Dedicated
To
All the Administrators, Faculty,
Non - Teaching Staff, Students
and Wellwishers
of
PJITSAU
Past & Present

Concept
Dr. V. Praveen Rao
Vice Chancellor, PJITSAU

Content and Design
Dr. V. Anitha
Dean, PG Studies

Dr. Ch. Venugopala Reddy
PAU/ AICC and PJITSAU Press

Dr. M. Sreenivasulu
Coordinator, Electronic Wing

Contributors
All University Officers, Associate Directors of Research, Associate Deans,
Technical officers, Faculty and Administrative Staff.

PJITSAU
A Transformative Journey
2014 - 2022
DESTINATION EXCELLENCE
HAPPENING TELANGANA

- Agriculture and the dynamic farming community are central to the culture and economic development of the State.
- Newly commissioned irrigation projects, lifts, restored minor irrigation tanks enhanced the irrigation potential, resulting in transition from rainfed to year-round evergreen farming in the State.
- Farmer-centric initiatives of Government of Telangana and technology support by the Professor Jayashankar Telangana State Agricultural University are propelling sustainable agriculture and prosperity across the community.

△ Kaleswaram lift irrigation project: An engineering marvel
The Trajectory of PJTSAU
Towards Excellence...

The nesting of the Professor Jayashankar Telangana State Agricultural University (PJTSAU) in 2014 has led to an enriching academic tree of agri-education excellence. This transformative journey has been the path of grit, determination, passion and with a huge purposive intent of serving the society at large and the farmers in particular. Pursuing its goal to provide contemporary academic, research and outreach excellence in conjunction with the cultural ethos of large agrarian community of the region, PJTSAU set out on this journey through:

Expanding the reach of agri-education to more students from marginalized and far-fetched areas across the State, country and from other developing countries, by opening many Colleges, Kriish Vigyan Kendras, Agriculture Polytechnics and Agriculture Research Stations across the State. These initiatives have enhanced the outreach of agri-education along with creating facilities to promote hyperlocal agro-ecological based research activities in major crops.

Leveraging modern technology-based tools to create digitally enabled environment for academics, research and outreach programs across all campuses. The robust, flexible and affordable e-learning ecosystem, with the assessment and evaluation capabilities is the best use model of the technology use for engagement with students and its farmer stakeholders making a paradigm shift towards delivery of holistic education, training systems to its stakeholders.

Transforming of University into a ‘Hub of Innovations’, an early focus on shaping strong research and extension programmes for developing locally acceptable technologies with global prowess has led to 100+ commercially viable technologies including 47 varieties with Pan India spread for more secure food, nutritional and economic prosperity for all stakeholders. Building State of the art research facilities, developing nationally accredited testing laboratories, creation of data repository centers; value addition processing units are some other interventions that shaped the capabilities of University faculty and services across agri-value chains. An emphasis towards translational research to take the products and research outcomes to societal use and for bettering rural livelihoods has shaped PJTSAU as a major Higher Education Institution of repute.

Developing unique Convergence Model(s) of Academic-Research-Outreach platforms through a planned strategy to build a strong pool of collaborations and network of partnerships have resulted in Faculty and Student Exchange programs, student research projects with industry; joint research programmes /collaborations; co-innovation programmes with agri-tech start-ups, technology validation and field immersion platforms for emerging innovations.

Catalyzing entrepreneurship development in the University led to establishment of agri-technology Incubator in a unique ‘Hubs and Spokes’ model to cater to tier II and tier III cities in rural areas of the State. This has opened up myriad of opportunities to students, Agri Startups, faculty and farmers in agribusiness sector. These initiatives are providing a new direction to the research and support to student’s internship and skill development programmes.

Indeed, this 7 year journey of PJTSAU has been remarkable but there are miles to travel to excellence……..

As PJTSAU Green Tillers, we stand committed to actualizing the University as a globally recognized Higher Education Institution of Excellence in Agri-Education.
EMPOWERING YOUNG MINDS AND FARMERS TOWARDS INNOVATION, ENTREPRENEURSHIP AND PROSPERITY

1. Administrative Office
2. Knowledge Management Centre
3. Agrib
4. Integrated Academic Block
5. Amphitheatre
6. College of Agriculture
7. High Horticultural Complex
8. Central Instrumentation Cell
9. Mill Plant Processing & Incubation Centre
10. Post Graduate & Research Centre
11. Dr. G. Theeramool Girls Hostel
12. Natural Dyes Processing & Incubation Centre
13. Institute of Biotechnology
14. Central Examination Centre
15. University Auditorium
16. Sports Complex
17. Health Centre
18. Boys Hostel

Quality and Commitment are the two foremost values that define PJITSAU
OUR VISION

PJ/TSAU envisions itself as a Centre of Excellence, a one-stop destination for agricultural innovation encompassing education, research and extension through all its facilities, to empower farmers and rural communities ensuring evergreen prosperity. It aims to create, foster and present to the world a crop of altruistic agriculture leaders and entrepreneurs who will strive to work for an ecologically and nutritionally balanced future for the state, country and the world at large.

OUR MISSION

To serve the cause of Agricultural Sciences by producing globally competitive quality human capital, generating cutting edge technologies to address contemporary challenges of agricultural sector and evolving responsive, effective, dynamic outreach mechanisms.

OUR MANDATE

- Train human resources needed for Agriculture, Agricultural Engineering & Technology, Community Science and allied sectors
- Conduct basic and applied research to develop improved varieties and technologies for sustainable agricultural development
- Promote on-farm research and technology assessment, refinement and transfer of knowledge through participatory approaches.
- Build partnerships and linkages with national/international educational/research/developmental institutions, rural development sector and agro industries
- Nurture innovations and entrepreneurship in agriculture and rural ecosystems through mentoring, piloting and facilitating access to market research and investment
OUR LOCATIONS....

The mandate of the university is fulfilled by the Teaching, Research and Outreach Centres spread across the three Agroclimatic Zones of the State. New Colleges [4], Polytechnics [4], Research Station [1], Research Schemes [2] and KVKS [2] have been established to provide the much needed agri services to remote rural communities.

NEW INSTITUTIONS ESTABLISHED

- 2014: ARL, formals
- 2015: College of Food Science & Technology, Aghub
- 2016: Agricultural College, Wonargal
- 2017: KVK, Belampally
- 2018: Agricultural College, Wonargal
- 2021: Agriculture College, Wonargal
PJTSAU .... Sought after destination for its academic programmes

BACHELORS PROGRAMME
B.Sc. (Hons.) Agriculture
B.Tech. (Agricultural Engineering)
B.Tech. (Food Science & Technology)
B.Sc. (Hons.) Community Science

MASTERS PROGRAMME
M.Sc. in Community Science

DOCTORAL PROGRAMME
Agriculture
Agronomy, Agricultural Economics, Entomology, Agricultural Extension Education, Genetics & Plant Breeding, Plant Pathology, Crop Physiology, Soil Science, Seed Science & Technology, Agricultural Statistics

MBA (Agri. Business Management)
M.Tech. in Agricultural Engineering & Technology
Soil & Water Engineering
Processing & Food Engineering
Farm Machinery & Power Engineering

Student Data 2014 – 2021

UG Programmes

- 3050+ Students in total (42% female and 58% male)
- 850+ Students in total (42% female and 58% male)
- 4000+ Students in total (42% female and 58% male)
- 525+ Students in total (42% female and 58% male)
- 235+ Students in total (42% female and 58% male)
- 1250+ Students in total (42% female and 58% male)

PG/Ph.D Programmes

- 475+ Students in total (42% female and 58% male)
- 225+ Students in total (42% female and 58% male)
- 6000+ Students in total (42% female and 58% male)

ALUMNI SPREAD THEIR WINGS ACROSS THE GLOBE

Professor Jayashankar Telangana State Agricultural University
The Oldest College and Crown Jewel of PJTSAU

COLLEGE OF AGRICULTURE
Rajendranagar, Hyderabad

Features

- Largest UG and PG College
- Digital Knowledge Management Centre
- Central Instrumentation Cell for PG and Faculty Research
- Academic Block and Amphi Theatre
- Central Examination Centre
- Sports Complex – Out door, Indoor Stadium, Gymnasium
- Ten Bedded Health Centre
- Equestrian NCC Unit
- International Students Hostel
- 113 hectares of Semi Mechanized Farm
- HiTech Horticultural Complex
AGRICULTURAL COLLEGE
Jagtial (2008)
Integrated Campus at Regional Agricultural Research Station (RARS), Jagtial, the Rice & Maize bowl of Telangana

FEATURES
- Floor space of 81000 sq.ft with smart class rooms, laboratories and examination hall
- An indoor auditorium for cultural activities that can seat 250 people
- PWD (Persons with Disabilities) friendly facilities with ramps and special washrooms
- Only centre producing national and international champions in Kick boxing

AGRICULTURAL COLLEGE
Aswaraopet (1989)
The second largest campus spread across 200+ acres surrounded by diverse horticulture crops

FEATURES
- The only campus that gives an opportunity for student’s exposure to an assorted Agri-horti cropping system
- A launching pad for higher learning with the maximum no. of students securing academic gold medals
- Untouched by urban distractions, students focus on sports & games leading to national level champions
**AGRICULTURAL COLLEGE**

**Palem (2015)**

- Integrated Campus at RARS, Palem, Nagarkurnool District, known for Millets, Castor and Sheep Farming
- Floor space of 117000 sq. ft. with PWD friendly facilities
- Students gain exposure to research and extension activities at RARS & KVK giving real-time experience of farmers’ problems in the region

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**AGRICULTURAL COLLEGE**

**Warangal (2016)**

- Integrated Campus located at RARS, Warangal, the stronghold of the Kakatiyas, pioneers of chain link irrigation tanks
- College Campus construction under Progress with a floor space of 1,00,000 sq. ft
- Opportunity for greater student participation with pro-active farming community specializing in commercial crops
AGRICULTURAL COLLEGE
Sircilla (2018)
The youngest college with a humongous campus spread across
35 acres at Jillella in the “Weavers home land”

FEATURES
- Built in floor area of 2,70,000 sq. ft with airy digitally enabled learning spaces, laboratories and expensive corridors for students to network
- An indoor auditorium for cultural activities that can seat 350 people
- Outdoor Amphitheatre for cool evening performances
- PMD (Persons with Disabilities) friendly facilities with ramps and special washrooms
- Field labs spreads across 17 acres with a 98-lakh litre capacity farm pond and drip irrigation facilities
COLLEGE OF AGRICULTURAL ENGINEERING
Kandi, Sangareddy (2011)

FEATURES
- The UG & PG technology college sharing a boundary with IIT (Hyderabad)
- Campus ideally located in proximity to industrial zones for student training and placements
- Smart class rooms and laboratories spread across 46,000 sq. ft
- Dedicated engineering workshops for hands on learning and prototyping small farm machinery

COLLEGE OF FOOD SCIENCE & TECHNOLOGY
Rudrar (2015)

FEATURES
- The only Food Technology College in the State located at Regional Sugarcane and Rice Research Station campus
- Launching food innovators into the sunrise sector
- An identical campus to CAE Sangareddy with spacious food processing labs
- The USP of the college is the unique turmeric pilot processing unit
COLLEGE OF COMMUNITY SCIENCE
Saifabad, Hyderabad (1964)

FEATURES
- 320 year old heritage admin. block
- Country's only Centre for Advanced Faculty Training in Community Science
- Digital Studio
- Campus Radio
- Cradle & Lab Nursery
- Millet Incubation Centre
- Food & Catering Labs
- Interior Design Studio
- Diet Counselling Centre
- Natural Dyes Quality Control Lab
- Natural Dyes Processing and Incubation Centre
Building Adaptive Rural Work Engines...
Polytechnics provide Para technicians for ground level operations

PJTSAU has provided robust skilled work force at grass root level through its polytechnics located at rural nodes. The diploma holders are extending valuable technical services to the rural community through Public & Private farm service providers helping to realize the vision of “Pay Back to Village”

All polytechnics are provided with full fledge academic buildings and hostels for both boys & girls

Diploma holders from PJTSAU are part of the 1300 recruits absorbed in the Dept. of Agriculture, Govt. of Telangana and are a formidable work force at the grass roots
FUTURE READY STUDENT ECOSYSTEM....
Learning fields for research innovations

RESEARCH LABS
The University has invested in developing modern laboratory infrastructure to foster innovative and cutting edge research by both faculty and post graduate research scholars.

CENTRAL INSTRUMENTATION CELL
A dedicated research space equipped with sophisticated instrumentation manned by trained technical personnel established with a budget outlay of Rs. 5.5 crores with technical guidance of University of Florida, USA.

FOCUS AREAS
- Soil, Water & Microbial analysis
- Plant analysis
- Molecular biology studies
- In-Vivo analysis
- Food analysis

FIELD LABS
The students are provided hands on research experience in all colleges and research stations to experiment, prototype and create value for real time solutions.

FEATURES
- Water saving micro irrigation systems
- Labour saving mechanized options
- Energy saving solar water pumps
- Sensor based precision farming systems
- Controlled environment facilities
DO IT TO LEARN IT...
The path to transform from job seeker to job provider

Experiential learning units were established to instill confidence in the students and expose them to on field challenges while working with various agri-enterprises.

Common Units
The units were standardised across colleges addressing ground level societal needs.

Speciality Units
Mushroom Cultivation, Rajendranagar
Sericulture, Jagtial

Number of Units
1 Mushroom Cultivation
7 Commercial Horticulture
5 Agri-knowledge Material Production
3 Vermicompost
3 Seed Production (Paddy, Sesamum)
4 Crop Production (Maize, Sweet corn, Fodder Sorghum)
2 Soil and Water Analysis
2 Biofertilizer Production
1 Medicinal and Aromatic Plants Production
2 Value Addition and Multigrain Flour Products
STUDENT READY

Experiential Learning (Agril. Engineering)
Agricultural Engineering students were trained in developing tools and machinery to improve resource use efficiency through latest CAD/ CAM designing tools and prototyping.

Students Trained

Creative talent of the students were honed to build self reliant businesses useful to the community

Experiential Learning (Community Science)

Food Science and Technology students were nurtured to prepare designer foods and value added products

Students attending their viva to Dr. V. C. Agrawal, IIMC (Food Tech)

Health Foods from Fruits, Vegetables & Cereals and Millet Based Health Biscuits

Value addition to Annona and Textiles

Knowledge Material Production

Floral Art Production
The first ever “Chenu Kaburlu” by the Students for the Farmers

Creativity and talent of young minds to the fore in transferring farm and community science know-how in local dialect.

First of its kind amongst State Agricultural Universities, inaugurated by Hon’ble Chief Minister of Telangana Sri K. Chandrashekhar Rao in 2015.

400+ EPISODES 85% RURAL BRANCH

INNOVATIVE STUDENT PROGRAMMES ....... FOR LOCAL OUTREACH AND GLOBAL EXPOSURE

Post Graduate Student Exchange Programme...
Exposure to international research culture

The University sponsored the student exchange program to Cornell University, USA & University of Hohenheim, Germany in 2019 giving an opportunity to 7 PG students of Genetics and Plant breeding, Seed technology, Agri-business management and Foods and Nutrition to interact with eminent researchers & conduct part of their research at their labs.

Gaining insights into research programs at Cornell University, USA

Students interacting at University of Hohenheim, Germany
Academic Reforms
THE PATH TO QUALITY EDUCATION & POST GRADUATE RESEARCH INNOVATIONS

Central Examinations Centre
Dedicated centre for question paper setting and result management for under graduates with 500+ capacity objective examination hall at main campus. All other campuses have exclusive 250+ capacity examination halls with CCC TV surveillance for fair conduct of examinations.

SAFE (2017)
Digitized Student Academic Performance Repository with access to Teacher, Student, Administrator

NAD Digit Locker (2018)
All degree certificates uploaded at central hub of student academic records for any time retrieval by students and employees

Establishment of CIC (2016)
Centralized instrumentation facility for advanced research by PG students

Online evaluation for UG students (2019)
Ensuring transparency & ease of evaluation by faculty on the TC3ian platform

National test based PG & Ph.D admissions (2020)
Admissions through ICAR - AIEEE/ACE for attracting merit & promoting outward flow to reputed institutes

External Question paper setting for RG (2016)
Testing teaching and learning standards by inviting external semester final exam question papers

External reviews of research sympoisa (2020)
Assuring innovative research addressing real time agricultural issues through external peer reviews

Special PG research Grants (2019)
Dedicated allocation of Rs. 40,000/M.Sc & Rs. 1,00,000/Ph.D student encouraging sophisticated research & high impact publications.

WE ARE THE TREND SETTERS

Introduced a unique course on “Design Thinking for Agripreneurship” as a mandatory course in the Final year of B.Sc./B.Tech

600+ Pass Outs

Introduced an advanced level elective certificate programme “Design Thinking for Translational Research & Agripreneurship” for PGR-Ph.D students

30+ Participants

THINK OUT OF BOX
PITCH IDEAS
WIN PRIZES

Orientation Program
Certificate Program on Design Thinking
For Post Graduate Students of PGR/PhD

Winter of Ideas Summer 1.0
2023

Research Corner at Knowledge Management Centre for PG Students

Self Check MID Library System
CREATING AMBIENCE FOR HEALTHY & HAPPY CAMPUS LIFE

PJTSAU has built up enviable infrastructure for comfortable student living with spacious hostels, extensive sporting facilities, convenience and needy supportive services.

All the hostels are Wi-Fi enabled and under CCTV surveillance ensuring safety for the inmates.

Health centres/clinics at the colleges monitor the physical and mental well being of students through health profiling and emergency aid with a 24x7 ambulance service.

The cultural arenas are witness to the creative art forms and vibrant energy of the students.

Students spend their leisure time on the sports grounds and gymnasium to keep physically fit and mentally alert.
The research agenda of the university has its base in the real time agricultural problems in the State. The critical planning & execution of research projects have led to outputs that have aided the policy makers to initiate the flagship programmes for crop diversification, input use efficiency, farm mechanisation, food processing and market driven agriculture.

Pre-sowing and pre-harvesting price forecasting for 16 crops of the state. Monthly commodity outlooks and crop updates for production and marketing decisions. Domestic and overseas price trends from Market Intelligent Centre at PJTSAU

Enhanced revenue generation from value added products as compared to direct produce selling.

Pilot units established for value addition for increasing non-farm income from Safflower, Redgram, Groundnut, Sesame and Turmeric

Soil, water, weather mapping based identification of cropping zones in the State

Base line Information on district wise food consumption pattern for demand and supply estimation of cereals, pulses, edible oils, spices and animal products

Mapping of district and mandal wise soil nutrient status for field level variable rate of nutrient management in the 31 districts of the State

PJTSAU AS THINK TANK FOR STATE AGRICULTURAL POLICY
The University has invested substantially in building/upgrading the physical and laboratory infrastructure over the eight years since its inception. The new buildings of Institute of Soil Health Management, Rice Research, RS & GIS laboratory and Market Intelligence Center at Rajendranagar are a few examples. New office buildings at the rural research nodes also boosted the pace of experimentation. These research centers are equipped to support academic and research activities of students as well.
QUALITY ASSURANCE IS OUR MOTTO...
ENSURING RESOURCE USE EFFICIENCY
AND CUSTOMER SATISFACTION

The university has laid much emphasis on delivering accurate research outputs and services in
time to all its clients through some
of its specialized laboratories at the
main campus. These laboratories
have been recognized at the State
and National level.

Biological Control Laboratory: The State nodal center for supplying and training personnel in mass
production of biocontrol agents for promoting ecofriendly/sustainable agriculture.

Water Technology Center: A pioneering center for research in irrigation water/micro irrigation and fertigation
scheduling for various crops. Houses a RS & GIS lab setup with the technical support from NRSC.

NABL ACCREDITED LABS
as per ISO:IEC 17025:2017

The Pesticide Residue Laboratory, EEI premises,
Rajendranagar
offers analytical services for
testing pesticide residues in
fresh produce through LC/MS/MS
& GC/MS/MS, HPLC, GC, ECD,
NPD. Generates data on
pesticide MRL in food & PHI for
various crops for ANP on
pesticide residues/CIBRC.

The MOFFI Quality Control Laboratory, EEI premises,
Rajendranagar
Offers food quality
testing for proximate
analysis in food commodities.
Telangana Sona (RNR 15048).... Low Glycemic Index, Super Fine Rice Variety.... Another kohinoor from the Deccan...........Reaping A Bountiful Harvest

Released and notified for the States of Telangana and Karnataka in the year 2015, has spread like wildfire across the country in over 24 lakh acres

Milled Rice Marketed By Various Firms
Under An Agreement With PJTSAU
REORIENTED RESEARCH MANDATE…. CROP BREEDERS EFFORTS BEAR FRUITS…. FARMERS GAIN DIVERSE PLATTER OF CROP VARIETIES TO GROW

PROMISING CROP VARIETIES

GREENGRAM
Yedasiri (WGG 42)
- Early maturity variety
- Suitable for machine harvest and cultivation preceding paddy or succeeding cotton
- Resistant to Yellow Mosaic Virus

REDGRAM
Varanagiri Kandi – 1 (WRGE 97)
- Mid-early variety
- Moderately resistant to Fusarium wilt
- Tolerant to drought

SOYBEAN
Adiviabad Intire Sayachikkudu – 1 (Akib 50)
- Medium duration variety
- Resistant to pod blight, flog eye leaf spot, alternaria leaf spot
- Tolerant to shattering even on delayed harvesting up to 7 – 10 days

COTTON
Adilabad Kopas – 1 (ADB 542)
- Medium duration
- Non-Bt straight variety with good fibre quality and chain ball bearing habit
- Tolerant to bacterial blight and tobacco streak virus

Central Varietal Release Committee
States Varietal Release Committees

APPROVED BY SVRC
32 Crop varieties released by PVU

APPROVED BY QRC
15

Timeline of release of varieties
1 2017
15 2015
13 2020
47 2021
2014
Our research invests in smallest of ideas for impactful solutions ... 
We ensure sustainable use of natural resources for enhancing livelihood security & empowering rural communities

**Potential Commercial Products**

1. **Wild Pest deterrents**
   Agri-Connex for vertebrate pest management

2. **Healthy Foods**
   Jowar Hal Exhausted Snacks
   Ready To Reconstitute Little Millet Smoothies
   Protein Rich Millet Based Blocks
   Nutri-Cereal (Killer)
   Vermicelli
   Multi Grain Flour
   Jowar Pasta
   Regi Noodles
   Low Glycemic Index Multi Grain Rath Mix

**Validated technologies popularized across State**

- **Dry Direct Seeded Rice**
  Direct seeding of paddy on well prepped unploughed soil either manually or mechanically with the onset of monsoon.
  - Water saving: 30%-35% (66 mm/ha)
  - Labour saving: 27%
  - Production cost saving: 35%
  - Less OPH erosion: 33%
  - Harvested in 50,000+ acres

- **Mechanization in Maize**
  Introduced multi crop vacuum planter for seeding and combine for harvesting in Maize for increased profits.
  - Sowing in Seed rate: 7.5 kg/ha
  - Cost: Rs. 1500/ha
  - Time saving in sowing: 21 hrs/ha
  - Time saving in harvesting: 65 hrs/ha
  - Water saving: 10%
  - Net saving: Rs. 11,000/ha
  - Adopted in 7 state alone

- **Seed to Seed Mechanization in Turmeric**
  Popularized raised bed method of mechanical planting and hoeing by adopting bed maker, ridge and furrow planter and tractor drawn digger.
  - Seed sowing: 1.5 kg/ha
  - Seed cost saving: Rs. 9000/ha
  - Time saving: 40%
  - Crop yield: 100 kgs
  - Water saving: 40%
  - Net saving: Rs. 29000/ha

- **High Density Planting in Cotton**
  A collaborative effort of multiple stakeholders University, Gene of Telangana & Seed industry.
  Short duration semi compact varieties/bifurcated grown at a spacing of row to row 750 (55 cm) and plant to plant 10 cm (2.5 cm)
  - High yield production: 30000+ bolls
  - Short duration: 120 days
  - Increased yield: 15%
  - Variety for seed to seed incorporation
  - High yield: 10-15 quintals/acre

**Alternate Wetting & Drying (AWD) in Rice**

- Water saving: 30% (220 mm/ha)
- Labour saving: 37%
- Production cost saving: 33% (Rs. 9993/ha)
- Seed sowing: 25%
- Sowing in standing time: 2.5 hrs
- Yield advantage: 12%
- Saving in cost of cultivation: Rs. 3550-4600/ha
- Prepared in: 50,000+ acres

**Promoting Broad Bed Furrow Planter in Soybean**

- Water saving: 35% (204 mm/ha)
- Labour saving: 37%
- Production cost saving: 35% (Rs. 9993/ha)
- Last OPH erosion: 25%
- Seed sowing: 25%
- Sowing in standing time: 2.5 hrs
- Yield advantage: 12%
- Saving in cost of cultivation: Rs. 3550-4600/ha
- Prepared in: 50,000+ acres
PIONEERING UAV APPLICATIONS IN AGRICULTURE
TAKING SMART TECHNOLOGIES TO TELANGANA FARMERS’ DOOR STEP

THE FIRST INDIAN AGRI-UNIVERSITY TO SECURE DODA APPROVAL FOR AGRI-RESEARCH

STANDARD OPERATING PROCEDURES [SOPS] GENERATED FOR AGRO CHEMICAL SPRAYING IN 7 CROPS [2020 onwards]

University rice varieties spread mapped with
Multi spectral & band data with 0.06m spatial resolution
Area surveyed = 47.4 ha
Location = Nalgonda and Nustulapur, Karimnagar Dist.
Test Varieties & Identification Accuracy
Kunaram Sannalu [KNM-118] = 82%
Telangana Sona [RNR-15048] = 94%
Overall accuracy of the classifier 89%.

COLLABORATORS
Dept of IT&EC, Govt. of Telangana
MIT, CHENNAI
NABARD
WORLD ECONOMIC FORUM
SATURE
MARUT DRONE TECH
THANOS

BENEFITS
Time saving 75%,
Water saving 99%,
Safety to applicator 100%
Fixed spraying area

Sample Classification Results Drone Images

Note: Class is assigned to the probability greater than 0.5.
FARMERS TRUSTED CHOICE FOR QUALITY SEED.... PJTSAU STRIVES TO DELIVER

PJTSAU has built an enviable reputation for delivering quality breeders/foundation and certified seed of University bred varieties to its client base spread across the country. Believing that seed chain development is as important as breeding new highly yielding varieties, the seed production processing facilities across the research farms have received generous support.

Seed Mela
Initiated in 2017. The Annual Seed Fair is held across research farms/KVs of PJTSAU in time for Rohini Karthi, the traditional preparatory time for sowing in Telangana.

Building brand value
Seeds produced, processed & packed on PJTSAU farms delivered under the brand name “Telangana Seeds”.

Strengthening seed processing infrastructure - Established 18 seed processing units with a capacity ranging from 0.4 tons to 4 tons/hr and combined total capacity of 25.5 tons/hr at any time.

Cold storage seed germplasm banks - Established at Maize Research Center and Seed Research Technology Center along with seed testing facility.

Licensing agreements with 37 private companies for PJTSAU varietal distribution generating valuable income to University.
From the Research Labs to the Farmers' Fields ...Well Oiled Outreach Engine

PJTSAU’s Extension arm, its ambassador on the ground advocating participatory approach with farmer capacity building and feedback being the corner stones for effective technology transfer and refinement. The proactive extension scientists have become the “Go to People” for farm advisories or disaster management for the farming community.

University Extension Outreach from 2014 to 2021

<table>
<thead>
<tr>
<th>Extension methodologies</th>
<th>Number/Beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology Assessment &amp; Refinement</td>
<td>9,460</td>
</tr>
<tr>
<td>Front Line Demonstrations</td>
<td>7,133</td>
</tr>
<tr>
<td>Vocational / Skill Trainings</td>
<td>724/15,546 Beneficiaries</td>
</tr>
<tr>
<td>Exposure / Field Visits</td>
<td>3,508 Beneficiaries</td>
</tr>
<tr>
<td>Diagnostic Field Visits</td>
<td>8,435</td>
</tr>
<tr>
<td>Field Days</td>
<td>404/20,722 Beneficiaries</td>
</tr>
<tr>
<td>Kisan Melas/ Agril Exhibitions / Rytho Sadasiss</td>
<td>251/49,492 Beneficiaries</td>
</tr>
<tr>
<td>Technology Weeks</td>
<td>681/6,800 Beneficiaries</td>
</tr>
<tr>
<td>Village Adoption Programme</td>
<td>148/88,523 Beneficiaries</td>
</tr>
<tr>
<td>Seed Production &amp; Supply</td>
<td>11,748 Quintals</td>
</tr>
<tr>
<td>TSP/ SCSP</td>
<td>43,449 Beneficiaries</td>
</tr>
<tr>
<td>Commercial Units</td>
<td>105 Units / 326 Beneficiaries</td>
</tr>
</tbody>
</table>

Flagship Training Programmes
- MAE in Agricultural(2011-17) - 500 Agricultural Officers trained
- Telangana Yeva Rytho Bagubdi(2019) - 339 young farmers trained

Disaster Management
Timely advisories saved Maize and Cotton crops from Fall Army Worm and Pink Soil Worm damage to an extent of 80%.
PJTSAU extension wing...
Early adopter of Digital media to reach their clientele
The State of Art AV studio at Electronic Wing, Agri Info Hub powered by AICC are testimony to the digital media outreach of the University

Lineup of high-tech displays
- Traditional and modern farming
- University mandate
- Monoliths of major soils of Telangana State
- Agriculture in Telangana State
- PJTSAU at a glance
- Agricultural Education
- Crop Improvement
- Crop Production
- Crop Protection
- Natural Resource Management
- Farm Mechanization
- Community Science
- Post Harvest Technology and Value addition
- Transfer of Technology

—we Communicate through.....

Audio & Video Recording Studio
Editing Suite (2015-16)
Digital repository

Linked and QR code for subscription
https://www.youtube.com/THVJ楊agriculture/video

Second ranked channel in the country among State Agricultural Universities.
70,000+ subscribers
54 laks+ viewers.
Published 300+ video modules
Play lists - Crop Production, Crop Protection, Community Science, Farm Mechanization, Farmer Success stories, PJTSAU initiatives, Education, University activities
Timely and need based video content production with technical expertise in local language.

Launched on 30-08-2017
First of its Kind
Agri Innovation Hub

Aghub is a First-of-its Kind Incubator built in a Hub and Spoke model that caters to building and creating a vibrant innovation & entrepreneurship ecosystem across the agri-food value chain. Aghub strives to nurture entrepreneurship among startup founders and student entrepreneurs PAN India through the Innovation Hub at PJTSAU, Hyderabad and spur rural entrepreneurship among rural communities through Rural Innovation Spokes at Jagtial, Warangal and Vikarabad in the State of Telangana. Aghub is funded by NABARD for building an innovation-driven agriculture ecosystem.

To promote innovations and entrepreneurship in agriculture and rural ecosystems through mentoring, piloting and facilitating access to market research and investment.

www.ag-hub.co
BUILDING THE VALUE CHAIN...
TRANSITIONING FROM PRODUCTION TO VALUE ADDITION FOR ENHANCED INCOME

University led by example, setting up Value addition units for post-harvest processing of raw produce in regional centers. Dal mills, Cold pressed oil units, Millet primary & secondary processing units, Natural dyes unit and Telmeric processing units are a few examples. These centers serve as training hubs and may be used by farmers & entrepreneurs on rental basis.

PJTSAU Products are popular under brand names.....
The College of Community Science has been a pioneer in developing food processing and eco-friendly textile technologies with focus on training students, women, and artisans towards entrepreneurship. These centers have attracted accolades from all around.

**MILLET PROCESSING AND INCUBATION CENTRE**

- Millet Cookies supplied to 250 Social welfare hostels to add nutrition to the inmates’ diets.
- Second common incubation centre for millets was established under “one district one product” with MOFPI funding of Rs 2.68 crore [2021].

**NATURAL DYES PROCESSING AND INCUBATION CENTRE**

- The beginning .... 5 crore funding from Telangana State Pollution Control Board for center development.
- Environmental stewardship: Produced 81 tons of natural dyes for coloring clay Ganesh idols and 1.5 tons of eco-halt colors.
- Social responsibility: Trained local artisans in natural dye production from plant sources.
- Make a colourful statement.
PITSAU entered into collaborative agreements with academic, research institutes and industry to facilitate faculty and students exchange for capacity building and collaborative research in emerging areas such as speed breeding, nanotechnology, food processing, drone technology, supply chain management.

**AREAS OF COLLABORATION**
- 7 PG Students exposed to international research
- 102 faculty participation in conferences overseas
- 8 international conferences
- 10 National/Regional conferences
- 16 National workshops/Brainstorming Sessions

**MoU Signed with...**
- University of Hohenheim, Germany
- CASNARAI, Hyderabad
- FMC
- N R S C, Hyderabad

**INTERNATIONAL COLLABORATIONS**

**SHARING... LEARNING... GROWING TOGETHER...**

**COLLABORATIONS**
- National: 74
- International: 16
Forging closer ties with the industry...
Bridging the gap... From theory to application

CII
PJITSALU is the first University to become a member of Confederation of Indian Industry which facilitated a unique view of industry vision and expectations. This partnership resulted in 3 AGRI TECH SOUTH Conferences & Expos of PJITSALU which attracted more than 2000 visitors a day.

TAFE
The University has forged individual agreements (26) with diverse agro industries to facilitate student internships, projects and collaborative research with faculty.

PLAY AND LEARN... Training the service technician for efficient farm mechanization. The University and TAFE (Tractors and Farm Equipment Limited) - the farm machinery giant established JIFM and PTC - a training center for skilling the students and rural youth in tractor and farm machinery maintenance.
Connecting People ....
Creating Platforms for Idea Exchange & Collaboration Sprouts

PJITSAU takes pride in hosting International & National conferences and meets on contemporary & emerging areas, bringing together global & national luminaries and budding scientists on a single platform to share scientific insights.
GOING GREEN

Driving the natural resource and environment conservation movement in the University

In tune with Sustainable Development Goals [SDG], the PJTSAU has adopted several green initiatives that are water and energy saving while recycling waste in sustainable manner in most of its campuses.

Other Green Initiatives...
- Roof water harvesting pits .. in all colleges
- Sewerage treatment plants.....CAE, Sangareddy
- Automated LED Campus lighting ...Energy saving
- E waste disposal as per Govt. norms
- Paper recycling through authorized dealers
- Vermicomposting of agricultural waste
AGRI - BIODIVERSITY PARK

For the first time in India PJTSAU established Agri-Biodiversity Park in 60 ha.

- To restore biodiversity of Deccan region of Telangana.
- To derive ecological, cultural and educational benefits.
- Developed 20 natural communities of 1000-1500 Indigenous species.

Diversity of the Park

439 species of floral diversity includes trees (80), Shrubs (54), Climbers (52), Herbs (206), and Grasses (39).
348 species of Faunual diversity Birds (139), Mammals (16), Herpetofauna (42) and Invertebrates (151).

Conservation measures undertaken by PJTSAU

- Plantation of native and economically important forest species
- Butterfly garden with host plants
- Database on biodiversity
- Provided artificial neat bases to attract and enhance breeding potential
- Spatial distribution maps using GIS tools
- Home breeders for all trees and biodversity aspects
- Conduct of awareness programs to all sections of people
Dynamic Governance......Efficient Administration ......
Happy Work Force......Enhanced Productivity

Shaping up as a new University, PJTSAU, put in earnest efforts to streamline the administrative procedures and controls leading to efficiency and discipline in governance.

Initiatives

Securing University Property

- All University lands across campuses mutated in the name of PJTSAU
- Drone mapping of main campus, protecting the University property against encroachments

Transparent and Merit based Recruitment

- Faculty
  - 179 Assistant Professor recruited in 2018
- Non-Teaching
  - 96 JACs appointed through TS PSC
  - 51 Compassionate Appointments in relevant cadres

Regular Career Advancement / Promotions

- Five CAS Selections for faculty (2016 to 2021): 391 Beneficiaries
- Regular promotions for Non-Teaching Staff: 210 Beneficiaries

Prompt pay revision Implementation

- Faculty: UGC Pay revision 2016 implemented in 2019
- Non-Teaching Staff: PFC 2015 implemented
  - Monetary benefits w.e.f. 02.06.2014
  - PRC 2020 implemented
  - Monetary benefits w.e.f. 01.04.2020

Statutory body meetings for transparent and timely implementation of academic and administrative initiatives

- Board of management - Bi-monthly
- The Research and Extension Advisory Council (REAC): 02
- Academic Council - Half yearly

Central and Regional monitoring and Feedback meetings

- Monthly University Officers meetings to review on-going academic, financial and civil works
- Bi-monthly meeting with AD’s, ADR’s (2016 to 2022)

Achievements

- The efficient governance reflected in the high research productivity...
  - >3000 peer reviewed publications in NAAS rated journals

- Extramural funded projects worth 11 cores sanctioned to the University

- Direct receipts have been enhanced twenty fold through food product
  - Industry sponsored research and self financed US administers

Best Center Awards bestowed by ICAR

- Rice Breeding – ICAR-PRC Rice Research Center, Rajendranagar.
- Entomology – ICAR-PRC, Warangal.
- Outstanding ICARPRC MSc. center – MSc. Research Center, Rajendranagar.
- Best Performance in Breeder Seed Production – MSc. Research Center, Rajendranagar.
- Commercialization of Technology – MSc. Research Center, Rajendranagar.

- Best Weed Management Center – ICARPRC on weed management, Rajendranagar.
- Best Performing Center – ICARPRC on Ferage crops and utilization, Rajendranagar.
- Best Center in an farm research category – ICARPRC on an Integrated Farming system, Warangal.

Other Prestigious Awards

- IOM – Outstanding dissemination and outreach of Agromet advisories – Agromet field Unit, PJTSAU
- NABARD Water Conservation Institutions Award – Krishi Vigyan Kendra, Palam.
- Mahindra Samriddhi India Agro Awards Krishi Shiksha Sammanan Runner up – Water Technology Center, PJTSAU, Rajendranagar.
- Jury Prize -3 for short film on More crop per drop community drip irrigation in tank command Areas of Telangana at MANASA April, Film festival – Electronic Wing, PJTSAU.
Student graduation ceremony.... A rite of passage.... for higher opportunities and achievements

- Timely award of Degrees -5 Convocations held since inception
- First University in the State to organize convocation in an online mode during COVID pandemic in 2020 & 2021

Distinguished Orators at the Convocations

- Dr. Trilashan Mehepatra (First Convocation)
- Dr. S.C. Paradn (Second Convocation)
- Dr. S. Ayyappan (Third Convocation)
- Dr. Guruvada Raju Chintala (Fourth Convocation)
- Dr. Sarmesh Chund (Fifth Convocation)

Celebrations

"adho adho adho adho..."