

Tamil Nadu Agricultural University Coimbatore - 641 003

A Brief Presentation



Genesis of TNAU

- Established in 1868 at Saidapet, Madras, by British Government
- 1906 - the Institute was upgraded as Agricultural College and Research Institute and shifted to Coimbatore
- 1920 - Bachelor Degree programme in Agriculture was offered
- 1960 - Four PG and Ph. D Programmes started
- 1971 - Tamil Nadu Agricultural University

TNAU

1269 Scientists

Education

- Colleges - 11 Constituent and 6 affiliated
- Diploma - 6 Constituent and 5 affiliated

Research

- 36 Research Stations

Extension

- 14 Krishi Vigyan Kendras

BUDGET

Sl. No.	Schemes	% to total
1	Non-Plan	42
2	Plan	25
3	IAMWARM	6
4	NADP	5
5	Indian Council of Agri Research	11
6	Government of India	3
7	Private Agencies & Foreign Agencies	3
8	University Receipts	5
	TOTAL	100

Under Graduate Courses

REGULAR

1. **B.Sc. (Agriculture)**
2. **B.Sc. (Horticulture)**
3. **B.Sc. (Forestry)**
4. **B.Sc. (Home Science)**
5. **B.Tech. (Agricultural Engineering)**
6. **B.Sc. (Sericulture)**

UG students 3123

SELF SUPPORTING

1. **B.Tech. (Biotechnology)**
2. **B.Tech. (Horticulture)**
3. **B.Tech. (Food Process Engineering)**
4. **B.Tech. (Energy and Environmental Engineering)**
5. **B.Tech. (Bioinformatics)**
6. **B.Tech. (Agricultural Information Technology)**
7. **B.S. (Agribusiness Management)**

UG Dual Degree
Nova Scotia
Agricultural
College, Canada



Post Graduate Programmes

- **40 Masters Programmes**

748 students

- **30 Ph.D Prog**

523 students

PG Dual Degree
Cornell, USA
MS & MPS in
Food Science
& Plant Breeding

❖ E – courses in Agriculture and Horticulture under NAIP

❖ On line exams

❖ On line registration of courses



Video streaming of teacher's lecture presentation

<http://mms.tnau.ac.in>

The screenshot shows a web browser window displaying the MMS website. The page is titled "SEMESTER VIII" and "About Project". It features a table of course presentations for Semester I and Semester II. The table lists the course name, credits, and a brief description of the course.

Course	Credits
AGRI01 Principles of agronomy and agriculture heritage	1+1
SACI01 Fundamentals of Soil Science	2+1
TAM101 Applied Physical Sciences	2+1
MAI101 Applied Mathematics	2+1
COM101 Introduction to Computer Technology and Programming Languages	0+2

Course	Credits
AMP101 Livestock and Poultry Production Technology	2+1
CRP101 Crop Physiology	2+1
TAU102 English for Speaking and Writing skills	0+1
PBO101 Agricultural Botany, Genetics and Cytogenetics	2+1
AGR102 Agronomy of Crops	2+1
BIC101 Biochemistry	2+1
TAU102 Basic Electronics and Instrumentation Technology	2+1

STUDENTS PLACEMENT

Sectors	2008-09	2009-10	2010-11	2011-12	Total
Agro Industry	161	357	156	213	887
Seed Industry	58	4	38	78	178
Food Industry	23	35	101	26	185
Fertilizer Industry	19	0	5	34	58
NGO/Govt.	80	20	71	38	209
Plantation	33	42	9	6	90
Banking	98	69	182	337	686
Total	472	527	562	732	2293

Civil Services

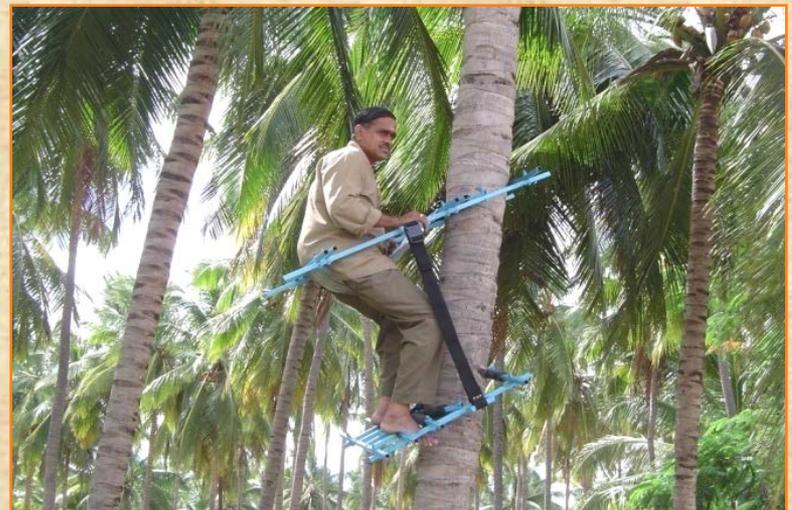
Year	Civil services	IFS	Other sectors
2008	24	3	411
2009	10	14	472
2010	7	6	95
2011	3	18	--
2012	10	11	--
Total	54	52	971

Research Directorates

S.No	Directorate	S.No	Directorate
1	Directorate of Research	7	Water Technology Centre
2	Director - TRRI	8	Natural Resource Management
3	Centre for Plant Breeding & Genetics	9	Seed Centre
4	Centre for Plant Molecular Biology	10	Centre for Agri & Rural Studies
5	Crop Management Studies	11	Agri - Business Directorate
6	Centre for Plant Protection Studies		

Research

- 776 crop varieties
- 157 Farm implements
- 1000s of crop management of technologies



TECHNOLOGIES RELEASED

System of Rice Intensification (SRI)



- ❖ Dapog (Mat) nursery
- ❖ 14 Day seedlings
- ❖ 1- 2 seedlings per hill
- ❖ Laser leveling
- ❖ Square planting
- ❖ Use Cono Weeder

Sustainable Sugarcane Initiative (SSI)

- Raising nursery using single budded chips (Seed rate 250 Kg/ha)
- Transplanting young seedlings (25-35 days)
- Wider spacing (5 x 2 feet)
- Providing need based drip irrigation
- Intercropping for effective land utilization , and
- Adoption of INM and IPM
- Yield 249 tons /ha



Precision Farming



REDGRAM

- 21 days old seedlings
- Drip and fertigation
- Maximum Yield 1975 kg/ ha
vs national average of 685 kg/ha



CASTOR

Drip fertigation in the castor hybrid YRCH 1 recorded the yield of 3.3 tones per ha

National average (1209 kg/ha)

Marigold - Precision Farming

Traditional Farming



Precision Farming



Parameters	Control	Precision Farming
Yield	25.12 tonnes / ha	35.24 tonnes /ha
Xanthophyll content	1.38 g / kg of fresh flower	1.79 g/kg of fresh flowers
BCR	1.30	2.02

Anna 4- New drought tolerant Rice variety

- Drought prone Rainfed areas - 4 lakh ha
- Traditional varieties - 1.2 t/ha yield
- Anna 4 - 3.7 t/ ha yield
- Additional yield for Tamil Nadu- 10 lakh tones
- Grain - white, long & slender



TNAU Patent Status

Patent obtained	Patent filed
9	45

Agri Business Directorate



- ❖ Technology commercialization
- ❖ Seed Consortium
- ❖ Agribusiness Incubation
- ❖ Consultancy
- ❖ Production of bio - inputs and products for use by farmers and consumers

Business Planning and Development - Incubatee details

- 21 VENTURES are supported in TNAU-BPD
- 6 ventures based on TNAU technologies
- 15 ventures based on private technologies

Papaya Mealy Bug

(*Paracoccus marginatus*)

- ❖ Mass production at TNAU – 7 colleges,
- ❖ 36 Research Stations & 14 KVKs across the State
- ❖ So far 5.5 million parasitoid released in infested field in all the districts of the state.
- ❖ Savings: Rs.163 crores (by not spraying chemicals)
- ❖ Loss avoided - Rs.435 crores

Acerophagus papayae



Lateral view - Female

Dorsal View

NAIP- Research on "Production to Consumption"

Value Chains developed for Banana, Mango, Guava, Flowers, agroforestry, wild honey bee and Bioenergy

Export packaging technology of jasmine for Dubai market



Fresh flowers



Jasmine string treated with Boric acid @4%



Treated jasmine strings packed in ventilated Corrugated Fibre Board boxes (2kg of flowers/box)

Ready for airlifting to Dubai market



Export packaging technology of jasmine for USA market



Achievements in Farm Mechanization

- Tractor drawn rotovator weeder
- Tractor Drawn Sweep Weeder
- Self Propelled Weeder
- Self Propelled Flial Mower
- Groundnut Stripper
- Stump Remover
- Sugarcane harvester
- Coconut Tree Climber
- Organic manure cum fertilizer applicator
- Improved Dhal Mill
- Tractor operated Rotary Spading Machine
- Steering System for Power Tiller Trailer Combination

GM crops & biotechnology

- Productivity increase by reducing the loss from biotic and abiotic stresses
- Rice, brinjal, cotton and groundnut – endure pest and disease resistance
- Bt in popular CO2 brinjal
- Virus resistance – banana, cassava & papaya

NANOTECHNOLOGY

- Nano-fertilizer for balanced crop nutrition
- Controlled release of Nanoherbicides for rainfed agriculture
- Customizing nanoparticle for improving the seed quality
- Biosensor for early detection of plant diseases
- Developing high barrier nanocomposite films for food packing
- Nanoencapsulation of functional foods
- Nano-films for improving self-life of preserved foods

Extension

14 KVKs



Location

Directorate

Sandhiyur

Virinjipuram

Madurai

Tindivanam

Vamban

Needamangalam

Sikkal

Vriddhachalam

Ramnad

Aruppukkottai

Pechiparai

Papparapatti

Tirur

Sirugamani

e agriculture initiatives

TNAU AGRI PORTAL

TNAU AGRITECH PORTAL
transforming the lives of farmers...

English | தமிழ்

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Search

Agriculture
SRI, Rice, Pulses, Oil Seeds, Forage, Millets, Cereals, Season, Irrigation, Weed, Pest, Disease, read more...

Horticulture
Nursery, Fruits, Vegetables, Flowers, Spices, Plantation, Medicinal, Aromatic Crops, Landscaping, read more...

Agri. Marketing
Commodity Boards, Schemes, Food Processing, Value Addition, Markets, read more...

Agri. Engineering
Farm Machinery, Bio-energy, Processing, PHT, Machinery, Equipment, Conservation, read more...

Seed
Seed Production, Seed Certification, Processing, Breeder, Foundation, Seed Law, Seed Act, read more...

Organic Certification
Organic, Certification, Accreditation, Vermicompost, Pseudomonas, Panchagavya, read more...

Sericulture
Mulberry, Silk worm, Rearing, Cocoon, Sericulture, read more...

Forestry
Agro Forestry, Social Forestry, Silviculture, Timber, Wildlife, Contract Farming, read more...

Fishery
Fresh water Fish, Marine Fish, Prawn, Fish Species, Riverine Fishery, Ornamental Fish, read more...

Animal Husbandry
Cattle, Livestock, Poultry, Piggery, Veterinary Services, Goat, Pig, read more...

TECHNOLOGIES
Crop Production
Crop Protection
Crop Improvement
Seed Technology
Bio Technology
Post Harvest Technology
Bio-Fuels
GAP | GLP | GMP

SPECIAL TECHNOLOGIES
System of Rice Intensification (SRI)
Precision Farming
Sustainable Sugarcane Initiative
Transplanting Technology in Redgram
Canopy Management in Mango
Ultra High Density in Mango
Dutch Roses in Open Field

SCHEMES & SERVICES
Govt. Schemes & Services
Development Blocks
Banking & Credit
Crop Insurance
KVK | ATMA | NGOs & SHGs
Agri Clinics
Kisan Call Centre
MDG-2015
Inter State Training Exposure Visit

DAILY EVENTS
TN-Uzhavar Sandhai
TNAU-DEMIC
TNAU Community e-Radio
THE HINDU - Podcast
Television Programs
Farm Radio Programs
Farm Magazines
Water Level (Dams)
HRD-(Agriculture)
AGRISNET

AGRI INFORMATION
Indigenous Farming
Sustainable Agriculture
Farm Enterprises
Nutrition

MARKET INFORMATION
Minimum Support Price
Input Source
Export & Import
NHRDF
MCX | NCDEX

RELATED INFORMATION
Environment & Pollution
Disaster Management
Patents
ICT Initiatives
Important Links | Blogs

RECENT UPDATES
MNAIS | RFP KCC | Modified KCC^{NEW}
12th Plan Approach^{NEW}
TN Budget 2011-12
AFDF | INSIMP
TN - Season & Crop Report

TNAU Weather
Daily Market Information DMI
Daily News Paper
Farm Information
Organic Farming

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- Integrated Portal (A-Z)
- Open Access
- Bi-Lingual
- 3.5 Lakh pages

Usage parameters

Total Viewers	65,23,450
Daily visitors	450
Average time on site	12-18 mts
No. of page hits / day	35-60
e-Mails Queries	1265
New visitors /day	125-140
Updating	Daily

Automatic Weather Stations

<http://www.tawn.tnau.ac.in>



OBJECTIVES

- To gather and provide weather data on real time basis with GSM links and for generating medium range agricultural forecast for weather based agro advisories.
- Creating database for understanding global warming and Climate Change

Weather output (10 parameters)

- Air temperature
- Relative Humidity
- Wind Speed
- Wind Direction
- Soil Moisture
- Soil Temperature
- Rainfall
- Leaf wetness
- Atmospheric pressure
- Solar Radiation

Dissemination of Market Information for Agri-Hort Products (DMI)



- DMI through mobile
- One commodity and two markets information
- Free of cost to farmers

- ❖ Information about 13 Markets
 - ❖ 11 TN market,
 - ❖ 1 Kerala Market
 - ❖ 1 Karnataka market
- ❖ Database of 3200 traders
- ❖ 47,000 farmer receiving SMS
- ❖ 3 years Data Base stored

Domestic and Export Market Intelligence (DEMIC)

Crops covered - 18

Rice, Wheat and Maize

Chana, Urad and Tur

Cotton

Sugarcane

Red Chilies, Turmeric and Coriander

Groundnut, Sesame, Sunflower, Soya & Mustard

Onion, Potato, Tomato, Peas and Brinjal

Cardamom, Pepper, Coconut

NAIP-Domestic and Export Market Intelligence cell

The Agricultural University, Dept of Agricultural Marketing, ICAR-National Agricultural Innovation Project, National Informatics Centre

AGMARKNET

Our Objectives

- Providing price forecasts well in advance of sowing of major commodities and during harvesting thus helping the farmers in taking better sowing and selling decisions.
- Providing other market intelligence such as product qualities, high price markets for

Price Data Price Behavior

Click here for Recommendations of the Discussion Meet of Experts and Producers of Agricultural Commodities

utilize market intelligence info

- Price Behaviour
- Price Data
- Collaborating Institutions
- Objectives
- Export Procedures
- Grades & Standards
- Infrastructure
- Agri Export Zone
- Post Harvest Technology
- Useful Links

Contents owned and updated by Tamil Nadu Agricultural University & Department of Agricultural Marketing, Chennai

Designed, developed and maintained by National Informatics Centre

www.tnagmark.tn.nic.in

- ❑ Till date no. of forecasts
 - ❖ All India – 486
 - ❖ TN - 80
- ❑ Success rate of price forecast 92-95 %

THANK YOU

