU – Mass Media Linkage Mechanism for Agricultural Development”	36	18
7.	25.11.2013 to 28.11.2013	PGDAEM -II Semester contact classes.	51	35
8.	25.11.2013 to 01.12.2013	Training programme for Probationary Deputy Collector	1	-
9.	06.01.2014 to 11.02.2014	Agripreneurship development programme - 2 Batches	27	23
10.	14 th , 18 th & 19.03.2014	Training for IAS Probationers 2012 batch	6	3

Department of Market Extension

Mandate

- To promote commodity based Farmers' Interest Groups.
- To promote institutional linkages for the Commodity Interest Groups for efficient marketing
- Organizing workshops on market linkages and facilitating Buyer – Seller Meets.
- To scout the market information and share it with all the Krishi Vigyan Kendras and line departments.
- To impart master training to the extension personnel on market forces, intelligence and information systems.
- To provide training on marketing management to the line department officials.

During the year 2013-14, through 12 training programmes, 3015 persons were benefitted.

**Activities during the year 2013-14**

Sl. No.	Date/ Duration	Name of the Training	Number participated		
			Male	Female	Total
1.	May 8, 2013	Interaction Meeting with CIG Farmers	9	1	10
2.	May 20-24, 2013	Training on Market-led Extension Approaches”	17	13	30
3.	September 27, 2013	State Level Conference with Farmers	450	150	600
4.	October 09 & 10, 2013	Training on Recent trends in Agricultural Marketing.	21	9	30
5.	October 09 & 10, 2013	Rabi season 2013-14 Training	6	8	14
6.	December 11-18, 2013	Training on Integrated Nutrient Management and Fertigation for Field and Horticulture Crops	13	7	20
7.	December 30, 2013	Farmers Discussion Group Meeting on Current Trends on Farm Mechanization	19	6	25
8.	January 11, 2014	State Level Farmers’ Day	1350	750	2100
9.	Feb 12- 19. 2014	Training on Economics and Marketing of Value added Foods	12	8	20
10.	March 10, 2014	Training cum Interaction meeting with Flower Growers Association Farmers	106	-	106
11.	March 19,2014	Farmers Discussion Group Meeting on Hi-Tech Banana cultivation	19	6	25

ICT based - e- extension**Details of usage of the TNAU Agri-Tech Portal**

Sl. No	Particulars	2013-14
1.	Total Viewers of portal	62,19,235
2.	Daily Visitors	17,039
3.	Average time on Site	2 min 37 sec
4.	Repeated hits / day	15,147
5.	e-Mails Queries	1,065 Nos
6.	New Visitors / day	13, 205

e-Velanmai

Year	Number of beneficiaries	Number of farm advisory services provided
2013-14	4770	8,222



Educational Media Centre (EMC)

Particulars	2013-14
Video programmes produced	1177
3 GP Video lessons produced	800
Video telecast through DDK, Chennai	393
Video coverages	209
Video CD lessons sold	320
Video shows conducted	105

Agricultural Technology Information Centre (ATIC)

The Agricultural Technology Information Centre (ATIC) is a single window delivery system. It provides agricultural information, products and technologies developed by the University to the farmers. Seeds of new varieties and other agro inputs are sold to the farmers. It is also rendering services to the visiting farmers through advisory services. In addition, the centre also addresses the clinical issues and problems by advocating suitable management measures.

Kisan Call Centre (KCC)

Kissan Call Centre was established in January 2004. This centre functions on all working days between 6.00 A.M. and 10.00 P.M. Under this scheme any farmer in the country can access by dialling the number 1551 or 1800-180-1551. The objectives are to give suggestions and answer to farmers' queries as and when they need. In Tamil Nadu, for effective functioning of this Centre, the Directorate of Extension Education under Tamil Nadu Agricultural University was assigned as the Nodal Agency from 17.10.2008. During the year 2013-14, 3.23 lakh calls were received.

Uzhavarin Valarum Velanmai

'Uzhavarin Valarum Velanmai' a monthly Tamil Farm magazine is published for the

benefit of the farming community and other stake holders. The reader's base is very large and diverse and the total subscribers is 12,978. Out of this, 5476 are life subscribers, 4512 are annual subscribers.

Community Radio Station

Community Radio in TNAU is used to benefit the farming community living in 18-20 km radius. It is functioning as 'Velaan Palkalaikazhaga Vivasayee FM' at 107.4 MHz frequency. Daily broadcast is made to benefit around 10,000 farm families residing in 22 villages around Tamil Nadu Agricultural University campus. During 2013-14, 348 recorded programmes were broadcast and 285 programmes were uploaded in <http://agritech.tnau.ac.in/comm-e-radio.html> website for the benefit of the farmers.

Other Activities

- Telecast of path breaking technologies of TNAU through Doordarshan Kendra with 52 Weeks programme to reach out to the farming community.
- Multimedia course for a duration of two months at Educational Media Centre for students
- High definition (HD) Video editing and Post production has been launched.
- Video programme on Hybrid Brinjal,



Guava, Moringa, Sapota and Turmeric is under Production.

Seminar on Integrated Farming System

At the Krishi Vigyan Kendra, Thindivanam, a one day interactive seminar on Integrated farming System was conducted on 23.07.2013. In this, extension officials working in 22 taluks of Villupuram district were trained.

National Initiative on Climate Resilient Agriculture (NICRA) Project

The National Initiative on Climate Resilient Agriculture (NICRA) project was sanctioned to function at Krishi Vigyan Kendras, Villupuram, Nagapattinam, Ramanathapuram and Namakkal. The programme was successfully launched to provide the climate led extension strategies to stakeholders. The monitoring team from Indian Council of Agricultural Research visited and reviewed the activities of this project on 23.09.2013 at Kattusiviri village in Mylam Taluk implemented through Krishi Vigyan Kendra.

Interactive Meeting on Challenges and Opportunities in Agriculture

An interactive meeting on the challenges faced and opportunities in Agriculture with respect to Villupuram district was conducted at Krishi Vigyan Kendra, Villupuram on 31.07.2013. SWOT Analysis on the State of Agriculture in Villupuram district was done in which 54 farmers representing various blocks participated.

ATMA Friendly Farmers and Technical Experts – Technical Training

At Krishi Vigyan Kendra, Thindivanam, 59 Technical Experts and 451 ATMA friendly farmers were trained during the Uzhavar Peru

Vizha inorder to double the productivity and triple the farm income on 04.04.2013 and from 08.04.2013 to 10.04.2013 imparting various technologies and demonstrations.

Best Seed Producer Award

A Dindivanam KVK farmer, Thiru. Govindan of Poosapadi, received the Best Seed Producer Award in the Regional Agricultural Mela at Aduthurai on 09.01.2014.

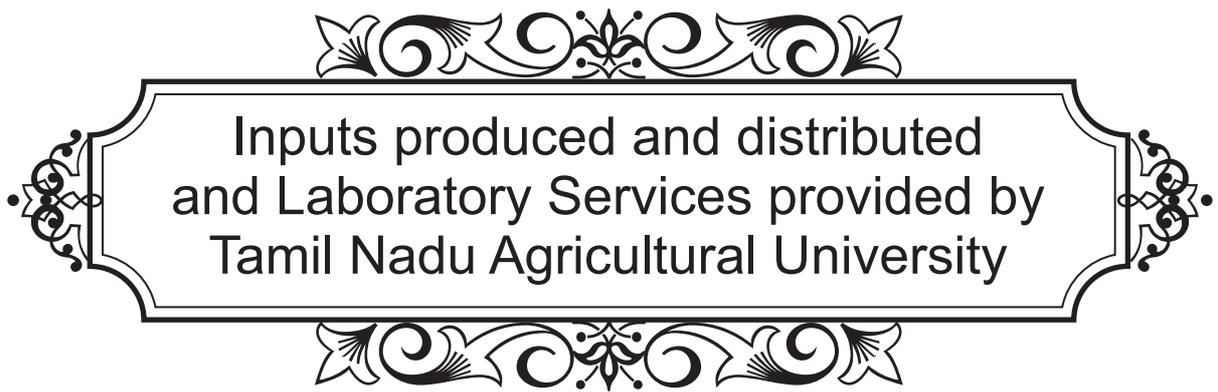
Regional Agricultural Melas

For the first time, Regional Agricultural Melas were conducted at Agricultural College and Research Institute, Madurai on 07.12.2013, at Agricultural College and Research Institute, Killikulam on 02.01.2014 and at Tamil Nadu Rice Research Institute, Aduthurai on 10.01.2014. Totally, 10,500 farmers visited the exhibitions and participated in the intreractions and seminars organised in these Melas. For the first time, Farmer-Teacher awards were instituted in these Melas and 8 progressive farmers were honoured.

Varieties Release Function and State Level Farmers Day

The Varieties Release function and State Level Farmers Day was conducted at Tamil Nadu Agricultural University, Coimbatore on 11.01.2014. More than 3500 farmers participated. Exhibition and farmers-scientists interaction sessions were organized.

To reduce the drudgery, for the use of farmers visiting Tamil Nadu Agricultural University, battery operated two wheelers were introduced in January 2014 for the mobility inside the campus and to see various facilities and demonstrations laid.



Inputs produced and distributed
and Laboratory Services provided by
Tamil Nadu Agricultural University



6. INPUTS PRODUCED AND DISTRIBUTED AND LABORATORY SERVICES PROVIDED BY TAMIL NADU AGRICULTURAL UNIVERSITY

Department of Crop Physiology

Sl. No.	Name of the input	Quantity of inputs distributed (in kg)	Value of inputs distributed (Rs.)
1	TNAU Coconut tonic	10591.2	2647800
2	Pulse wonder	2009.5	401900
3	Groundnut rich	1233.5	246700
4	Maize Maxim	475.5	142650
5	Cotton Plus	607.25	121450
6	Sugarcane Booster	446.75	156363

Department of Veterinary and Animal Sciences

Name of the analysis	Number of cases attended	Amount charged (Rs.)	Free services provided (No.)	Total Number
Treatment to Animals	612	8140	University Animals -1694	2306

Department of Soil Science & Agricultural Chemistry

Inputs distributed

Sl. No.	Name of the input	Quantity of inputs distributed	Value (Rs.)
1	Micronutrient mixture kg	9739	524032
2	Soil Health card , DSSIFER and VDK software (No)	581	58100

Laboratory services

Sl. No.	Name of the analysis	Number of samples analysed	Revenue (Rs.)	Number of beneficiaries
1	Soil	1844	7,86,290	618
2	Water	534		373

Department of Agricultural Microbiology

Inputs distributed

Sl. No.	Name of the input	Quantity of inputs distributed	Value of inputs (Rs.)
1.	Bio-fertilisers	15734.8 Kg	5,61,012
2	Liquid Bio-fertilisers	816 lit	2,46,975

**Laboratory services**

Sl. No.	Name of the analysis	Number of samples analysed	Amount charged
1	Quality analysis	57 samples	2,10,500
2	Mother culture supply	79 bottles	2,55,000

Environmental Science Department**Inputs distributed**

Sl. No.	Name of the input	Name of the scheme	Quantity of inputs distributed	Value of inputs distributed
1.	Growth promoters - Panchagavya	VCS	1000 litres	Rs. 80,000

Laboratory services

Sl. No.	Name of the analysis	Number of samples analysed	Amount charged (Rs.)	Number of beneficiaries
1.	Quality Analysis of water, soil and gas samples	450 Water samples 210 Soil samples 380 Gas samples	19,98,456	1050

Department of Plant Pathology**Inputs distributed**

S.No.	Title	Product sold	Revenue generated (Rs.)
1.	Mass production of different Plant Growth Promoting Pseudomonas formulations.	Pseudomonas talc and liquid, Pseudomonas-FP7, Bacillus, Beauveria, Metarhizium, Quality analysis, Mother culture	6,33,150
2.	Sale of Toxicological data and mass production of Trichoderma viride	Trichoderma viride talc	4,16,925
3.	Mushroom Training and Input supply	Mushroom Spawn and Mushroom cultivation training	6,92,111

Mushroom Inputs distributed

Sl. No.	Name of the input	Quantity of inputs distributed for cost	Value of inputs distributed for cost (Rs.)
1	Mushroom mother spawn	7528 bags	2,25,840
2	Mushroom bed spawn	145 bags	21,750
3	Mushroom culture tubes	1 No	2,000



Farm Produce sold

Sl. No.	Name of the input	Quantity of inputs	Value of inputs (Rs.)
1	Mushroom	32	2,520
2	<i>Pseudomonas fluorescens</i> (Pf1)	6254 kgs (talc based)	4,69,050
3.	<i>Pseudomonas fluorescens</i> (Pf1)	510 litres (liquid based)	1,53,000

Home Science College and Research Institute, Madurai Laboratory services

Sl. No.	Name of the analysis	Number of samples analysed	Amount (Rs.)	Category of the beneficiary
1.	Moisture, Protein, fat, acidity and pH analysis in milk products	3	5000	Entrepreneur
2.	Moisture, vitamin-C, acidity, TSS and pH in amla candy	4	3350	Entrepreneur
3.	Moisture, protein and fat analysis in paneer	1	2000	Entrepreneur
4.	Total sugar, reducing sugar and ash content in honey	2	1200	Students
5.	Carbohydrate, protein, energy, TSS, Brix, acidity %, beta carotene, total sugar analysis in Mango RTS	1	950	Students
6.	Moisture, vitamin-C, total carotenoids, carbohydrates, total Anti-oxidant activity, total phenols and iron in lechakottai leaves <i>Pisonia grandis</i>	5	7750	Students
7.	Calcium, fibre and tannin in <i>Pisonia grandis</i> powder	1	1850	Students
8.	Analytical charges for lemon and mango	2	5250	Entrepreneurs

Agricultural Machinery Research Center

During the year 2013-14, totally, 1091 farm machinery and equipments were produced and distributed to farmers and various institutions.

Agricultural Engineering College and Research Institute, Kumulur Laboratory services

Sl. No.	Samples tested	Name of the scheme	Amount (Rs.)	Beneficiary Number
1	Breeder seed – 238	Seed testing for quality parameters	51,800	40
2	Truthful labeled seeds - 179			

**Krishi Vigyan Kendras**

During the year 2013-14, seeds, biofertilizers, growth promoters, pesticides, parasitoid cards, vermicompost, forage grass slips and other inputs worth Rs. 69.66 lakhs were distributed to 4735 farmers.

Sale of farm produce

During the year 2013-14, farm produces, grains and other inputs worth Rs. 12.89 lakhs were sold to 1821 farmers by the TNAU - KVKs.

Sl.No.	Name of the Analysis	Number of Samples tested	Amount (Rs.)	Number of Samples tested without fee	Number of beneficiaries
Krishi Vigyan Kendra, Virudhunagar					
1	Soil Analysis	91	2275	-	91
2	Water Analysis	45	450	-	45
Krishi Vigyan Kendra, Pudukkottai					
1	Soil Analysis	272	6800	-	264
2	Water Analysis	216	2160	-	209
Krishi Vigyan Kendra, Thiruvallur					
1	Soil Analysis	87	2175	-	55
2	Water Analysis	13	130	-	4
Krishi Vigyan Kendra, Tiruchirappalli					
1	Soil Analysis	190	4750	-	105
2	Water Analysis	160	1600	-	153
Krishi Vigyan Kendra, Nagapattinam					
1	Soil Analysis	224	5600	-	164
2	Water Analysis	179	1790	-	166
3	Plant Analysis	126	-	126	105
Krishi Vigyan Kendra, Salem					
1	Soil Analysis	120	-	120	120
2	Water Analysis	200	600	188	200
Krishi Vigyan Kendra, Vilupuram					
1	Soil Analysis	363	9075	-	338
2	Water Analysis	227	5675	-	212
Krishi Vigyan Kendra, Cuddalore					
1	Soil Analysis	55	1375	-	32
2	Water Analysis	99	990	-	45
Krishi Vigyan Kendra, Ramanathapuram					
1	Soil Analysis	25	100	-	25
2	Water Analysis	20	10	-	20
Krishi Vigyan Kendra, Vellore					
1	Soil Analysis	21	1100	-	21
2	Water Analysis	10	500	-	10



Krishi Vigyan Kendra, Thiruvarur					
1	Soil Analysis	107	-	107	96
2	Water Analysis	88	-	88	78
Krishi Vigyan Kendra, Kanyakumari					
1	Soil Analysis	220	5500	-	99
2	Water Analysis	27	270	-	13
3	Plant Analysis	40	1000	-	11



Awards conferred on
Tamil Nadu Agricultural University
Departments and Scientists





7. AWARDS CONFERRED ON TAMIL NADU AGRICULTURAL UNIVERSITY, DEPARTMENTS AND SCIENTISTS

Awards conferred on Tamil Nadu Agricultural University

National Intellectual Property Award, 2013 for TNAU

- The National IP Award instituted by Indian Patent Office, Government of India. Department of Industrial Policy and Promotion (DIPP) and Intellectual Property Office, Government of India, in collaboration with Confederation of Indian Industry (CII) was conferred to Tamil Nadu Agricultural University as the Top Indian Academic Institution in Patent, 2013.
- The award carried one lakh cash, a memento and citation. Nine inventions of (TNAU) received patent and 57 inventions were filed for patent as on date and many more innovative inventions are in the pipeline.

Awards conferred on Departments and Scientists

Young Extension Professional Award

Dr. C. Karthikeyan, Professor of Agricultural Extension, TNAU, Coimbatore was conferred the Young Extension Professional Award by the International Society of Extension Education (INSEE), Nagpur and University of Agricultural Sciences (UAS), Bangalore at the jointly organized International Conference on “Extension Educational Strategies for Sustainable Agricultural Development – A Global Perspective” at UAS, Bangalore during 5-8, December, 2013.

Department of Remote Sensing and Geographical Information System

Sl. No.	Individual Name	Name of the Award	Date of award	Awarding Institution
1.	Dr. B.Vinothkumar Assistant Professor (Entomology)	Best poster award	January 22 nd -24 th , 2014	National symposium on Emerging trends in ecofriendly insect pest management. organized by, Dept of Agrl Entomology, TNAU, Coimbatore,
2.	Dr. B.Vinothkumar Assistant Professor (Entomology)	Young Achievers Award 2013	March 2014	Society for Advancement of Human and Nature (SADHNA), Dr. Y S Parmar University of Horticulture and Forestry, Solan, Himachal Pradesh, India

**Department of Soil Science and Agricultural Chemistry**

Sl.No.	Name of the Department	Name of the Award	Date of award	Awarding Institution
1	AICRP on Micronutrients Unit, Department of Soil Science and Agricultural Chemistry, Tamil Nadu Agricultural University, Coimbatore	Best Research Centre Award for 2013-14 among AICRP Centres on Micronutrients	March 2014	All India Co-ordinated Micronutrient Research Project, ICAR, Bhopal
2	Dr.P.Stalin, Professor, Department of Soil Science and Agricultural Chemistry, Tamil Nadu Agricultural University, Coimbatore	Scientist Award - S.N.Ranade Memorial Award for 2013-14 for Research on Micronutrients	March 2014	IPNI- International Plant Nutrition Institute, USA

Department of Plant Pathology

Sl. No.	Individual Name	Name of the Award	Date of award	Awarding Institution
1	Dr. P.Renukadevi Asst. Professor	Best NSS programme Officer award for the Year 2012.	01.07.2013	TNAU, Coimbatore.
2	Dr. B.Meena, Asst. Professor	Best Paper Award (National)	21.7.2013	National Academy of Biological Sciences, Chennai
3	Ramyabharathi, S.A.	P. R. Verma award for the Best M. Sc. Student	08.01.2014 to 10.01.2014	35 th Annual Conference by Indian Society of Mycology and Plant Pathology, Udaipur, Rajasthan
4	Karthiba, L	Smt. Guman Devi Verma Best Woman Scientist Award		
5	Satya, V. K	P. R. Verma award for the Best Ph.D. Student		

Department of Bio-energy

Sl. No.	Individual Name	Name of the Award	Date of award	Awarding Institution
1.	Selvi R. Shalini	Best M.Tech Research Thesis of IST in Agricultural Engineering 2013	August 2013	Indian Technological Society, New Delhi

Centre for Plant Breeding and Genetics - Department of Millets

Sl. No.	Individual Name	Name of the Award	Date of award	Awarding Institution
1.	Th.R. Vinodh	Young Scientist Award 2014	22.02.2014 – 23.02.2014	Integrated University, Lucknow.

Awards conferred on Krishi Vigyan Kendra Scientists**Krishi Vigyan Kendra, Thindivanam, Villupuram district**

Name of the Award

Best KVK Award for the Year 2013 by Malarum Velanmai.

Awardee

Krishi Vigyan Kendra, Thindivanam, Villupuram district

Sponsoring Institution

Malarum Velanmai – Leading Agricultural Journal in vernacular language (Tamil)**Krishi Vigyan Kendra, Aruppukkottai, Virudhunagar District**

Sl. No.	Individual Name	Name of the Award	Date of award	Awarding Institution
1.	Dr.K.Ramakrishnan	Indira Gandhi Sadbhavana gold medal award 2013	April 2013	Global economic progress and research association, Thiruvannamalai
2.	Dr.V.K. Paulpandi	Indira Gandhi Sadbhavana gold medal award 2013	April 2013	Global Economic Progress and Research Association, Thiruvannamalai
3.	Dr.D. Jegadeeswari, Assistant Professor	“Tamil Nadu Young Women Scientist Award – 2012”	29.1.14	The Science City, Department of Higher Education, Govt. of Tamil Nadu on at Chennai.

Krishi Vigyan Kendra, Madurai District

Sl. No.	Individual Name	Name of the Award	Date of award	Awarding Institution
1.	Dr. N.S. Venkataraman	Best Extension Worker	August 2013	TNAU, Coimbatore

Krishi Vigyan Kendra, Papparpatty, Dharmapuri district

Sl. No.	Individual Name	Name of the Award	Date of award	Awarding Institution
1.	Dr. P.S. Shanmugam Dr. N.A.Saravanan Dr. N. Tamilselvan	Best Poster Award - International	25.01.2014	UAS, Bangalore



Funding Sources



Annexures



ANNEXURE I

PUBLICATIONS

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ANNEXURE II

CIVIL WORKS

LIST OF COMPLETED CIVIL WORKS IN THE YEAR 2013 - 2014		
Sl. No.	Name of the work	Estimate Amount Rs. in Lakh
Tamil Nadu Agriculture University, Coimbatore		
1	Construction of Two wheeler shed No. 2 at Tamizhagam hostel	530000
2	Providing Ramp with hand rail arrangements for the differentaly abled students at the University Examination hall	15300
3	Finishing works for PG hostel additional dining hall	1424000
4	Construction of UG Laboratory and Class room in the First Floor of Cropping system unit for Agro Climate Research Centre	1590000
5	Construction of toilet block for the ODL Building	900000
6	Construction of Insect museum in Agricultural Entomology Department	9000000
7	Construction of FF over the existing laboratory office, P & H room & Northern side verandah for the Department of Bio-Technology	5210000
8	Construction of Illrd floor over the existing university library building (West portion)	4000000
9	Construction of FF over the lecture halls in AEC & RI, Kumulur	5360000
10	Providing Chain link fencing around the Urban Forestry Model park near farmers residency	965000
11	Providing Interlocking paver block for the Pathway insdie the Urban Forestry model park near farmers residency	1000000
12	Providing floor carpet in Anna Auditorium to the New buildings Inagural function	22600
13	Electrification of newly constructed FF lecture hall lab and Staff building at Department of Bio-Tech & Department of Bio-Informatics	990000
14	Renovation of Mangalore tiled roof building (1912 building) for the Department of Rice	800000
15	Drilling of borewell for urban forestry model park near farmers residency	400000
16	Construction of new building for housing fermentor's (Super structure) in the Department of Microbiology	990000
17	Heightening of the compound wall from South house Gate (Gate No. 6) to Sub way	910840
18	Renovation of additional bed rooms in drivers quarters	990000
19	Finishing works in the New building for housing fermentor's in the Department of Agricultural Microbiology	980000



20	Repairs & renovation of Drivers' quarters	971000
21	Renovation of Seed godown at wetland farm in the Department of Farm management	100000
22	Construction of Second floor over the office building for PBS	500000
23	Reinstallation of Net house in the Department of Agrl. Entomology	175000
24	Renovation of the circulation counter in the Reception of library building	299000
25	Construction of rest room for students at yard for the department of Farm management	600000
26	Construction of Lecture hall and office room in the second floor of ODL building	2900000
27	Renewal of road from community hall to Robertson road gate	1615000
28	Repair & renovation works to the compound wall ladies hostel gate (Gate No.8) to vinayakar koil along Maruthamalai road North side	900000
29	Construction of NABL accredited laboratory & students lecture hall	45300000
Coconut Research Station, Aliyarnagar		
30	Construction of Drying shed for Bio-Control agencies	240000
31	Providing MR power panel & three phase cable from the newly provided transformer to the office building, pathology and entomology building	515000
Agricultural Research Station, Bhavanisagar		
32	Construction of additional room in the first floor of boys hostel	400000
Agriculture Research Station, Vaigaidam		
33	Strengthening of irrigation facilities & Strengthening of Infrastructure facilities	415000
34	Strengthening of power supply with starter arrangements to the Pumping station	375000
Agricultural Research Station, Vrinjipuram		
35	Construction of Surface level water storage tank	487559
36	Renovation of Staff quarters	300000
Horticultural College & Research Institute Periyakulam		
37	Construction of Seed Processing & Storage infrastructure - 2 Nos	2000000
38	Extension of kitchen in Kurinji hostel	1000000
39	Providing RCC roof for drivers quarters	300000
40	Construction of first floor in Marutham hostel	8000000
41	Construction of second floor in Senbagam hostel (Ladies hostel)	12000000
Agricultural Engineering College & Research Institute, Kumulur		
42	Repair and renovation of Seminar hall	1250000
43	Providing basket ball court (Girls)	820000
44	Construction of lecture hall cum exam hall in the existing academic block first floor	2750000



	Agriculture Research Station, Kovilpatti	
45	Construction of Examination hall - I over the existing storage godown building (FF)	1500000
	Horticultural College & Research Institute (Women) in Anbil Dharmalingam Agricultural College & Research Institute Tiruchirappalli	
46	Renovation and Special repair works to the Girls hostel (Old)	1000000
47	Construction of laboratories for UG / PG students	2500000
	Tamilnadu Rice Research Institute, Aduthurai	
48	Providing generator power supply to the yard office, seed processing godown & guest house	300000
	Agricultural College & Research Institute Madurai & Home Science College & Research Institute Madurai	
49	Construction of Food quality control laboratory	1000000
50	Construction of Girls hostel (Cauvery hostel) first & Second floor	20000000
	Horiculture Research Station, Ooty	
51	Construction of View point building Cum Implement shed in Wood house farm	1500000
	Horiculture Research Station, Kodaikanal	
52	Formation of BT Road to main office building	250000
	Horiculture Research Station, Yercaud	
53	Providing chain link fencing with MS angles for the Western slope	1125000
	Agricultural College & Research Institute Killikulam	
54	Strengthening and renovation of barbed wire along the border of PG Students experimental field demonstration plots crop cafeteria	1000000
55	Construction of Girls / Boys hostel	10000000
	Vegetable Research Station, Palur	
56	Electrification of newly constructed administrative building	340000
57	Repair and renovation of staff quarters and old office building	200000
58	Renovation of Compound wall	2941000
	Rice Research Station, Aruppukottai	
59	Special repairs & renovation of works to ASP1, A1 quarters and Professor & Head quarters (Boys hostel)	250000
	Forest College & Research Institute, Mettupalayam	
60	Renovation of Staff quarters	300000
	Soil & Water Management Research Institute, Thanjavur	
61	Strengthening of farm fencing around the farm	1000000
	Krishi Vigyan Kendra, Needamangalam	
62	Providing chain link fencing around ABCD Block new farm area	995000
	Institute of Agriculture - Kudimiyanmalai, Pudukottai Dt	
63	Construction of Surface level water tank	400000
	Grapes Research Station, Anaimalayanpatti, Theni Dt	



64	Construction of Storage godown, grapes pack house and establishment of lab	5600000
65	Construction of Entrance gate	300000
66	Other construction works/ repair works / other works – Totalling 397 Numbers.	6,66,12,824
	Total	24,33,02,977



ANNEXURE III

COLLEGES, RESEARCH STATIONS AND KRISHI VIGYAN KENDRAS UNDER TAMIL NADU AGRICULTURAL UNIVERSITY

Constituent Colleges

- | | |
|---|---|
| <p>1 Agricultural College and Research Institute,
Tamil Nadu Agricultural University,
Coimbatore - 641 003.
Phone: 0422-661120;
Email ID: deanagri@tnau.ac.in</p> | <p>5 Agricultural College and Research Institute,
Tamil Nadu Agricultural University,
Vallanadu, Killikulam – 628 252,
Thoothukudi district.
Phone: 04630-261226
Fax: 04630-261268
Email ID: deanagrikkm@tnau.ac.in</p> |
| <p>2 School of Post graduate Studies,
Tamil Nadu Agricultural University,
Coimbatore - 641 003.
Phone: 0422-6611261
Email ID: deanspgs@tnau.ac.in</p> | <p>6 Agricultural Engineering College and Research Institute,
Tamil Nadu Agricultural University,
Kumalur – 621 712, Trichy district.
Phone: 0431-2910155, 2912105
Fax: 0431-2541218
Email ID: deancaekum@tnau.ac.in</p> |
| <p>3 Agricultural Engineering College and Research Institute,
Tamil Nadu Agricultural University,
Coimbatore - 641 003.
Phone: 0422-6611255, 6611253
Fax: 0422 - 6611455
Email ID: deancaecbe@tnau.ac.in</p> | <p>7 Anbil Dharmalingam Agricultural College and Research Institute,
Tamil Nadu Agricultural University,
Navalur Kuttappattu – 620 009,
Tiruchirapalli district.
Phone: 0431-2906100
Fax: 0431-2690693
Email ID: deanagrity@tnau.ac.in</p> |
| <p>4 Horticultural College and Research Institute,
Tamil Nadu Agricultural University,
Coimbatore - 641 003.
Phone: 0422-6611270, 6611371
Fax: 0422-2430781
Email ID: deanhortcbe@tnau.ac.in</p> | <p>8 Agricultural College and Research Institute,
Tamil Nadu Agricultural University,
Madurai - 625 104, Phone:
0452-2422956
Fax: deanagrimdu@tnau.ac.in</p> |



- 9 Forest College and Research Institute,
Tamil Nadu Agricultural University,
Mettupalayam - 641 301.
Phone: 04254-222010
Email ID: deanformtp@tnau.ac.in
- 10 Horticultural College and Research
Institute,
Tamil Nadu Agricultural University,
Periyakulam- 625 604, Theni district.
Phone: 042546-231726, 231319,
231422
Email ID: deanhortpkm@tnau.ac.in
- 11 Home Science College and Research
Institute,
Tamil Nadu Agricultural University,
Madurai – 625 104,
Phone: 0452-2424922
Email ID: deanhscmdu@tnau.ac.in
- 12 Horticultural College and Research
Institute for women,
Tamil Nadu Agricultural University,
Navalur Kuttappattu – 620 009,
Tiruchirapalli district.
Phone: 0431-2918033
Email ID: sohort@tnau.ac.in

Constituent Institutes – Diploma in Agriculture

- 1 C. Subramanian Institute of Agriculture,
Oil Seeds Research Station,
Tindivanam – 604 002,
Villupuram district.
Phone: 04147-250293,
Email ID: arstvm@tnau.ac.in
- 2 M. S. Swaminathan Institute of
Agriculture, Bhavanisagar – 638 451,
Erode district. Phone: 04295-240244,
240032. Fax: 04295-240032
Email ID: arsbsr@tnau.ac.in
- 3 Institute of Agriculture,
Rice Research Station,
Ambasamudram – 627 401,
Tirunelveli district.
Phone: 04634-250215
Fax: 04634-255424
Email ID: arsasd@tnau.ac.in
- 4 Institute of Agriculture,
Aruppukotai – 626 107,
Virudhunagar district.
Phone: 04566-220562
Email ID: arsapk@tnau.ac.in
- 5 Institute of Agriculture, Agricultural
Research Station, Kovilpatti – 628 501,
Thoothukudi district.
Phone: 04632-220533, 220522,
221133, 234955
Fax: 04632-2211338, 234955
Email ID: arskovilpatty@tnau.ac.in
- 6 Institute of Agriculture,
Soil and Water Management Research
Institute,
Kattuthottam– 613 501,
Thanjavur district.
Phone: 04362-267680
Email ID: arsswmri@tnau.ac.in
- 7 Institute of Agriculture,
Kudumiyamalai– 622 104,
Pudukkottai district.
Phone: 04339-241333
Fax: 04339-241334
Email ID: iakdm@tnau.ac.in



Constituent Institutes – Diploma in Horticulture

- 1 Institute of Horticulture,
Horticultural Research Station,
Pechiparai – 629 161, Kanya kumari district
Phone: 04651-281191, 2817592
Email ID: hrwppi@tnau.ac.in

Research Stations

- | | |
|---|--|
| <ol style="list-style-type: none"> 1 Agricultural Research Station,
Bhavanisagar - 638 451, Erode district.
Phone: 04295-240244, 240032
Email ID: arsbsr@tnau.ac.in 2 Agricultural Research Station,
Kovilpatti –628 501,
Thoothukudi district,
Phone: 04632-220533, 220522, 221133,
Fax: : 04632-2211338
Email ID: arskovilpatty@tnau.ac.in 3 Agricultural Research Station,
Vaigai Dam-625 512,
Theni district,
Phone: 04546-292615
Email ID: arsvaigai@tnau.ac.in 4 Agricultural Research Station,
Paramakudi – 623 707,
Ramanathapuram district.
Phone: 04564-222139
Email ID: arspmk@tnau.ac.in 5 Agricultural Research Station,
Tirupathisaram – 629 901,
Kanyakumari district.
Phone: 04652-276728
Email ID: arstps@tnau.ac.in | <ol style="list-style-type: none"> 6 Agricultural Research Station,
Virinjipuram – 632 104,
Vellore district.
Phone: 0416-2272221
Email ID: ars.vrm@gmail.com 7 Coconut Research Station,
Veppankulam – 614 906,
Thanjavur district.
Phone: 04373-260205
Fax: 04373-260124
Email ID: arsvpm@tnau.ac.in 8 Coconut Research Station,
Aliyarnagar – 642 101,
Coimbatore district.
Phone: 04253-288722
Email ID: arsaliar@tnau.ac.in 9 Cotton Research Station,
Srivilliputhur – 626 125,
Virudhunagar district.
Phone: 04563-260736
Email ID: arssvpr@tnau.ac.in 10 National Pulses Research Centre,
Vamban – 622 303,
Pudukkottai district.
Phone: 04322-209692
Email ID: arsvamban@tnau.ac.in |
|---|--|



- 11 Tamil Nadu Rice Research Institute,
Aduthurai – 612 101, Thanjavur district.
Phone: 0435-2472098
Email ID: dirtrri@tnau.ac.in
- 12 Tapioca and Castor Research Station,
Yethapur – 636 119,
Salem district.
Phone: 04282-293526
Email ID: arsyethapur@tnau.ac.in
- 13 Agricultural Research Station,
Pattukottai – 614 602,
Thanjavur district.
Phone: 04373-235832
Fax: 04373-236491
Email ID: arspattu@tnau.ac.in
- 14 Rice Research Station,
Tirur – 602 025, Thiruvallur district.
Phone: 044-27620233
Email ID: arstirur@tnau.ac.in
- 15 Rice Research Station,
Ambasamudram – 627 401,
Thirunelveli district.
Phone: 04634-250215
Fax: 04634-255424
Email ID: arsasd@tnau.ac.in
- 16 Coastal Saline Research Centre,
Ramanathapuram – 623 501,
Ramanathapuram district.
Phone: 04567-230250, 230359
Email ID: arsramnad@tnau.ac.in
- 17 Regional Research Station,
Kovilankulam,
Aruppukottai - 626 107,
Virudhunagar district.
Phone: 04566-220562
Email ID: arsapk@tnau.ac.in
- 18 Regional Research Station,
Paiyur – 635 112,
Krishnagiri district.
Phone: 04343-290600
Email ID: arspaiyur@tnau.ac.in
- 19 Regional Research Station,
Virudhachalam – 606 001,
Cuddalore district.
Phone: 04143-238231
Fax: 04143-238120
Email ID: arsvri@tnau.ac.in
- 20 Horticultural Research Station,
Pechiparai – 629 161,
Kanyakumari district.
Phone: 04651-281191, 2817592
Email ID: hrsppi@tnau.ac.in
- 21 Horticultural Research Station,
Thadiyankudisai – 624 212,
Dindigul district.
Phone: 04542-224225
Fax: 04542-224393
Email ID: hrstkd@tnau.ac.in
- 22 Horticultural Research Station,
Yercaud – 636 602, Salem district.
Phone: 04281-224225
Fax: 04281-222456
Email ID: hrsycd@tnau.ac.in



- 23 Horticulture Research Station,
Uthagamandalam – 643 001,
The Nilgiris district.
Phone: 0423-2442170
Fax: 0423-2449382
Email ID: hrsooty@tnau.ac.in
- 24 Horticultural Research Station,
Kodaikanal – 624 103,
Dindigul district.
Phone: 04542-240931
Email ID: horskodai@tnau.ac.in
- 25 Vegetable Research Station,
Palur – 607 113,
Cuddalore district.
Phone: 04142-275222
Email ID: hrspalur@tnau.ac.in
- 26 Information and Training Centre,
Chennai – 600 040, Chennai.
Phone: 044-26263484
Email ID: Chennai@tnau.ac.in
- 27 Hybrid Rice Evaluation Centre,
Gudalur – 643 212,
The Nilgiris district.
Phone: 04262-264945
Email ID: arsgudalur@tnau.ac.in
- 28 Oilseeds Research Station,
Tindivanam – 604 002,
Villupuram district.
Phone: 04147-250293
Email ID: arstvm@tnau.ac.in
- 29 Sugarcane Research Station,
Cuddalore – 607 001,
Cuddalore district.
Phone: 04142-292630
Fax: 04142-292630
Email ID: arscuddalore@tnau.ac.in
- 30 Sugarcane Research Station,
Sirugamani – 639 115,
Trichy district.
Phone: 0431-2614217
Email ID: kvksgm@tnau.ac.in
- 31 Sugarcane Research Station,
Melalathur – 635 806,
Vellore district.
Phone: 04171-220275
Email ID: arsmelalathur@tnau.ac.in
- 32 Soil and Water Management Research
Institute, Kattuthottam,
Thanjavur – 613 501, Thanjavur district.
Phone: 04362-267680
Email ID: arsswmri@tnau.ac.in
- 33 Cotton Research Station,
Veppanthattai - 621 116,
Perambalur district.
Phone: 04328-293503
Email ID: arsvpt@tnau.ac.in
- 34 Maize Research Station,
Vagarai- 624 613,
Dindigul district,
Phone: 04545-292900, 267373
Email ID: arsvagarai@tnau.ac.in



35 Dryland Agricultural Research Station,
Chettinad-630102,
Sivagangai district.
Phone: 04565-238080
Email ID: darsc@tnau.ac.in

36 Floriculture Research Station,
Thovalai – 629 302.
Kanyakumari district.
Phone: 04652-285009
Email ID: hrsthov@tnau.ac.in

37 Grape Research Station,
Mallingapuram, 625 526
Theni district
Phone: 04554-253625
Email ID: grstheni@tnau.ac.in

38 Centre of Excellence in Millets,
Athiyendal, Thiruvannamalai - 606 603,
Thiruvannamalai district.
Phone: 9443422461
Email ID: cemtvm@tnau.ac.in

Plant Clinic Centres

1 Plant Clinic Centre,
Agricultural College and Research Institute,
Killikulam,
Thoothukudi district – 628 252.
Phone: 04630-261268
Email ID: deanagrikkm@tnau.ac.in

2 Plant Clinic Centre,
Cotton Research Station,
Srivilliputhur – 626 125,
Virudhunagar district.
Phone: 04563-260736, 261953
Email ID: arssvpr@tnau.ac.in

3 Plant Clinic Centre,
Rice Research Station,
Ambasamudram – 627 401,
Thirunelveli district.
Phone: 04634-2450215
Email ID: arsasd@tnau.ac.in

4 Plant Clinic centre,
Regional Research Station,
Paiyur – 635 112, Krishnagiri district.
Phone: 0434-250043
Email ID: arspaiyur@tnau.ac.in

5 Plant Clinic Centre,
Agricultural Research Station,
Bhavanisagar - 638 451, Erode district.
Phone: 04295-240244, 240032
Email ID: arsbsr@tnau.ac.in



Krishi Vigyan Kendras (KVK)

- 1 Krishi Vigyan Kendra,
Agricultural College and Research
Institute,
Madurai - 625 104, Madurai district.
Phone: 0452-2422955
Email ID: kvkmdu@tnau.ac.in
- 2 Krishi Vigyan Kendra,
Needamangalam - 614 407,
Thiruvarur district
Phone: 04367-261444
Fax: 04367-260666
Email ID: kvkndm@tnau.ac.in
- 3 Krishi Vigyan Kendra,
Regional Research Station,
Virudhachalam - 606 001,
Cuddalore district.
Phone: 04143-238353
Email ID: kvkvri@tnau.ac.in
- 4 Krishi Vigyan Kendra,
Coastal Saline Research Centre,
Ramanathapuram – 623 501,
Ramanathapuram district.
Phone: 04567-230250
Email ID: arsramnad@tnau.ac.in
- 5 Krishi Vigyan Kendra,
Sugarcane Research Station,
Sirugamani - 639 115,
Trichy district.
Phone: 0431-2614417
Fax: 0431-2614457
Email ID: kvksgm@tnau.ac.in
- 6 Krishi Vigyan Kendra,
Sandhiyur - 636 203,
Salem district.
Phone: 0427-2422550
Fax: 0427-2422269
Email ID: kvksandhiyur@tnau.ac.in
- 7 Krishi Vigyan Kendra,
Oilseeds Research Station,
Tindivanam - 604 002,
Villupuram district.
Phone: 04147-250001
Fax: 04147-250002
Email ID: kvktvm@tnau.ac.in
- 8 Krishi Vigyan Kendra,
Rice Research Station,
Tirur - 602 025,
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