



NAARM Celebrates 43rd Foundation Day

The Academy celebrated its 43rd Foundation Day on September 1, 2018. Dr. Peter Carberry, Director General, ICRISAT was the Chief Guest and delivered the Foundation Day address. During his speech, he said that “Indian Agricultural Human Resources are second to none in the world in agricultural research to reaching out to farmers”. He complemented the Academy for its unique service of developing the change agents to meet the challenges faced by the agricultural sector of the entire country. In his presidential address, Dr. Ch. Srinivasa Rao, Director, NAARM said that strong collaborations are further needed between ICRISAT and NAARM to lead the small- farmer centric agricultural research and evolving several polices. NAARM Policy Brief No (3), “District-level Food Demand: A Better Estimate for Planning Food Production and Nutritional Security” was released by the Chief Guest. On this occasion, various awards instituted by the Academy viz. ‘best employee of the year’ and ‘best employee of the decade’, award for various categories of



the staff members, including the contractual staff members were given. The staff members were also awarded in recognition of their contribution towards *Swachh Bharath Abhiyaan*, Maintenance of infrastructure and energy conservation. Plantation activities were also done on this day. Dr. SK Soam coordinated the event.

NAARM Bags ‘Best Stall’ Award

The Academy had put its stall at Pragati Maidan, New Delhi during International Agricultural and Horti-Expo cum show on Government Achievements and Schemes during July 27-29, 2018 organized by NNS Media Group, New Delhi. The stall was visited by different kinds of stakeholders which included farmers, students, teachers, researchers, entrepreneurs, ministers, government employees and general public. NAARM stall was



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adjudged 'Best Stall' during this 2-day International Expo based on the multidimensional showcase of NAARM's Education, Extension and Training activities through

audio visual as well as verbal presentation. Drs. K. Kareemulla and Surya Rathore participated and coordinated the event.

Scientific Meetings

NAAS Workshop on Ranking of ICAR Institutes

A brainstorming workshop on 'Development of Proforma for Ranking of ICAR Institutes' was conducted at the Academy in collaboration with National Academy of Agricultural Sciences (NAAS), New Delhi on July 20, 2018. About 35 senior level scientists from several South bound ICAR institutes participated in the workshop. Dr. JC Katyal, Former DDG (Education) and Convener of Core Group, chaired the inaugural and plenary sessions. Dr. AK Singh, Secretary, NAAS and Dr. Arvind Kumar, Vice Chancellor, Rani Laxmi Bai Central Agricultural University, Jhansi were the Guests of Honour.

Dr. Ch. Srinivasa Rao, Director, ICAR-NAARM & Convener, NAAS Chapter, Hyderabad also presented various aspects of the ranking criteria and indicators. (Workshop Coordinator: Dr. SK Soam).



National workshop on Artificial Intelligence in Agriculture

A two-days National Workshop on 'Artificial Intelligence in Agriculture: Status and Prospects' was organized by ICAR-IASRI, New Delhi jointly with ICAR-NAARM, Hyderabad and ICAR-IIWM, Bhubaneswar at NASC, New Delhi during July 30-31, 2018. The broad objectives of the workshop were to discuss various possible AI based applications in agriculture and development; to explore the possibilities of incorporating AI based systems in potential areas of agriculture, and to provide a platform for agricultural scientists to deliberate on AI and its implementation in agriculture.

Sh. Amitabh Kant, CEO, NITI Ayog was the Chief Guest of the inaugural session. Dr. Trilochan Mohapatra, Secretary, DARE & DG, ICAR and Sh. Chhabilendra Roul, Special Secretary, DARE & Secretary, ICAR, and DDGs of



various subject matter divisions of ICAR graced the occasion. Sh. Amitabh Kant delivered the inaugural address and congratulated and appreciated ICAR for taking up the initiative of using AI in agriculture. NAARM Policy Brief No (2), "Artificial Intelligence and Internet of Things: Implications for Human Resources in Indian NARES" was released by the Chief Guest. Dr. SK Soam coordinated the workshop from NAARM's side.

QRT Meeting

The first meeting of 7th Quinquennial Review Team (QRT) of NAARM was conducted on August 6, 2018 under Chairmanship of Dr. Mangala Rai, Former Secretary, DARE and Director General, ICAR; Dr. B. Venkateswarlu, Former Vice Chancellor, Vasant Rao Naik Marathwada Krishi Vidyapeeth, Parbhani, Maharashtra; Dr. (Mrs.) Ranjini Warriar, Former Advisor, Ministry of Environment, Forests & Climate Change, New Delhi; Dr. Praveen Arora, Advisor & Head, National Science & Technology Management Information System (NSTMIS), Department of Science and Technology, New Delhi; Dr. Ch. Srinivasa Rao, Director, NAARM; Heads of Divisions; Head, PME Cell; JD (Administration) & Registrar and CFAO of NAARM attended the meeting. The Chairman, QRT, emphasized on research quality to be followed and perspective visualization of the future plan of different programmes may be developed. He informed that



Academy should take lead role in ranking of ICAR institutes and SAUs which should be based on purpose and by discipline. Citing example of automation level of Chitale dairy, Pune, he stressed that ICAR institutes should develop prototypes for automation and mechanization of small agriculture farms in India. (Programme Coordinator: Dr. SK Soam, Member Secretary, QRT)



Institute Research Council (IRC) Meeting

The 21st IRC of the Academy was held during Sep 10-12, 2018 at the Committee Room, Faculty Centre, NAARM. The meeting was chaired by the Director, NAARM and all the faculty members participated. Dr. P. Krishnan, Member secretary, IRC provided an overview of the research projects operated in the Academy and the collaborations forged by NAARM with various

organizations. Progress with respect to 27 research projects were presented by the faculty members. Dr. Ch. Srinivasa Rao, Director, NAARM and Chairman, IRC emphasized that the research studies need to have specific focus to strengthen the role of the Academy to serve as think tank of ICAR.

Dr. M.V. Rao Memorial Lecture at NAARM

Dr Trilochana Mohapatra, DG, ICAR and Secretary, DARE, Govt of India delivered Dr. M.V. Rao memorial lecture at NAARM on September 22, 2018. The probationer-scientists of 108th FOCARS, trainees of various training programmes of the Academy, scientists, staff members of the Academy attended this programme. Dr. Mohapatra said that "the budding scientists should learn from the life of Dr. M.V. Rao on how to navigate from dream to destination without compromising on personal and professional front".



The lecture was arranged to commemorate late agriculture scientist Padma Shri Dr. M.V. Rao. Dr. Ch. Srinivasa Rao, Director, NAARM briefed about the great achievements of Dr. M.V. Rao, and recollected his association with him from student's days. On this occasion, Dr. M. Srinivas Rao, son of late Dr. MV Rao briefed the audience about the early life struggle of his

father and narrated his journey from a small village in Andhra Pradesh till becoming a lead architect of national mission on oilseeds. In the morning, Dr. Mohapatra also actively participated in *Swachhata* activities, and planted several saplings. On this occasion a bulletin on '*Swachh Bharat Abhiyan* at ICAR-NAARM' was released by him.

Foundation Courses

108th Foundation Course for Agricultural Research Service (FOCARS)



The 108th FOCARS was started on July 2, 2018 and completed on Sep 29, 2018. A total of 135 ARS probationers attended this course, consisting of 85 men and 50 women scientists representing 24 states and 32 disciplines. This course was inaugurated by Dr. Ashok Dalwai, CEO, National Rainfed Area Authority (NRAA) and Chairman, Committee on Doubling of Farmers' Income. He motivated the young scientists with the examples all-time great scientists like Dr. Norman Borlaug, Dr. MS Swaminathan and Dr. Vergheese Kurien. During the First phase of 39 working days, there were total 82 sessions. Besides, there were practical sessions in the field of video production, digital presentation, team building and personality development.

The participants also visited International Crops Research Institute for Semi-Arid tropics (ICRISAT) and ICAR-Central Research Institute for Dryland Agriculture (CRIDA) apart from exposure to different eminent guest speakers on different aspects of Indian agriculture and allied subjects. During the Second phase, participants were exposed to 21 Field Experience Training (FET) program at 22 locations in 11 states of India. During the Third phase of 14 working days, there were 20 sessions and two practical sessions each in the field of Data Analytics and IP-Informatics. This phase offers more of experiential learning through several presentations like FET report and scientific writing workshop.

Dr. T Mohapatra, Secretary, DARE & DG, ICAR, Dr. AK Srivastava, Chairman, ASRB, Dr. Chhabilendra Roul, Special Secretary, DARE, Dr. J. K. Jena, DDG, Fisheries Dr. AK Singh, DDG, Extension, Dr. Anupama Verma, NAAS Fellow, Dr. SA Patil, Ex. Director, IARI, Dr. S Senthil Kumar, IGNFA, Dehradun and other prominent dignitaries addressed the probationers. Dr. Misha Madhavan M received the best FOCARS trainee award. This course ended with the valedictory address by Dr. Manju Sharma, Ex-Secretary, DBT, GOI on September 29, 2018. A video story of 3 months FOCARS period prepared by the FOCARS probationers was also released during the valedictory session.

<https://www.youtube.com/watch?v=n-tKAFxk3NY>

(Course Directors: Drs. P. Ramesh, M. Krishnan and Alok Kumar)



Field Experience Training (FET) of 108 FOCARS

The overall aim of FET is to provide ARS probationers, an opportunity for gaining first-hand experience and insight into agricultural and rural development scenario in general and the farming situation in respect

FET Center	Monitoring Faculty
DEE office, UAS, Dharwad	Dr. Bharat S Sontakki
IGFRI, Regional Station, Dharwad	
KVK Mysore	Dr. S Ravichandran
KVK Tumkur	
KVK Khurda	Dr. D Thammi Raju
ICAR-CIWA	
KVK Puducherry	Drs. Ch. Srinivasa Rao & Senthil Vinayagam
ICAR-NIANP, Bengaluru	
KVK Sehore	Dr. S K Soam
KVK Indore	
KVK Salem	Dr. P Venkatesan

of the theme based enterprises in particular. 108 FOCARS had FET from Aug 21 to Sep 10, 2018 with monitoring faculty for centres as below:

KVK Chittoor	Dr. G R K Murthy
KVK Ajmer	Dr. Surya Rathore
KVK Kota	
KVK Churu	Dr. P C Meena
KVK Nadia	Dr. M Balakrishnan
KVK North 24 Parganas	
KVK Saran	Dr. Alok Kumar
KVK Barh, Patna	
KVK Sarakela	Dr. Sanjiv Kumar
KVK Chitrakoot, Uttar Pradesh	Dr. V K J Rao
ICAR-CISH, Uttar Pradesh	

Research Projects

Documentation of Success Stories of Agri-graduates turned Entrepreneurs

The Extra-mural project on Documentation of Success Stories of Agri-graduates turned Entrepreneurs was carried out within the limits of five states namely; Andhra Pradesh, Karnataka, Maharashtra, Gujarat and Rajasthan. In the study, 30 entrepreneurs belonging to vivid Agricultural Sciences were interviewed. Critical Success Factors (CSF) responsible for entrepreneurial development found in the study were emphasis on market knowledge, maintaining friendly relationships with the competitors, always taking experts' advice, following participative leadership and knowledge of multiple languages. Five videos of 'Success Stories of Agri-graduates turned Entrepreneurs' from the disciplines of Agriculture, Horticulture and Home Science belonging to 4 State Agricultural Universities: ANGRAU, Hyderabad;



UAS, Bangalore; RAU, Bikaner and MPUAT, Udaipur have been developed, the links of which are as follows:

- <https://www.youtube.com/watch?v=86AHCEd9I2U&t=19s>
- <https://www.youtube.com/watch?v=0hry6vRCd0c&t=164s>
- <https://www.youtube.com/watch?v=WZu0kRVySRw&t=55s>
- https://www.youtube.com/watch?v=iE5L_Ovab4g&t=23s
- <https://www.youtube.com/watch?v=jAlFqjOT2mY&t=143s>

Training Programmes

Off-campus Training Program on Scientific Communication & Developing Winning Research Proposals

A tailor-made off-campus program was held at the behest of Tamilnadu J. Jayalalitha Fisheries University (TNJFU), Nagapattinam for 28 of their newly recruited faculty members, representing different colleges during Aug 02-

04, 2018. The participants had specialization in the area of Fisheries Resource Management, Aquaculture, Fish Processing Technology, Fisheries Engineering, Fish Health, Biotechnology and Genetics, Social Sciences, etc.

The core content of the program included elements of scientific writing and oral communication; tools and tips for communicating research ideas; research concept writing; preparation of project logframes and making winning research proposals. The participants were introduced to the online applications developed by NAARM viz., AHP Analyser, Research Concept Writer and Project Logframe Writer. The participants were also sensitized on the issues confronted by the young

researchers and tips for self-motivation and positive thinking. The programme comprised of a blend of lectures, discussions, group activity, hand-on exercises and presentation. The training program was organized in collaboration with the Academy of TNJFU at College of Fisheries, Ponneri, Chennai.

(Programme Coordinators: Drs. P. Krishnan, Bharath S. Sontakki and SK Soam)

Developing Business Proposal for Farmer Producer Companies

A training programme on 'Developing Business Proposal for Farmer Producer Companies' was organized in the Academy during Aug 06-10, 2018. The training was attended by 27 participants representing ICAR institutes, FPOs and agricultural universities from 12 states. The training programme was aimed to build an integrated view and enhance the knowledge base to cater to the agri-business management challenges in the current scenario. The sessions included business proposal development, quantitative methods for analyzing the financial viability of businesses, developing marketing plan, project risk management, and winning pitch presentation. The participants also visited Suraksha Producer Company Ltd, Siddipet and interacted with the executives and

farmer members. The programme was organized during August 06-10, 2018.

(Programme Coordinators: Drs. Ranjit Kumar and K Srinivas)



दालें-आधारित उत्पादक कंपनियों (FPO/FPCs) के व्यापार विकास पर निदेशक मंडल का प्रशिक्षण

कौशल्य फाउंडेशन के एफ(, एक गैरलाभकारी संगठन-से प्राप्त अनुरोध पर दो किसान उत्पादक संगठन (बीओडी) के निदेशक मंडल (एफपीओ) के लिये 3-दिवसीय प्रशिक्षण बिहार राज्य के नवादा में आयोजित किया गया। बिहार राज्य में एफपीओ को बढ़ावा देने के लिए के एफ को लघु किसान एग्रीबिजनेस कंसोर्टियम द्वारा संसाधन संस्थान (एसएफएसी)

के रूप में पहचाना गया है। नवादा महत्वाकांक्षी जिलों की सूची के अंतर्गत आता है। कौशल्य फाउंडेशन द्वारा जिले में -किसान 1000 सदस्यों के साथ दो एफपीओ बनाए गए हैं। प्रशिक्षण 28 बीओडी सदस्यों को दिया गया, जिसमें एफपीओ के गठन के बारे में अभिविन्यास, एफपीओ को उत्पादक कंपनियों के रूप में पंजीकरण और एफपीओ के लिए व्यापक व्यापार योजना शामिल किया गया। उन्हें अरहर के बेहतर उत्पादन प्रथाओं प्रौद्योगिकियों और मिनी दाल मिल की स्थापना के / बारे में भी जानकारी दी गई। प्रशिक्षुओं को हिंदी में दो पुस्तिकाएं / -मैनुअल भी दिए गए थे 1. उत्पादक कंपनी स्थापित करना एवं व्यापार योजना, 2. अरहर की खेती और प्रसंस्करण। प्रशिक्षण कौशल्य फाउंडेशन के अधिकारियों के साथ डॉ रणजीत कुमार और डॉ के श्रीनिवास द्वारा अगस्त 14-12, के दौरान दिया गया था 2018।



ICTs and Its Applications in Agriculture

A training programme on 'ICTs and its Applications in Agriculture' was conducted to upgrade the knowledge and skills of agricultural graduate students during August 21-September 19, 2018. The programme included various topics on computer applications in agriculture; blogs, database creation and internet resources, ICT applications in agriculture and rural development, geospatial knowledge management, CMS content



management and E-learning, virtual learning, expert system language, statistics and data analysis, Artificial Intelligence and IoT applications agriculture, bioinformatics, big data and cloud computing in agriculture, Video production theory and practical, challenges and opportunities in agricultural research, library information system, OERs and on line collaboration tools, open source tools, social media and

their applications. There were 25 students from various colleges of ANGRAU, Guntur, Andhra Pradesh. Dr. AK Srivastava, Chairman ASRB was the Chief Guest for the valedictory session.

(Programme Director: Dr. M. Balakrishnan; Programme Coordinators: Drs. GRK Murthy & VV Sumanth Kumar)

Intellectual Property Valuation & Technology Management

An MDP on 'Intellectual Property Valuation & Technology Management', was organized during August 24-29, 2018. About 14 scientists (3 women and 11

men) from ICAR institutes of various disciplines such as animal biotechnology, fisheries, agriculture economics etc. got benefitted from the training. The experts discussed about the S&T in emerging economy, IP Valuation and monetization, Technology management, transfer and commercialization. Concepts on marketing and business models were also discussed. To have a wider exposure of the incubation concepts, the group visited Atal Incubation Centre-CCMB, Hyderabad.

(Programme Coordinators: Drs. Manju Gerard and K Srinivas)



Developing Winning Research Proposals

Two training programmes were organized on 'Developing Winning Research Proposals (DWRP)'- one at NAARM (August 23-28, 2018) and other off-campus at Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya (RVSKVV), Gwalior during September 25-27, 2018. Major purpose of the programme was to develop the skills for writing research proposals that can win funds from donors focusing on the needs of the stakeholders. Nineteen scientists from ICAR institutes, SAUs and General Universities participated in the programme. The off-campus training programme was the 40th training programme on DWRP. Twenty-five faculty members from various colleges of RVSKVV attended the programme.



(Programme Coordinators: Drs. SK Soam and P Krishnan {At NAARM}; Drs. SK Soam, P Krishnan and Ch Srinivasa Rao {Off-campus})

Analysis of Experimental Data

A training programme on 'Analysis of Experimental Data' was held during September 06-11, 2018. The objective of the training was to impart knowledge and use of statistical tools for analyzing data collected from various agricultural experiments by researchers in agriculture, animal and fisheries. Data analysis using SAS was performed to the participants using SAS Enterprise Guide (EG). The topics for the training programme included: Principle of Experiments for Conducting Research; Exploratory Data Analysis; Introduction to SAS and Data Management, Correlation, Regression and

Diagnostics; Analysis of Experimental Data using Basic as well as advanced designs, Pooled analysis, Multivariate Data Analysis using Principal Component Analysis (PCA), Factor Analysis, Response Surface, etc. Emphasis was given to analysis of data using appropriate statistical techniques and interpretation of the results. Total 27 participants including 19 from ICAR institutes, 6 from SAUs and 2 from private industries attended the training.

(Programme Coordinators: Drs. S Ravichandran and A Dandapani)

NAARM-Coromandel Collaborative Capability Building Programme for Young Agri-Business Professionals

Third NAARM-Coromandel Collaborative Capability Building Programme for 35 sales and marketing professionals was conducted at the Academy during September 17-21, 2018. The programme covered present agricultural scenario, fundamentals of crop production

and protection practices, behavioral aspects such as personality development, time management and emotional intelligence.

(Programme Directors: Drs. KH Rao and Ranjit Kumar).

Stress Management

A training programme on 'Stress Management' was conducted during September 17-20, 2018 with total participants of 17 consisting of 15 men and 2 women scientists from ICAR (14 numbers) and SAU's (3 numbers). Most of them were of principal scientist cadre and some were HODs and Directors of ICAR Institutes. The sessions covered were stress concepts, medical and psychological, stress assessment, inter personal relationship in stress management, Psycho analysis of stress, Emotional intelligence, stress related cardiovascular disorders, stress related musculo-skeletal disorders, common anxiety disorders in stress, stress and diet, neuro linguistic programming in stress management, time management, spiritual intelligence in stress management, positive thinking, stress management strategies. Apart from class room sessions, regular early morning yoga sessions were conducted for the participants and were appreciated very much by the



participants. Investigations were carried out for all the participants that include fasting blood sugar, complete blood profile, lipid profile, serum creatinine, blood urea, serum electrolytes and ECG to assess their stress.

(Programme Coordinators: Drs. P Ramesh and A Debnath)

Soft Skills and Personality Development for Technical Staff of ICAR

A competency enhancement programme on 'Soft Skills and Personality Development for Technical Staff of ICAR' was conducted during September 18-27, 2018. The programme aimed to enhance the soft skills and personality of participants. Twenty-one participants from different ICAR institutions across the country participated in the programme. The trainees were exposed to Communication skills, Presentation skills, Interpersonal

relationships at work, team work, personality development, time management, inter-team interaction, Official language policies & Hindi word processing, MS Word, PowerPoint, Excel, Office communication & drafting, ICAR – ERP, etc.

(Programme Coordinators: Dr. N Srinivasa Rao and Mr. S Raju Kumar)

Advanced Bioinformatics Tools and its Applications in Agriculture



A training programme on 'Advanced Bioinformatics Tools and its Applications in Agriculture' was conducted during September 25-29, 2018 to upgrade the knowledge and skills of agricultural professionals for sharing of knowledge management process in research and education. The programme covered a range of topics related to Bioinformatics that helps in collecting, linking and manipulating different types of biological information to discover new biological insights. The knowledge gained during the programme could be used

to produce stronger, more drought resistant, disease resistant, insect resistant and more productive crops. The training included theory and hands-on sessions on different aspects of Bioinformatics. This training programme was conceived with an idea to provide an insight to the participants about the enormous potential of

Bioinformatics and its tools management to explore it in the area of agriculture. There were 28 participants from the different part of India.

(Programme Coordinators: Drs. M Balakrishnan and N Srinivas Rao)

Events

Health Camp and Awareness

A cardio-diabetic health camp was organized at NAARM Health Center on August 4, 2018. Dr. Chaitanya, Cardiologist from Maxcure Hospital came for consultation. FBS/RBS/PPBS test will be done. Blood glucose, ECG, 2D Echo Biothesiometry/ neuropathy test,

ECG were done for those required. Special lectures were also organized on September 18, 2018. Dr. Alluri Vasu, Cardiologist spoke on stress related cardio vascular diseases and Dr. Ratnakar Rao, Orthopedic surgeon addressed the audience on Musculo-skeletal diseases.

Independence Day Celebration at the Academy



The Academy celebrated the 72nd Independence Day on Aug 15, 2018. Dr. Ch. Srinivasa Rao hoisted the flag and addressed the scientists and staff of the Academy. He mentioned the achievements the Academy has achieved during the year. He reiterated to focus on the mandated activity of the Academy to bring newer heights in the coming years. The Academy was decorated with lightings which added to the beauty of the Academy. Winners of various competitions were given prize by the Director.

Product launch of SkyKrafts Aerospace

On the eve of 72nd Independence Day of India, a-IDEA at NAARM celebrated with the Product launch of SkyKrafts Aerospace, one of the AgTech Startup's "Spraying Drone". The launch was facilitated by Dr. Ch. Srinivas Rao, Director – NAARM, in the presence of staff of SkyKraft, a-IDEA, NAARM and PGDMA Students of NAARM.



Startup Samvad

a-IDEA, Technology Business Incubator of NAARM organized a series of 'Startup Samvaad' during the quarter. Startup Samvaad is a platform that brings together entrepreneurs, agri-enthusiasts, investors, agribusiness corporates enabling the ecosystem to assemble, discuss, brainstorm & network with focuses on sensitizing & motivating the Agri entrepreneurs, Agri enthusiasts, students, and early-stage startups on agribusiness opportunities and help them avail the available supports for building Agri Startups. "Startup Samvaad" is a one-day program that encompasses



pitching sessions, keynote speeches, successful startup stories followed by panel discussion.

The first Samvaad was held on July 7, 2018 at a-IDEA, ICAR-NAARM. Mr. Ajit Rangnekar, Director General, Research and Innovation Circle of Hyderabad (RICH) and Mr. Sameer Goel, Managing Director, Coromandel International Limited (CIL) were the key speakers for the



occasion. A panel discussion on “Aligning Agri startups innovations towards farmers & stakeholders in agriculture” was conducted during the event.

The second Samvaad was held in association with KL University, Yes bank, and Agri-Biotech Foundation on August 3, 2018. A panel discussion on “Agri-Biotech Startups in Bridging the gaps in Indian Agriculture” was conducted. Mr. Suresh Kumar, Chief General Manager, NABARD (APRO) was the key speaker.

Agri-BioNEST, an Agri-Biotech focused Bio-Incubator of a-IDEA, TBI of NAARM & ABF in association with SRiX, the largest incubator in the Tier-III city at Warangal, Telangana organized third Samvaad on September 15, 2018. A panel discussion on “Scope & Challenges: Emerging Agri-Biotech in Industrial Era” was conducted during the event. Mr. Raj Agarwal Group CEO, PASURA GROUP, Mr. Emmanuel Murray, Senior Advisor, Caspian Impact Investments were the key speakers.

ICAR-All India Entrance Exam-2018

The Academy conducted the ICAR’s 23rd All India Entrance Examinations for admission to UG, Master’s & Doctoral degree programmes for the Academic Session 2018-19 during Aug 18-19, 2018 at various examination centers at Hyderabad. For UG 2606, for PG 1686, and for

AICE (JRF/SRF) 284 students appeared in the examination at Hyderabad Center. Dr. SK Soam was the Nodal Officer, and Dr. M. Balakrishnan was the Co-Nodal Officer of the Hyderabad Examination Center.

NAARM participated in the ICAR South Zone Sports Meet-2018

NAARM Contingent participated in the ICAR South Zone Sports Meet-2018 during Sep 5-9, 2018 at DSA Complex, Kakinada organized by CTRI Rajahmundry. Mrs. Rukmini won the Overall Champion (Women) Award (1st in shotput, 1st in discus, 3rd in javelin, winner in caroms, winner in shuttle badminton, runner in table tennis). The Academy also bagged prizes in men’s shotput (1st-MK Samson), Discus (1s – MK Samson), Javelin (2nd– MK Samson), Carrom – men’s singles (Runners-Mr. Sham Bahadur) and Chess- women (Winner - Smt. N. Vijayalaxmi). Among team events, the Academy bagged



runners-up in both Table tennis- men’s doubles and basketball.

Release of TELAgE publications and products at ICAR, New Delhi

ICAR-NAARM has released three products of TELAgE project on Sep 29, 2018 at ICAR, New Delhi. Hon’ble DG Dr. T. Mohapatra released the report on Technology Enhanced Learning Education and a bulletin on Technology Enhanced Learning showcasing the technology standards for adoption in education. On the occasion, first of its kind digital course on veterinary entomology and acarology was released, which was a joint effort of ICAR-NAARM and TANUVAS, Chennai.



Dr. NS Rathore, DDG (Edn) and Dr. PS Pandey, ADG (EP & HS) were the other dignitaries in the event.

Hindi Pakhwada Celebrated in the Academy



The Academy celebrated Hindi *Pakhwada* during Sep 14-28. Various competitions were organized during the two-week celebration. Competitions were organized for scientists, office and staff, FOCARS trainee scientists as well as for PGDMA students. The valedictory programme was organized on Sep 28, 2018. Prizes were distributed to the winners of the competitions by the Director on the occasion.

Swachhata Hi Seva

The Academy celebrated *Swachhata Hi Seva* during Sep 15-Oct 02, 2018 which focused on beautification of the campus including pruning of tree branches, hedge cutting, cleaning of in the campus. Dr. AK Srivastava, Chairman, ASRB participated in the activity on Sep 19, 2018; and on Sep 22, 2018, a mass cleaning programme was organized in which Dr. T Mohapatra, Secretary, DARE and DG-ICAR participated. Bottle palm tree plantation was also taken up in the lawns of scientist home. Various competitions like essay writing, speech and song competition were conducted during the fortnight and prizes were awarded to the winners.



First Monthly Meeting with Pensioners/Family Pensioners

As per the instructions from ICAR, the first monthly meeting with pensioners and family pensioners of ICAR Institutes located in Hyderabad was organized on Sep 18, 2018 in the Academy under the Chairmanship of Director, ICAR-NAARM. The was organized as part of good governance, to minimize their grievances related to pension on a pattern similar to the Pension Adalats being organized by Ministry/Department in the Government of India. The objective of the meeting is to redress the

pensioners grievances promptly within the framework of extant policy guidelines/rules. Heads of Administration, Finance from the local ICAR Institutes and many pensioners participated in the meeting. The issues raised by the participants in the meeting will be promptly addressed by the officers concerned and the same will be reviewed in the next monthly meeting.

MoUs Signed

A memorandum of Understanding (MoU) between a-IDEA, NAARM, Hyderabad and Maharashtra Hybrid Seeds Company Private Limited (MAHYCO), Jalna, Maharashtra was signed to promote the startups programmes/events organized by MAHYCO for the larger benefit of Indian agriculture. The MoU was executed on Aug 6, 2018.



A memorandum of Understanding (MoU) between a-IDEA, NAARM, Hyderabad and Millet Processing & Incubation Centre, Professor Jayashankar Telangana State Agricultural University (PJTSAU), Hyderabad was signed to synergize the institutional capabilities and expertise to

create complementing entrepreneurship ecosystem for millet based startups. The MoU was executed on Aug 16, 2018.

Academic News

Placement Drive 2018

PGDMA 2017-19 & 2018-20 batches have successfully completed placement drive for 2018 during Sep 8-16, 2018. During the drive, students visited around 147 companies covering 9 metropolitan cities of India which includes Delhi, Mumbai, Pune, Kolkata, Hyderabad, Cochin, Chennai, Bangalore and Ahmedabad. It helped them to understand the dynamics of agribusiness sector and expectation of industry from students which in turn will groom them and they will work upon themselves in the right direction. The main focus of placement drive was to introduce our course and campus to industries of all the mainstream agribusiness sectors and invite them for final placement, summer placement and live projects, information of the same is as follows:

- i. Agri-Input Sector- Bayer Crop Science, Godrej Agrovet Limited, HM Clause India Pvt. Ltd.(Limagrain), Nagarjuna Agrochemicals Ltd., Nagarjuna Fertilizers & Chemicals Ltd, UPL Ltd, Dhanuka Agritech Ltd, etc.
- ii. FMCG and Food Processing- AMUL, Archer Daniels Midland, Adani Wilmar, LT Foods etc.
- iii. Retail- Reliance, Safe Harvest, ABRL, etc.
- iv. Banking and Finance- HDFC, Basix Sub K, Samasta finance, Ujjivan finance, etc.
- v. Consultancy- Grant Thornton, etc.
- vi. Commodity- Origo, Star Agri, etc.

ERUDITION: PGDMA Corporate Guest Lecture Series

Following corporate officials from different agri-business industry visited the Academy and shared their experience with the PGDMA students:

- Mr. Rajsekhar Mandal, Vice President, Food Processing vertical Samunnati Financial Intermediation and Services, Jul 25, 2018.
- Mr. Anupam Satpathy, National Marketing Head, Mahindra Crop Care, Aug 4, 2018.
- Mr. Samumedra Kumar Nayak, Global Portfolio Manager (Fungicides), UPL Limited, Aug 10, 2018.

- Mr. Balachandran MK, Vice President, HDFC-ERGO General Insurance Company Ltd., Aug 13, 2018.
- Mr. Raja Vadlamani, Vice President (Supply Chain), Seedworks International, Aug 15, 2018.
- Mr. Mihir Mohanta, General Manager (SCM-International Business), Mother Dairy, Sep 1, 2018
- Mr. Amit Mittan, Country Manager at Agroy Group. On Sep 4, 2018

PGD-TMA First Contact Programme

The 1st Term Contact Programme for the students of PGD-TMA 2018 batch was conducted at the Academy during Sep 1-3, 2018. About 27 students attended the program, with most of them working professionals from various organizations such as Coromandal, Du Pont, Syngenta, KVKs etc. Officials from University of Hyderabad also participated as resource persons

(Programme coordinators: Drs. Manju Gerard and BS Yashavanth)



Distinguished Visitors

Mr. Govinda Rajulu Chintala, Chief General Manager, NABARD along with his team Visited a-IDEA, NAARM on Aug 27, 2018.

Mr. Manish Diwan and **Dr. Gayatri Saberwal** from Biotechnology Industry Research Assistance Council (BIRAC) visited the BioNest facilities at a-IDEA, NAARM, and ABF on Aug 31, 2018.

Foreign Visits

Dr. Ch. Srinivasa Rao, Director, NAARM attended the 23rd Inter-Governmental Meeting of the Asia Pacific Network (APN) for Global Change Research at Bangkok, Thailand during July 9-12, 2018. During his visit, he participated and co-chaired Capacity Development Committee Meeting, APN in which 17 multi-year projects of various countries were reviewed. Discussions were held on finalization and modalities of capacity building projects. He also co-chaired Steering Committee Meeting as a nominee of Indian focal point. He participated in South Asia Sub Regional Sessions where discussions were held on research priorities in continuation with the last workshop which was held at ICAR-NAARM, Hyderabad.



During the event he evaluated Thailand youth poster session on Global Change Research and Development.

Faculty Achievements

Honors, Awards and Recognitions

Dr. N Srinivasa Rao received the 'Distinguished Scientist' award in the field of Computer Science from Centre for Advanced Research and Design of Venus International Foundation, Chennai on Aug 11, 2018.

Dr. SK Soam was selected as a member of the Consultative Group constituted by Registrar of Geographical Indications, Govt. of India on Aug 28, 2018.

Dr. MB Dastagiri was awarded "International Kohinoor Award for Excellence Person (With Gold Medal) by Economic Growth Foundation, New Delhi held at Tashkent, Uzbekistan on 8th July 2018.

Dr. Ahire M. Laxman received 'Outstanding Achievement Award' for outstanding contribution in the field of Agricultural Extension during DISHA-2018 held at Ranchi on August 12, 2018.

Student Guidance as Major Guide/Advisor

Dr. M. Krishnan guided as Major Advisor 3 PhD students in Fisheries Economics of ICAR-CIFE, Mumbai:

- Ms. Piyashi DebRoy: Thesis Title- 'Resource use patterns, trade-offs and governance strategies for fisheries development in lake Rudrasagar, Tripura'
- Ms. Neha W. Qureshi: Thesis Title- 'The amplified economics of an intrinsic common use resource: The Dal Lake'
- Mr. Naorem Dinesh Singh: Thesis Title- 'Propagative causal price transmission in Indian shrimp exports market'

Publications

Research Articles

Ahire ML, Srinivasarao Ch, Venkattakumar R and Vijender-reddy P (2018) An Innovative Concept to earn an extra Income from Agri -Tourism – The Case of an Agri-Tourism Centre in Maharashtra, India. *Multilogic in Science*, 8, Special Issue (E).

Anupam B and Balakrishnan M (2018) Smart phone applications: Role in agri-information dissemination. *Agricultural Reviews*, 39(1): 82-85.

Balakrishnan M, Srinivasarao Ch and Soam SK (2018) Status of Bioinformatics Applications in Agricultural Research and Education in India. *International Journal of Agriculture Sciences*, 10(11): 6317-6319.

- Dastagiri MB, Srinivasarao Ch and Anjani-Sneha V (2018) Trading prices for India's major cereals during WTO regime: Growth rates, TOT, elasticities and foreign trade policies. *International Journal of Agricultural Sciences* 8(7): 1465-1475.
- Dastagiri MB and Anjani-Sneha V (2018) "World trading signals for Indian agriculture during WTO regime: multi-stakeholders decision making". *American Journal of Plant Sciences*, 9(9): 1868-1893.
- Meena Phoolchand, Meena PC and Choudhary A (2018) Biofortification of cereal crops: An emerging strategy to overcome hidden Hunger. *International Journal of Chemical Studies*, 6(3): 776-785.
- Qureshi NW, Krishnan M, Wani SA, Ramasubramanian V, Sivaramane N and Sundaramoorthy C (2018) Does information change attitudes? The case of restoration of indigenous fishery in Dal Lake, Kashmir, India. *Indian Journal of Fisheries*, 65 (2): 113-118.
- Ramachandrappa BK, Thimmegowda MN, Krishnamurthy R, Babu PN, Srikanth, Savitha MS, Srinivasarao Ch, Gopinath KA, Ravindra CG (2018) Usefulness and impact of agromet advisory services in eastern dry zone of Karnataka. *Indian Journal of Dryland Agricultural Research and Development*, 33(1): 32-36 DOI: 10.5958/2231-6701.2018.00005.2.
- Ravichandran S, Yashavanth BS and Kareemulla K (2018) Oilseeds production and yield forecasting using ARIMA-ANN modelling. *Journal of Oilseeds Research* 35(1): 57-62.
- Shyla MH, Himanshu P, Manju G and Amit C (2018) Bio-fabrication of Silver nano particles using Chrysanthemum Coronarium flower extract and it's in vitro anti-bacterial activity, *International Journal of Applied Pharmaceutics*, 10(5): 209-213.
- Srinivasarao Ch (2018) Climate Change and Extreme Climatic Events: Impacts and Adaptation Strategies for Agriculture. *The Andhra Agricultural Journal*. 65(2): 253-259.

Technical Reports

- Rathore S, Rao VKJ and Sontakki BS (2018) Documentation of Success Stories of Agri-graduates turned Entrepreneurs ICAR-National Academy of Agricultural Research Management, Hyderabad, 242p.
- Soam SK, Rama Rao D, Virmani SM and Ch. Srinivasarao (2018) Developing Winning Research Proposals: Status and Impacts of an Innovative Training Initiative. ICAR-National Academy of Agricultural Research Management, Hyderabad, 107pp.
- Srinivasarao Ch, Soam SK, Rao RVS, Murali V, Basith MA, Vijender Reddy P and Laxman Ahire (2018) Swachh Bharat Abhiyan at ICAR-NAARM. ICAR-National Academy of Agricultural Research Management, Hyderabad, 44pp.

Training Manuals

- Ranjit-Kumar and Srinivas K (2018) Developing Business Proposals for Farmer Producer Companies. ICAR-National Academy of Agricultural Research Management, Hyderabad.
- Ranjit-Kumar, Srinivas K and Sanjiv-Kumar (2018) उत्पादक कंपनी स्थापित करना एवं व्यापार योजना [Formation and Business Planning of FPO]. ICAR-National Academy of Agricultural Research Management, Hyderabad.
- Ranjit-Kumar, Srinivas K and Sanjiv-Kumar (2018) अरहर की खेती और प्रसंस्करण [Cultivation and Processing of Arhar]. ICAR-National Academy of Agricultural Research Management, Hyderabad.

Conference Proceedings/ Policy Briefs/ Poster Presentation/Book Chapters

- Krishnan M and Srinivasarao Ch. (2018) Swipe for smart credit – Kisan Credit Card for fisheries. In: S. Ayyappan, M. Katakataware and G. Letha Devi (eds.) *Compendium on National Consultation on Sustainable and Remunerative Small Farming*. Bengaluru: NABARD, ICAR- NIANP, pp.21-22.

Ranjit-Kumar, Sivaramane N, Sanjiv-Kumar, Meena PC, Dhandapani A and Srinivasarao Ch. (2018) District-level Food Demand: A Better Estimate for Planning Food Production and Nutritional Security. Policy Brief, No. 3, August 2018. ICAR-NAARM, Hyderabad. DOI: 10.13140/RG.2.2.20685.69604.

Sanjiv-Kumar, Kalamkar SS, Parihar TB and Meena PC (2018) Fodder Production and Marketing Practices in Gujarat. In: International Conference on Emerging Global Economic Situation: Impact on Trade and Agribusiness in India, BJVM, VV Nagar, Anand, Gujarat, 28-29 September 2018.

Soam SK, Balakrishnan M, Sumanthkumar VV and Srinivasarao Ch. (2018) Artificial Intelligence and Internet of Things: Implications for Human Resources in Indian NARES. Policy Brief, No. 2, July 2018. ICAR- National Academy of Agricultural Research Management, Hyderabad.

Faculty / Staff Participation in Scientific Events

Programme Name	Venue & Date	Scientist Name
ICAR Senior Officers' Committee (SOC) Meeting	ICAR, New Delhi, Jul 03, 2018	Dr. Ch Srinivasa Rao
Meeting of Cadre Review of Scientists	ICAR, New Delhi, Jul 17-18, 2018	
National Conference on Reforming Agrarian Economy: Role of Insurance	India International Centre, New Delhi, Jul 21, 2018	
Workshop to discuss the proforma and necessary guidelines regarding rating research institutions	NAAS, New Delhi, Jul 28, 2018	
6 th Group Monitoring cum 7 th Meeting of Advisory Committee for earth and atmospheric sciences projects	NIT, Raipur, Aug 02, 2018	
Meeting of Steering Committee of Senior Officers of ICAR	ICAR Krishi Bhavan, New Delhi, Aug 14, 2018	
ICAR Senior Officers' Committee (SOC)	ICAR, New Delhi, Sep 06, 2018	
Closing Ceremony of ICAR South Zone Sports Tournament 2018	ICAR-CTRI, Rajahmundry, Sep 09, 2018	
Developing Effective Organizational Leadership for Senior Officers of ICAR	New Delhi, Jul 23, 2018	Dr. Ch. Srinivasa Rao Dr. SK Soam
Meeting to discuss and finalize training modules for administrative staff including finance of ICAR	New Delhi, Aug 29, 2018	
Workshop on "Artificial Intelligence and IoT in Agriculture"	NASC, New Delhi, Jul 30-31, 2018	Dr. Ch Srinivasa Rao Dr. SK Soam Dr. M. Balakrishnan Dr. GRK Murthy Dr. VV Sumanth Kumar
National Level Review/Interface Meeting of National Academic Depository	UGC, New Delhi, Jul 4, 2018	Dr. N Sivaramane
National Steering Committee Meeting for review of performance of ABIs and ZTMCs	NASC Complex, New Delhi, Aug 28, 2018	Dr. Ch Srinivasa Rao Dr. SK Soam Dr. K Srinivas Dr. Manju Gerard
Meeting on Strategic investments for blue revolution	NITI Aayog, New Delhi, Aug 7, 2018	Dr. M Krishnan
National Consultation on Sustainable and remunerative small farming	ICAR-NIANP, Bengaluru, Sep18-19, 2018	

Programme Name	Venue & Date	Scientist Name
BSMA Committee on Social Sciences stakeholders meeting	EEL, Hyderabad, Jul 12, 2018	Dr. D Thammi Raju
Workshop on Issues and Challenges in Strengthening Extension Services in Animal Husbandry Sector	MANAGE, Hyderabad, Aug 20, 2015	
Group discussion on Curriculum development for Social Sciences	TISS, Hyderabad, Aug 30, 2018	
State Level workshop on Problems and prospects of Fishery Extension Services in Andhra Pradesh – Way forward	Sri Venkateswara Veterinary University, Tirupati, Sep 28, 2018	
Startup Samvaad, AgriBioNEST	KLEF University, Guntur, Aug 3, 2018 & SR Engineering College, Warangal, Sep 15, 2018	Dr. Manju Gerard
Workshop on “IP Strategy & Monetization: Derive the Maximum Value from your Intangible Assets”	Hyderabad, Aug 10, 2018.	
Symposium on “Impact of New Breeding Technologies in Agriculture”	Hyderabad, Sep 3, 2018	
Broad Subject Matter Area Committees (BSMA) meeting for Social Science (Agri-Business Management and Agricultural Economics)	Rajasthan Agricultural University, Bikaner, Sept 17-18, 2018	Dr. Ranjit Kumar
Workshop on “Agricultural Communication: Yesterday, Today and Tomorrow”	GBPUAT, Pantnagar, Aug 19, 2018	Dr. Surya Rathore
Review meeting of Niche Area of Excellence Projects	NASC, New Delhi, 28 Sep 2018	Dr. GRK Murthy
Drafting Committee for National Mariculture Policy	NFDB, Hyderabad, Sep 28, 2018	Dr. P Krishnan
International Conference on “Emerging Global Economic Situation: Impact on Trade and Agribusiness”	Anand, Gujarat, Sep 28-29, 2018	Dr. Sanjiv Kumar

Lectures Delivered/Invited as Key Speaker in Scientific Meetings

Faculty	Topic	Event	Venue	Date
Dr. Ch Srinivasa Rao	Application of Artificial Intelligence in Agriculture	ICAR National Workshop on Artificial Intelligence in Agriculture: Status and Prospects	NASC, New Delhi	Jul 30, 2018
	Intellectual Property Rights in Communication	Orientation lecture series for PG students	University of Hyderabad, Hyderabad	Aug 20, 2018
	Innovation Platforms for Entrepreneurship	Regional Conference on Motivating and Attracting Youth in Agriculture (MAYA)	NASC Complex, New Delhi	Aug 30, 2018
Dr. M Krishnan	Enhancing the Impact of Fisheries Schemes for increasing farmers' welfare	Training programme to NFDB officers on doubling fishers' and fish farmers' income	MANAGE, Hyderabad	Aug 06, 2018

Faculty	Topic	Event	Venue	Date
Dr. M. Krishnan	Emerging technologies for processing and packaging of fish and fishery products	Training programme on “Emerging food processing and packaging technologies: A driver of economic opportunities”	PJTSAU, Hyderabad	Jul 25, 2018
Dr. Surya Rathore	Artificial Intelligence in Indian Agriculture	Machine Learning and Artificial Intelligence for Agriculture Sector	APHRDI, Bapatla	Jul 19, 2018
	Prospects and Avenues of Agricultural Education in India and Abroad	ICAR Winter School on “Extension & Communication Approaches for Sustainable Agriculture”	College of Agriculture , Rajmata Vijayaraje Scindhia Krishi Vishwavidhyalaya, Gwalior	Sep 25-26, 2018
	Applications of IOT in Agriculture			
	Documentation of Success Stories			
Dr. D Thammi Raju	Extension through application of ICT tools and techniques	Training on ‘Innovative ICT initiatives in Agriculture’	MANAGE, Hyderabad	Aug 7, 2018
	Teaching Management	Training programme on ‘Advances in Application of ICT in libraries of NARES to support Education and Research’	PJTSAU, Hyderabad	Sep 17, 2018
Dr. GRK Murthy	E-Learning	Orientation Programme for Lecturers	MANUU, Hyderabad	Jul 12, 2018
	Role of online education/training through MOOCs platform	Improving eGovernance in Agriculture	MANAGE, Hyderabad	Aug 8, 2018
	Technology enhanced learning	Training of Trainers	ASCI, Hyderabad	Sep 25, 2018
Dr. Sanjiv Kumar	Project Management	Diploma programme in Cooperative Management	Institute of Co-operative Management, Hyderabad	Jul 30, 2018

Training attended by the Faculty/Staff

Drs. PC Meena and Sanjiv Kumar attended “Case Writing and Teaching Workshop” at Indian School of Business (ISB), Hyderabad during Sep 21-22, 2018.

Mrs G Aneja participated in the training programme on “New media for agricultural extension” organized by MANAGE during Jul 9-13, 2018.

Mrs G Aneja participated in Executive education programme on “Taking people along: Managing by persuasion” organized by IIM, Ahmedabad during Aug 6-10, 2018.

Staff News

Retirement/Superannuation

- Shri S Swamy, Skilled Supporting Staff (Asst. Generator Operator) – Retired on superannuation w.e.f. 31.08.2018
- Dr. A Debnath, T-9 Chief Technical Officer (Medical Officer) – Retired on superannuation w.e.f. 30.09.2018
- Shri MK Shamshuddin, Technical Officer (Technician Electrical) – Retired on superannuation w.e.f. 30.09.2018
- Smt. M Yadamma, Skilled Support Staff – Retired on superannuation w.e.f. 30.09.2018

Best Employees of the Year/ Decade

Award for 2017-18	
Shri W Sreenivasa Bhat	Administration including Finance (Officer)
Shri K Suryanarayana	Administration including Finance (Non-Officer)
Shri. N Naresh Kumar	Technical (T-1 to T-5 grade -1)
Dr. P Vijender Reddy	Technical (T-6 and above -1)
Shri P Yadaiah	Skilled Support (Male)
Smt. C Kausalya	Skilled Support (Female)
Shri P Yadaiah	Casual Labourer- TS (Male)
Smt. J. Prameela	Casual Labourer-TS (Female)

Award for the Last Decade	
Smt. N Vijaya Lakshmi	Administration including Finance
Dr. A Debnath	Technical
Shri S Swamy	Skilled Support Staff
Shri D Babaiah	Casual Labourer with Temporary Status
Special Category Award	
Dr. MA Basith	Implementation of <i>Swachch Bharat Abhiyaan</i>
Er. Sohail Ahmed Khan	Maintenance of Infrastructure
Mr. P Mohan Singh	Energy Conservation



Best Employee Awardees of the Academy given during ICAR-NAARM Foundation Day

Editors: Dr. Ranjit Kumar, Dr. Sanjiv Kumar, Dr. B.S. Yashvanth, Smt. G. Aneeja

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