



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

PJ TSAU

A Transformative Journey

2014 - 2022

DESTINATION EXCELLENCE

Concept

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Content and Design

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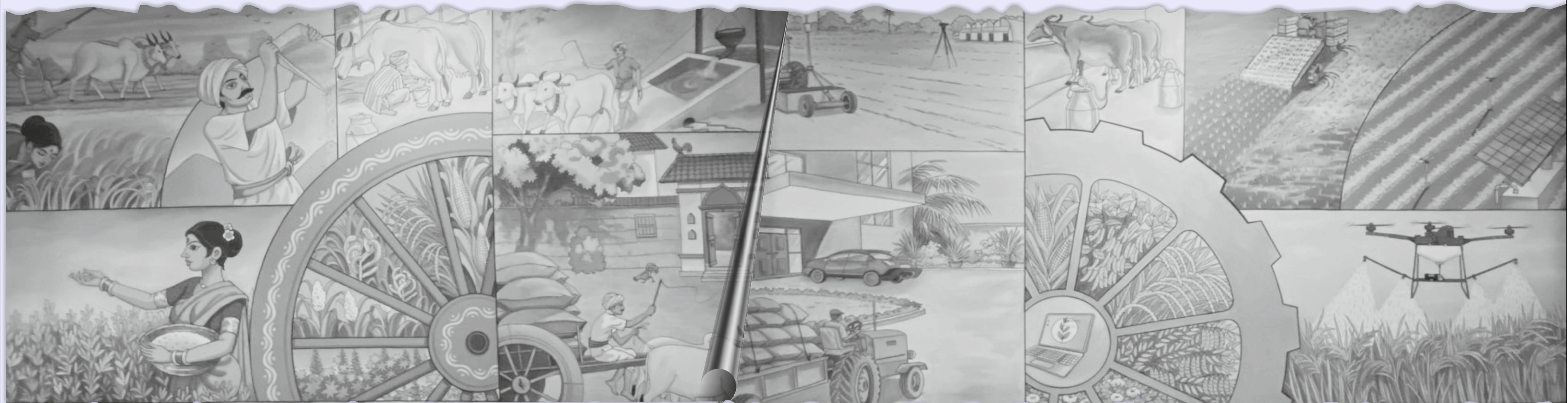
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PAIO, AICC and PJ TSAU Press

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Contributors

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Technical officers, Faculty and Administrative Staff.**

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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





ISO 9001: 2015 Certified Organization

Who We Are...



Professor Jayashankar Telangana State Agricultural University (PJ TSAU) is the only farm university in Telangana State which provides quality education, location specific research and farmer outreach programs to address the needs of the industrious farming community of the state. The University was christened in honour of the fervent Telangana ideologue and an eminent educationist, Professor Jayashankar.



V. PRAVEEN RAO
VICE CHANCELLOR
PJ TSAU



Striving for a greener tomorrow

The Trajectory of PJ TSAU Towards Excellence...

The seeding of **The Professor Jayashankar Telangana State Agricultural University (PJ TSAU)** in 2014 has led to an arching academic tree of agri-education excellence. This transformative journey has been a 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, PJ TSAU 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, Krishi 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 programmes 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 toward translational research to take the products and research outcomes to societal use and for bettering rural livelihoods has shaped PJ TSAU 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.

Catalysing 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 PJ TSAU has been remarkable but there are miles to travel to excellence.....

As PJ TSAU 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



The Hon'ble Chief Minister Sri K. Chandrashekar Rao formally initiated the journey of PJTSAU (3rd September, 2014)

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

Quality and Commitment are the two foremost values that define PJTSAU



MAIN CAMPUS OF THE UNIVERSITY IS SPREAD ACROSS
2538 ACRES

OTHER CAMPUSES ACROSS TELANGANA ARE SPREAD OVER
2000 ACRES

OUR VISION

PJTSAU envisions itself as a Centre of Excellence, a one stop destination for agricultural innovation encompassing education, research and extension through all its faculties, 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.



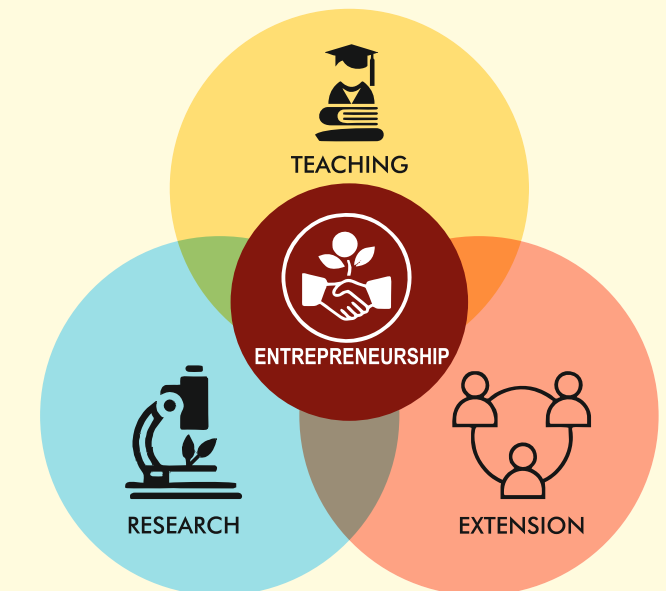
OUR MISSION

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.



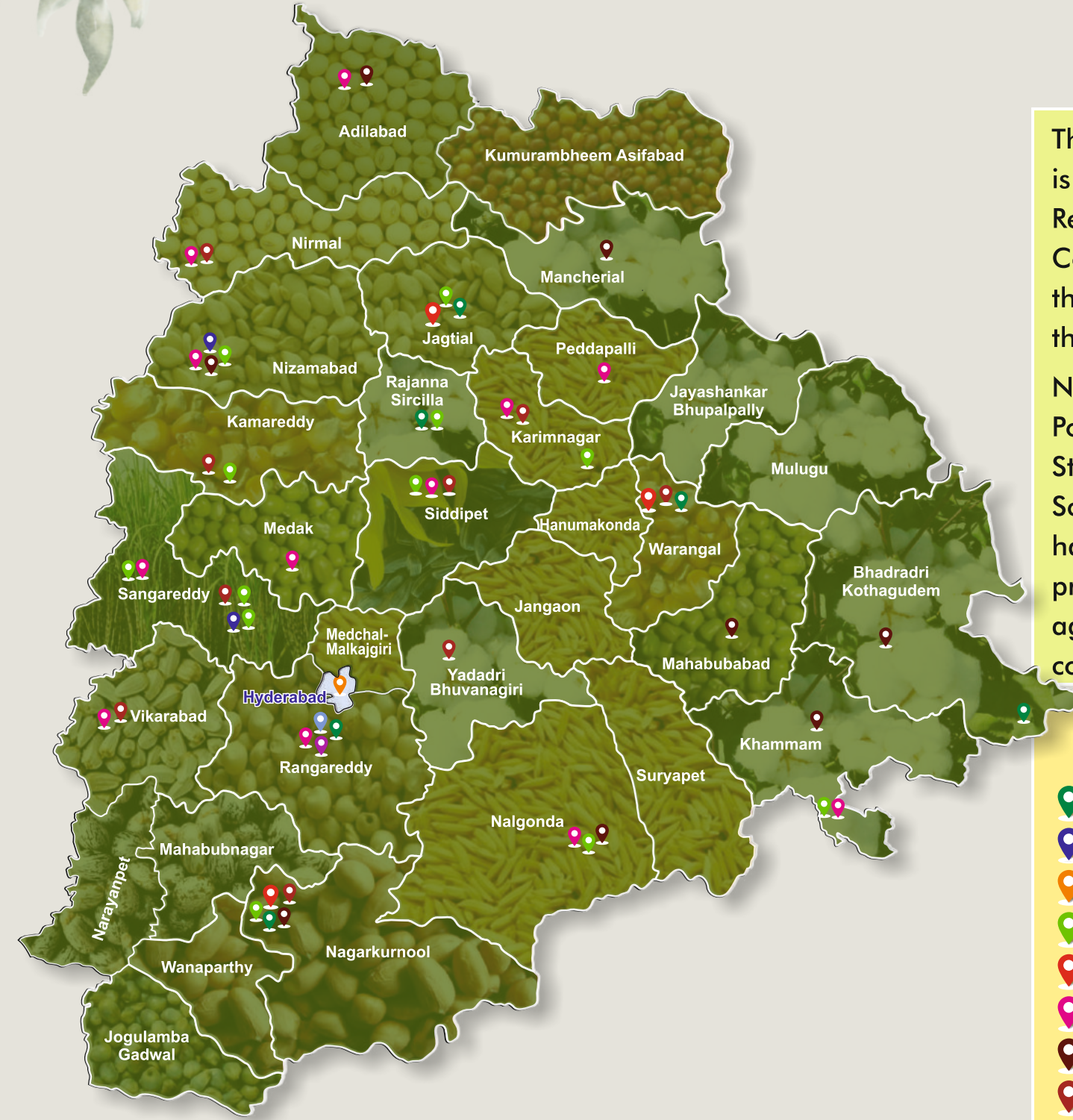
OUR MANDATE

- 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



FACETS OF UNIVERSITY

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.

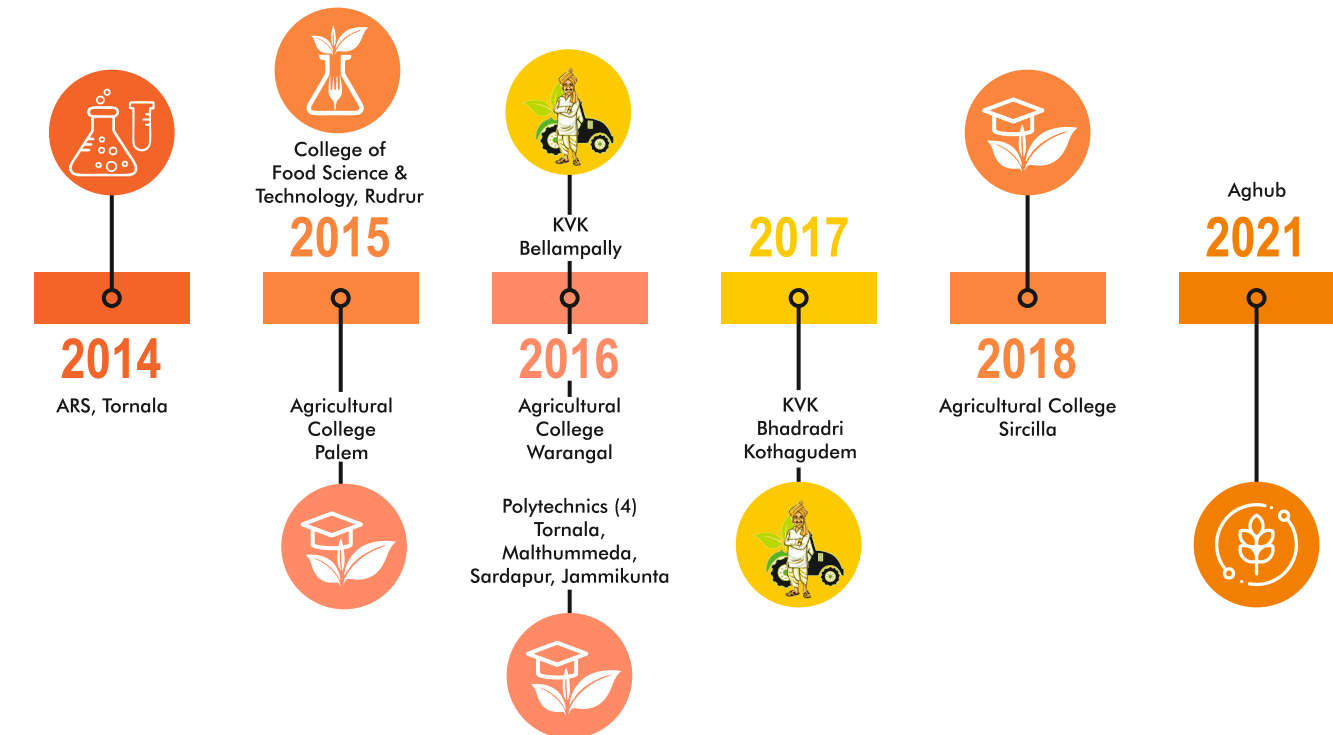
New Colleges [4], Polytechnics [4], Research Station [1], Research Schemes [2] and KVKs [2] have been established to provide the much needed agri services to remote rural communities.

- Agricultural College
- Technology College
- College of Community Science
- Polytechnic
- Regional Agricultural Research Station
- Agricultural Research Station
- Krishi Vigyan Kendra
- DAATTC
- Specialized Centre
- Aghub

List of Centres

- COLLEGES**
- 6 Agricultural Colleges**
Rajendranagar, Aswaraopet, Jagtial, Palem, Warangal, Sircilla
- 2 Technology Colleges**
College of Agricultural Engineering, Kandi
College of Food Science & Technology, Rudrur
- 1 College of Community Science, Saifabad**
- 12 Polytechnics**
Palem, Jagtial, Kampasagar, Basanthpur, Madhira, Sangupet, Jammikunta, Malthummeda, Tornala, Sardapur, Rudrur, Kandi (AE&T)
- RESEARCH STATIONS**
- 3 Regional Agricultural Research Stations**
Palem, Jagtial, Warangal
- 12 Agricultural Research Stations**
Kampasagar, Tandur, Adilabad, Karimnagar, Mudhole, Kunaram, Rudrur, Madhira, Basanthpur, Tornala, Nathnaipally, Rajendranagar
- 29 AICRP and AINP Centres**
- 7 GoI Schemes**
- EXTENSION CENTRES**
- 9 DAATTCs**
(District Agricultural Advisory and Transfer of Technology Centres)
Mudhole, Karimnagar, Malthummeda, Warangal, Tornala, Sangupet, Yadadri Bhuvanagiri, Tandur, Palem
- 8 KVKs (Krishi Vigyan Kendras)**
Malyal, Rudrur, Wyra, Adilabad, Kampasagar, Palem, Kothagudem, Bellampally
- 4 Specialized Centres**
Extension Education Institute, Agricultural Information & Communication Centre and PJTSAU Press, Agricultural Technology Information Centre, Electronic Wing - Rajendranagar
- 1 Aghub**
Rajendranagar

NEW INSTITUTIONS ESTABLISHED



PJ TSAU

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 Agriculture

Agronomy, Agricultural Economics, Entomology, Agricultural Extension Education, Genetics & Plant Breeding, Plant Pathology, Crop Physiology, Soil Science, Seed Science & Technology, Agril. Microbiology, Agricultural Statistics

MBA (Agri. Business Management)

M.Tech. in Agricultural Engineering & Technology

Soil & Water Engineering
 Processing & Food Engineering
 Farm Machinery & Power Engineering

M.Sc. in Community Science

Food & Nutrition, Human Development & Family Studies, Resource Management and Consumer Science, Extension Education & Communication Management and Apparel and Textile Science

DOCTORAL PROGRAMME

Agriculture

Agronomy, Agricultural Economics, Entomology, Agricultural Extension Education, Genetics and Plant Breeding, Plant Pathology, Soil Science, Seed Science & Technology

Agricultural Engineering & Technology

Soil & Water Engineering
 Farm Machinery and Power Engineering

Community Science

Food & Nutrition, Human Development & Family Studies, Resource Management and Consumer Science, Extension Education & Communication Management and Apparel and Textile Science

Student Data 2014 – 2021

UG Programmes

3050+

Students on roll (2021) (across all the faculties and campuses)

850+

Students Intake (2021) (across all the faculties and campuses)

4000+

Students Passed out (2014 - 21) (across all the faculties and campuses)

PG/Ph.D Programmes

525+

Students on roll (2021) (across all the faculties and campuses)

235+

Students Intake (2021) (across all the faculties and campuses)

1250+

Students Passed out (2014 - 21) (across all the faculties and campuses)

Diploma

475+

Student on roll (2021) (across all the faculties and campuses)

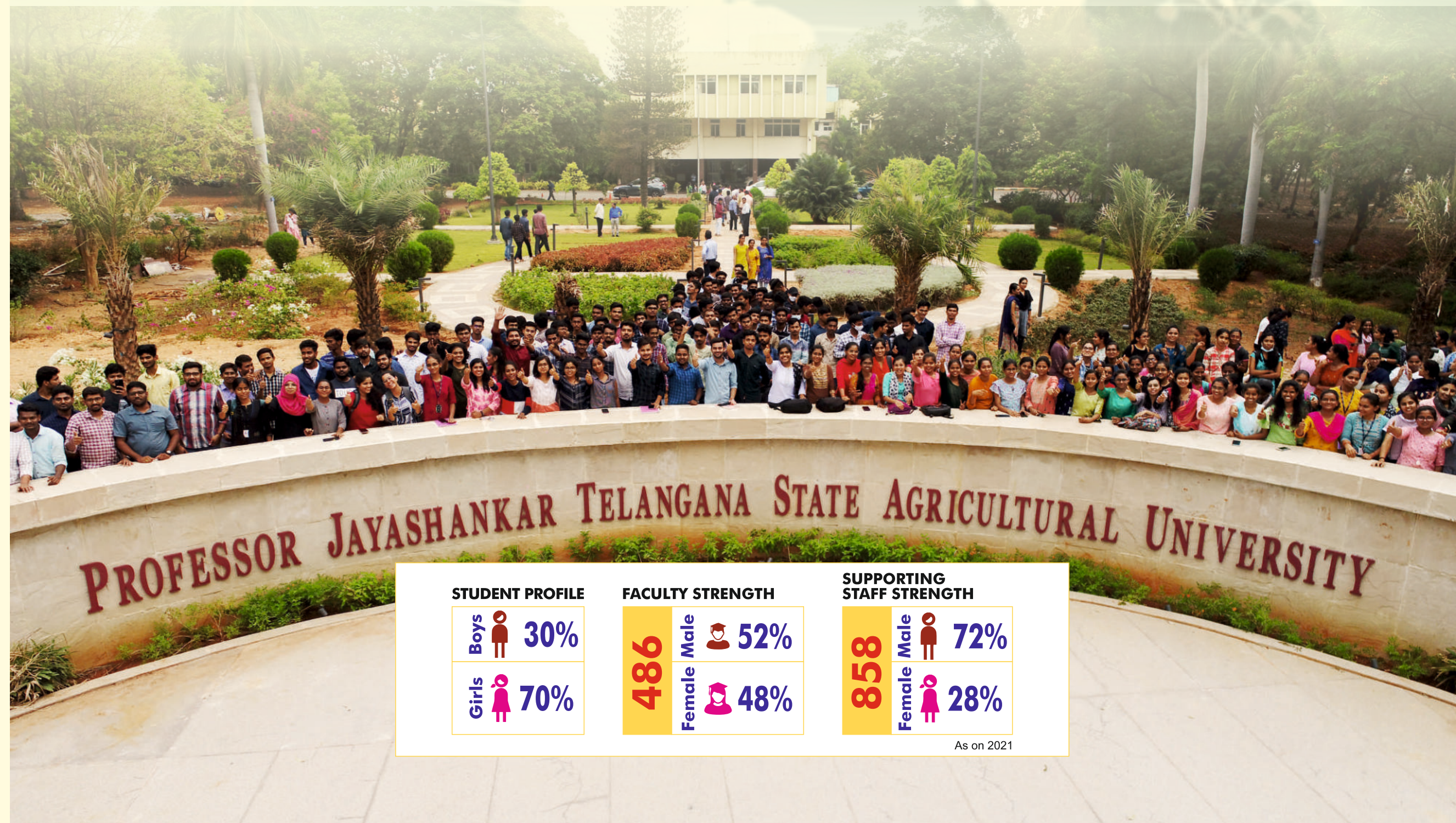
225+

Students Intake (2021) (across all the faculties and campuses)

6000+

Students Passed out (2014 - 21) (across all the faculties and campuses)

ALUMNI SPREAD THEIR WINGS ACROSS THE GLOBE



STUDENT PROFILE

Boys **30%**
 Girls **70%**

FACULTY STRENGTH

486
 Male **52%**
 Female **48%**

SUPPORTING STAFF STRENGTH

858
 Male **72%**
 Female **28%**

As on 2021

The Oldest College and Crown Jewel of PJTSAU

COLLEGE OF AGRICULTURE

Rajendranagar, Hyderabad

1946
GENESIS
AT ARI,
RAJENDRANAGAR

1948
SHIFTED TO
OSMANIA UNIVERSITY
CAMPUS

1964
BECAME THE
CONSTITUENT
COLLEGE OF
APAU

1968
SHIFTED TO THE
PRESENT CAMPUS,
RAJENDRANAGAR

1996
APAU RENAMED
AS ANGRAU

2014
BECAME THE
CONSTITUENT
COLLEGE OF
PJTSAU

2021
CELEBRATED
PLATINUM
JUBILEE



Language Lab



Knowledge Management Centre



Hitech Horticultural Complex



Soil Analysis Laboratory



NCC Firing Range



International Students Hostel

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



Academic Block

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)

FEATURES

- 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



AGRICULTURAL COLLEGE

Warangal (2016)

FEATURES

- 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 proactive farming community specializing in commercial crops



College Campus construction under Progress



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 expansive corridors for students to network
- An indoor auditorium for cultural activities that can seat 350 people
- Outdoor Amphitheatre for cool evening performances
- PWD [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)



COLLEGE OF FOOD SCIENCE & TECHNOLOGY

Rudrur (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

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 46000 sq.ft
- Dedicated engineering workshops for hands on learning and prototyping small farm machinery



COLLEGE OF COMMUNITY SCIENCE

Saifabad, Hyderabad (1964)



FEATURES

- 200 year old heritage admin. block
- Country's only Centre for Advanced Faculty Training in Community Science
- Digital Studio
- Campus Radio
- Creche & 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

Floor space of
1,12,000 Sq.ft



The most sought after College for students with creative flair catering to health and happiness of the home & community

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 fledged 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...o

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

Students trained in different experiential learning units (%)



- Number of Units**
- 3 Seed Production (Paddy, Sesamum)
 - 7 Vermicompost
 - 1 Mushroom Cultivation
 - 7 Commercial Horticulture
 - 2 Sericulture
 - 1 Agri-knowledge Material Production

- Number of Units**
- 4 Crop Production (Maize, Sweet corn, Fodder Sorghum)
 - 5 Soil and Water Analysis
 - 1 Biofertilizer Production
 - 1 Medicinal and Aromatic Plants Production
 - 2 Value Addition and Multigrain Flour Products

Common Units

The units were standardised across colleges addressing ground level societal needs



Speciality Units



STUDENT READY

DEVELOPING SKILL AND CONFIDENCE TO FACE THE REAL WORLD

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.



Experiential Learning (Food Science & Technology)

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



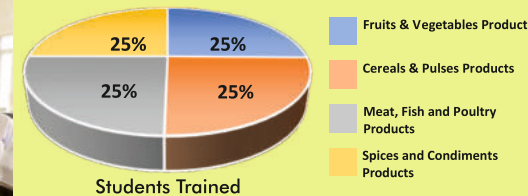
Meat, Fish and Poultry Products



Spices and Condiments Products



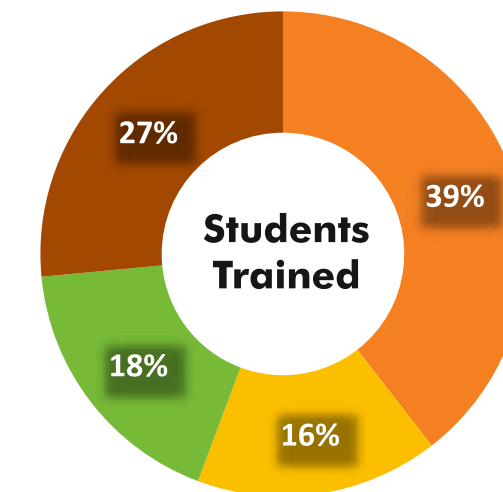
Fruits & Vegetable Products



Students Trained

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

Experiential Learning (Community Science)



Students Trained



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



Value addition to Apparel and Textiles



Students exhibit their wares to Dr. R.C. Agrawal DDG (Edn.) ICAR



Knowledge Material Production

Floral Art Production



INNOVATIVE STUDENT PROGRAMMES FOR LOCAL OUTREACH AND GLOBAL EXPOSURE



The first ever “ **తెలుగు కబురు** ” by the Students for the Farmers

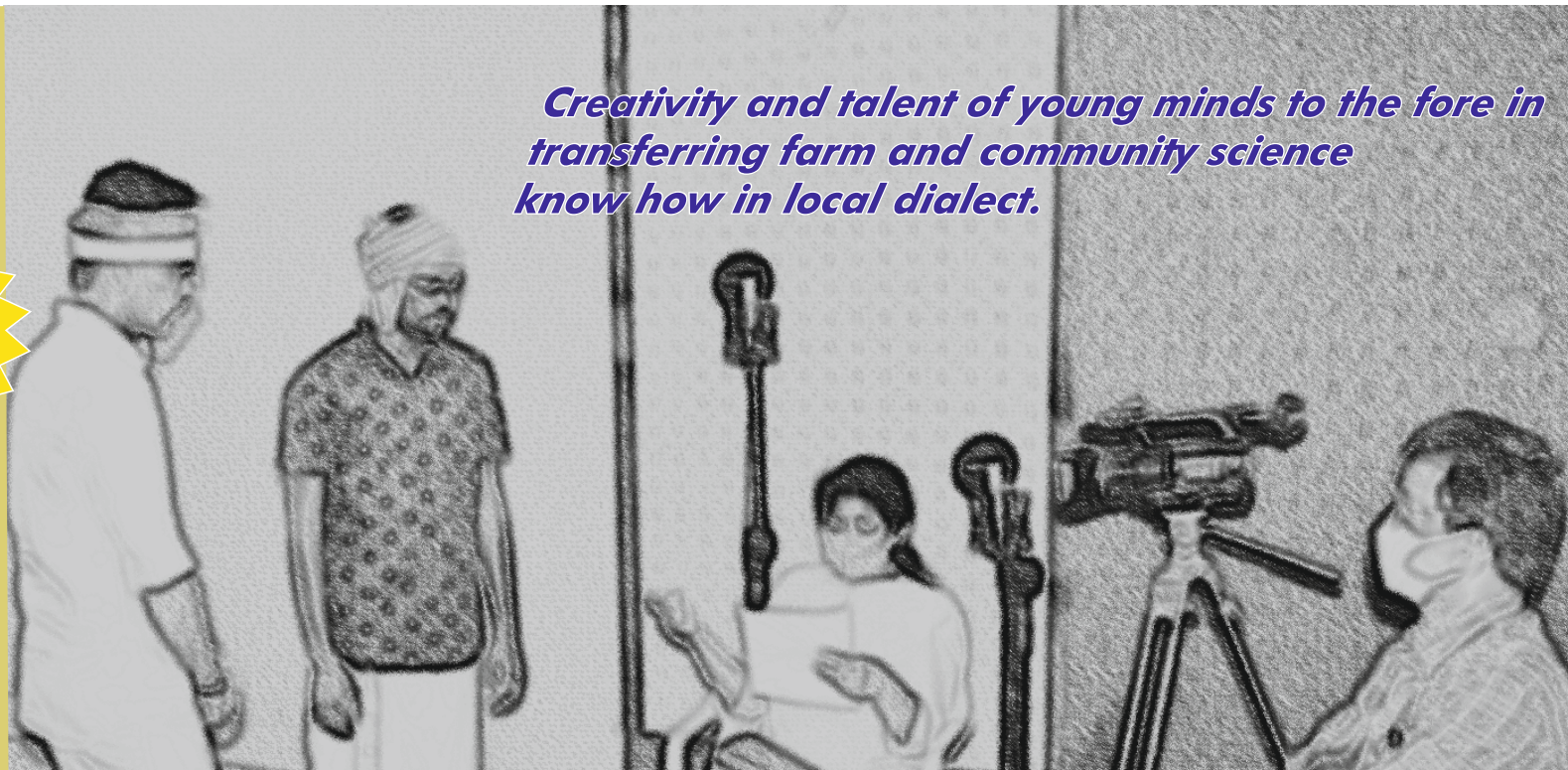


AIR Hyderabad-1
1.30 pm to 2.30 pm
Every Wednesday

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

400+
EPISODES
85%
RURAL REACH

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



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

Students interacting at University of Hohenheim, Germany

Gaining insights into research programs at Cornell University, USA



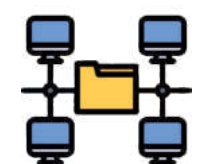
Academic Reforms

THE PATH TO QUALITY EDUCATION & POST GRADUATE RESEARCH INNOVATIONS



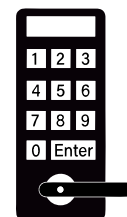
Central Examinations Centre

Dedicated centre for question paper setting, Evaluation and Record management for Under graduates with 500+ capacity spacious examination hall at main campus. All other campuses have exclusive 250+ capacity examination halls with C.C TV surveillance for fair conduct of examinations.



SAPR [2017]

Digitized Student Academic Performance Repository with access to Teacher, Student, Administrator



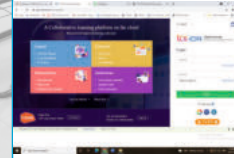
NAD Digi Locker (2018)

All degree certificates uploaded to 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 TCSion platform



National test based PG & Ph.D admissions (2018)

Admissions through ICAR - AIEEA/AICE for attracting merit & promoting outward flow to reputed institutes



External Question paper setting for PG (2016)

Testing teaching and learning standards by inviting external semester final exam question papers



External reviews of research synopsis (2020)

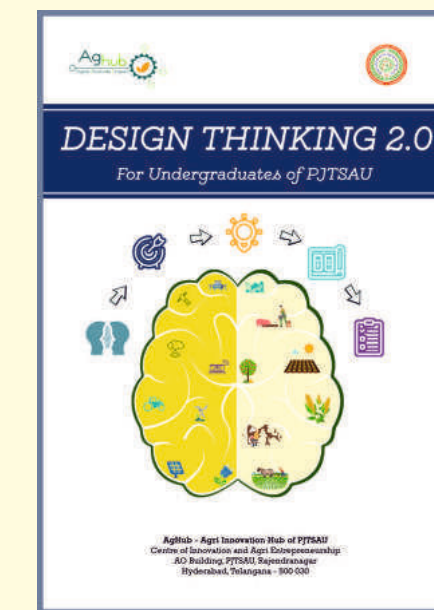
Assuring innovative research addressing real time agricultural issues through external peer reviews



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 PG& Ph.D students

30+
Participants



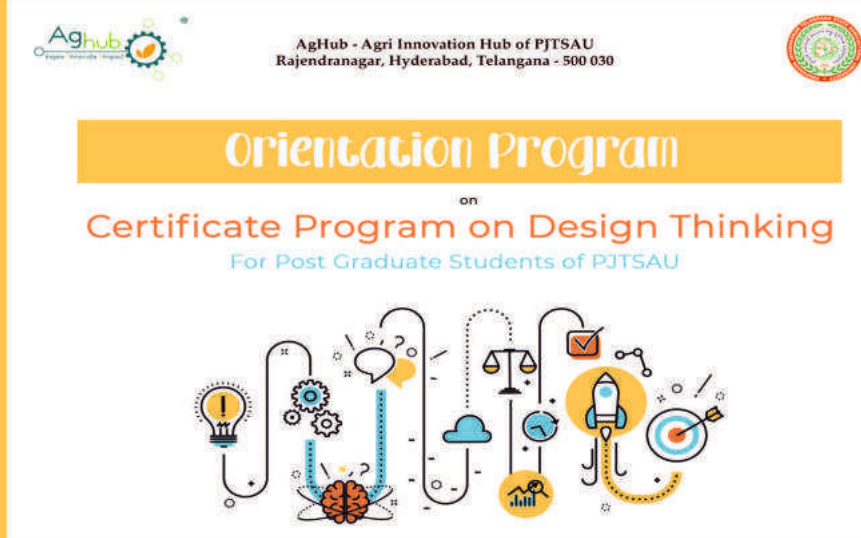
THINK OUT OF BOX



PITCH IDEAS



WIN PRIZES



Winner of Idea Sprout 1.0 2022



Research Carrels at Knowledge Management Centre for PG Students

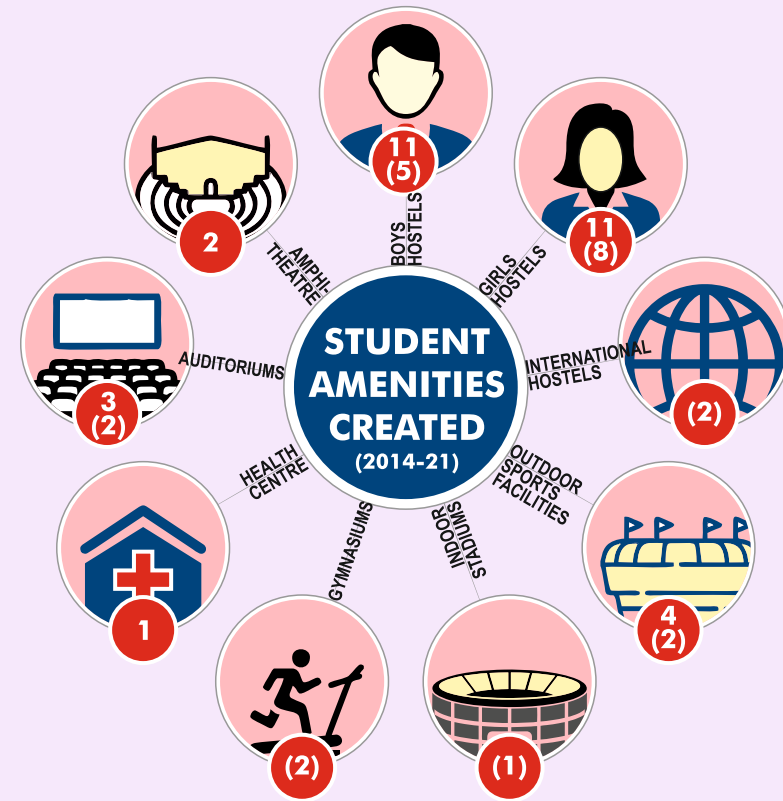


Self Check RFID Library System

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.



Figures in parenthesis indicate renovations



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.



Students spend their leisure time on the sports grounds and gymnasium to keep physically fit and mentally alert.



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



PJ TSAU AS THINK TANK FOR STATE AGRICULTURAL POLICY

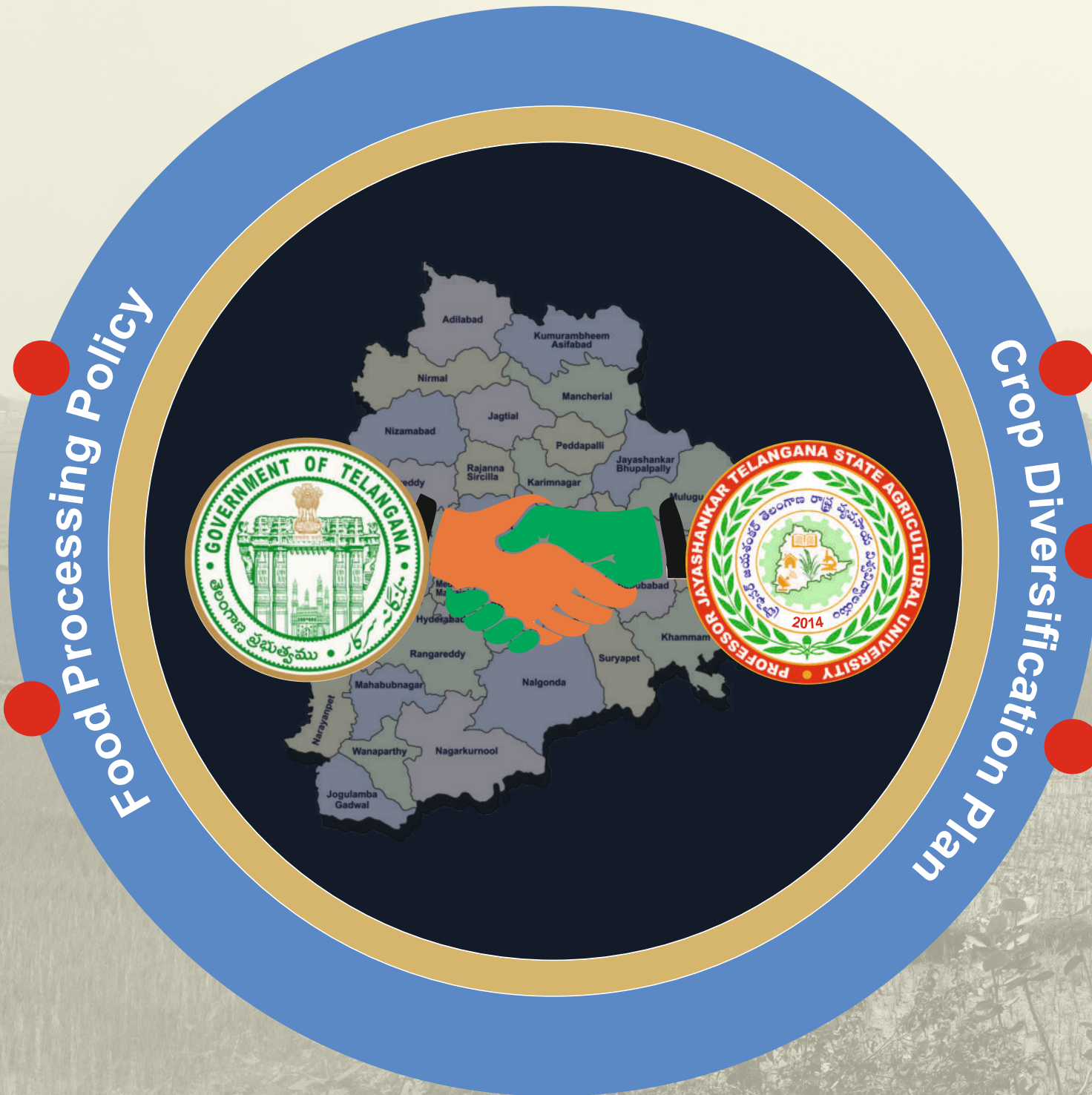
The research agenda of the university has its base in the real time agricultural problems in the State. The critical planning & execution of research projects have led to outputs that have aided the policy makers to initiate the flagship programmes for crop diversification, input use efficiency, farm mechanisation, food processing and market driven agriculture



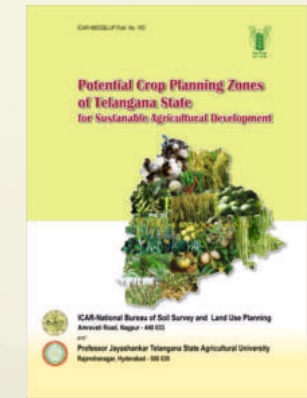
Pre-sowing and pre-harvesting price forecasting for 16 crops of the state. Monthly commodity outlooks and crop updates for production and marketing decisions. Domestic and overseas price trends from Market Intelligent Centre at PJTSAU



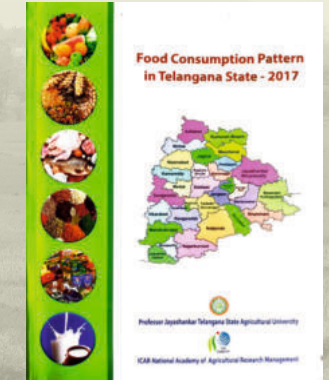
Enhanced revenue generation from value added products as compared to direct produce selling. Pilot units established for value addition for increasing non-farm income from Safflower, Redgram, Groundnut, Sesame and Turmeric



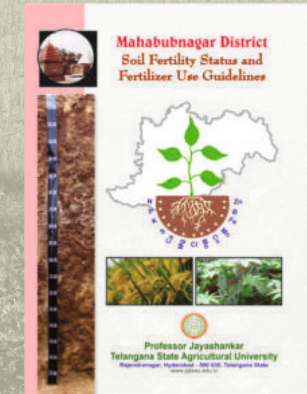
Soil, water, weather mapping based identification of cropping zones in the State



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



STRENGTHENING RESEARCH INFRASTRUCTURE... FOR IMPACTFUL TECHNOLOGY BREAKTHROUGHS

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.



ESSOR JAYASHANKAR TELANGANA STATE AGRICULTURAL UNIVERSITY
REGIONAL SUGARCANE AND RICE RESEARCH STATION,
PLANT TISSUE CULTURE LABORATORY

Tissue Culture lab at RS&RRS, Rudrur

Market Intelligence Centre Sponsored by Department of Agriculture, Telangana

RS & GIS lab with the Technical Support of NRSC, Hyderabad

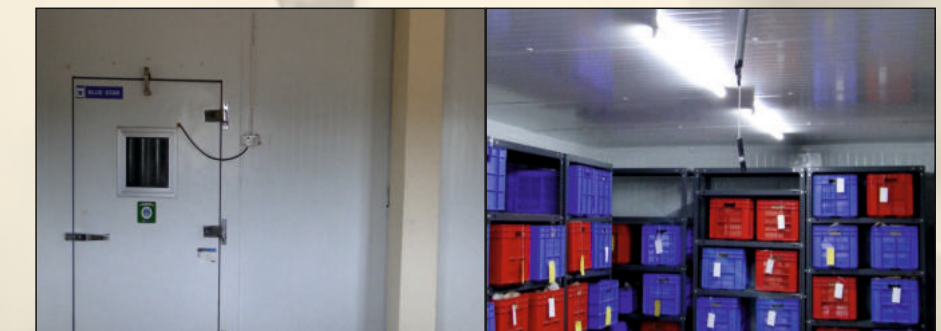
New Office cum Research Infrastructure



ARS, Karimnagar



ARS, Tornala



Maize Germplasm Bank (Cold Storage Units), Rajendranagar



RS & RRS, Rudrur



ARS, Madhira



Misting units at six Rice breeding locations

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, EEl premises, Rajendranagar offers analytical services for testing pesticide residues in fresh produce through LCMSMS & GCMSMS, HPLC, GC, ECD, NPD. Generates data on pesticide MRL in food & PHI for various crops for AINP on pesticide residues/CIBRC.



TC-7508



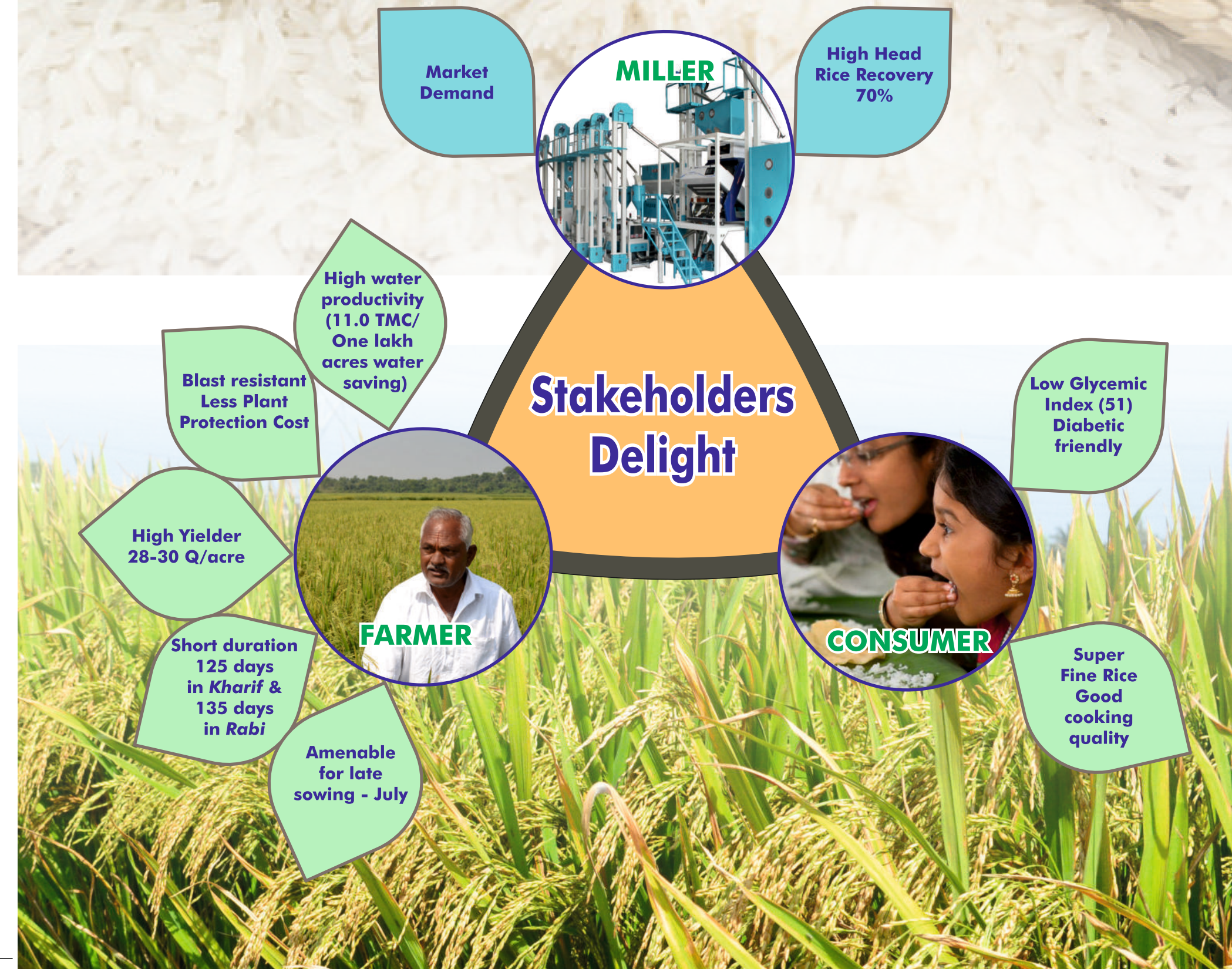
The MOFPI Quality Control Laboratory, EEl permises, Rajendranagar Offers food quality testing for proximate analysis in food commodities



TC-6135

Telangana Sona (RNR 15048).... Low Glycemic Index, Super Fine Rice Variety....

Another *rohinitor* from the Deccan.....Reaping A Bountiful Harvest



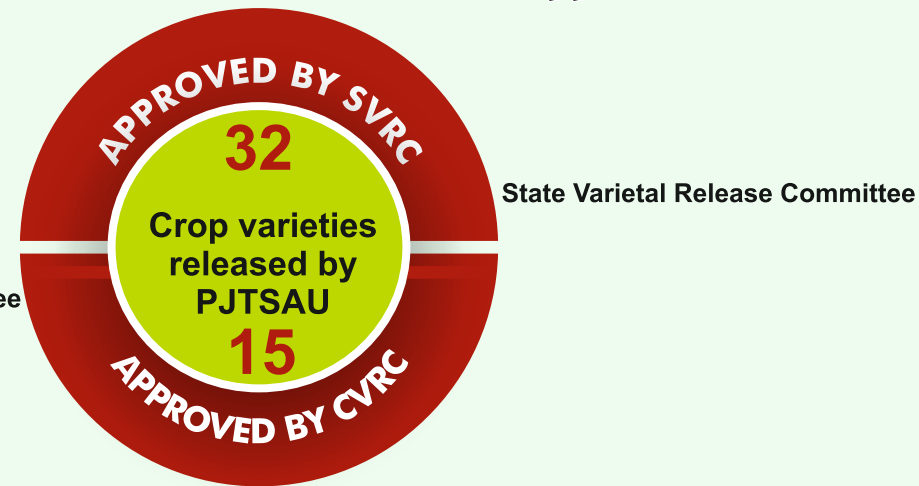
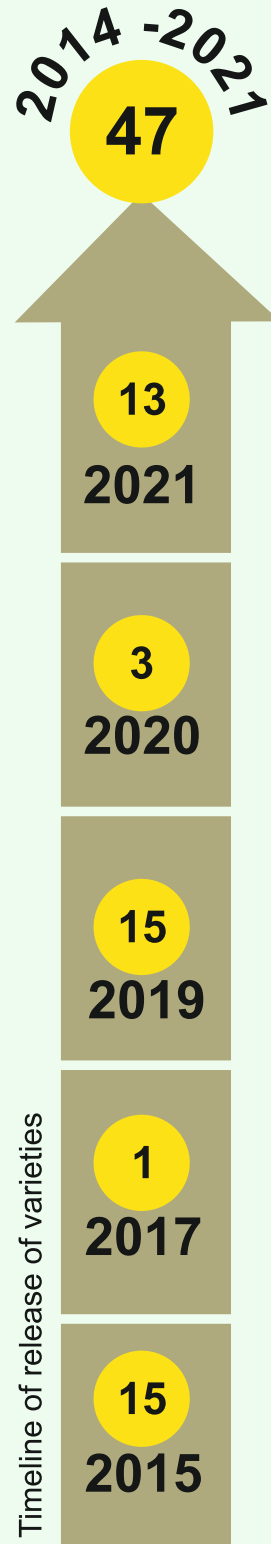
Released and notified for the States of Telangana and Karnataka in the year 2015, has spread like wildfire across the country in over 24 lakh acres



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



SESAME
Jagitial Til – 2 (JCS 2454)

- Late maturity variety
- Moderately resistant to powdery mildew and alternaria leaf spot
- Suitable for late sown situations



SOYBEAN
Adilabad Indore Soyachikkudu – 1 (Alsb-50)

- Medium duration variety
- Resistant to pod blight, frog eye leaf spot, alternaria leaf spot
- Tolerant to shattering even on delayed harvesting up to 7 – 10 days



COTTON
Adilabad Kapas – 1 (ADB 542)

- Medium duration
- Non-Bt straight variety with good fibre quality and chain boll bearing habit
- Tolerant to bacterial blight and tobacco streak virus



GREENGRAM
Yadadri (WGG 42)

- Early maturity variety
- Suitable for machine harvest and cultivation preceding paddy or succeeding cotton
- Resistant to Yellow Mosaic Virus



REDGRAM
Warangal Kandi – 1 (WRGE 97)

- Mid-early variety
- Moderately resistant to Fusarium wilt
- Tolerant to drought

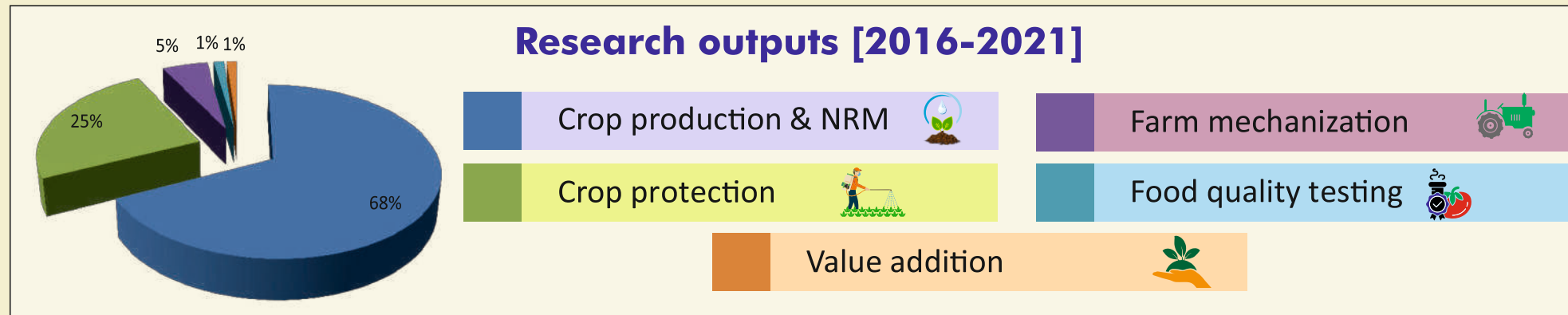


MAIZE
Karimnagar Makka – 1 (KNMH 4010131)

- Early maturity hybrid
- Resistant to Turicum leaf blight, Maydis leaf blight, Rajasthan downy mildew and Erwinia stalk rot

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-Cannon for vertebrate pest management

IOT Based Bioacoustics Solutions against Wild Animals in Agriculture fields

2. Healthy Foods

Jowar Hot Extruded Snacks
Ready To Reconstitute Little Millet Smoothies
Protein Rich Millet Based Biscuits
Nutri-Cereal (Millet) Vermicelli
Multi Grain Flour
Jowar Pasta
Ragi Noodles
Low Glycemic Index Multi Grain Roti Mix

Validated technologies popularized across State

DRY DIRECT SEEDED RICE

Direct sowing of paddy on well prepared unplugged soil either manually or mechanically with the onset of monsoon.

- Water saving - 30% (304 mm/ha)
- Labour saving - 27%
- Production cost saving - 25% (Rs.9000/ha)
- Less GHG emission - 25%
- Promoted in 50,000+ acres

MECHANIZATION IN MAIZE

Introduced multi crop vacuum planter for seeding and combiner for harvesting in Maize for increased profits.

- Saving in Seed rate - 7.5 kg/ha
- Cost - Rs.1500/ha
- Time saving in sowing - 21 hr/ha
- Time saving in harvesting - 62 hr/ha
- Crop stand - Uniform
- Energy saving - 15%
- Net saving - Rs. 11,000/ha
- Adopted in 2 lakh acres.

SEED TO SEED MECHANIZATION IN TURMERIC

Popularised raised bed method of mechanical planting and harvesting by adopting bed maker, ridge and furrow planter and tractor drawn digger

- Seed saving - 9.5 q/ha
- Seed cost saving - Rs 19000 / ha
- Time saving - 60 %
- Crop stand - Uniform
- Water saving through drip - 40 %
- Net saving - Rs.29000/ha

HIGH DENSITY PLANTING IN COTTON

A collaborative effort of Multiple stakeholders : University, Govt. of Telangana & Seed industry.

Short duration semi compact varieties/hybrids grown at a spacing of row to row [75-90 cm] and plant to plant [10-20cm]

- High plant population - 25000/acre
- Short duration - 150 days
- Escapes pink boll worm attack
- Amenable for seed to seed mechanization
- High yield - 10-15 quintals/acre

ALTERNATE WETTING & DRYING (AWD) IN RICE

- Water saving - 30%
- Increased net profit - Saving water/electricity/labour cost.
- Tolerance to lodging - Ease of mechanical harvesting.
- Less GHG emission - 30%
- Spread across in 20,000+ Acres.

PROMOTING BROAD BED FURROW PLANTER IN SOYBEAN

- Water saving - 30% (304 mm/ha)
- Labour saving - 27%
- Production cost saving - 25% (Rs. 9000/ha)
- Less GHG emission - 25%
- Seed saving - 25%
- Saving in sowing time - 2 hr/ha
- Yield advantage - 16%
- Saving in cost of cultivation - Rs. 3500-4000/ha
- Popularised in - 50,000+ acres

PIONEERING UAV APPLICATIONS IN AGRICULTURE TAKING SMART TECHNOLOGIES TO TELANGANA FARMERS' DOOR STEP



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



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

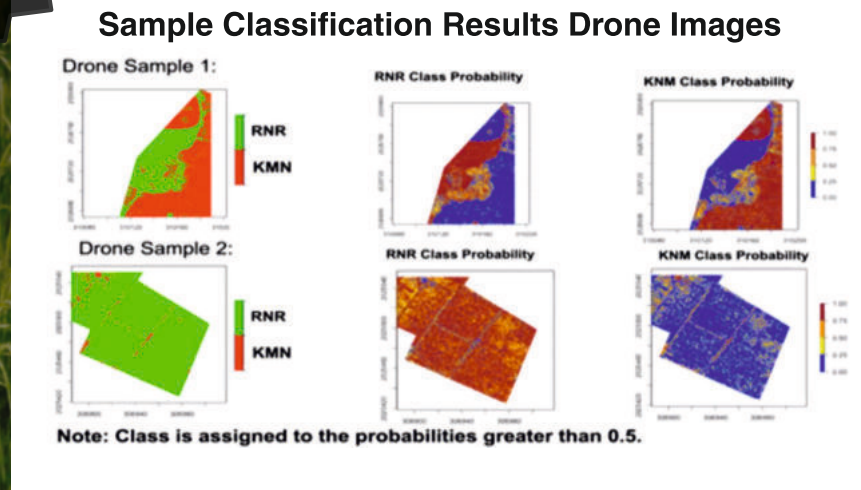
BENEFITS
Time saving -75%
Water saving -90%
Safety to applicator-100%
Fixed spraying area



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

- + PADDY + COTTON + PIGEONPEA + GROUNDNUT
- + SOYBEAN + SAFFLOWER + SESAMUM

University rice varieties spread mapped with
Multi spectral 6 band data with 0.06m spatial resolution
Area surveyed - 47.4 ha
Location - Nalgonda and Nustulapur, Karimanagr Dist.
Test Varieties & Identification Accuracy
Kunaram Sannalu [KNM-118] - 82%
Telangana Sona [RNR-15048] - 94 %
Overall accuracy of the classifier 89%.



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.

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.



Seed Mela

Initiated in 2017. The Annual Seed Fair is held across research farms/KVKs 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"**.



BREEDER SEED

18991
Quintals

FOUNDATION/
CERTIFIED/
TRUTHFULLY
LABELLED
SEED

70,656
Quintals

SEED HUBS

11,767
Quintals

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.



Commercial Unit established at KVK



Tribal Sub Plan-Capacity building of Farmers



Extension Education Institute- Capacity building to middle level extension functionaries



University Extension Outreach from 2014 to 2021

Extension methodologies	Number/Beneficiaries
Technology Assessment & Refinement	9,460
Front Line Demonstrations	7,133
Vocational / Skill Trainings	754/15,546 Beneficiaries
Exposure / Field Visits	3,608 Beneficiaries
Diagnostic Field Visits	8,435
Field Days	404/20,722 Beneficiaries
Kisan Melas/ Agril Exhibitions/ Rythu Sadassus	251/49,492 Beneficiaries
Technology Week	481/6,800 Beneficiaries
Village Adoption Programme	148 /88,523 Beneficiaries
Seed Production & Supply	11,748 Quintals
TSP/ SCSP	43,449 Beneficiaries
Commercial Units	105 Units/ 326 Beneficiaries

Flagship Training Programmes

MAO's as Agronomists(2016-17) - 599 Agricultural Officers trained
Telangana Yuva Rytu Sagubadi(2015) - 330 young farmers trained

Disaster Management

Timely advisories saved Maize and Cotton crops from Fall Army Worm and Pink Boll Worm damage to an extent of 80%



The Hon'ble Vice President, India, Sri M. Venkaiah Naidu visiting PJTSAU stall at Agri Expo 2020



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

A showcase of University activities and technologies with an eye catching display of updated information for info seekers.

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



Agri Info Hub...



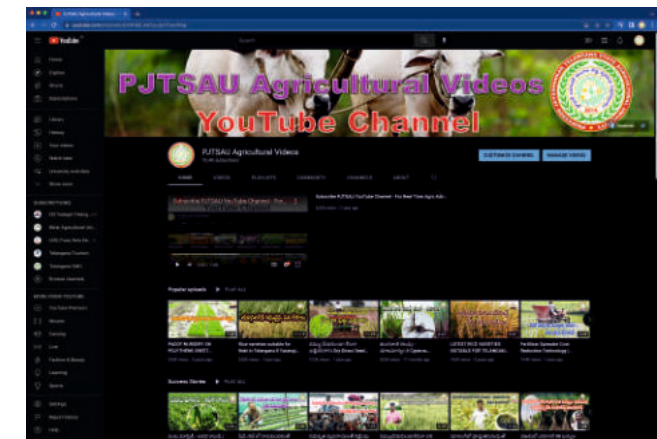
Audio & Video Recording Studio



Editing Suite (2015-16)



Digital repository



Launched on 30-08-2017

We Communicate through.....



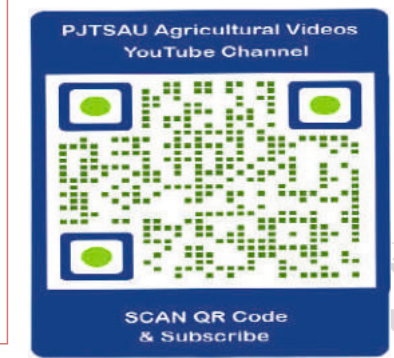
Model depicting Implementable agro technologies in a rural landscape



- + Second ranked channel in the country among State Agricultural Universities.
- + 70,000+ subscribers
- + 54 lakhs+ 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.

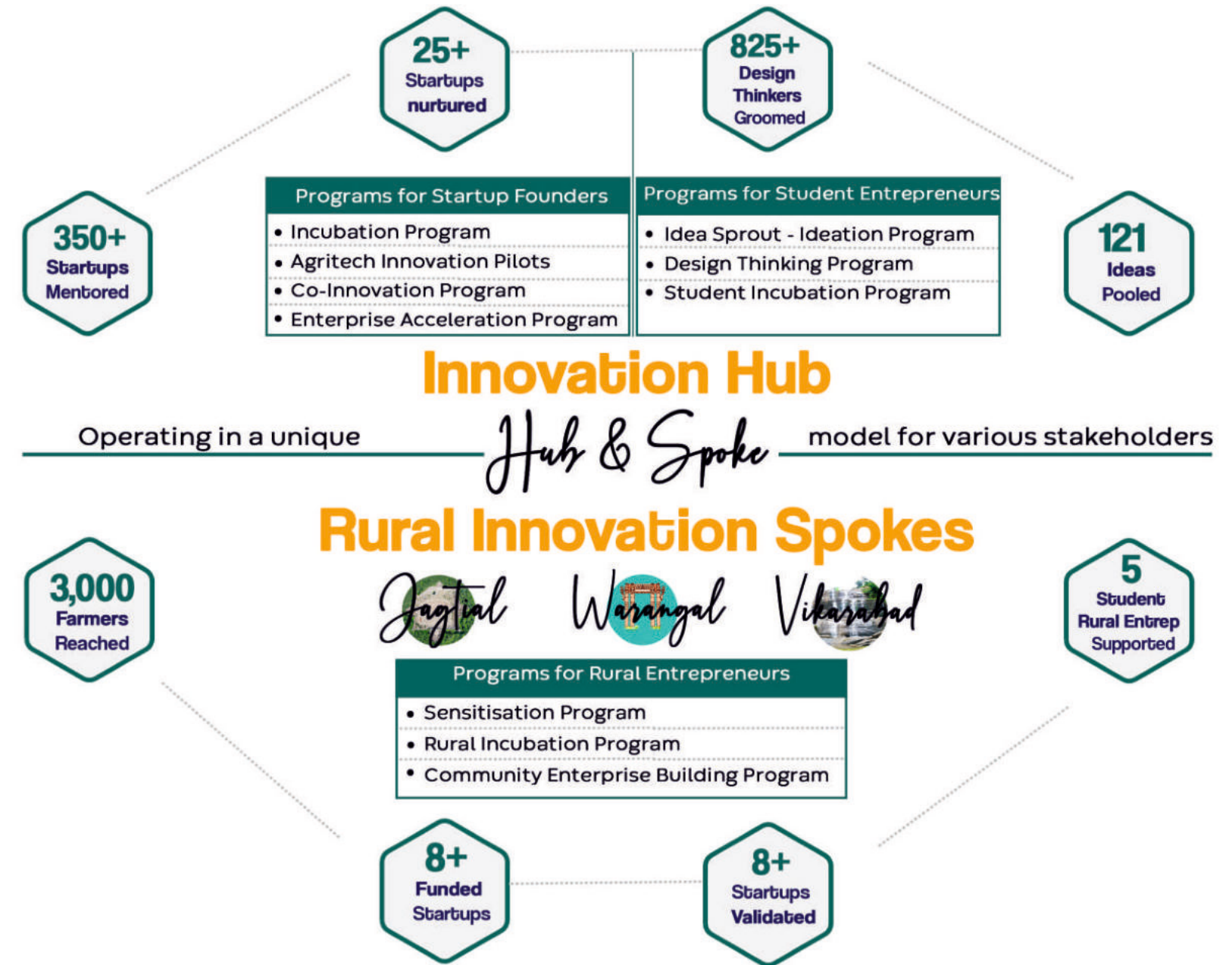
Link and Q.R code for subscription
<https://www.youtube.com/c/PJTSAUAgriculturalVideos/videos>





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.



A world class Agri Innovation Hub that promotes innovations and entrepreneurship in Agri-Food Systems for a local change with global impact.

VISION

MISSION

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



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 Termeric processing units are a few examples. These centers serve as training hubs and may be used by farmers & entrepreneurs on rental basis.



Tandur Dal – Pro Pulse

PJTSAU Products are popular under brand names.....

COLD PRESSED OILS



TURMERIC POWDER



MILLET PLUS



FRONT RUNNERS IN SPECIALITY INCUBATION ECOSYSTEM ... MILLETS AND NATURAL DYES PROCESSING and INCUBATION CENTERS

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

NATURAL DYES PROCESSING AND INCUBATION CENTRE



125 tons production over 7 years

Millet Cookies supplied to 250 Social welfare hostels to add nutrition to the inmates diets



Wide range of FSSAI Certified millet products marketed as "Millet plus"

Second common incubation centre for millets was established under "one district one product" with MOFPI funding of Rs 2.68 crore [2021]



The beginning 5 crore funding from Telangana State Pollution Control Board for center development

Social responsibility Trained local artisans in natural dye production from plant sources



Environmental stewardship Produced 81 tons of natural dye paints for coloring clay Ganesh idols and 1.5 tons of eco holi colors



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

 **74**
National

COLLABORATIONS

 **16**
International

PJTSAU 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



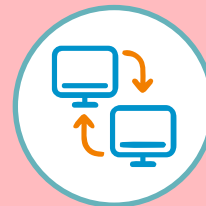
FACULTY/STUDENT EXCHANGE



COLLABORATIVE RESEARCH



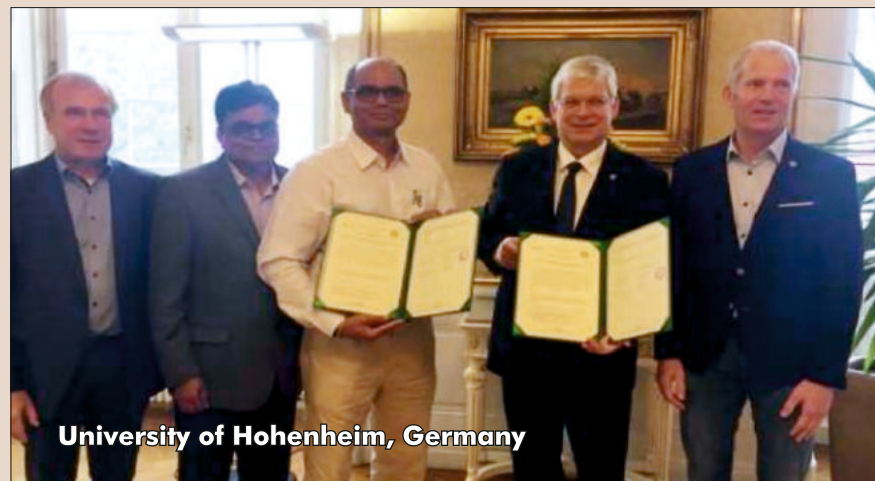
CAPACITY BUILDING



EXCHANGE OF TECHNICAL INFORMATION AND FACILITIES

- 7 PG Students exposed to international research.
- 102 Faculty participation in conferences overseas.
- 4 International conferences
- 10 National /Regional conferences
- 16 National workshops/ Brainstorming Sessions

MoU Signed with....



University of Hohenheim, Germany



ICAR-NAARM, Hyderabad



FMC



N R S C, Hyderabad



Forging closer ties with the industry... Bridging the gap... From theory to application

THE UNIVERSITY HAS FORGED INDIVIDUAL AGREEMENTS (26) WITH DIVERSE AGRO INDUSTRIES TO FACILITATE STUDENT INTERNSHIPS, PROJECTS AND COLLABORATIVE RESEARCH WITH FACULTY.



First of its kind PPP initiative among SAUs

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

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 J Farm and PTC, a training center for skilling the students and rural youth in tractor and farm machinery maintenance.

TAFE





Connecting People

Creating Platforms for Idea Exchange & Collaboration Sprouts

PJTSAU 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



IGNITE - a novel idea contest for students organized on the occasion of INSPIRE workshop



Global conference on Innovative approaches for enhancing water productivity in agriculture including horticulture

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

16
FARM PONDS
DEVELOPED ACROSS
CAMPUSES



HARITHAHARAM
1,00,000
PLANTS ACROSS
CAMPUSES



ROOF TOP SOLAR
POWER PLANT
718 KWP CAPACITY
SAVING
RS. 38 LAKHS
PER YEAR



AGRI - BIODIVERSITY PARK

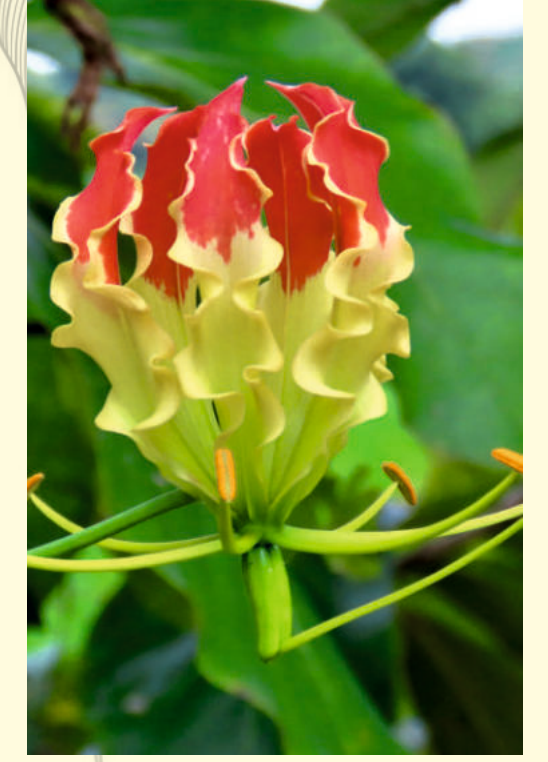
For the first time in India PJTSAU established Agri- Biodiversity Park in 60 ha.

- 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 (56), Climbers (52), Herbs (206), and Grasses (39).
348 species of Faunal 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 nest boxes to attract and enhance breeding potential
- Spatial distribution maps using GIS tools
- Name boards for all trees and biodiversity 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.

Achievements



Intiatives

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 Professors recruited in 2018



Non-Teaching

96 JACTs appointed through TSPSC
51 Compassionate Appointments in relevant cadres

Regular Career Advancement / Promotions

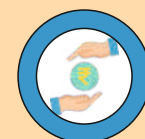
Five CAS Selections for faculty (2016 to 2021)- 391 Beneficiaries



Regular promotions for Non-Teaching Staff - 210 Beneficiaries

Prompt pay revision Implementation

Faculty : UGC Pay revision 2016 implemented in 2019



Non-Teaching Staff:
• PRC 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

30

Board of management - Bi monthly

02

The Research and Extension Advisory Council [REAC]

16

Academic Council - Half yearly

Central and Regional monitoring and Feedback meetings

95

Monthly University Officers meetings to review on going academic, financial and civil works

32

Bimonthly meeting with AD's, ADR's (2016 to 2022)



Capacity building of Staff - Foundation and refresher courses at NAARM / ICAR institutes / ICARISAT (Faculty) ; MHRD - CGG (Non-Teaching)



Staff welfare programmes SBI life Sampoorna Suraksha Group life insurance 2017
61 Beneficiaries

Performance based Awards and incentives on foundation day

Foundation Day awards instituted for Best College, Best Research Centre, Best Extn. Centre, Best Polytechnic, Best Faculty, Best Teacher (2), Best Researcher[2], Best Extension Scientist [2], Cash prize[Rs 25,000] for Highest NAAS rated paper, Cash incentive for Extramural project with highest budget outlay, Cash incentive of Rs 5000/ publication in >7 NAAS rated journals



Best Non teaching staff [19] for all cadres, Best PJTSAU UG & PG Student awards[2], Progressive farmers awards[9]



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

70

Extramural funded projects worth 11 crores sanctioned to the University

Direct receipts have been enhanced twenty fold through Seed production Industry sponsored research and self financed UG admissions



Best Center Awards bestowed by ICAR

2017

- Rice Breeding – AICRP, Rice Research Center, Rajendranagar.
- Entomology – AICRP, RARS, Warangal.
- Outstanding AICRP Maize center – Maize Research center, Rajendranagar.
- Best Performance in Breeder Seed Production - Maize Research center, Rajendranagar.
- Commercialization of technology - Maize Research center, Rajendranagar.

2018

- Best Weed Management Center – AICRP on weed management, Rajendranagar.
- Best Performing Center – AICRP on Forage crops and utilization, Rajendranagar.
- Best Center in on farm research category – AICRP on integrated Farming system (IFS), Warangal.

2020

- Best Center in on station main center category – AICRP on integrated Farming system (IFS), Rajendranagar.
- Pandit Deendayal Upadhyay Rashtriya Krishi Protsahan Puraskar 2020 – Krishi Vigyan Kendra, Wyr.

Other Prestigious Awards

2018

- IMD - Outstanding dissemination and outreach of Agromet advisories - Agromet field Unit, PJTSAU.

2020

- NABARD Water Conservation Institute Award – Krishi Vigyan Kendra, Palem.

2021

- Mahindra Samrudhi India Agro Awards Krishi Siksha Samman Runner up – Water Technology Center, PJTSAU, Rajendranagar.
- AIASA – Institution of Excellence Award 2021.

2022

- Jury Prize -3 for short film on More crop per drop community drip irrigation in tank command Areas of Telangana at MANAGE Agri. 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. Trilochan Mohapatra
(First Convocation)



Dr. R.S Paroda
(Second Convocation)



Dr. S. Ayyappan
(Third Convocation)



Dr. Govinda Rajulu Chintala
(Fourth Convocation)



Dr. Ramesh Chand
(Fifth Convocation)



జయతు జయతు పుడమితల్లి పూజాలయం
జయతు జయతు అన్నదాత సేవాలయం
చోధన పరిశోధన విస్తరణ
ముష్టిటక అల్లుకున్న అద్భుత విద్యాలయం
ప్రాఫెసర్ జయశంకర్ తెలంగాణ రాష్ట్ర వ్యవసాయ విశ్వవిద్యాలయం