Vol. 5 No. 1 January - March, 2022







Striving for a greener tomorrow...

In this issue

From the VC's Desk	1
New Initiative	
AgHub Launches Bootstrap Grant –	
Strengthening Agri Innovations	2
Workshops, Conferences, Meetings,	
Seminars, Exhibitions	
Zonal Research and Extension Advisory Council	
(ZREAC) Meetings	2
The 16 th Academic Council – Enhances the Seats	3
of UG courses	3
Collaborations	
PJTSAU and TSIC collectively providing A Niche	0
for Agri innovation space	3
PJTSAU and Agri Biotech Foundation come	
together for Collaborative Research in Crop Improvement	3
PJTSAU Signs MoU with Dhanuka Agritech	3
Limited - Impetus to Digital Dissemination	
of Technical Knowhow	4
Alliance with BIPA for Transformation of	
Agri-enterprises	4
AgHub collaborates for Strengthening the	
Agripreneurship	4
Capacity Building	
AgHub Encourages Youth towards	
Entrepreneurship	5
Enlightening on Energy conservation and	
Environmental Protection	5
Encouraging Rural Youth Towards Farm	_
Based Livelihood	5
Training Programme on Biotechnological	
Tools by Institute of Biotechnology	6
Effective Utilization of Social Media Skills for networking different stakeholders of Agriculture	6
<i>"</i>	U
Visitors	
Hon'ble Agriculture Minister, Karnataka	7
Visits PJTSAU	
Awards & Honours	7
Celebrations	7
Cups and Trumpets	7
Videos on Agro Technologies uploaded in PJTSAU	
Youtube Channel during January – March 2022	8



Visit us at www.pjtsau.edu.in

From the VC's Desk



The soil, a living entity that nurtures a multitude of macro/micro flora and fauna also serves as the vital resource for enhanced crop production &productivity that is necessary to cater to the food requirements of people world wide. The food needs of the growing global population were met through intensification of agriculture, thanks to the green revolution albiet at the cost of soil health. Nearly 11-76 % of arable lands across the country have been found to be deficient in organic carbon while 95% of soils were reported to be deficient in available Nitrogen, 50% of soils with medium potassium compounded by micro nutrient deficiencies of Zinc, Iron and Boron, all of which contribute to stagnation in crop yields. On the other hand, accumulation of toxic heavy metals

cadmium, lead and arsenic and destruction of beneficial soil flora and fauna are causing irreversible damage to the environment and human health. Imbalanced application of nutrients and irresponsible farming practices like burning crop residues, extensive tillage have led to decreased water and nutrient use efficiencies by the crops that are cultivated on such depleted soils.

The organic carbon content in the crop lands of the country was recorded below 0.5%, dire warranting a serious relook into the problem and identify the possible remedies to be implemented on priority basis to preserve and restore soil quality. An extensive popularization of balanced nutrient management with an increased application of organic manures along with practices like crop rotation, efficient crop residue management, conservation agriculture and efficient water management practices for effective implementation across the arable lands will help in resolving the problem. It is also important to identify the soil needs based on the geographies with focused remedial measures as per the requirements for improving the soil health.

The action on soil health with emphasis on maintaining soil biodiversity received a boost globally in 2012 by creation of Global Soil Partnership (GSP) as soils are a reservoir of bio-diversity. Reenergizing the plant and soil micro-biome through concerted cross disciplinary technologies would serve as a promising approach for achieving nutrient rich crops with higher yields. The GOI also in its endeavour to improve soil health status of the country introduced flagship programmes like soil health management and soil health card schemes in 2015 for replenishing the lost soil health of arable lands across the country. Around 159 million soil health cards were issued by 2021 and mapping the soil health status of the country was made possible through the programmes for adoption of soil test based nutrient requirements unlike the umbrella mode of nutrient application.

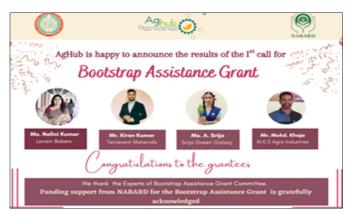
PJTSAU with an objective of soil health management of soils of Telangana, developed district wise soil maps for all the districts of the state and the research and extension wings of the varsity were also actively involved in distribution of soil health cards to farmers of the state. Further research on impact of technologies like water management, conservation agriculture, crop diversification, reduced tillage, DDSR in rice etc on soil health is under progress. The mapping of soils by adoption of technologies like satellite imaging and artificial intelligence depicting the soil health status from time to time and resolution by the farming community to adopt

Dr. V. Praveen Rao Vice Chancellor

New Initiative

AgHub Launches Bootstrap Grant - Strengthening Agri Innovations

AgHub with an endeavour to encourage agri innovations and startups by providing scaling up support has launched a Bootstarp Grant on 13th January, 2022. This opens avenues to the entrepreneurs, students and rural innovators working in the agri and allied space to avail financial assistance to kickstart their entrepreneurial journey. It has announced the Bootstrap Assistance Grant to four startups on 24th March, 2022 with a funding assistance by NABARD - National Bank for Agriculture and Rural Development.



Bootstrap grant announced to four startups

Workshops, Conferences, Meetings, Seminars, Exhibitions

Zonal Research and Extension Advisory Council (ZREAC) Meetings

Zonal Research and Extension Advisory Council (ZREAC) Meetings were organized in three climatic zones of Telangana *i.e* Central Telangana Zone, Southern Telangana Zone and Northern Telangana Zone at Balavikasa, Kazipet, Warangal, RARS, Palem and Zilla Parishad Hall, Karimnagar on 16th & 17th March, 23rd & 24th March and 28th & 29th March respectively. Special sessions on Conservation Agriculture; Illegal cultivation of HT cotton and its impact on Agricultural Ecosystem; Role of millets in doubling farmers' income and sustainable development of Telangana; Invasive pest, Thrips *Parvispinus* threat to certain crops and way forward; Over view on die back in neem & its integrated management

and Usage of drones in agriculture and future prospects were organized to enlighten the participating officials and farmers. Dr. V. Praveen Rao, the Hon'ble Vice Chancellor, PJTSAU in his address at CTZ highlighted and reiterated the importance of crop diversification to attain sustainability and further advised to carry out soil tests at regular intervals and adopt soil test based nutrient management to achieve higher yields. Dr. R. Jagadeeshwar, Director of Research, Dr. V. Sudha Rani, Director of Extension, Associate Directors of Research, Principal Scientists (Crops and Themes), District Agricultural officers of various districts, scientists and farmers participated in the programme.



The Hon'ble Vice Chancellor addressing the gathering at ZREAC, CT Zone



Director of Research interacting with the farmers at ZREAC, ST Zone

The 16th Academic Council – Enhances the Seats of UG courses

The 16th Academic Council meeting was held on 22nd March, 2021 under the chairmanship of the Hon'ble Vice Chancellor. The council discussed various issues pertaining to academics, admissions, enhancement of fee etc. The council further approved ten agenda items related to PG programmes for further action and the guidelines of FMC Science leadership programme to be implemented from academic year 2021-22. The council also decided to enhance the seats of various UG courses and convert the Seed Technology Polytechnic at Rudrur, Nizamabad to Agricultural Polytechnic.



Dr. V. Praveen Rao interacting with the council at the meet

Collaborations

PJTSAU and TSIC collectively providing A Niche for Agri innovation space

The AgHub – Agri Innovation Hub of the varsity with a motto to provide technical backstopping to grassroot entrepreneurs and students in the State of Telangana entered into an MoU with TSIC (Telangana State Innovation Cell) of the Information Technology, Electronics & Communications Department, Government of Telangana on 10th January, 2022. This collaboration will guide the innovators, entrepreneurs and students from rural areas of Telangana in understanding and developing innovations in a techno commercial angle within the agri and allied innovation ecosystem.

Sri Jayesh Ranjan, Principal Secretary, Industries & Commerce (I&C) and Information Technology (IT) of the Government of Telangana speaking on the occasion highlighted that many grassroot innovators and entrepreneurs are in the look-out for avenues to support them and this collaboration would facilitate agri innovation space, especially in the rural areas.

Dr. V. Praveen Rao, the Hon'ble Vice Chancellor, PJTSAU and Chairperson, AgHub stressed that close



AgHub inks MoU with TSIC

collaborations and partnering with all ecosystem facilitators would build a strong and enabling ecosystem for aspiring agriprenuers and start-ups. "With initiatives like AgHub, PJTSAU has the potential to be an innovation sandbox, combining the intrinsic capabilities of the knowledge and expertize in agri, food value chain links with stakeholders like farmers, aspiring innovators and start-ups".

PJTSAU and Agri Biotech Foundation come together for Collaborative Research in Crop Improvement

PJTSAU with a motto of collaborative academic, research and extension activities in the areas of Genetic improvement through genetic transformation and Marker assisted Breeding for the improvement of Agricultural crops, promoting bio fertilizers, bio pesticides usage, developing protocols in the identified technologies and large scale multiplication through field trials and demonstrations and experiential learning programs of the university entered into an MoU with Agri Biotech Foundation located in PJTSAU campus. Dr. D. Vishnu Vardhan Reddy, Director, Agri Biotech Foundation and Dr. S. Sudheer Kumar, Registrar, PJTSAU in the presence of Hon'ble Vice Chancellor Dr. V. Praveen Rao signed the MoU on 25th January, 2022.



Dr. S. Sudheer Kumar and Dr. D. Vishnu Vardhan Reddy exchanging MoUs in presence of Dr. V. Praveen Rao

PJTSAU Signs MoU with Dhanuka Agritech Limited - Impetus to Digital Dissemination of Technical Knowhow

PJTSAU and Dhanuka Agritech Limited (DAL), New Delhi entered into a collaborative agreement to establish a friendly relationship to promote and accelerate the programmes of Academic, Research & Development, Scholarship for the deserving students, Sponsorship Progammes, Extension with special reference to digital dissemination of research findings on 12th February, 2022 at PJTSAU. Dr. V. Praveen Rao, the Hon'ble Vice Chancellor, PJTSAU briefed about the national and international collaborations being carried out by the University for the benefit of farming community of the state. He envisaged that this MoU shall translate into quick action in the area of organizing conferences, providing scholarship to meritorious students, Industry attachment of scholars, standardization of SOP's for drone operations through joint action. Later the signed MoU documents were exchanged by both parties.



MoU ceremony of PJTSAU and Dhanuka Agritech Limited

Mr. Abhishek Dhanuka, National Sale Head, Dhanuka Agritech Limited, New Delhi, Dr. S. Sudheer Kumar, Registrar and other University Officers participated in the event.

Alliance with BIPA for Transformation of Agri-enterprises

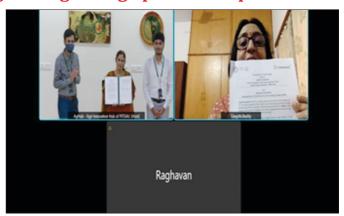


Dr. KRK Reddy, President, BIPA, Secunderabad and Dr.V. Praveen Rao, Hon'ble Vice Chancellor, PJTSAU at MoU ceremony

PJTSAU and Bio Agri Inputs Producers Association (BIPA), Secunderabad would collaboratively work in conducting training, research and development activities for the transformation of Indian agriculture and agri-enterprises in particular as per the MoU signed on 12th February, 2022 at Hotel Park Hyatt, Hyderabad. As per the agreement bioefficacy studies along with research and extension activities mutually beneficial for students and faculty will be undertaken. Dr. Reddy, President reiterated the need for integration of Indian Industry for due recognition. Dr. V. Praveen Rao, the Hon'ble Vice Chancellor informed that an MoU with an industrial body is first of its kind in the varsity and emphasized the need for partnership of academia and industry for an impressive innovations and growth in technology.

AgHub collaborates for Strengthening the Agripreneurship

As part of Enterprise Acceleration Program, AgHub entered into a collaborative agreement with Nutricircle Limited, an organization on Nutraceuticals and Nutrition focusing on plant protein from various potential cereals and other crops on 2nd February, 2022. AgHub collaborates with Sammunati Foundation to strengthen the offerings in the field of agriculture, Agri allied activities and Agriprenuership as per the MoU signed on 14th February, 2022. Another MoU was also signed with Oscillo Machines Private Limited, a startup working on modernizing the cultivation practices with Indigenous solutions, which integrates the traditional approaches with modern technologies on 14th February, 2022. This start-up will be utilizing AgHub ecosystem including scientific expertise, the network of Agri- research, extension and the educational ecosystem of PJTSAU and piloting support under the "AgriTech Innovation Pilots (AIP) Program' of AgHub, PJTSAU. Similarly an MoU with Plantaerie with an aim to



Virtual MoU ceremony of AgHub with Sammunati Foundation and Nutricircle Limited

finetune, refine and validate their product and develop sales and marketing strategies with incubation support from AgHub was undertaken on 15th February, 2022.

Capacity Building

AgHub Encourages Youth towards Entrepreneurship

The young postgraduates of PJTSAU were encouraged towards entrepreneurship by AgHub through a Certificate Course on "Design Thinking for Postgraduates of PJTSAU" on 24th January, 2022. The design thinking program helps young postgraduates of the PJTSAU to provide indepth experience of the process of design thinking, and understanding the basics of entrepreneurship along with interactive sessions with the entrepreneurs who have made it big in the agribusiness startup ecosystem. A two hands-on sessions were organized on 16th and 19th March, 2022 to help them to understand the concepts of design thinking for problem solving. Twenty eight PG students and 8 faculty members participated in the programme.



Hands-on session as part of Design thinking course

Enlightening on Energy conservation and Environmental Protection

An ICAR sponsored 21days Winter School Programme on "Energy Consumption and Environmental Pollution in Interiors: Issues & Challenges" was organized by Dr. V. Vijaya Lakshmi and her team from Dept. of RMCS, College of Community Science, PJTSAU from 1st February to 21st February 2022 in Virtual Mode. The training programme mainly focused on Energy Consumption and Indoor Environmental Pollution related causes and challenges in Residences, Commercial Buildings, Commercial Kitchens, Educational Institutes, Hotel and Hospitality spaces, Open pit mines, Travel and Transit buildings, Clothing Industries, Agricultural fields, Animal Husbandry units, Hospitals etc. The participants were also enlightened on Energy conservation strategies and eco - friendly practices useful in different buildings and sectors; Energy management systems in buildings; Role of green and eco - friendly building materials in conserving energy; Waste recycling options available to make different building materials and consumer



The Hon'ble Vice chancellor addressing the participants in the valedictory session

products; Benefits of indoor landscaping, Practices related to Net zero and Zero Carbon buildings etc. Further case studies and success stories of few NGOs and other organizations working for Environmental Protection were also presented.

Encouraging Rural Youth Towards Farm Based Livelihood

Training programme entitled "Farm Based Sustainable Livelihood Opportunities for Rural Youth" was organised by National Institute of Micro, Small and Medium Enterprises (NI-MSME), and Rajeev Gandhi National Institute for Youth Development (RGNIYD) in collaboration with College of Agriculture, Rajendranagar, PJTSAU from 9th to 11th March, 2022 with an objective to create awareness and knowledge on the opportunities available in the farm sector. As part of the programme participants were exposed to various schemes and supporting institutes facilitating the Rural youth in taking up the farm based livelihoods.

A total of 40 Under Graduate students undergoing AELP from all constituent colleges of PJTSAU related to Agriculture, Agricultural Engineering and Community



Prof. P. Uday Shanker, Ex-DG, NI-MSME -FPOs & Agriculture Cooperation delivering the lecture

Science were nominated for the training programme. The students were exposed to various concepts of livelihoods, entrepreneurship and had lively interactive sessions on identification of opportunities in the sector. Further, a session on Soft skills was organized for the benefit of the outgoing students. Eminent speakers from various organizations shared their practical knowledge and experiences with the students. The inaugural session was chaired by Dr. C. Narendra Reddy, Associate Dean, College of Agriculture, Dr. Srikanth Sharma, Associate Faculty, NI-MSME and Dr. B. Savitha, Associate Professor and the coordinator of the programme.

Training Programme on Biotechnological Tools by Institute of Biotechnology

Faculty development programme on "Biotechnology tools in crop improvement" intended to upgrade the technical skills of the faculty in the area of molecular markers and marker assisted crop improvement was organized at PJTSAU from 14th to 26th March, 2022. The programme was organized by Institute of Biotechnology, Rajendranagar as part of the skill vignan initiative scheme of Department of Biotechnology, Govt. of India and TSCOST. Eminent speakers like Dr. Rajeev K Varshney, Director, SABC, Murdoch University, Australia, Dr.C. Bharadwaj, Principal Scientist, IARI, New Delhi, Dr. R. M. Sundaram, Director, ICAR-IIRR, Rajendranagar, Dr. T. Nepolian, Principal Scientist, ICAR-IIMR, Dr.P. Anand Kumar, National Professor and Dr. Santosh Deshpande, Research Coordinator, Hytech Seed India Pvt. Limited, Hyderabad delivered lectures on frontier areas in genomic data resources, integration of conventional and modern biotechnological tools towards crop improvement, QTL mapping, marker assisted breeding etc. The participants were given hands on experience



Participants of the training programme with the dignitaries

through various practical sessions along with 33 guest lectures by eminent speakers. Dr.V. Praveen Rao, the Hon'ble Vice Chancellor graced the valedictory function and distributed certificates to the successful participants.

Effective Utilization of Social Media Skills for networking different stakeholders of Agriculture

A capacity building programme entitled "Social Media Skills for Extension Officers of Department of Agriculture" was organized for extension officers by Electronic Wing, PJTSAU in collaboration with MANAGE, Hyderabad from 22nd to 25th March, 2022. Dr. V. Sudha Rani, Director of Extension, PJTSAU, Chief guest of the valedictory session highlighted the importance of social media as it is very handy tool for Extension Professionals in serving the farming community with real time agro-advisories.

Lectures on important topics viz Social Media in Agricultural Extension-Good practices and challenges was deliverd by Dr. Saravanan Raj, Director (Agricultural Extension); Mobile Apps in Agriculture: SMS based tools and techniques by Sri Bhaskar, Assistant Director (SG), MANAGE; Harnessing Social Media for sharing Agricultural Information: Tips and techniques by Dr. A. Sreenivasacharyulu, Program Officer, MANAGE; Social Media tools for Extension Professionals by Dr. Lakshmi Murthy, Former Deputy Director, MANAGE; New generation tools for Extension: Creation of You Tube channel and uploading videos by Mr. Melwin Sam, Creative Director, Couch Potato Video Production House, Hyderabad; Writing Skills for visual communication through Digital Media by Dr. Madavi Ravi Kumar, Assistant Professor,



Participants interacting virtually with the organisers

University of Hyderabad; Digital media for Agricultural Extension by Mrs. Bharathi Madan, Deputy Director (I.T), PAMETI, Ludhiana, Punjab and Open Access to Agricultural Knowledge by Dr. A. Sreenivasacharyulu, Program Officer, MANAGE. The programme hosted by Dr. A. Sreenivasa charyulu, Programme Officer, MANAGE and organized by Dr. M. Sreenivasulu, Course Director and Coordinator, Electronic Wing and Dr.P. Prashanth, Scientist (Ag. Extension), Electronic Wing, Rajendranagar, Hyderabad. A total of 22 participants from across India attended the online training programme.

Visitors

Hon'ble Agriculture Minister, Karnataka Visits PJTSAU

Sri B.C. Patil, the Hon'ble Minister of Agriculture, Govt. of Karnataka along with delegation comprising of Sri S.R. Umashankar, Principal Secretary (Agriculture), Dr. M.V. Venkatesh, Commissioner, Watershed Development, Smt. C.N. Nandini Kumari, Director of Agriculture, Sri Venkatramareddy Patil, Addl. Director of Agriculture, Organic Farming, Sri Shivanand, Managing Director, KSSC and Dr. A.B. Patil, Officer on Special Duty to Agriculture Minister and Coordinator visited the varsity on 11th March, 2022. AgHub, Field Experiment Blocks and Production units and Labs were visited by the minister followed by interaction with Hon'ble Vice Chancellor and University Officers. Dr. V. Praveen Rao briefed the University accomplishments since its establishment.



The PJTSAU team with Sri B.C. Patil, the Hon'ble Minister of Agriculture, Govt. of Karnataka during his visit

Awards & Honours

- Dr. V. Praveen Rao, the Hon'ble Vice Chancellor is elected as Secretary General of Indian Agricultural Universities Association for the year 2022
- PJTSAU film entitled "More Crop Per Drop -Community Drip Irrigation in Tank Command Areas of Telangana - A success story" was selected for the Jury Prize-3 with a cash award of Rs.10,000/- along with certificate and a momento in the MANAGE Agri Film Festival 2022 held on 11th March, 2022.
- Dr. G. Sridevi, Principal Scientist & Head, AINP on Pesticide Residues, Rajendranagar received "Women's Leadership Award -2022 in Agriculture", organized by Hybiz TV on 7th March, 2022.
- Dr. Aparna Kuna and Dr. Lakshmiprasanna Kata of MFPI - Quality Control Laboratory, Rajendranagar received the Best Article Award for the article "Role of food testing Laboratories for quality analysis" published in Vol.4 (1) of the Agriculture & Food e-Newsletter and the Innovative Article Award for the article "Technology Trends in Modern Agriculture" published in Vol.3 (10) of the Agriculture & Food e-Newsletter on 7th March, 2022.

- Dr. K. Lakshmiprasanna, Scientist (Seed Tech), Quality Control Laboratory, Rajendranagar has been nominated as "Radiological Safety Officer" for PJTS Agricultural University on 7th January, 2022, by the Atomic Energy Regulatory Board, Radiological Safety Division, Govt. of India, for the Gamma Radiation (GC-5000) facility valid up to 7th January, 2025.
- KVK, Palem Farmer from Nagarkurnool received "IARI Innovative Farmer Award 2022" on 11th March, 2022 by IARI for his immense contribution in Agriculture especially in organic farming during the "Pusa Krishi Vigyan Mela 2022" held at IARI, New Delhi from 9th to 11th March, 2022.
- Dr. Shivakrishna Kota, SMS (Agril. Extension), received the Young Scientist Award (2022) under Vigyan Varta Excellence Awards 2022 organised by Vigyan Varta (an international e magazine for science enthusiasts) in collaboration with Omm Shanti Natayan Foundation Trust.
- Ms. A. G. Akhila, final year student from Agricultural College, Palem participated in Republic Day Parade Camp on 26th January, 2022 at Rajpath, New Delhi.

Celebrations

Cups and Trumpets

Inter collegiate Sports, Games, Cultural and Literary meet for constituent colleges of varsity for the year 2021-22 was held on 28th to 31st March, 2022 at University Sports Complex after a break of 2 years due to COVID. Four hundred and fifty (450) Students from all the constituent colleges participated in the various indoor and outdoor

sports and games besides cultural and literary events. The overall championship in sports and games for boys and cultural and literary events was bagged by College of Agriculture, Rajendranagar and overall championship in sports and games for girls was bagged by Agricultural College, Jagtial.



Opening of the Intercollegiate sports meet by the University officers on 28th March, 2022



Agricultural college, Jagtial team with overall championship in sports and games for girls



Blood donation camp at College of Agriculture on account of the Hon'ble Chief Minister's birthday celebrations at Varsity



Women's day celebrations at RARS and Agricultural College, Warangal on 8th March, 2022

Videos on AgroTechnologies uploaded in PJTSAU Youtube Channel during January - March 2022















Dr. Ch.Venu Gopala Reddy

Patron-in-Chief Dr. V. Praveen Rao

Editor

Dr. C.V. Sameer Kumar

Assistant Editor Dr. M. Pallavi

Published by Principal Agril. Information Officer, Agricultural Information and Communication Centre and PJTSAU Press, Rajendranagar, Hyderabad -500 030, Telangana State, Phone no. 040 24015380, Email: pjtsau.editor@gmail.com Printed at PJTSAU Press, Rajendranagar, Hyderabad -500030, Telangana State. Pub.No.11/NL/PJTSAU/2022

Chief Editor