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### From the DG's Desk



Dear Readers,

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Indian Agriculture and rural life have undergone tremendous transformation since independence. Agricultural development is an integral part of overall economic growth and was the main source of national income and occupation at the time of Independence. It contributed about 50 % to India's national income and around 72 % of total working population was engaged in agriculture at that time. Although the contribution of agriculture to national GDP is decreasing over the years, it is important that the growth of other sectors and overall economy depends on the performance of agriculture to a considerable extent. Because of these reasons agriculture continues to be dominant sector in the Indian Economy. The post-Independence journey of Indian Agriculture has been quite impressive despite several limiting factors such as uncertainties of weather, declining soil health, increasing atmospheric temperature and emergence of more virulent pests and pathogens. Technological advancements in agriculture have been influential in driving changes in the farm sector. Although the amount of land and labour used in farming declined, the total farm output increased more than 5 times between 1950-51 and 2020. Similarly, the yield (kg/ha) has increased about four times during the same period.

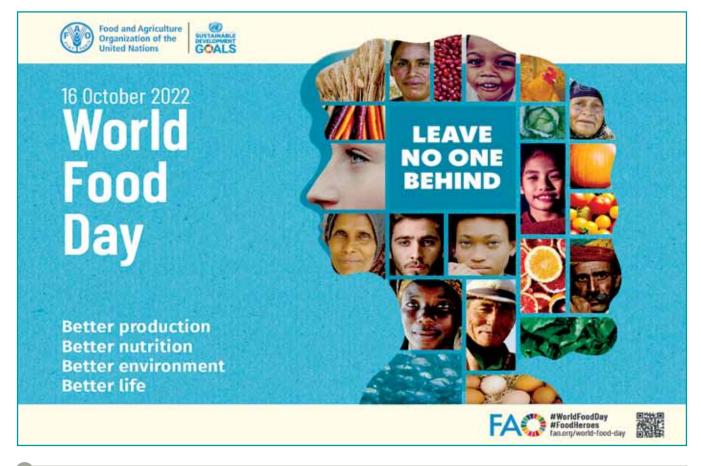
The special thrust is on micro level agricultural land-use planning, soil and water conservation, water harvesting, storage and groundwater recharge, improving water productivity and nutrient use efficiencies, integrated nutrient management, resource conservation technologies, organic farming, integrated farming system including agroforestry, waste water utilization, hill and coastal agriculture, bio-waste management, weed management, climate resilient agriculture, abiotic stress management cutting across the states/UTs. Land Resource Inventory (LRI) on 1:10,000 scale for 27 aspirational districts of India has been prepared to workout block level land-use planning. For drought proofing in Bundelkhand region, Haveli System was rejuvenated to enhance system productivity. The subsurface drip irrigation resulted in higher cane yield (131.0 t/ha) compared to surface drip method (124.4 t/ha) and furrow irrigation (105.0 t/ha) method. An e-ATLAS on micronutrients in Indian Soils was developed to delineate micronutrients deficiency in different soils of the country.

The digital soil mapping framework has been developed using AVIRIS-NG Hyper spectral data, STRM data (30 m), and Sentinel-2 data, and prepared Geo-referenced desertification map of Rajasthan (1 : 500,000 scale) using Indian remote sensing satellite images (IRS-AWiFs), mapping of groundwater potential zones and identification of recharge structures in hard rock areas. Granular mineral fertilizer has been developed as an alternative to conventional P and K fertilizer, mechanized technique for seed coating of biofertilizer and a soil biological health kit. Besides, a mini pan evaporimeter for on-farm irrigation

scheduling, cut-soiler technology for reclamation of saline soils and a bio-consortia for enhancing the productivity of agri-horticultural crops have been standardized.

CSR GROW-SURE, a unique bio-stimulant comprising highly efficient salt-tolerant bacteria has been developed. The formulation was tested for growth and yield parameters in tomato, and banana cultivated in sodic soils of pH 9.14-9.30 and partially reclaimed sodic soils of pH 9.2, respectively and found more effective than CSR-Bio. Plastic mulching in oil palm was found effective in enhancing wateruse efficiency as it recorded almost comparable yields with micro jet irrigation. Plastic mulching is effective in saving 25% water in drought conditions. Thematic maps have been developed for soil suitability for grape growing in Maharashtra, Madhya Pradesh and West Bengal. These maps will be useful for the identification of regions suitable for grape growing in non-traditional areas and grow grapes for round the year availability. Investigation on tomato cultivars Kashi Aman and Kashi Adarsh revealed that they can tolerate moderate salinity when grafted over brinjal rootstocks.

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# WORKSHOP, MEETING, SEMINAR AND CONFERENCE

#### Regional Station, ICAR-Directorate of Poultry Research organized brain storming meet on Duck Research in India-a Way Forward

4 July 2022, Hyderabad. In the Seminar organised by ICAR-DPR, Deputy Director General (Animal Science), Dr B N Tripathi was the Chief Guest and Dr RP Singh, Director, ICAR-DFMD, Bhubaneswar was the Guest of Honour. Dr R N Chatterjee, Director, ICAR-DPR welcomed the guest and emphasized the importance of duck species in the country and urged the eminent scientist to discuss the researchable issues and come up with recommendations to develop duck production in the country. Dr C K Behura, Incharge, Regional Station presented the significant achievements and contribution of the centre in duck development. Dr Mahesh P S, Joint Commissioner & Director, CPDO, Bangalore and Dr A Jalaudeen, Ex-Director of Academics & Research, KVASU, Kerala narrated the status of duck production in India and abroad and highlighted the researchable issues in different areas of duck production. Dr B N Tripathi, DDG (AS) stressed on the importance of duck research in India. He suggested to develop a road map that could improve the duck production to 40 millions from 33 millions in coming 5 years. He also emphasized for collaborative program with CPDO for effective extension and propagation of duck rearing. After the presentations, a Round table discussion was held inviting suggestions from all the experts and scientists. The program ended with vote of thanks from Dr S K Sahoo, Pr Scientist. Experts from the different Government organizations, OUAT, entrepreneurs and scientists participated in the meeting.



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#### Annual Zonal Workshop of KVKs of Zone-VIII organized by ICAR-ATARI, Pune

07-09 July 2022, Anand. An Annual Zonal Workshop on KVKs of Zone-VIII comprising of Maharashtra, Gujarat and Goa was jointly organized by ICAR-ATARI, Pune and Anand Agricultural University (AAU) at AAU, Anand (Gujarat) during 07-09 July, 2022. The Inaugural Function of the Workshop was graced by the Chief Guest, Dr AK Singh, hon'ble DDG (AE), ICAR, New Delhi and Chairman, Dr K B Kathiria, hon'ble Vice Chancellor, AAU, Anand. The dignitaries include Hon'ble VCs of SAUs (NAU, Navsari, SDAU, SK Nagar, and JAU, Junagadh) and Directors of ICAR Institutions (ATARI, Zone VIII, Pune and ICAR-DGR, Junagadh) and Scientists of IIMR, SAUs, KVKs of Zone VII and others.

In the Inaugural session, Dr A K Singh, hon'ble DDG (Agri. Extension) highlighted the crop production scenario in the Country including those of Pulses and Oilseeds; and reiterated that all-round efforts should be made in scaling their production/productivity in the country. In his address, Dr K B Kathiria, hon'ble Vice Chancellor, AAU, Anand thrusted upon the key role of KVKs in progress of agriculture and sought for appropriate linkages for win-win situation. Earlier, Dr N K Gontia, hon'ble Vice Chancellor, JAU, Junagadh pointed out the importance of such review meeting in enabling self-sufficiency in food grains and other commodities by our country. Dr R M Chauhan, hon'ble Vice Chancellor, SDAU, SK Nagar highlighted the role of millets for fulfilling the need for food and feed, and recommended adoption of integrated cropping/farming systems and women empowerment. Dr Z P Patel, hon'ble Vice Chancellor, NAU, Navsari accentuated the impact of social sciences and KVKs in self-sustenance. Further, Shri H H Adrushya Kadsiddheshwar Swamiji, Chairman, Kaneri Math, Kolhapur reiterated on increased production keeping in view the population explosion. The meeting ended with vote of thanks to the chair by Dr H B Patel, DEE, AAU, Anand.



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# Emerging Aquaculture Systems and Practices@AKAM

11 July 2022, Webinar. On the occasion of 'National Fish Farmers Day, 2022', ICAR-CCARI, Goa, organised a national campaign on "Emerging Aquaculture Systems and Practices", through an online webinar on "Seaweed Aquaculture" under Azadi Ka Amrut Mahotsav. Dr Vaibhav Mantri, Sr. Principal Scientist, CSMCRI, Bhavnagar, Gujarat was the resource person and a total of 70 participants attended the webinar. Dr Parveen Kumar, Director ICAR-CCARI, highlighted the importance of seaweed aquaculture along with its uses and economic value, which can be useful in the sustainable development of fisheries livelihood in coastal region. He assured full technical support from the institute for seaweed culture development activities in the State of Goa and coastal region. Dr Shirish Narnaware Section In-Charge, Animal and Fishery Science, ICAR-CCARI, emphasized the role of local communities/self-help groups in promoting the seaweed aquaculture as an income source. Shri Trivesh Mayekar, Scientist (Fish Genetics and Breeding), ICAR-CCARI, briefed on the status of seaweed aquaculture, its Global and Indian scenario, uses and applications of seaweed, culture methods, the import and export scenario, the commercially important seaweed species and funding under PMMSY. The guest lecturer, Dr Vaibhav Mantri, highlighted different cultivation methods of commercially important seaweeds and experimental culture practices developed by CSMCRI.

Dr Vaibhav Mantri recommended the participants to attend the field training programs organised by CSMCRI to gain more practical knowledge.



AKMU, ICAR-CCARI, Old Goa - Goa

# National Workshop on FRP inaugurated at ICAR-CIFA

15 July 2022, Bhubaneswar, Odisha. AICRP on PEASEM center at ICAR-Central Institute of Freshwater Aquaculture, Bhubaneswar organized National workshop-cum-Hands on Training programme on "Design and development process of agricultural gadgets in FRP" during 15-16 July, 2022. Dr R K Singh, Project Coordinator of AICRP on PEASEM, Ludhiana; Dr S K Jena, Project Coordinator, CRP on Water, ICAR-IIWM, Bhubaneswar and Dr Saroj Kumar Swain, Director, ICAR-CIFA, Bhubaneswar graced the inaugural session. Participants from twelve states & UT (Odisha, Karnataka, Jharkhand, Rajasthan, Meghalaya, Punjab, Uttar Pradesh, Gujarat, Uttarakhand, Sikkim, Chhatisgarh and Jammu & Kashmir) participated in the programme. CIPET-IPT, Bhubaneswar is providing technical support to the programme.



Dr B C Mohapatra, Principal Scientist & PI of AICRP on PEASEM, ICAR-CIFA organized this workshop and welcomed the guests from different parts of the country. He highlighted the role and significant achievements of the AICRP center at ICAR-CIFA, Bhubaneswar and the design of the course curriculum for the training. Dr R K Singh as the Chief Guest of the function urged to accelerate research on plastics which could be reused over single use plastics with objective to venture new and promising applications of plastics in Indian agriculture.

Dr Jena highlighted the use and usefulness of plastic lined ponds in the agriculture sector of the country. He also urged the participants to take the benefit of this training and popularise the eco-friendly plasticulture technologies for the growth of the agriculture sector.



Dr Saroj Kumar Swain, Director, ICAR-CIFA as president of the function highlighted the achievements of the institute on application of plastics in aquaculture.

The programme is coordinated by Dr D Panda, Sr. Scientist and Mr N K Chandan, Scientist, ICAR-CIFA, Bhubaneswar.

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### Innovative farmers and farmwomen meet: Workshop on agri-nutri Cereals

16 July 2022, Washim. The Indian Council of Agricultural Research (ICAR New Delhi) celebrated 94<sup>th</sup> ICAR Foundation Day. To mark the occasion Krishi Vigyan Kendra Washim organized Innovative Farmers and Farm Women Meet and Workshop on Agri-Nutri Cereals under the chairmanship of Director Extension Education Dr PDKV Akola, Dr Rajendra Gade and in chief presence of Sau Amrutatai Social Activist.

At the outset of the program Live Webcasting of Hon'ble Agriculture and Farmers Welfare Minister address to the farmers on the eve of ICAR Foundation Day was transmitted. After welcoming the guest of honor event organized at KVK was started with ICAR song and welcome address, Head and Senior Scientist Dr R L Kale briefed the salient achievements of KVK and emphasize role of KVK in promoting and nurturing integrated farming system approach and capacity building for preparation of organic inputs at home stead level by SHGs.

Dr Rajendra Gade in his presidential address enumerated two impactful success stories who have change the life of womens from weeker section and appeal farm womens to go for food processing and value addition and suggested role of all the stake holders for improving the socio economic condition of the womens. While Sau. Amrutatai Social Activist in his address briefed on activity for women empowerment and emphasize importance of Agro Processing.



District Project Manager MSRLM Mr Sudhir Khuje presented outreach of UMED program and shared views on strengthening and nurturing of 9300 women SHGs in the district while Nodal Officer PMFME and SDAO Agriculture Department Nilesh Thombre guided about core activities and programs under Prime Minister Formalization of Micro and Small Enterprise (PMFME) program. Scientist from Sorghum Research Unit Dr PDKV Akola and Dr Gopal Thakare presented role of millets in nutritional security and suggested various extension programs for the SHGs. While DDM NABARD S S Kokadwar highlighted NABARD schemes and suggested to do farming on scientific farming line.

On this occasion farmers whose success stories have been published under Doubling Farmer Income and 25 innovative farm womens were recognized and honored for their contribution good impact through their activities by KVK Washim. Certificate for successful participation in Bee keeping training were also distributed to the selected womens. Event register participation of 250 farmers, farm women, extension personnel across the district.

Krishi Vigyan Kendra, Karda Tq. Risod, Dist. Washim (M.S.) 444506

### Mechanization for Farm Women through WFPOs under Schedule Caste Sub Plan Programme (SCSP)

16 July 2022, Bhubaneswar. A Workshop-cum-Training Programme on Mechanization for Farm Women through WFPOs was organized under the Schedule Caste Sub Plan Programme (SCSP) by ICAR-Central Institute for Women in Agriculture, Bhubaneswar, Odisha in MGMG adopted village of Sankilo under Nischintakoili block, Cuttack district of Odisha. The programme was organised as a part of Azadi ka Amrit Mahostav to commemorate 75 years of India's independence. About 50 participants including scientists and staffs of ICAR-CIWA, farm women, farmers, Personnel from line department and NGOs participated in the programme.

At the outset, Dr Lipi Das, Nodal officer, MGMG programme welcomed the participants and described about importance of WFPOs for promoting mechanization for farm women and explained the use of different women friendly farm tools and equipments in rice, pulse and vegetable farming to improve the work efficiency, work output, drudgery reduction and health hazards of farm women. Dr Biswanath Sahoo, Principal Scientist explained the importance of value addition of milk and milk products for empowering farm women through mechanizing small holder dairy farming and their market linkage through WFPO to get maximum financial benefits. The farm women of WFPO 'Ananya Farmer Producer Company Limited also shared their experience in farming and described their profits obtained through intervention made of ICAR-CIWA, Bhubaneswar.

The programme was followed by a demonstration and distribution of different women friendly farm tools and equipment *viz.*, khurpi, shovel, garden hoe, finger hoe, fabric vermin beds, spade, steel milk cane, improved sickle, hand hoe, ring cutter, cono weeder and micro-nutrients like borax, zinc sulfate among 30 SC farm women under SCSP programme. The programme was thoroughly covered by the print media for wide publicity. At the end of the programme, vote of thanks was proposed.



Dr Lipi Das Director, ICAR-CIWA <lipi.icar@gmail.com>

#### FPOs, Farmers, Start-ups Immersion Program

**16 July 2022, Hyderabad.** ICAR-NAARM, Hyderabad organized "FPOs/FPCs, Farmers and Startups Immersion Program" on 16 July 2022, at ICAR-NAARM in collaboration with Samunnati, Hyderabad with an objective to bring both the Farmer Producer Organizations/Companies of Telangana state and the start-ups associated with a-IDEA on a common platform.

Shri Somasundaram, DGM, NABARD, who was the chief guest during the program interacted with the FPOs to understand their problems and helped resolve their issues pertaining to financial support, market linkages and better solution for farmers in preparing a business plan. Dr Ranjit Kumar, Head, ABM, ICAR-NAARM stressed the need for reducing the cost of inputs with improved operational efficiency and market linkages for profit maximization. He also discussed about digitalization for providing customized services according to the needs of FPOs/ FPCs. Shri Rajesh Savarala, Head, Farmer Network (AP & Telangana) explained about the evolution of Samunnati since 2014 in bringing overall development of the farming community in general and Telangana farmers in particular. He expressed that Samunnati working in 22 states covering with more than 3500 FPOs as aggregators for better byproduct disposal.

Dr Vijay Avinashilingam, Additional CEO, a-IDEA, ICAR-NAARM coordinated and highlighted the objectives of the start-up FPOs/FPCs Immersion program and stressed the importance, need and scope for bringing FPOs and startups together for a win-win situation. During the technical session, Shri Siva Kumar, Manager, SBI briefed about the various schemes of SBI focusing on the FPOs and Startups. Shri Venkateshwarlu, PD, ATMA also present on the occasion emphasized the importance of farm mechanization, IFS and the state government schemes targeted towards the farmers and FPOS.

Shri Ramachandraiah, President, Mithra Foundation & Shri Sudheer, Director of Vyapana, FPCs also exhibited their innovations before the audiences.

The event was attended by 15 startups incubated under a-IDEA and pitched before the 50 FPOs of the state of Telangana. This program not only helped the startups to network with FPOs but also help in refining their products through the feedback given by the FPOs. The programme was attended by more than 125 participants.



ICAR-National Academy of Agricultural Research Management, Hyderabad

# ICAR-IIRR inaugurates SERB sponsored high end workshop

18 July 2022, Hyderabad. ICAR- Indian Institute of Rice Research is conducting 2 weeks High End Workshop on "Statistical and Machine Learning Techniques for Agricultural Systems Modeling and Forecasting using R" (Under the KARYASHALA Scheme - a SERB Initiative) from 18 to 30 July, 2022. The High end workshop was funded by Science and Engineering Research Board (SERB), Department of Science and Technology, Government of India.

Dr Santosha Rathod Course Director presented brief outline of the programme with training objectives and expected outcomes. Dr P Muthuraman, PS and Head, Transfer of Technology and Training in his remarks presented a glimpse of machine learning and R language.

Dr RM Sundaram, Director ICAR - IIRR, in his inaugural remarks highlighted the importance of the training programme in the context of increasing role of data sciences and its advanced methodologies. Chief Guest, Dr Rajender Prasad, Director, ICAR - IASRI while virtually inaugurating the 15 days high end workshop on 18 July 2022, captivated the minds of the young trainees by stressing upon the need to update and apply recent advances in the statistical tools and methodologies over the strong foundation on fundamental statistics.

Later Dr R M Sundaram, Director ICAR - IIRR and the coordination team in the presence of Dr Rajender Prasad, Director, ICAR-IASRI released the two volumes of the Training Manual.



AKMU/GIS-IIRR Indian Institute of Rice Research (IIRR) Rajendranagar, Hyderabad-500030 Telangana

#### State Level Interface Meeting on Agricultural Contingency Preparedness for Rajasthan -2022

18 July 2022. A State Level virtual Interface Meeting on Enhancing the Preparedness for Agriculture Contingencies during *kharif* 2022 for Rajasthan was jointly organized by ICAR-Central Research Institute for Dryland Agriculture (CRIDA), Department of Agriculture, Govt of Rajasthan.

The interface meeting was chaired by Shri Dinesh Kumar, Pr. Secretary Agriculture & Horticulture, Govt of Rajasthan. Shri Kana Ram, Commissioner, Dept of Agriculture, Dr M Osman, Director (I/c), ICAR-CRIDA, Dr SK Sharma, Director (Research), MPUAT, Dr P Shekhawat, Director (Research), SKRAU, Bikaner, Dr T Satyavathi, Project Coordinator, AICRP on Pearl and Millet, Jodhpur, Dr Rohilla, ATARI, representatives from ICAR institutes, District and Divisional officials from Department of Agriculture attendented this meeting.



Dr K V Rao, ICAR-CRIDA, explained about the about the effort made by CRIDA along with State Agricultural Universities in the development and

Updation of district agriculture contingency plans and the need for sensitization of department officials on the implementation of contingency plans in case of weather aberrations.

#### Major recommendations:

- Since the state is expected to have above normal rainfall during the season and also in different months, suggested to monitor block level rainfall events which can cause temporary waterlogging of fields
- Based on soil information, areas prone for temporary waterlogging are to be marked in each district for monitoring of crop growth due to high rainfall events
- Crops which are sensitive to temporary waterlogging in each district are to be identified for monitoring purpose.
- Dryspells info is to be shared by ICAR-CRIDA on weekly basis to state government for initiation of action, if any.
- Pest and disease problems in different crops to monitored as above normal rainfall is expected.

Mediacell, CRIDA, Hyderabad-500 059, Telangana

### Stakeholders' meet on sugarcane and sugar sector

20 July 2022, Lucknow. A Stakeholders' meet on Sugarcane and Sugar Sector @2025 was organized by ICAR- Indian Institute of Sugarcane Research, inaugurating the meet as the Chief Guest, Shri Sanjay R Bhoosreddy, Additional Chief Secretary, Department of Sugarcane and Sugar Development, Government of Uttar Pradesh said that due to the improved cane production technology of research institutes, hard work of farmers and intervention in the management of sugar mills, farmers' income has increased by 1.75 time during the period 2017-2022 and effort is now intensified to double the farmers' income in real term by 2027 considering the figure in base year 2022. He appreciated the improved sugarcane production technologies developed by the research institutes and congratulated the Scientists for their immense contribution.

Dr A D Pathak, Director, ICAR-IISR, Lucknow, while welcoming the guests and participants, discussed the major achievements of the Institute. Dr G Hemaprabha, Director, ICAR-Sugarcane Breeding Institute, Coimbatore informed that varieties of sugarcane developed by the Institute are prevalent in various countries around the globe. Shri S C Deshmukh, Director General, Vasantdada Sugar Institute, Pune, credited the government policies for the transformation of sugarcane and sugar industry. Dr Sushil Solomon, former Vice Chancellor, C S Azad University of Agriculture and Technology, Kanpur appreciated the coordinated efforts of all the stakeholders to translate the vision documents prepared by IISR, Lucknow into a reality and appreciated the farmers' friendly policies of the Government for the betterment of sugarcane and sugar sector.

Prof. Narendra Mohan, Director, NSI, Kanpur attributed the transformation in the Indian sugar sector to the fixation of minimum selling prices of sugar and the differential pricing policy of ethanol. Shri Sanjay Awasthi, President, STAI credited the success of breaking infamous sugar cycle to the techniques of research institutes and government policies. He explained the need of transformation into green energy production with global competiveness in term of per unit cost. In his plenary presentation, Shri R K Gangwar ED, Mawana Sugar, highlighted the yield gains and monetary contribution of variety Co 0238 especially in subtropical zone. On this occasion, eminent persons of sugar industry, Technocrats, Presidents of women self-help groups and progressive sugarcane farmers were felicitated with Certificates and Memento.

Dr A K Sah, Principal Scientist and Organizing Secretary proposed formal vote of thanks to dignitaries, guests and participants. More than 300 scientists, researchers, executives of sugar industry, officers of sugarcane development department, *Urjadata* (sugarcane farmers), members of NGOs/FPOs/SHGs have participated in the meeting.



Dr A K Sah

Principal Scientist, FUPAAS, FISEE, VP-ISEE Incharge, Extension-Training & Rajbhasha Indian Institute of Sugarcane Research, Lucknow Ajay.Sah@icar.gov, training.iisr@icar.gov.in

# Interactive meeting on Openwater fisheries development in Assam

21 July 2021, Guwahati. ICAR-Central Inland Fisheries Research Institute, Barrackpore and Directorate of Fisheries (DoF), Govt. of Assam jointly organized an Interactive meeting on 'Openwater fisheries development in Assam' at Meen Bhawan, Guwahati. It was inaugurated by Shri Rakesh Kumar, IAS, Commissioner & Secretary of Fisheries, Govt. of Assam. He appreciated past collaborative activities by both the organizations and urged them to continue to work together for open water fisheries development for enhancement and conservation of the resources.



Dr Dhurba Jyoti Sharma, Managing Director, FISHFEDcum- Nodal Officer, APART, DoF, Assam explained the purpose of the programme. Shri J P Medhi, Joint Director of Fisheries, Assam welcomed the guests and participants.

Shri Rakesh Kumar, IAS, Commissioner & Secretary Fisheries, Govt. of Assam, Department urged both the organizations to work together for development of fisheries sector of the state. Shri Prasanta Borkakati, ACS, Managing Director, Assam Fisheries Development Corporation Ltd., stated that ICAR-CIFRI and AFDC have been working closely for development of beel fisheries under the administrative control of AFDC. Dr B K Das, Director, ICAR-CIFRI explained about recent development in inland openwater fisheries of the country and recent initiatives of the institute in Assam and other states.

Two theme lectures were presented on the occasion, Dr R C Barman, Mission Director, FMS-CMSGUY gave a presentation on "Recent initiatives of Department of Fisheries, Assam in openwater fisheries development and its future road map". Dr B K Bhattacharjya gave a presentation on 'Recent ICAR-CIFRI initiatives for R&D of openwater fisheries of Assam'.

During the interactions, Dr R Suresh, Resident Consultant, WorldFish appreciated the steps taken by ICAR-CIFRI and the DoF to sit together and interact on the subject in a focused manner. He also briefed about the activities under the fisheries component of APART project.

Scientists of ICAR-CIFRI, DoF officials and other stakeholders actively took part in the interaction session held in the afternoon. In his concluding remarks, Director, ICAR-CIFRI urged both the Institutions to join hands for enhanced fish production of the state by utilizing openwater fisheries of the state.

#### Ganesh Chandra

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#### Review of Research Activities and Strengthening Future Research Program of NICRA Strategic Partner Institutes under NRM and Agril. Engineering

21-22 July 2022, NASC, New Delhi. Dr B Venkateswarlu, Former VC, VNMKV and Chairman, Expert Committee for NICRA Strategic Research, stressed on the need to focus research on carbon sequestration, and water & energy footprint of different NRM technologies.

Dr S K Chaudhari, DDG (NRM) and Co-Chair highlighted the need to work on nature-based solutions and LCA of nanofertilizers. Dr N C Patel, Former VC, AAU and Member, Expert Committee highlighted the importance of using tools like sensors and IoTs particularly for water and soil fertility management. Dr S Bhaskar, ADG (AAF&CC) and Member emphasized the need to address challenges of climate variability. Dr V K Singh, Director, ICAR-CRIDA and Member Secretary welcomed the participants. Dr M Prabhakar, PI, NICRA gave an overview of the research program of partner institutes. Reivew of research progress of partner institutes and finalization of technical program for 2022-23 will be done in this meeting during 21-22 July 2022.



ICAR-Central Research Institute for Dryland Agriculture, Hyderabad

### State Level Interface Meeting on Agricultural Contingency Preparedness for Maharashtra -2022

22 July 2022. A State Level virtual Interface Meeting on Enhancing the Preparedness for Agriculture Contingencies during *kharif* 2022 for Maharashtra was jointly organized on 22 July, by ICAR-Central Research Institute for Dryland Agriculture (CRIDA), Department of Agriculture, Govt of Maharashtra.

The interface meeting was chaired by Shri Eknath Dawalle, Pr. Secretary Agriculture, Govt of Maharashtra. Shri Vikas Patil, Director (Extension & Training), Shri Raosaheb Bhagde, Commissioner, (Agriculture), Smt Sarita Bandekar Deshmukh, Joint Secretary (Agriculture) Dr M Osman, Director (I/c), ICAR-CRIDA, Dr H S Pathak, Director, NIASM, Baramati, Dr V K Kharche, Director (Research), PDKV, Akola, Dr S R Gadakh, Director (Research), MPKV, Rahuri Representatives from ICAR institutes locate din Maharashtra, Chief Scientists of AICRP on Dryland Agriculture, AICRP on Agro meteorology, District and Divisional officials from Department of Agriculture, KVKs, etc. attendental the meeting.



Dr K V Rao, ICAR-CRIDA, informed that agriculture contingency plans for all rural districts of Maharashtra have been developed and updated with help of state agriculture universities and also about interface meetings conducted during 2015-2021 with help of Department of Agriculture for sensitization and implementation of contingency plans.

#### Major recommendations:

- As above normal rainfall is expected in remaining months of kharif season, suggested to monitor high intense and extreme rainfall events on a daily basis and for cumulative 2-3 days which can cause temporary waterlogging of fields.
- Suggested to cultivate Soybean till 25 July, 2022. Strongly suggested to have experiments for extending the sowing windows with delayed sowings and to work out decline in yields for delay in each week so that farmers can be sensitized on expected yields for decision making.
- Cropping system experiments are to be initiated with short duration late sown *kharif* crops and normal planting of *rabi* crops to address scenario experienced during this year
- Based on soil information, areas prone for temporary waterlogging are to be marked in each district and for sensitive crops for monitoring of crop growth and to initiate need based interventions
- As a preparatory mechanism to address continuous rainfall scenario leading to stagnation, land management options viz BBF, Paired row planting, ridge and furrow planting to be promoted.
- Option of fodder maize to be explored in areas demand for fodder exists
- Chief Scientists of AICRP on Dryland are to prepare an advisory on nutrients (micro and macro nutrients), for diseases for each district
- Land management options with graded surface drains with cascade of water harvesting systems are to be taken up in a large way with programs of MGNREGA, IWMP as a preparedness measure to overcome large scale water stagnation for long periods
- In paddy growing areas, staggered nurseries are to be promoted as prepared mechanism so that

sufficient planting material can be made available in case of damage to nursery material

ICAR-Central Research Institute for Dryland Agriculture, Hyderabad

### ICAR-IISWC and Annamalai University, Tamil Nadu jointly organized the National Workshop cum Stakeholders Meet

22-23 July 2022, Hybrid mode, Chdiambaram. ICAR-Indian Institute of Soil and Water Conservation (IISWC), Research Centre, Udhagamandalam and Centre for Natural Farming and Sustainable Agriculture (CNFSA), Annamalai University, Chidambaram, Tamilnadu jointly organized "National Workshop cum Stakeholders Meet on Climate Resilient Natural Farming for Sustainable Agriculture" at Ooty. At the outset, Dr K Kannan, Head and Convener welcomed the august gathering and Dr R Raman, Director (CNFSA) and organizing secretary, briefed about the workshop. Prof Dr RM Kathiresan, Honorable Vice Chancellor, Annamalai University, Chidambaram was the chief guest of the function. In the Chief Guest address Prof. Dr RM Kathiresan, Honorable Vice Chancellor discussed about the natural farming principles and ways to revive the ancient practices of Indian agriculture. Dr M Madhu, Director, ICAR-IISWC, Dehradun in his presidential address stressed the need for Natural Farming practices for the improvement of soil health and for the conservation of natural resources. Shri Ravindra Kumar, Regional Director, Regional Centre for Organic and Natural Farming, South Zone, Bengaluru and Dr K Jayabalan, Former Deputy Director General, Geological Survey of India, Kolkata were the guest of honors. Dr K Jayabalan in his address emphasized the need for site-specific and crop specific Natural Farming practices for improving soil health and farmer's livelihood security.

The inaugural function was followed by the technical sessions in which experts viz., Dr N Ravisankar, Principal Scientist & National PI (NPOF) ICAR-IIFSR, Modipuram; Prof. E Somasundaram, Director, ABD, TNAU, Coimbatore; Prof. R Raman, Director, CNFSA Annamalai University, Chidambaram; Dr P Kumaravadivelu, Head ICAR- Krishi Vigyan Kendra, Coimbatore discussed about emerging trends and challenges with more focus on crop diversification, soil health and fertility management in natural farming under changing climate conditions for the benefit of all the stakeholders. In continuation to the technical session, stakeholders - scientists' panel interaction was organized in which farmers from Tamilnadu, Kerala, Andhra Pradesh and Karnataka have participated along with their co-ordinators both in online and offline mode and shared their experiences in Natural Farming. The programme was attended by more than 250 research scholars, students, farmers, subject matter specialists from

KVKs and other extension workers from the state government departments across the nation. The panel discussion was moderated by Prof. E.Somasundaram, Director, TNAU, Coimbatore. On 23<sup>rd</sup> July, 2022, farmers and other participants were taken to the exposure visit to model field of Natural farming near Kothagiri by a progressive farmer.



H&E Division/AKMU Cell ICAR-IISWC, Dehradun-248195 (Uttarakhand)

#### ICAR & APAARI Knowledge Management Workshop

23 July 2022, New Delh. ICAR Jointly organised the Hybrid Knowledge management workshop with APAARI. The objective of the workshop was to take stock of situation in Knowledge Management and develop roadmap for future collaboration. Dr Trilochan Mohapatra, Secretary, DARE and DG, ICAR and Dr A K Singh, DDG (Agricultural Extension) were Chairman and Co-chairman of the workshop, respectively. DDGs, ADGs and Directors of ICAR research institutes attended the workshop.

The programme began with opening remarks of Dr Mohapatra wherein he highlighted that ICAR led NARES is the largest agricultural knowledge generation system in the World. On the basis of strong knowledge base and its application, the country has experienced several revolutions in agriculture and ICAR is amongst the leading agricultural producers. Dr Ravi Khetarpal, Executive Secretary, APAARI, highlighted the association of APAARI with ICAR. He said that APAARI looks towards ICAR for its support in developing knowledge management system to benefit other nations associated with the APAARI.

In order to sensitize the discussion, Dr S K Malhotra, Project Director, DKMA made a presentation and gave a holistic view of the ICAR Knowledge Management System highlighting the complex network of Apps, platforms, etc. He presented ICAR's knowledge generation and diffusion system prevailing in agriculture through 113 institutes including ATARIs. He further mentioned that the ICAR institutes have contributed profusely through development and implementation of knowledge resource portals such as 15 digital resources, Krishikosh, Krishi e-Resource, e-pubs, DKMA publications, KIRAN, KVK Knowledge network and Kisan Sarthi. He emphasized for social engineering of new knowledge. Dr A K Singh, DDG (Extension) expressed his desire for the integration of the knowledge available at discreet locations at one single focal point. Dr T R Sharma, DDG (Crop Sciences) highlighted that ICAR is fortunate to have Directorate of Knowledge Management in Agriculture dedicated to the dissemination and sharing of agricultural knowledge and information. Dr A K Singh, Director (IARI) brought to the fore the role of Intellectual Property Management in the KM process along with the need for commercialization of available technologies.

Dr Rajendra Prasad, Director (IASRI) apprised that IASRI is housing 13 digital repositories which are accessible worldwide and are also a part of the GARDIAN system of the CGIAR. He also demanded that knowledge resources available with APAARI should be shared with ICAR and interpretability of the KM system. Dr J P Mishra, ADG (IR) enlightened the participants about the spread and scope of ICAR citing that ICAR is omnipresent with its footprints everywhere on the Indian landscape and mentioned that we need to reflect upon the approach towards KM-Innovation process. Smt Martina Spisiakova highlighted the role of Knowledge Management in Innovation and how KM is an integral part of Innovation. The presentations were followed a round of group discussion reflecting on the similarities/ dissimilarities of the KM process of ICAR and APAARI.

Post lunch session on participatory analysis of KM gaps of ICAR took place wherein the dignitaries identified both the structural as well as functional gaps in the present KM system of ICAR. At the end, a common framework was chalked out on how APAARI and ICAR can collaborate on the identified thematic areas.

The workshop ended by a vote of thanks by DG, ICAR, Project Director (DKMA) and Executive Secretary, APAARI.



Dr S K Malhotra Project Director ICAR-Directorate of Knowledge Management in Agriculture, Krishi Anusandhan Bhawan-I Pusa, New Delhi 110 012 director.dkma@icar.gov.in, dkma.icar@gmail.com

#### State Level Interface Meeting on Agricultural Contingency Preparedness for Gujarat-2022

26 July 2022, Hyderabad. A State Level Interface Meeting on Enhancing the Preparedness for Agriculture Contingencies during *kharif* 2022 for Gujarat was jointly organized by ICAR-Central Research Institute for Dryland Agriculture (CRIDA), Department of Agriculture, Govt of Gujarat.

The interface meeting was chaired by Shri S J Solanki, Director of Agriculture, Govt. of Gujarat. Smt Kamala Chhaiya, Additional Director, Dept. of Agriculture, Smt Mittal Dudhat, Dy. Director, Agriculture, Dr G Ravindra Chary, PC, AICRPDA, ICAR-CRIDA, Directors of Research, Dr B S Deora (SDAU), Dr T R Ahlawat (NAU) and Dr M K Jhala (AAU), Dr D S Hirpara, Research Scientist, AICRPDA centre, Rajkot, senior scientists from CRIDA, JAU, NAU, AAU and SDAU, JDAs, officials from line departments, ATMA and KVKs participated.



Dr. Ravindra Chary briefed about the purpose of the meeting. Shri Solanki in his initial remarks briefed about the rainfall scenario, progress in crop sown area and crops condition in the state. Dr K V Rao, Convener, Agriculture Contingency Cell, CRIDA, informed that CRIDA along with SAUs, state line departments, ICAR Institutes and KVKs prepared and also updating district agriculture contingency plans and there is a need for sensitization of department officials on the implementation of contingency plans in case of weather aberrations.

#### Major recommendations:

- Since the state is expected to have excess rainfall during the season and also in different months, suggested to monitor block level rainfall events where sowing can be ensured with good drainage measures in case of water logging with suitable crop and varieties.
- Since, there are good rains in different parts of the State, it was suggested to complete the sowing with good drainage facility in the unsown areas especially for cotton, groundnut and fodder.
- In the changing onset of monsoon and rainfall patterns in North Gujarat, it is suggested prepare optimum sowing windows for the major crops.

Periodical review for time-to-time strategies during the whole crop season this year by sharing excess rainfall information with ICAR-CRIDA for initiation of action, if any.

The meeting ended with words of thanks by Dr A V M Subba Rao, PS, ICAR-CRIDA, Hyderabad

ICAR-CRIDA, Hyderabad-500 059, Telangana

#### State Level Interface Meeting on Agricultural Contingency Preparedness for Telangana-2022

28 July 2022, Hyderabad. A State Level Interface Meeting on Enhancing the Preparedness for Agriculture Contingencies during *kharif* 2022 for Telangana was organized jointly by ICAR-Central Research Institute for Dryland Agriculture (CRIDA) and Department of Agriculture, Govt of Telangana.



Shri Hanumanth Rao, Special Commissioner, Agriculture chaired the meeting. Dr R M Sundaram, Director, ICAR-IIRR, Dr C V Ratnavathi, Director, ICAR- IIMR, Dr Jagadeeswar, Director of Research, PJTSAU, Director of Research, PVNRVU, Dr G Ravindra Chary, PC, AICRPDA, scientists from CRIDA, IIOR, PJTSAU, District Agriculture Officers, officials of ATMA, line departments, and KVKs participated.

Dr Ravindra Chary briefed about the purpose of the meeting. Shri Solanki in his initial remarks briefed about the rainfall scenario, progress in crop sown area and crops condition in the state. Dr K V Rao, Convener, Agriculture Contingency Cell, CRIDA, informed that CRIDA along with SAUs, state line departments, ICAR Institutes and KVKs prepared and also updating district agriculture contingency plans and there is a need for sensitization of department officials on the implementation of contingency plans in case of weather aberrations.

Directors/scientists of SAUs and ICAR institutes highlighted the interventions implemented and suggested the contingency measures, plant protection measures, etc.

#### Major recommendations:

Since the State is expected to have excess rainfall during kharif season spread over different months, it is suggested to monitor block level rainfall events where sowing can be ensured with good drainage measures in case of water logging with suitable crop and varieties. The District Agriculture Officers presented a good overview of status as well as plan to supply seed requirements throughout the districts in the State.

- Wet DSR needs to be promoted in the identified districts/mandals
- Foliar nutrition/top dressing needs to be taken up in the standing crops. Prophylactic measures for plant protection in the standing crops
- Since, some of the districts have also been identified for promoting millets by Govt. of India, the officials were suggested to promote millets in the targeted districts
- To be vigilant towards the rainfall situations in the forthcoming days for taking up suitable preparedness and real-time measures during excess rainfall situation in the standing crops
- Suitable varieties of paddy, cotton, castor, groundnut, pigeonpea under these normal to excess rainfall situations were also suggested.
- For livestock, deworming followed by vaccination to endemic diseases and special attention to foot rot and fodder availability with protection of animals from high rains were suggested. Appropriate feed /fodder management for small ruminants needs to be taken up as suggested.

Source: ICAR-CRIDA, Hyderabad-500 059, Telangana

### Training of FPOs of UP on Enhancing the income of the farmer through cow rearing and natural farming

28 July 2022, Jhansi. ICAR-Indian Grassland and Fodder Research Institute, Jhansi; UP FPO Association Lucknow and Amroukh Artha Jev Urja FPO, Jhansi organized a one day training programme for directors of various FPOs of Jhansi, Lalitpur and Jalaun districts of UP. The total 78 FPO are working in these 3 districts.



Dr Amaresh Chandra, Director ICAR-IGFRI, Jhansi and Shri Dayashankar Singh, President of UP FPO Association Lucknow inaugurated the programme. Dr Chandra briefed the participants about improved fodder production technologies and urged them to become ambassador of IGFRI in transferring fodder technologies. Shri Singh, explained various aspects of FPO function and to improve their profitability. Shri Shyam Bihari Gupta, member, Kisan Samrudhi Ayog, UP, explained the steps needed for natural farming using products from cows. The focus of training was on cow based natural agriculture. The important topics of sessions were round the year fodder production, biogas energy, natural farming, value addition of agricultural products and improving the FPO performance. On these aspects different experts made presentation. All the participants visited the Technology Park of IGFRI and saw improved fodder technologies. More than 50 participants from different FPO participated in the training.



ICAR-Indian Grassland and Fodder Research Institute, Jhansi, Uttar Pradesh

### State level workshop on oil palm cultivation

29 July 2022. The State level workshop on oil palm was jointly organised by KSNUAHS, Shivamogga, AICRP (Palms) oil palm, Bavikere Centre, Department of Horticulture, Government of Karnataka. The workshop was inaugurated by Dr K Nagendra Prasad, IAS, Director of Horticulture, Government of Karnataka. In inaugural address informed to the gathering that Hon'ble Chief Minister of Karnataka dectened to extend the area under oil palm from present 8,000 ha to 25,000 ha and to launch the separate scheme for oil palm production in line with Government of Andhra Pradesh. Further, in the process of extending the area, many discussion were held by involving farmers, industrialists and policy makers with special reference to reduce the import, emphasize on inter/mixed cropping in oil palm to double the farmers income. Dr Sobarad, Additional Director of Horticulture (Oil Palm) underlined the development and up gradation of State Horticulture department which, is the nodal department for oil palm, actively involved in the planning and implementation of the new oil palm policy. Dr K Manorama Principal Scientist (Agronomy) and Dr G Ravi Chandran, Principal Scientist (Seed Technology) from ICAR- IIOPR, Pedavegi served as resources person. Factors that cause limitations in obtaining optimal yields include

improper intercropping practices, insufficient and untimely distribution and application of fertilizers and inadequate irrigation, lack of technical knowledge, etc. were discussed.

About 317 participants, including farmers, Horticultural Officials and Industrialists, attended the workshop. In recognition of high FFB production, seven farmers were honoured.

ICAR - All India Coordinated Research Project on Palms, ICAR- CPCRI, Kasaragod



Interface Meet on AnGR Bihar A Mission towards Zero Non-descript AnGR of India held

30 July 2022, Patna. The 13<sup>th</sup> State-Interface Meet of ICAR-NBAGR and Department of Animal Husbandry & Fisheries Resources (DAH&FR), Govt. of Bihar and Bihar Animal Science University (BASU) was organized under the 'Mission towards Zero Non-descript AnGR of India' on 30 July 2022, at Patna. Theme of the meeting was "Characterization and Documentation of Animal Genetic Resources of Bihar: A Mission towards Zero Non-Descript Population". More than 100 delegates including Scientists of ICAR-NBAGR, ICAR-RCER, Academicians of BASU and Officers of Animal Husbandry Department attended the meet.

Dr N Saravana Kumar, Secretary, DAH&FR & Chairman of the meet congratulated the ICAR for taking up such an important mission to recognise native AnGR for the benefit of the society across the Country. Giving paramount importance, he assured all support of the department to complete mission activities in the state.

Dr B P Mishra, Director, ICAR-NBAGR, Karnal, talked about the importance of native AnGR as well as their role in ecosystem services and biodiversity management. He also sensitized the delegates about the purpose of the mission to characterize nondescript animal populations in various states. Emphasizing the importance of native AnGR, Dr Rameshwar Singh, Hon'ble VC, BASU, Patna also felt the necessity of improvement and conservation of native breeds. Dr A Upadhyaya, Director, ICAR-RCER, enlightened the efforts of the institute in exploring, characterizing and documenting new germplasm in the state in collaboration with ICAR-NBAGR. Dr M S Tantia of ICAR-NBAGR and Dr P C Chandran of ICAR-RCER also explained to document native AnGR of the state, under the mission.



Director, ICAR-NBAGR, Karnal

#### ICAR-NRC on Meat, Hyderabad organized DST-SERB sponsored Highend Workshop

21-30 July 2022, Hyderabad. ICAR NRC on Meat, Hyderabad organized DST-SERB sponsored Highend workshop (Karyashala) on "Targeted and High Throughput Sequence Data Analysis Approaches for Candidate Gene Mining" was organized during 21-30 July 2022. The program was inaugurated by Dr S B Barbuddhe, Director, NRC on Meat. The workshop provided both theoretical and hands-on experience on various basic and advanced tools such as RT-PCR, RACE-PCR, ddPCR, real time PCR including advanced bioinformatics tools for high throughput sequence data analysis like transcriptome data quality control, assembly, annotation, differential gene expression analysis, gene ontology and pathway analysis. This program was attended by 10 students from 5 Veterinary colleges. Exposure visits to National Institute of Animal Biotechnology (NIAB) and Directorate of Poultry Research (DPR) were also organized. A training manual was prepared and distributed to the participants. During the valedictory program, Dr S B Barbuddhe, Director, NRC on Meat highlighted the futuristic applications of various molecular tools learned during the workshop and encouraged the participants to use them innovatively to address research problems in their respective field of study. Dr Gireesh Babu P, Senior Scientist, Dr Rituparna Banerjee, Scientist and Dr Vishnuraj M R, Scientist coordinated the program.



ICAR-National Research Centre on Meat Chengicherla, Boduppal Post Hyderabad 500092, India

### DST-SERB sponsored Karyashala - A High-End 10 days Workshop on Spatial and Temporal Modeling of Zoonotic Diseases using R

22-31 July 2022, Bengaluru. ICAR-National Institute of Veterinary Epidemiology and Disease Informatics (ICAR-NIVEDI), Bengaluru organized a DST-SERB sponsored Karyashala - "A High-End 10 days Workshop on Spatial and Temporal Modeling of Zoonotic Diseases using R" from 22 to 31 July 2022.



The workshop was initiated at ICAR-NIVEDI campus on 22 July 2022, on an energetic note with the interest and enthusiasm of 20 participants from all over India.

The workshop focused on developing the expertise and strengthening the skills among PG and PhD students in the area of zoonotic disease modeling in the country using R and to develop future leaders in the area.

Dr Md Mudassar Chanda, Senior Scientist and Course Director and Dr B R Shome, Director, ICAR-NIVEDI emphasized the importance of zoonotic disease modeling in generating evidence based decisions to policymakers for effective prevention and control of zoonotic diseases in the country.

ICAR - National Institute of Veterinary Epidemiology and Disease Informatics (NIVEDI) Ramagondanahalli, Post Box No. 6450 Yelahanka, Bengaluru-560064, Karnataka, India

### IGFRI-IGKV collaborative Online workshop on Fodder Resources Development Plan for Chhattisgarh

05 August 2022, Jhansi. The ICAR-Indian Grassland and Fodder Research Institute, Jhansi, Uttar Pradesh in association with the Indira Gandhi Krishi Viswvidyalay, Raipur, CG organized a webshop on "Fodder Resources Development Plan for Chhattisgarh" on 5 August 2022. This is part of "National Initiative on Accelerating Fodder Technology Adoption NIAFTA" of the Institute. The objective was to disseminate the ongoing research related to the fodder technologies, and to develop fodder resource development plan for Chhattisgarh. About 140 participants from Directorate of Veterinary Services, KVKs, IGKV, Dau Shri Vasudev Chandrakar Kamdhenu Vishwavidyalaya and IGFRI participated. Dr Purushottam Sharma, NO, NIAFTA, welcomed the guests and briefed about the initiative of institute, Dr Amaresh Chandra, Director, ICAR-IGFRI, Jhansi highlighting the important research activities carried out by the Institute with particular reference to the agro-climate of Chhattisgarh.



Smt Chandan Sanjay Tripathi, IAS, Director, Veterinary Services, Govt. of Chhattisgarh, explained the feed and fodder situation the states and government schemes being implemented to meet the demand.

Dr Dakshinkar N Purshottam, Hon'ble VC, Dau Shri Vasudev Chandrakar Kamdhenu Vishwavidyalaya, Anjora, Durg, (CG) welcomed the initiative and explained various technologies developed by the university. Dr Girish Chandel Hon'ble VC, Indira Gandhi Krishi Vishwavidyalaya, Raipur, chaired the session and in his address, emphasized the development and promotion of biofortified fodder crops along with convention fodd er technologies.

Dr Shahid Ahmed, PS and Head (CI), IGFRI, presented draft "Fodder Resources Development Plan of Chhattisgarh State" which was discussed. Dr S K Jha, OIC, AICRP(FCU), IGKV Raipur, highlighted improved fodder technologies suitable for Chhattisgarh State developed by IGKV and AICRP(FCU).

The participants interacted and provided valuable suggestions which will be incorporated in fodder plan. Meeting ended with vote of thanks by Dr V K Vasnik, Sr. Scientist, IGFRI, Jhansi.

ICAR-Indian Grassland and Fodder Research Institute, Jhansi, Uttar Pradesh

#### 5<sup>th</sup> Annual Zonal Workshop of KVKs of Bihar and Jharkhand

*6-8 August 2022, Patna.* ICAR-Agricultural Technology Application Research Institute, Patna organized "5<sup>th</sup> Annual Zonal Workshop of KVKs of Zone-IV" at Rajgir International Convention Centre. Dr A K Singh, Deputy Director General (AE), ICAR inaugurated the workshop with lighting of lamp. Dr Anjani Kumar, Director ICAR-ATARI welcomed the Chief-Guest, Guest of Honour and dignitaries. He presented the overall achievements of ATARI, Zone-IV. Dr A K Singh, DDG (AE), ICAR stated that ICAR successfully documented DFI case of 75000 farmers whose incomes double during the period of 2016-17 to 2021-22. He stressed that KVK should organized their training programme by considering one district one product so that, KVK is like one stop shop. He stressed that now we need to moves towards agriculture with little use of chemicals in form of fertilizer and pesticides.



Dr Randhir Singh, ADG (Extension), ICAR, New Delhi, congratulate all the KVKs to successfully achieved target of DFI success stories cases. He said that adoption of new technology is only the way to revolutionize the agriculture and ultimately increase the income of farmers.

Dr R K Malik, Country Coordinator, CIMMYT emphasized on the need of Integrated Farming System for enhancing the income of smallholders, valueaddition, women empowerment and following the cluster-based approach by the KVKs. He advocated for popularization of bio-fortified variety through OFT and FLD. Dr Rameshwar Singh, VC, BASU said integration of animal husbandry along with cropping is very helpful for increasing the farmers income. He also said that KVKs are like bridging the gap between farmer and research institutes. Dr Krishna Kumar, VC, RPCAU urged for making the agriculture as Business Oriented. He stressed on the need of better marketing for enhancing the farmers' income.

On valedictory session Shri Shrawan Kumar Hon'ble Minister of Rural Development of Bihar as Chief guest addressed the participants and pointed out that agriculture is backbone of state economic. He also appreciated the education provided by universities and work done by Scientist of KVKs for farmers at ground level. He stressed the need of contingency crop planning in the changing climatic resilient agriculture and making agriculture profitable.

The Annual Zonal Workshop was attended by ICAR Institute NRC Litchi, MGFRI and Director of Extension Education of Universities, Associate Director Extension of Universities, Scientist of ICAR institute and Heads of 68 KVKs.

ICAR-Agricultural Technology Application Research Institute, Zone-IV, Patna, Bihar

#### National Workshop on Pathways for Effective Implementation of SC Subplan Scheme in ICAR

19 August 2022, Hyderabad. ICAR-National Academy of Agricultural Research Management conducted twodays National Workshop on "Pathways for Effective Implementation of SC Sub-Plan Scheme in ICAR" during 18-19 August 2022, in Hybrid mode. The objectives of the workshop were to deliberate on issues and challenges faced in effective implementation of SCSP across ICAR institutions and to identify consensusbased operational reforms and good practices to be for effective implementation of SCSP scheme.

A total of 62 participants representing 21 ICAR institutes implementing SCSP attended the programme of which 34 attended in-person.

During the inaugural programme, Dr Ch Srinivasa Rao, Director, ICAR-NAARM expressed that the guidelines which are being developed in discussion with the nodal officers of ICAR institutions will ensure smooth implementation of SCSP scheme in ICAR and thereby ensuring livelihood security of deprived sections of the society. Dr G Venkateshwarlu, Joint Director, ICAR-NAARM stressed the need for identifying entrepreneurial modules in agri-horti sector which greatly improves the nutritional security and ensures equity among different sections of the society in Rural India.

During the workshop, brainstorming sessions were held on 3 thematic areas namely challenges faced in implementation; good practices; and operational reforms. The points emanated from the brainstorming sessions were synthesised in the plenary session held on 19 August 2022. Dr Ch Srinivasa Rao stressed the urgent need to bring out the guidelines document for effective implementation of the scheme at ICAR.

Dr M Balakrishnan and Dr M Ramesh Naik coordinated the workshop.



ICAR-NAARM, Hyderabad, Telangana-500030.

### Stakeholders' Dialogue on Climate Smart Agriculture Organized

18 August 2022, Ludhiana. ICAR-Agricultural Technology Application Research Institute (ATARI), Ludhiana organized "Stakeholders' Dialogue on Climate Smart Agriculture" to invite experiences and perspectives of different stakeholders on climate smart agriculture for cross learning. Dr S K Chaudhari, DDG (NRM), ICAR was the Chief Guest of the program. The dialogue witnessed deliberations from more than 120 participants including Scientists and Experts from ICAR institutes, State Universities and KVKs along with Sarpanches, innovative farmers and rural youth from intervention villages.

Dr S K Chaudhari, DDG (NRM), ICAR and the Chief Guest praised farmers and researchers of Punjab for pioneering the agricultural innovations in the country. He highlighted major achievements in the field of agriculture and called for action on environment and ecosystem management along with economics and entrepreneurship. Dr Ashok Kumar, DEE, PAU, Ludhiana emphasized need for deploying precision agricultural technologies and drone technology for better utilization of farm inputs. He highlighted the role of climate smart technologies for ensuring sustainable productions and minimizing losses. Dr Sujay Rakshit, Director, ICAR-IIMR, Ludhiana urged farmers to adopt maize farming and follow knowledge intensive modern technologies. Dr Nachiket Kotwaliwale, Director, ICAR-CIPHET, Ludhiana emphasized processing and value addition technologies available for the farmers.

Earlier, Dr Rajbir Singh, Director, ICAR-ATARI, Ludhiana, elaborated the objective of the dialogue and briefed adverse impact of heat wave 2022 occured in the northern states of the country. He emphasized the need for clear strategy and vision that is necessary for the agriculture in the region in the wake of climate change.

A preparedness workshop for crop residue management was also organized. Thorough discussions were held among the participant and the action plans of crop residue management for all the KVKs were finalized. A publications titled "Heat Wave in Northern India: Farmers' Perspective" was released by the Chief Guest during the dialogue.



ICAR-Agricultural Technology Application Research Institute, Ludhiana

#### Annual Review Meeting of AICRP and Megaseed Project on Pig

25-26 August 2022, Port Blair. The Annual Review Meeting of "All India Coordinated Research Project on Pig" and "Megaseed Project on Pig" was organized at the ICAR-Central Island Agricultural Research Institute (CIARI), Port Blair, Andaman & Nicobar Islands from 25 to 26 August 2022.

Dr Bhupendra Nath Tripathi, Deputy Director General (Animal Science), ICAR highlighted the importance of pig for food and economic security in the country, especially among weaker sections of the society. The DDG stressed on the need for research directed towards development of location specific technologies for research driven of piggery in the country. Dr Tripathi also emphasized on characterization and conservation of indigenous pig germplasm.

During the programme, Dr V K Saxena, Assistant Director General (AP&B), ICAR highlighted application of genomic technologies for identification and breeding of superior germplasm.

Dr V K Gupta, Director, ICAR-NRC on Pig & Project Coordinator presented Coordinator's report for the year 2021-22 and suggested the centres to work towards supporting farmers for dissemination of technologies for economic upliftment and livelihood security. Dr E B Chakurkar, Director, ICAR-CIARI highlighted the role of importance of native pig germplasm of the A&N Islands and contribution of ICAR-CIARI, Port Blair for nutritional security and entrepreneurship development.

During the occasion, Dr B N Tripathi, laid the foundation stone for construction of a conservation unit for native goat germplasm in presence of ADG (AP&B), Director, ICAR-NRCP and Director-CIARI, Port Blair. The delegates visited institute farm and research facilities. The meeting was attended by Principal Investigators of 21 cooperating centres spread across the country, Scientists of ICAR-NRC on Pig, Assam and ICAR-CIARI, Port Blair.



ICAR-National Research Centre on Pig, Assam and ICAR-CIARI, A&N Islands

A brainstorming workshop on regulating the use of chemicals and veterinary medicinal products (VMPs) in Indian aquaculture



25-26 August 2022, New Delhi. A brainstorming workshop was conducted by ICAR-Central Institute of Brackishwater Aquaculture (ICAR-CIBA) under All India Network Project on Fish Health (AINP\_FH), at NAAS Complex, ICAR, New Delhi. The scientific knowledge and data generated on safety and efficacy of chemicals and VMPs for effective management of fish health, environment and human health were discussed for their possible implementation by different Ministries of the Govt. of India (Gol).

In the presidential address, Dr J K Jena, DDG (Fy.) highlighted the need for regulatory policies backed by strong scientific data. He also stressed the need for concerted cooperation among the agencies to achieve higher production, supplying guality fish and fishery products both to domestic and international consumers. The Chief Guest of the function Shri Sagar Mehara, Joint Secretary, DoF, Ministry of Fisheries, Animal Husbandry and Dairying, Gol emphasized the need to regulate the use of chemicals and VMPs in Indian aquaculture for safe fish production. Earlier, Dr K P Jithendran, Director, ICAR-CIBA, in his inaugural address highlighted the efforts of ICAR-CIBA and other institutes in developing standards for aquatic animal health management in the country. The meeting was attended by high-level officials from the Ministry of Fisheries, Animal Husbandry and Dairying, Ministry of Commerce and Trade, Ministry of Health and Family Welfare, Gol., Dr V Kripa, Member Secretary, Coastal Aquaculture Authority (CAA), Dr C N Ravishankar, Director and Vice Chancellor, ICAR-CIFE, Mumbai, Dr Riji John, Vice Chancellor, KUFOS, Kochi and other subject matter experts in food safety, aquaculture medicine attended the workshop. Following the two-day deliberations, policy recommendations were prepared for effective implementation of the guidelines for the benefit of the Indian aquaculture sector.



Central Institute of Brackishwater Aquaculture Raja Annmalai Puram, Chennai, Tamil Nadu-600028

#### A Brainstorming Session on Agricultural Water Management in West Bengal: Issues and strategies

27 August 2022, Barrackpore. A Brainstorming Session on "Agricultural Water Management in West Bengal: Issues and strategies" was organized by ICAR-Central Research Institute for Jute and Allied Fibres (CRIJAF), Barrackpore collaboration with National Academy of Agricultural Sciences, Kolkata Chapter. Prof. Biswapati Mandal, Convenor, NAAS Kolkata welcomed all the NAAS Fellows and distinguished scientists.

Dr T Mahapatra, President, NAAS, New Delhi delivered the inaugural speech (online mode) emphasized that the regional chapters must flag the regional problems and have scientific deliberation involving senior fellows, young scientists and students to frame specific guidelines for policy intervention by state Govts.

The technical session was chaired by a senior NAAS Fellow, Dr B B Jana, Former Professor, University of Kalyani. There were 6 lectures on different aspects of agricultural water management delivered by Dr Gouranga Kar, Director, ICAR-CRIJAF, Barrackpore; Shri Sujit Choudhury, Executive Director of PAN Network Pvt Ltd; Dr Dibyendu Sarkar, Former Secretary, Department of Panchayati Raj and Self-Help Group, Govt. of West Bengal; Dr Dhiman Barman, Head, CSSRI RRS, Canning; Dr B K Das, Director, ICAR-CIFRI, Barrackpore and Dr A N Chowdhury, Chemist, CGWB, Kolkata. The other eminent scientists present in this programme were Dr D D Patra, Former VC, BCKV; Dr D B Sakhyawar, Director, ICAR-NINFET; Dr S K Rautray, I/c, Director, ICAR-IIWM; Dr T K Dutta, Head, ICAR-NDRI, Kolkata centre; Dr C Chattopadhyay, NAAS Fellow and Pr Scientist, ICAR-CRIJAF and Subhankar Chakrabarty, Pradan (West Bengal). There was very fruitful discussion at the end based on which few recommendations on agricultural water management in West Bengal were sorted out for policy issues in future.

In total 52 distinguished NASS Fellows, scientists from various ICAR institutes, universities attended the brainstorming session conducted in hybrid mode.

The programme ended with vote of thanks given by Dr C Chattopadhyay, NAAS Fellow and Pr Scientist, ICAR-CRIJAF.



I CAR-Central Research Institute for Jute and Allied Fibres (ICAR-CRIJAF) Barrackpore, Kolkata-700121

#### Awareness Campaign on 'Efficient and Balanced Use of Fertilizers (including Nano-Fertilizers)

29 August 2022, Hyderabad, KVK Rangareddy District ICAR-CRIDA organized an awareness programme on "Efficient and balanced use of fertilizers including nano fertilizers" as a part of Azadi ka Amrit Mahostav on 29 August 2022, at Panchayath Office, Mangalpally Village, Amangal Mandal of RR District. Dr DBV Ramana, OIC, KVK welcomed Dr V K Singh, Director, ICAR-CRIDA and farmers explained about the objectives of the programme.

Dr V K Singh, Director, ICAR-CRIDA emphasized about challenges in agriculture pertaining to major, secondary and micronutrients and their depletion in the soil over the period.

Dr K Sammireddy, Head (i/c), DRM highlighted the importance of organic carbon in the soil and use of green manure crops, concepts of waste to wealth. Dr DBV Ramana, OIC, KVK educated farmers about impact of indiscriminate use of chemicals on fodder and animal health. Smt S Geetha, District Agriculture Officer, Ranga Reddy and Smt Sujatha Kumari, ADA highlighted the importance of use of bio-fertilizers for solubilizing, mobilizing and fixing of Phosphorous, Potassium, and nitrogen in the soil for integrated nutrient management.

Shri G Krishna, SMS (Horticulture) explained about precautionary measures to be taken for increasing water and nutrient use efficiency and suggested

fertigation technique for increased fertilizer use efficiency. Dr D Sudheer, SMS (Veterinary Science), Dr S Vijaykumar, SMS (Agriculture Engineering) Smt. Aruna Kumari, MAO, Smt Vahini, AEO, Sri. Narasimha Reddy, Sarpanch and Shri Narayana, Raithu Bhandu Coordinator and 70 farmers attended this programme.



ICAR-Central Research Institute for Dryland Agriculture Krishi Vigyan Kendra, Hayathnagar, R.R.District, Telangana

#### Makhana Stakeholders' meet at ICAR-Makhana Research Center Darbhanga

5 September 2022 Ludhiana. To boost the Makhana sector, ICAR-CIPHET, Ludhiana, in collaboration with ICAR-Regional center on Makhana, Darbhanga organized a one day long Stakeholder's meet on Makhana. The programme was attended by makhana growers, manual makhana popping workers, makhana processors and various government officials.

The programme was inaugurated by Shri Sanjay Saraogi, Hon'ble MLA, Drabhanga, Dr S N Jha, DDG (Engineering) ICAR, New Delhi presided over the function. Others present were Shri Rajiv Roshan, IAS, District Magistrate, Darbhanga, Dr M S Kundu, Director Extension Education, Dr Ashutosh Upadhyaya, Director, ICAR-Research Complex of Eastern Region, Patna, while the programme was hosted by Dr Nachiket Kotwaliwale, Director, ICAR-CIPHET, Ludhiana.

Director CIPHET presented overview of post-harvest processing technologies of makhana and other food commodities. Entrepreneurs, framers and makhana processor discussed difficulties in makhana production and processing. It was further suggested that the makhana Research Center may be converted to Regional Centre of ICAR-CIPHET, so that mechanization is promoted appropriately. The farmers demanded for minimum support price for makhana. Concerns about subsidy on makhana processing equipments were also raised.

Dr S N Jha emphasizes on the historical importance of makhana in the development of this region. He also requested farmers to use mechanized way of popping makhana for higher productivity, health of workers and income generation.

DM, Darbhanga, Shri Rajiv Roshan emphasize that the farmers should go for starts up by taking makhana as meal product. Stake holders appreciated the efforts of ICAR-CIPHET, Ludhiaan for its contribution in mechanization of makhana processing in this region. An emerging entrepreneur of Saurth Foundation, Madhubani Shri Shyam Babu Jha has requested to collaborate ICAR-CIPHET, Ludhiana and its activities to this makhana center in the interest of makhana farmers of this Milthila region.

The chief guest requested for development of machine with higher capacity and suggested that ICAR-CIPHET should conduct some training programmes for farmers and stakeholders of Bihar.

The event ended with vote of thanks by Dr Indu Shekhar Singh, PS and Head, ICAR-Regional center on Makhana, Darbhanga.



ICAR-Central Institute of Post-Harvest Engineering & Technology, Ludhiana-141004, Punjab, India

# 29<sup>th</sup> Annual Zonal Workshop of KVKs of Uttar Pradesh

10 September 2022, Meerut. At the 29<sup>th</sup> Annual Zenal workshop of KVKs of Uttar Pradesh, the Chief Guest of the workshop, Shri Surya Pratap Shahi, Hon'ble Minister (Agriculture, Agricultural Research and Education), Uttar Pradesh, inaugurated the workshop and released publications, and gave away awards to innovative farmers and other participants. In his address, Hon'ble minister said that KVKs should develop resource conservation models for farmers. He said that scientist should speed up the scientific technology dissemination to the farmer. Guest of Honor Dr Himanshu Pathak, Secretary DARE & DG, ICAR said that India has made unprecedented progress in agriculture in the last 75 years. Extension systems including KVKs are doing this job very adequately. KVK should come up as the model in the district and therefore, there is need to work accordingly, Hon'ble DG categorically emphasized. Guest of Honor Dr A K Singh, DDG (AE), ICAR said in his address that promoting Natural Farming is Government's priority. 300 drones will be provided to KVKs, SAUs and ICAR Institutes shortly. Crop cafeteria is the face of KVK and it should be well maintained in each KVK, Dr Singh further stated. Guest of Honor Captain Vikas Gupta, Chairman UPCAR and guest of honor Dr. Sanjay Singh, DG, UPCAR also addressed the gathering.

Dr D R Singh, Hon'ble VC, SVPUAT Meerut said that under natural farming project, KVKs will soon conduct demonstrations in each KVK. Each scientist must have one product to popularize in the district.

13 best KVKs were awarded. Government has gave budget for drones in 32 KVKs, 52 KVKs are selected for Natural farming project. Vacant staff positions in KVKs and ICAR Institutes need to be filled for better performance.

Dr P K Singh, Director Extension, SVPUAT Meerut gave vote of thank to all guests and participants and inaugural session ended with the vote of thank. Scientists from all 89 Krishi Vigyan Kendras of Uttar Pradesh participated in the inauguration function of workshop.



ICAR-ATARI, Zone III, Kanpur

### National Group Meeting of ICAR-AICRP on Forage Crops and Utilization

26-27 September 2022, Virtual Mode. All India Coordinated Research Project on Forage Crops and Utilization, Jhansi organized National Group Meeting *Rabi*-2022-23 during 26-27 September 2022, in virtual mode. Six technical sessions, 'Varietal Identification Committee meeting' and 'Plenary session' were held during the meet. About 140 Scientists from different departments including private companies participated in the meeting.

The I Technical session, 'Review of progress and work done during the year 2021-22' was chaired by Dr T R Sharma, Deputy Director General (Crop Science), ICAR Dr R K Singh, ADG (CC & FFC), ICAR and Dr. Amaresh Chandra, Director ICAR-IGFRI Jhansi were co-chairman. Dr A Chandra explained various activities and initiatives taken by IGFRI, especially the preparation of state fodder plan and use of drone technology in reseeding the grasslands.

Project Coordinator Dr A K Roy presented the achievements of AICRP for the last 5 years and various activities executed by AICRP on forage crops during the year. He highlighted the maintenance of 'Golden Jubilee Forage Garden' at 54 institutions across the country, and a new initiative taken in celebration of 'National Forage Day' on 9 September simultaneously at 38 locations across the country.

Dr Rahul Kapoor, Dr R K Agarwal and Dr Ashlesha Atri, presented the summary of activities and achievements being carried out at different centres in rabi fodder crops for crop improvement, Crop production and crop protection respectively. Dr R K Singh stressed upon the need of adoption of new approaches especially in breeding programmes and to strengthen the extension activities for popularizing the new technologies. Dr T R Sharma emphasized that nutritious fodder in ample quantities is key to sustained livestock production and to the rural economy. He appreciated the achievements of AICRP in maintaining Golden Jubilee Forage Garden, observance of National Forage Day, awards and recognitions earned by AICRP scientists, and publications of various books encompassing all the activities of AICRP Forage during the last 50 years.

In the 'Varietal Identification Committee' meeting chaired by Dr T R Sharma, DDG (CS), ICAR, 5 varieties in 3 forage crops namely Lucerne, Berseem, Oat were identified for release in specified zones.

Plenary session was chaired by Dr S K Chaturvedi, Hon'ble Vice Chancellor, RLBCAU, Jhansi. The chairman highlighted the need of FLDs, seed hub, and extension activities to popularize the new technologies and address the forage seed shortage. The release of publications, award and felicitation of superannuating scientists were done in the session.

Project Coordinating Unit, AICRP on Forage Crops and Utilization, ICAR-IGFRI, Jhansi



### Hindi Pakhwada 2022 organized by ICAR - Indian Institute of Soybean Research, Indore

16-29 September 2022, Indore, In accordance with the official language Act of the Government of India, many events are organized under Hindi Pakhwada for the promotion of the official language "Hindi". In this direction, ICAR - Indian Institute of Soybean Research, Indore organized "Hindi Pakhwada 2022" from 16 September to 29 September 2022. Dr Punam Kuchlan, Official language officer-in-charge, and Shri Ravi Shankar Kumar were the organizer and coordinator of the event respectively. In this 14-day long program, competitions of different genres, such as dictation writing, original hindi slogan, note writing, essay writing, and quiz competition were organized. The scheme of Govt. of India, for incentivizing the personnels working in hindi, was also implemented and employees for cash rewards were identified. A Hindi workshop was organized on 23 September 2022. Dr Jayshree Bansal, Assistant Director, Human Resource Department, Devi Ahilya Vishwavidyalaya, Indore was the guest speaker of the workshop. She discussed the importance and relevance of "Hindi" from its origin to the present time. The event came to a close on 29 September 2022, and certificates and prizes were distributed to the participants of this program. Dr Sanjay Gupta, Director-in-Charge of the Institute congratulated all the participants and motivated all the employees of the institute to do more and more work in "Hindi" and maintain the nobility of the language.



ICAR-Indian Institute of Soybean Research, Khandwa Road, Indore-452001

### Workshop on "Agribusiness Incubation in Sheep Enterprises and Use of Natural Fibers in place of Plastics"

30 September 2022, Avikanagar. A one-day workshop on "Agribusiness Incubation in Sheep Enterprises and Use of Natural Fibers in place of Plastics" was organized by ICAR-Central Sheep and Wool Research Institute, Avikanagar. Dr D B Shakyawar, Director, National Institute of Natural Fiber Engineering and Technology, Kolkata, Chief Guest of the program emphasized the use of fibers like wool and jute as an alternative to plastics. Presiding over the program, Dr Arun Kumar Tomar, Director, Avikanagar Institute, highlighted the utility and growth potential of sheep and goat-based businesses in the present scenario. Dr. Vikram Singh, a scientist coordinating the agribusiness nurturing program in various institutes of the Indian Council of Agricultural Research, was present as a special guest.



More than 50 entrepreneurs from across the country associated with the Institute's Agribusiness

Fostering Center participated in the workshop and thanked the institute for its contribution to its entrepreneurship journey. Guests and entrepreneurs appreciated the wool sapling bag developed in collaboration with the institute as an important technology in the direction of environmental protection. In the workshop, 5 business institutes and entrepreneurs who newly joined the Institute, signed a Memorandum of Understanding (MoU) with ICAR-CSWRI Avikanagar for mutual cooperation. Shri Santosh Mahatme, Consultant, Bhadpal Shetkari (Farmer) Producing Organization, Maharashtra signed MoU with the Institute for Technical Cooperation in Sheep Rearing and Nutrition Technologies. Shri Dharampal Garhwal, Amalaan Organic, Rajasthan signed MoU for Indigenous Woolen Shawl Branding and Commercialization. Subject experts from Kolkata and Avikanagar Institute, Dr Sanjoy Debnath, Dr. Ajay Kumar, and Dr L Ammayappan delivered lectures on the research done and products developed on the use of natural fibers especially jute and wool as an alternative to single-use plastics. Dr Vinod Kadam, the Organizing Secretary of the program highlighted the importance of the ABI center in the upliftment of young entrepreneurs through technical support and a strong hand-holding by the institute. Dr Ajit Singh Mahla and Dr Arvind Soni were the co-conveners of the scientific workshop. On this occasion, all scientific and technical staff of ICAR-CSWRI along with students and nearby progressive farmers' participation counted close to a hundred.

AKMU, ICAR-Central Sheep and Wool Research Institute, Avikanagar, Rajasthan

### International Linkages

#### ICAR-IIWM, Bhubaneswar Organized NRM Division Review Meeting for Foreign-aided Projects

23 July 2022 Bhubaneswar. The Natural Resource Management Division of ICAR reviewed the 6 monthly (January to June, 2022) progresses of foreign-funded projects as well as projects agreed in the workplan between ICAR and CGIAR Centres (ICRAF & IWMI) at ICAR-IIWM, Bhubaneswar. The review meeting was chaired by Dr S K Chaudhari, DDG (NRM), ICAR, New Delhi. He urged the scientists to implement all foreign-aided projects effectively and advised to pay sufficient attention for the timely completion of their objectives. Scientists from different ICAR NRM institutes presented the progress and achievements of the projects. Earlier, Dr R K Panda, Director of the institute welcomed the guests and participants of the meeting.



Rabindra Kumar Panda Director (Acting) ICAR-IIWM, Bhubaneswar

# International workshop on DUS testing of apple and pear

7-8 September 2022, Srinagar, (Hybrid Mode). ICAR-Central Institute of Temperate Horticulture, Srinagar and PPV&FRA, New Delhi jointly organized a 2 days International workshop on "DUS testing of apple and pear" from 7 to 8 September 2022, at ICAR-Central



Institute of Temperate Horticulture, Srinagar, Kashmir (Hybrid Mode) under Indo-German Cooperation on Seed Sector Development. During the event, speeches on DUS testing of apple and pear in India were made by Dr K V Prabhu, Chairperson, PPV&FRA, Dr T K Nagarathna, Registrar, PPVFRA, Dr Ravi Prakash, Ex-Registrar, PPV&FRA and Dr Javid Iqbal Mir, PI, DUS Centre on temperate fruits & nuts project, and Dr Erik Schulte, Head of regional DUS testing Station with Focus on Fruits in Wurzen, Germany. Thorough discussions related to DUS testing of apple and pear under Indian conditions was deliberated. Fine tuning of On-site DUS testing was planned after relevant and desired feedback obtained from German scientists. Workshop was attended by scientists from ICAR-CITH, Srinagar, ICAR-NBPGR, Srinagar, SKUAST-K, Srinagar, PPV&FRA, New Delhi, Dr YSPUH&F, Shimla, ICAR-CITH (RS), Mukteshwar, etc. Field visit was also organized to provide on spot training on DUS testing for the participants. Farmers were made aware about protection of their varieties through PPV&FRA and its benefits. Dr Om Chand Sharma, Director, ICAR-CITH, Srinagar shared the achievements made by the Institute and specified the areas of collaboration with Germany for further cooperation.

Director, ICAR-Central Institute of Temperate Horticulture, Srinagar, Kashmir

#### International Conference on Agriculture & Allied Sectors for Improving Livelihood and Environmental Security



*30 September 2022, Srinagar.* The ICAR-IGFRI, Regional Station Srinagar and National Agriculture Development Cooperative Limited (NADCL) organized a 3 days International Conference on "Advances in Agriculture, Veterinary and Allied Sciences for Improving Livelihood and Environmental Security (AAVASILAS-2022)" which was concluded successfully on 30 September 2022, at the University of Kashmir. Delivering the welcome address, the Director, ICAR-IGFRI, Dr Amaresh Chandra, elucidated the existing land-use practices and challenges of climate change that resulted into fragmentation of land, deteriorating natural resources, decreasing total factor productivity of major crops including forage crops that warrants obligations and providing innovative solutions to sustainable natural resource management.

Dr O C Sharma, Director, ICAR-CITH, highlighted the increasing demand for horticultural produce due to greater health awareness, rising income, export demands and increasing population poses the challenge for further increase in the production and productivity of horticultural crops. Dr Sardar Singh Rana, Director, CSR & TI, Pampore, discussed the role of sericulture in providing a livelihood and additional income option without disturbing existing agriculture practices in hilly regions. Dr Sajad Ahmad Gangoo, Dean, Faculty of Forestry, remarked that the conference was in tune with the UNO Sustainable Development Goals (SDGs) adopted by all Member States in 2015. Prof. Bashir Ahmad Ganaie, Director, North Campus, University of Kashmir emphasized that the targets of the Sustainable Development Goals could only be realized through improved technological options, institutional arrangements and appropriate policies in partnership with all stakeholders, maintaining an optimum balance between economic development and ecological security. Prof. Nisar Ahmad, registrar of the university stressed on the need of developing high yielding and biofortified varieties of various crops. Dr F A Masoodi, Dean Academic Affairs of the university emphasized on the need of having more multi-stake holder conferences for effective multi-institutional and multi-disciplinary collaborations to have maximum impact.

Dr A K Roy, PC, AICRP-FCU, suggested to have a holistic and integrated approach for recognizing

and implementing the inter-twined social, cultural, economic and ecological aspects of resource management. Dr Suheel Ahmad presented the detailed report of the various technical sessions that emphasized on developing holistic location-specific, cost-effective, eco-friendly technologies and innovations that are market driven for higher agricultural productivity and profitability without weakening the natural resource base.

During the conference, distinguished and Young scientist awards, best

PG&PhD thesis awards, best farmer awards in various specific sectors like mushroom farming, horticulture, organic farming, seed production, fodder development, prizes for oral as well as poster presentations were distributed among the scientists and research scholars. Dr M P Thakur, a well known scientist in mushroom research and Dr Ratna Nashine, a remarkable academician and extension scientist were also honoured with Life Time Achievement Award and Award of Excellence, respectively.

ICAR-IGFRI, Regional Station Srinagar

#### ICAR-IISR signed Memorandum of Understanding with NABI and CIAB

4 July 2022, Indore, ICAR-Indian Institute of Sovbean Research with its large infrastructure in production has tied up with National Agri-Food Biotechnology Institute (NABI) and Center of Innovative and Applied Bioprocessing (CIAB), Mohali under Department of Biotechnology, Government of India, to mutually benefit from the strengths of the respective institutions. Under this initiative, Executive Director, National Agri-Food Biotechnology Institute (DBT, Government of India), Mohali, Prof. Ashwani Pareek visited Indian Institute of Soybean Research, Indore on 4 July 2022 and interacted with the Scientists with regard to the research at the Institute. As a part of government of India's initiative "Aazadi ka amrut mahotsav" a lecture on "Raising drought and salinity tolerant crops: Learning lessons from mother nature" was delivered by him. He visited the Agri-Business Incubation Center (ABI) operated by the institute and understood the manufacturing processes of soya prepared food items.

Further, discussing about the future the institutes mutually decided to collaborate with each other and sign an MoU. For this collaboration, Dr Nita Khandekar, Director (A) along with the principal Scientists, Dr M P Sharma and Dr M K Shrivastava of the institute visited National Agri-Food Biotechnology Institute (NABI) and Center of Innovative and Applied Bioprocessing (CIAB), Mohali on 19 July 2022, and signed the Memorandum of Understanding between the Institutes. The main areas of the collaboration envisioned are; the training of IISR Scientists in the field of CRISPER Cas genome editing technology for soybean improvement, development of sensorbased technology for detection and quantification of microbes in biofertilizer formulations, encapsulation of bacteria in hydrogel and characterization of its efficacy and stability using sensor-based technology, isolation and characterization of triacontanol as bio-stimulant for soybean production, estimation of Kunitz Trypsin inhibitor in different recently released soybean varieties and characterization of soybean food products for its shelf life and storability. Such a collaboration will open new vistas of use of soybean in the country.



Dr Nita Khandekar, Acting Director, ICAR-Indian Institute of Soybean Research, Indore-452001, Madhya Pradesh

#### ICAR-NAARM Signs MoA with 15 ICAR Institutes

*O8 July 2022, Hyderabad.* ICAR-NAARM signed Memorandum of Agreement with 15 ICAR Institutes *viz.*, CICR, Nagpur; MGIFRI, Motihari; IASRI, New Delhi; NDRI, Karnal; IISS, Mau; NRC on Meat, Hyderabad; CIPHET, Ludhiana; NRC on Yak, Dirang; CCARI, Ela, Old Goa; CIARI, Port Blair; IGFRI, Jhansi; IIVR, Varanasi; CIFE, Mumbai; NRC Pomegranate, Sholapur and CMFRI, Kochi on 08 July 2022, at the Academy in presence of Dr R C Agrawal, Deputy Director General (Education), ICAR, New Delhi. The MoA was signed with the aim to support start-ups in agriculture and allied sector for organizing co-events, co-incubation, value-added services, extending lab facilities, co-networking, etc.

On this occasion, Dr R C Agrawal, DDG (Education), ICAR addressed about the importance of technical mentoring support by NARES system for startups and entrepreneurs. He stressed the need of sensitization program on EDP among students of agri and allied sectors.

Dr Ch Srinivasa Rao, Director, NAARM appraised the existing model of incubation system at a-IDEA and Dr G Venkateshwarlu, Joint Director, NAARM highlighted the need of MoA with ICAR Institutes to utilize the wet lab facilities besides mentoring to early stage startups. Dr Senthil Vinayagam, CEO of a-IDEA coordinated the MOA process.



ICAR-National Academy of Agricultural Research Management, Rajendra Nagar, Hyderabad, Telangana chsrao\_director@naarm.org.in

# ICAR-Indian Soybean Research Institute signs MoU with ITC Limited

23 July 2022, Indore. To empower the farmer the Indian Institute Soybean Research, Indore signed an MoA with ITC Limited on 23 July 2022, Shri Akhilesh Kumar Yadav (Regional Manager), Shri Nilesh Patkar (Program Officer), Shri Sahyog Tiwari (Program Executive), and Shri Prasad Deshkar (Accountant) from ITC, Bhopal were present on the occasion. Highlighting the memorandum, Dr Nita Khandekar, Director (A) of the institute, said that under this MoA, various farmers of Indore, Ujjain, Dewas, Sehore, and Vidisha districts of the state would be trained by the institute. The training will focus on the proper use of BBF and climate-smart technologies. In the past, the Indian Institute of Soybean Research, Indore has organized various seminars with ITC Limited in the direction, under which guidance was given to the farmers according to the current season so that they can get maximum benefit.



Dr Nita Khandekar, Acting Director, ICAR-Indian Institute of Soybean Research, Indore-452001, Madhya Pradesh

### ICAR-IIMR signs MoU with Flipkart to enable market access to FPOs

19 August 2022, Hyderabad. ICAR-IIMR signed a Memorandum of Agreement (MoU) with Flipkart India Private Limited on 19/08/2022 at Hyderabad to enable market access for FPOs and SHGs by procuring quality produce directly from the farmers. Dr C V Ratnavathi, Director, ICAR-IIMR; Giridhar Perab, Associate Director, Flipkart, Girish Nair, South zone head, Flipkart; Dr Srinivas Babu and Dr Sangappa, Scientists of ICAR-IIMR participated in MoU agreement signing.

Through this partnership both the parties focus on empowering local farming communities of FPOs by increasing business and trade inclusion opportunities for small and marginal farmers of FPOs in 4 states (Andhra Pradesh, Karnataka, Telangana, and Madhya Pradesh) where ICAR-IIMR is acting as CBBO. It creates a shared value for all stakeholders and provide better marketing linkages, remunerative prices to small and marginal farmers of FPOs.

ICAR-IIMR in collaboration with Flipkart aims to enable market access to FPOs, by engaging small and marginal farmers with groceries private label business for sourcing requirements and training, capacity building initiatives of FPOs. This shall help, assist and develop, provide knowledge and understanding in regard to quality of produce, quantity, documentation, pricing and licenses requirements and aspects to be part of the ecosystem for the small, marginal farmers of FPOs. ICAR-IIMR will support Flipkart's engagement with the FPOs, by providing infrastructure support for training and capacity building activities in the implementation and engagement of the program with their available resources.



Indian Institute of Millets Research, Rajendranagar, Hyderabad-500 030, Telangana

#### ICAR-IIMR Signs MoU with IFFCO Kisan to Promote Bio-fortified Pearl Millet Cultivars Through FPOs

5 September 2022, Hyderabad. ICAR-IIMR and IFFCO Kisan signed Memorandum of Agreement (MoU) virtually on 05/09/2022 at Hyderabad to promote Biofortified Pearl Millet cultivars through FPOs in Koppal district of Karnataka. Dr C V Ratnavathi, Director, ICAR-IIMR, Mr Praveer Srivastava, COO, IFFCO Kisan, Mr Siddharth Bhattacharya, Lead - Partner Relationships, Dr Srinivas Babu and Dr Sangappa, Scientists, ICAR-IIMR, Dr Rafi and FPO Nest staff of ICAR-IIMR participated in virtual MoU signing.

Through this collaborative effort, local farming of FPOs in Karnataka, Telangana, and Andhra Pradesh will receive seed distribution, technology orientation, advice dissemination, and capacity building on packaging of biofortified seeds in terms of nutritional content and its benefits.

Mr Praveer Srivastava highlighted that IFFCO Kisan will distribute seed and assures the buyback of Pearl Millet at farm gate from FPOs at a competitive price by replicating its pilot project in districts of Karnataka, Telangana and Andhra Pradesh. Siddharth Bhattacharya further added that with the help of ICAR-IIMR they will be involved in on-boarding of farmers and FPOs, trainings, capacity building on better package practices, technology orientation and seed distribution to shareholders of FPOs and provides better market linkages to farmers. Morup Namgyal hailed the efforts of ICAR-IIMR in handholding and supporting small and marginal farmers through its 33 FPOs in 4 states.

Dr C V Ratnavathi affirmed that ICAR-IIMR will engage farmers and FPOs with knowledge partner IFFCO Kisan and aims in creating awareness of biofortified seeds and nutritional values of Millets. Dr. Sangappa confirmed that ICAR-IIMR will acts as expert participant in organizing FPO meetings for training and capacity building to shareholders of FPOs.



ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500 030

#### ICAR-NIANP Inks the Third Commercialization of Anti-methanogenic Feed Supplement '*Harit Dhara*'

29 September 2022, Bengaluru. The ICAR-National Institute of Animal Nutrition and Physiology, Bengaluru, Karnataka commercialized the anti-methanogenic feed supplement 'Harit Dhara' to BAIF Development Research Foundation, Pune on a non-exclusive basis through AgrInnovate India on 29 September 2022.

Dr Raghavendra Bhatta, inventor & Director, ICAR-NIANP, Bengaluru and Shri Bharat Kakade, President, BAIF Development Research Foundation, signed the Memorandum of Agreement (MoA) on behalf of their respective organizations for the licencing and commercial manufacturing of the anti-methanogenic feed supplement. Dr Bhatta stated that the product has been developed through systematic and comprehensive research for more than a decade and the supplement is very effective in mitigating the daily enteric methane emission from ruminants by about 20%.

Dr Praveen Malik, CEO, AgrInnovate India, New Delhi was also present during the signing of the Memorandum of Agreement. On the occasion, Shri Bharat Kakade, President BAIF Development Research Foundation, Pune informed that BAIF is planning to adopt the Harit Dhara technology across 10 states of India for the effective mitigation of daily enteric methane emissions thereby improving livestock productivity.

The co-inventors of the technology, Dr P K Malik and Dr A P Kolte along with the other senior officials of NIANP and Dr M J Aware, Senior Nutritionist, BAIF were also present during the signing of the Memorandum of Agreement at ICAR-NIANP. The 'Harit Dhara' is a patent-applied technology (No. 201941004992).



ICAR-National Institute of Animal Nutrition and Physiology, Bengaluru, Karnataka

# Capacity Building

#### Executive Development Programme Concluded at ICAR-NAARM

9 July 2022, Hyderabad. The Executive Development Programme on "Leadership Development" was organized on 4-9 July 2022, for 18 Research Managers encompassing DDG/ADGs of ICAR Head Quarters and Directors/Joint Directors of ICAR institutes across the country spanning from Arunachal Pradesh to Andaman & Nicobar Islands. Shri Hemang Jani, Secretary, Capacity Building Commission, New Delhi, Govt of India, the Chief Guest of the Valedictory Programme on 9 July 2022, highlighted the need for demand driven capacity building programmes, democratising the training with flexibility of anywhere and anytime mode. Dr Ch Srinivasa Rao, Director NAARM and President of the function complimented the participants for successful completion of the training programme and requested to translate the learnings into action at the respective ecosystems for improving organizational efficiency towards farmers welfare and to resolve the current challenges in agriculture sector.

Prof Appa Rao Podile, former Vice Chancellor of University of Hyderabad inaugurated the progarmme on 4 July 2022. He stressed on transformational leadership for the success of the organization and advocated to follow the best practices of other successful organizations. The programme sessions included Cross Learning from other Scientific Organizations viz., ISRO, CSIR & NIAS; HRM outbound exercises viz., Collaboration, Leadership attributes and Team building; Features of Administrative and Financial Management in ICAR and Happiness and Wellbeing with Yoga classes and Heart based Meditations for Spiritual Transformation.

Dr G Venkateswarlu, Joint Director and Programme Director presented different capacity building initiatives of NAARM and their impacts. Dr D Thammi Raju Principal Scientist coordinated the programme.





ICAR- National Academy of Agricultural Research Management, Hyderabad, Telangana

#### Post-flood Environmental Monitoring Camp held at Baksa district of Assam

10 July 2022, Charan beel. ICAR-Central Inland Fisheries Research Institute, Regional Centre, Guwahati organized a "Post-flood Environmental Monitoring Camp" at Charan beel, Baksa district, Assam. The programme was attended by more than 50 tribal fish farmers of the locality under the Dhulabari Charanpar Janajati Unnayan Samity, Deulkuchi led by Shri Naren Basumatary (President) and Shri Jadu Swargiary (Secretary).

On this occasion, Dr Rajesh Kumar, Director, ICAR-ATARI Zone VI, Guwahati and Dr B K Bhattacharjya, Head, ICAR-CIFRI Regional Centre, Guwahati also interacted with the tribal fishers and other stakeholders about flood condition. Scientists from the Centre, Dr A K Yadav, Dr Pronob Das, Dr S C S Das and Dr S Borah and Shri A Kakati, STA monitored environmental conditions of water bodies of the locality including Charan beel. They explained about the significance environment health management from fisheries perspective. This programme was organized under overall guidance of Dr B K Das, Director, ICAR-CIFRI, Barrackpore.



ICAR- Central Inland Fisheries Research Institute Barrackpore, Kolkata-700 120

# Interaction between IISR, Scientists and Soybean Farmers

14 July 2022, Indore. The ICAR-Indian Institute of Soybean Research, Indore organized an online Scientist-Farmer interactive session for soya farmers jointly in association with Atma Project, Department of Agriculture, District Indore, Solidaridad Bhopal and ITC limited Madhya Pradesh. More than 2000 soya growers form major soybean growing states like Madhya Pradesh, Maharashtra and Rajasthan attended the event in which the institute scientists delivered technical message for adopting preventing measures for management of weed, insect-pest and diseases in the coming days. The program was simultaneously webcasted using social media channels of ICAR-IISR especially its Facebook page, Telegram and YouTube channel through zoom platform.

In the initial session of this discussion, Dr BU Dupare, Principal Scientist (Agriculture Extension) of the Institute, explained the importance of the expected incidence and different insects over longer period on account of different planting dates favoring more life cycles resulting in yield losses and increased cost. At the outset the co-organizers of the event especially Dr Suresh Motwani, Shri Rakesh Mohan Yadav, of ITC Limited, and Smt Shirley Thomas, Project Director, ATMA district Indore gave their feedback regarding present crop condition in their respective areas. Director-in-Charge of the Institute, Dr D Billore, in his address to the farmers, cautioned not to use chemicals which are not recommended for soybean crop. Dr R K Verma, Scientist (Agronomy) discussed about the different ways of managing the weeds including recommended herbicides to be applied after 15-20 days of sowing. Dr Lokesh Kumar Meena, Scientist (Entomology) suggested the spray of Chloratreniliprol (150 ml/ha) for the control of insect pests like blue beetle, linseed catterpillar, white fly in the early stage of soybean crop. Dr Laxman Singh Rajput, Scientist (Plant Disease Physiology) informed that due to excessive rainfall at this time, diseases like collar rot and Rhizoctonia aerial blight occur in the roots of the plant, for which solution Hexaconazole and Propiconazole should be used.



Entomologist Dr Amar Nath Sharma said that this year farmers need to be alert. According to him, this is a very suitable time when farmers can simultaneously spray an insecticide called Chlorantraniliprol while spraying weedicides for weed control, so that along with weed control, the crop can be protected from the outbreak of leaf-eating insects for the next one month. After this, problems expressed by the soya farmers were discussed and addressed.

Dr S D Billore, dsrdirector@gmail.com Acting Director I/C ICAR-Indian Institute of Soybean Research Khandwa Road, Indore-452001 M.P.

### ICAR-CCARI, Goa organized Stakeholders meet on kokum and Jackfruit

22 July 2022, Goa. ICAR-CCARI, Goa organized 'Stakeholders meet on Kokum and Jackfruit' in zoom platform under Azadi ka Amrit Mahotsav. Dr Parveen Kumar, Director, ICAR-CCARI emphasised the relevance of kokum and jackfruit crops in his introductory remarks and explained the research activities carried out by ICAR-CCARI in these crops. Around 50 participants from different coastal states interacted in the meeting and expressed the research and promotional needs in these crops. Dr A R Desai, Principal Scientist (Hort.), ICAR-CCARI, Goa; Dr Pradip Sarmokadam, Member Secretary, Goa State Biodiversity Board; Dr M Latha, Principal Scientist (Plant Breeding) & OIC, ICAR-NBPGR, Thrissur; Shri Shree Padre, Editor (Adige Patrike) interacted along with scientists and researchers from various ICAR institutes, state agricultural universities, extension officers from KVKs and state agricultural departments and farmers. Dr A R Desai, Principal Scientist (Hort.), ICAR-CCARI, Goa gave concluding remarks and the meeting ended by vote of thanks given by Dr Maneesha Sr. Scientist (Fruit Science), ICAR-CCARI, Goa.



AKMU, ICAR-CCARI, Old Goa - Goa

#### Startup Cohort Networking & Capacity Building Program

23 July 2022, Hyderabad. The Technology Business Incubator (TBI) of ICAR-NAARM organized the "Cohort Networking and Capacity Building Program" for incubatees of a-IDEA under NIDHI PRAYAS, BIRAC BIG, ABI & Krishiboot on 22-23 July 2022, with the objective to develop networking among startups, and train them on financial management, effective pitch making, patent filing and concept of digital marketing and branding, etc.

Dr Adil Zainulbhai, Chairman, Capacity Building Commission, who was the chief guest during valedictory asked the startups to solve the realtime problems of the stakeholders and explained about the role of investors and venture capitalists in supporting the Startups. The session ended with the exchange of MoAs signed between a-IDEA, ICAR-NAARM and participant startups.

Dr Ch Srinivasa Rao, President, a-IDEA & Director, ICAR-NAARM in his inaugural address highlighted the role of ICAR in nurturing agri-ecosystem, bringing customized solutions to the problems in agriculture, FPOs & FPCs, sensitizing agri-students to have their unique idea for establishing agripreneurship. Dr Hemang Jani, Secretary, Capacity Building Commission (CBC), asked more and more startups to get financed and benefitted by the Atal Innovation Mission, GOI.

Shri Tapan Kumar Sahoo AGM, NABARD, explained the NABARDs role in promoting FPOs, Dr Sangappa, Sr Scientist, and ICAR-IIMR highlighted business opportunities in minor millets and Shri Paritosh Tripati, COO; a-IDEA delivered a session on improving pitching skills. Shri Mahender Kondapalkala, Founder, Biz Brand Solutions Pvt Ltd delivered the last session of the day on advertising & brand management. On day 2, Shri Srikanth, Faculty, CDAC delivered an interactive session on IoT and it was followed by Shri Yaseen Shareef shaik, Director, Fundenable with a session on investor pitching and due diligence. Shri Ugandhar, CA, Brandllp underlined the importance of financial management for startups before the lunch.

Dr G Venkateshwarlu, Joint Director & Vice-President, a-IDEA, ICAR-NAARM highlighted the startup initiative by Govt. of India and the role of government schemes in supporting the ABIs.

Dr Senthil Vinayagam, CEO and team a-IDEA coordinated the programme.

ICAR-National Acade my of Agricultural Research Management, Hyderabad, Telangana-500030.

#### Capacity Building Program on "Technology demonstrations for enhancing resilience"

24-25 July 2022, ICAR-CRIDA, Hyderabad



"Technology demonstrations for enhancing resilience" 24-25 July 2022, was organized by Technology Demonstration Component of NICRA at ICAR-CRIDA, Hyderabad. The inaugural session was chaired by Dr S K Chaudhari, DDG (NRM), ICAR. Dr V K Singh Director, ICAR-CRIDA, Dr JVNS Prasad, Project Leader, TDC-NICRA, scientists from ICAR-CRIDA and Directors and Nodal officers from ATARIs of Jodhpur, Kanpur and Patna, and Senior Scientists and Heads of 49 NICRA KVKs, NICRA Co-PIs and SRFs of respective KVKs were present in the session. Dr JVNS Prasad welcomed the dignitaries and participants and briefed about the objectives of the capacity building programme. Dr V K Singh Director, ICAR-CRIDA in his opening remarks described the farming system typology-based approach instead of previously followed module-based approach, selecting the KVKs based on risk and vulnerability atlas of IPCC, Fifth Assessment Report, collaboration with NMSA and other programmes, need for this capacity building programme for achieving the target of carbon neutral villages. Dr S K Chaudhari, DDG (NRM) in his address stressed the need of discussing among the KVKs and share their experiences. KVKs and village institutions played a vital role in ground level sensitization. He emphasized the need for collecting scientific data and observations for net carbon balance. Many Natural Resource Management, Crop, livestock, fisheries based interventions were found effective. During Inauguration one publication was released. At the end, Dr T V Prasad, Principal Scientist proposed formal vote of thanks.



ICAR- CIARI, Santosh Nagar, Hyderabad, Telangana-500059

# Sensitization on Responsible fisheries & input distribution under STC

25-29 July 2022, Port Blair. Regional Station, Minicov, Lakshadweep of ICAR-CIARI Port Blair, conducted a "Sensitization on responsible fisheries and Input Distribution under Schedule Tribe Component (STC)" for the welfare of tribal fishermen of Minicov from 25 to 29 July 2022. Speaking on the inaugural occasion, the Chief Guest Dr Shrikant R Tapdiya, the Deputy Collector of Minicoy expressed his happiness about the technological intervention in tuna fishing, sustainable fisheries, tuna harvest, and postharvest practices. The Guest of Honour Shri Hussain Manikfan, Chairperson, Village Dweep Panchayat, Minicoy also expressed his views on tuna fisheries, masmin production, and fish aggregating device for enhancing the livelihood of tribal fishermen. The scientific team comprising of Dr Gladston Y and Dr Ajina S M interacted with the fishermen and impressed upon the responsible fishing and postharvest management practices for tuna and the bait fishery. Shri Shareefuddeen Hassan, Senior Technical Assistant, and Shri Arif M I, Senior Technician and the Coordinator of the program informed about the technical know-how and how to do the participants in 'Mahl' (the local language).

The scientific team visited Bada, Aoumagu, Boduathiri, New Boduathiri, Rammedu, Sadivalu, Aloodi, Funhilol, Kudehi, Fallessery, and Kendiparty villages and South Pandaram to sensitize about responsible fishing practices. At the end, the input was distributed to fishermen. A total of 500 seasoned bamboo poles were distributed to the 55 Tuna *Lanchi* of Minicoy. A total of 61 people participated. Shri Ajina S M, Convener and Co-Conveners Dr Gladston Y, Coordinator Shri Shareefuddeen Hassan & Shri Arif M I, Dr S K Zamir Ahmed, Nodal Officer, Lakshadweep coordinated the overall conduct of program under the Chairmanship of Dr Eaknath B Chakurkar, Director, ICAR-CIARI, Port Blair.

ICAR-Central Island Agricultural Research Institute In-charge, PME Cell Post Box No. 181, Port Blair - 744 101

Andaman and Nicobar Islands, India pme.ciari@icar.gov.in





#### Brainstorming meet on India@2047: In Agricultural Engineering Perspective

29 July 2022, New Delhi. The Division of Agricultural Engineering, Indian Council of Agricultural Research (ICAR), New Delhi, organized an online meeting with the professionals from Agricultural Engineering Industries in India to seek their views and foresight on the growth and development of Agricultural Engineering technologies in India in the next 25 years. Senior officials and owners of the industries involved in manufacturing of farm machinery and post-harvest equipment, processing and value addition of natural fibres, resins and gums participated in the discussions along with scientists from the institutes. More than 110 participants were present. The meeting was Chaired by Dr S N Jha, DDG (Agril. Engg.). Shri T R Kesavan, TAFE; Shri Mukul Varshney, Johndeere; Dr Syed Ismail, Shri Manoj K Sharma, Shri Suresh Kotak, Shri Sarabjeet Singh Panesar, Er Baldev Singh; Shri Ram Bohra, Shri Shailesh Ganeriwala; Shri Ashwin Srirangaraj, Shri S V Raju, Shri Sanjeev Sagar, Smt Akshita Sagar and Ms Navnoor Kaur were the key participants from the industry. They emphasized upon collaborative research, human resource

upgradation, development of testing facilities and related manpower for equipment/machinery being manufactured using electronics, sensors, artificial intelligence, etc.

ICAR-IARI, Division of Agricultural Engineering, Pusa Campus, New Delhi - 110012



### ICAR-NAARM Organizes Farmers Training at KVK on Soil Health Management under SCSP

27 July 2022, Hyderabad. To create an awareness on Importance of soil testing and soil health for crop productivity enhancement, ICAR-NAARM organized one-day training programme on **Soil testing** in collaboration with KVK Yagantipalle, AP on 27.07.2022 under SC-SP of NAARM for the farmers. The meeting was presided by Smt G Dhanalakshmi, Senior Scientist and Head, KVK Yagantipalle. Dr Ch Srinivasa Rao, Director, NAARM, Hyderabad participated in the programme as Chief Guest virtually.

Dr Ch Srinivasa Rao addressed the gathering virtually about the importance of soil health, critical role of crop residue addition, locally available organic materials to recycle into the soil, mulch cum manuring and importance of soil organic carbon in improving use efficiency of added fertilizer nutrients besides drought mitigation. Soil health cards were also distributed with the fertilizer recommendations.

Dr M Balakrishnan, Principal Scientist and Programme coordinator, ICAR- NAARM, Hyderabad briefed about the programme. Smt G Dhanalakshmi explained various programmes undertaken by the KVK for the benefit of farmers and highlighted the soil health improvement for higher crop production. Shri K V Ramanaih, Subject Matter Specialist (Soil Science) interacted with farmers on Importance of Soil test based nutrient management, Soil sampling procedure, testing and interpretation of data. Shri Suresh Kumar from KVK, 40 farmers from seven villages of district Kurnool, AP participated in the programme. Shri K V Ramanaih Subject matter specialist (Soil Science) proposed vote of thanks.



ICAR-NAARM, Rajendra Nagar, Hyderabad Telangana-500030

#### Awareness Programme on Nutri Sensitive Agriculture among the school children

29 July 2022, Bhubaneswar. ICAR-Central Institute for Women in Agriculture, Bhubaneswar organized an awareness programme on "Nutri Sensitive Agriculture" among the school children of Mahanta Balaramdas Vidyapitha, village- Chaudabatia, block- Satyabadi of Puri district, Odisha on The objective of the programme was to create awareness on importance of agriculture in addressing the nutritional challenges so that they are able to take balance diet at home and also educate their parents. Dr Anil Kumar, Director in his speech encouraged the children to think big and become responsible citizens of the country. He also said that nutritionally aware children will grow to become healthy adults and contribute to the nation development. He invited the children to visit ICAR-CIWA to acquire latest know how in Agriculture. A debate competition was organized on "Eradication of Malnutrition through Nutri-sensitive Agriculture" and the winners were awarded. About 150 students, teachers, elected representatives including ICAR-CIWA officials participated in the programme. The programme was organised as a part of Bharat ki Azadi ka Amrit Mahostav to commemorate 75 years of India's independence.



Director (A), ICAR-Central Institute for Women in Agriculture, *Plot No.50-51, Mouza-Joklandi, Barmunda, Bhubaneswar-751 003 (Odisha)* 

#### Andaman & Nicobar Islands Students Sensitized on Entrepreneurship Development by ICAR-NAARM & CIARI

12 August, 2022, Hyderabad. The a-IDEA, Technology Business Incubator (TBI) of ICAR-National Academy of Agricultural Research Management (NAARM), Hyderabad organized a sensitization programme on "Entrepreneurship Development and Start-Up Ecosystem" in Agriculture and Allied sectors for the students of Andaman & Nicobar Islands in collaboration with ICAR- Central Island Agricultural Research Institute (CIARI), Port Blair. The programme also invited participants across multidisciplinary institutions namely Andaman College (ANCOL), Portblair, Andaman Law College, Portblair, Tagore Government College of Education, Portblair, Jawaharlal Nehru Rajkeeya Mahavidyalaya, Portblair, Dr B R Ambedkar Institute of Technology (DBRAIT), Portblair and Pondicherry University, Regional Campus, Portblair to encourage and motivate the students to take up entrepreneurship as a profession. It was attended by about 200 students and faculty members of ICAR-NAARM & ICAR-CIARI, Portblair.

Dr Ch Srinivasa Rao, Director, ICAR-NAARM & President, a-IDEA, in his presidential address highlighted the significance of Island ecosystem in general and Andaman & Nicobar in particular. He stressed the participants to explore the various options namely agro-eco tourism, fisheries, large-scale plantation & poultry and meat industry for agri-preneurship. Dr Eaknath B Chakurkar, Director, ICAR-CIARI, who was the chief guest of the programme addressed the gathering to make utilize fully the opportunity provided by a-IDEA, ICAR-NAARM in entrepreneurship.

Dr G Venkateshwaralu, Joint Director, ICAR-NAARM & Vice President, a-IDEA discussed about the various schemes of Government in focussing on innovation and entrepreneurship. Dr Jaisunder, Incharge, PME, ICAR-CIARI welcomed the participants and mentioned that the Island region provides ample scope for entrepreneurship due to its rich diversity. Dr N A Vijay Avinashilingam, Principal Scientist, ICAR-NAARM & Additional CEO, a-IDEA highlighted the need for the development of entrepreneurship and start-up ecosystem in our country. He also explained the process of incubation and the role of a-IDEA in incubating the start-ups in the agri-ecosystem.

Dr Ranjit Kumar, Head Agribusiness Management, ICAR-NAARM emphasized on the skillsets for entrepreneurship. He focussed on the mindset of entrepreneurs and qualities required for establishing a successful enterprise.

Shri Nitish Gaurav, Founder & CEO of Genflow Al shared the challenges he faced and his experiences in turning his idea into a successful start-up.



ICAR-National Academy of Agricultural Research Management, Hyderabad

#### Azadi Ka Amrit Mahotsav Field Day-Vegetable cultivation (Pumpkin) under coconut plantation

12 August 2022, Minicoy, Lakshadweep. Regional Station, Minicoy of ICAR-CIARI Port Blair, conducted a "Field Day-Vegetable cultivation (Pumpkin) under coconut plantation" for the tribal farmers of Minicoy.

The Chief Guest DrShrikant R Tapdiya, the Deputy Collector of Minicoy, expressed his happiness on the ICAR-CIARI technologies, scientific pumpkin farming and doubling farmers income through agriculture. A total of 23 participants including farmers and farm women from Fallessery, Bada, and South Bandaram attended the field day in which they were exposed to a scientific pumpkin cultivation at the institute. The scientific team comprising of Dr Gladston Y and Dr Ajina S M interacted with the farmers and impressed upon the package of practices for organic pumpkin cultivation under coconut plantation. Shri. Shareefuddeen Hassan, Senior Technical Assistant and Shri Arif M I, Senior Technician the Coordinator of the programme informed about the technical knowhow and do how to the participants in 'Mahl' (the local language).

The vegetable kits were distributed among the farmers in the presence of officials of Department of Agriculture, Minicoy Unit Shri Kunjikoya. A total of 19 women and 4 men farmers participated.



Dr Jai Sunder, Pr Scientist & I/c PME Cell ICAR-CIARI, Port Blair, A & N Islands pme.ciari@icar.gov.in

# Technology demonstrations for enhancing resilience

13-14 August, 2022, Hyderabad. ICAR-CRIDA, Hyderabad, Second phase of 2 days Capacity Building Program on "Technology demonstrations for enhancing resilience" was inaugurated on 13 August 2022, by the Technology Demonstration Component of NICRA at ICAR-CRIDA, Hyderabad. The inaugural session was chaired by Dr S K Chaudhari, DDG (NRM), ICAR. Dr V K Singh Director, ICAR-CRIDA, Dr JVNS Prasad, Project Leader, TDC-NICRA, scientists from ICAR-CRIDA and Dr Lakshman Singh Director ATARI, Pune, Dr S R K Singh, Director ATARI, Jabalpur, Dr J V Prasad, Director ATARI, Hyderabad, Dr D R S Reddy Nodal officer Banglore, Senior Scientists and Heads of 42 NICRA KVKs, NICRA Co-PIs and SRFs of respective KVKs were present in the session. Also Nearly 70 students of Rural Agricultural Work Experience (RAWE) program representing 7 universities were present in the session.

Dr V K Singh Director, ICAR-CRIDA appreciated the work of KVKs and asked to collect the experiences on established custom hiring centers, seed bank, farm ponds and see the impacts under this project. He also asked the participants to do on line practice on data collection formats, analysis and reports generation.

Dr S K Chaudhari, DDG (NRM) in his address expressed that KVKs are back bone of agriculture sector and appreciated the work done during the pandemic situation. He stressed to learn from past experience and plan for feature climatic interventions by understanding the requirements of farmers and prepare and provide the solutions.



On the first day the participants were imparted with the skills on evidence of climate change and agromet advisories, targeting technologies to minimize the impact of climatic stresses in a farming system perspective and detailed discussion on data collection formats. Participants got hands on exercise on use of data collection formats and reporting the impacts of interventions at the household level.

On the second day the trainees were imparted with skills on Targeting Technologies to minimize the impact of climatic stresses in a farming system perspective, constitution of VCRMC, streamlining their functioning, contingency plans and addressing contingencies during the cropping season, custom hiring centers -guidelines for making CHCs in entrepreneurship mode, organizing launch programme in the NICRA villages of new KVKs.

The valedictory session on 14 August 2022 was chaired by Dr V K Singh, Director, ICAR-CRIDA. Dr D V S Reddy. Nodal Officer, ATARI- Bengaluru, Dr Thushar Attare, Nodal officer ATARI-Pune, Dr JVNS Prasad, Project Leader, TDC-NICRA and Dr T V Prasad, Principal Scientist and co-PI, TDC-NICRA, scientists from ICAR-CRIDA and Senior Scientist and Head of 42 NICRA KVKs, NICRA Co-PIs and SRFs of respective KVKs were present in the session.

Dr JVNS Prasad stressed to do quantification of impacts of CC on crops, water resources and milk production. He asked the KVKs to purchase the equipment's and establish custom hiring centers as soon as possible. He also stressed to do launching workshops of new NICRA villages in new KVKs.

Participants gave their feedback and expressed the utility and benefits of this programme.

Dr V K Singh Director, ICAR-CRIDA in his remark stressed to document the knowledge which have global and national important through vidieos or other media, so it will be shared world wide.

A video released was on "Success saga of NICRA" of KVK, amadalvalasa, Srikakulam. At the end, Dr TV Prasad, Principal Scientist proposed formal vote of thanks.

The trainees were also exposed to the field visit of custom hiring centers, seed production and processing, fodder production systems in Hayathnagar Research Farm.

CRIDA, Hyderabad-500 059, Telangana

#### ICAR-Indian Institute of Soybean Research, Indore employees create awareness of the Har Ghar Tiranga campaign

13-15 August 2022, Indore. Rising to the call of the government of India "Azadi Ka Amrit Mahotsav" initiative, ICAR-IISR, Indore organized various activities under the "Har Ghar Tiranga" campaign, celebrating the completion of 75 years of independence of the country with great fervur. Under this, a team lead by Dr B U Dupare conducted awareness among student of the Shri Ram Convent School, Musakhedi, Indore with regard to the struggle our country went to attain freedom in 1947. They called upon the students to urge their families and society to celebrate the occasion by hoisting the flag from 13-15 August 2022. Dr Dupare appealed to the students, stating that our country is tied together despite its diversity of languages and communities in one thread, in the

same way, we all should give a message of solidarity by hoisting the national flag '*Tiranga*' at our homes. In addition to this, employees came out in the streets of the city in a two wheeler rally. The rally was lead by the director and raised slogans of patriotism to motivate and remind the citizens of the city to fly the tri-colour inevery home andbuilding.



ICAR-Indian Institute of Soybean Research, Khandwa Road, Indore-452001

#### 30-day Entrepreneurship Development Programme on nutri-products of pearl millet organized for women entrepreneurs

15 July to 14 August 2022, Jodhpur. The Entrepreneurship Development Programme (EDP) on pearl millet nutri-products was organized by ABI, ICAR-Central Arid Zone Research Institute, Jodhpur for the Laghu Udyog Bharti (LUB), Jodhpur involving theoretical and practical technological training of the 15 women trainees. A month-long training programme included theory and practical training on *Bajra* based nutritionally rich products like pearl millet biscuits, chocolates, Kurkure and flakes. During the inaugural programme held on 14 July 2022, the chief guest, Shri Prakash Chandra of LUB emphasized that the pearl millet being local crop of Western Rajasthan, the efforts to prepare value added products from pearl millet is a welcome initiative on CAZRI's part. During the valedictory programme held on 16 August, 2022, the chief guest, Prof Ajay Kumar Sharma, Vice Chancellor, MBM, University, Jodhpur, lauded the efforts of CAZRI scientists to train the upcoming women entrepreneurs.



Dr O P Yadav, Director, CAZRI expressed that the humble millets are set to go global as the millets got international recognition with the United Nations declaring 2023 as the International Year of Millets.

The EDP was conducted by ABI under the expert supervision of Dr N V Patil and the faculty of Division of Agricultural Engineering and Renewable Energy of CAZRI headed by Dr Dilip Jain and Course Co-ordinator, Dr Soma Srivastava. As a feedback of training programme, the trainees expressed confidence in the production and marketing of pearl millet products as the positive response of consumers in their products have assured them of reaping good profits.

Dr O P Yadav FNA, FNAAS Director ICAR-Central Arid Zone Research Institute (CAZRI) Jodhpur, Rajasthan 342 003 (India)

#### Scientist-Extension-Farmer Interface meeting on Cashew Production Technologies organised under STC/TSP scheme

16 August 2022, Puttur. Under the aegis of Azadi ka Amrut Mahotsav campaign, a Scientist-Extension-Farmer interface meeting on Cashew Production technologies was organised at ICAR-DCR, Puttur for the ST farmers. During the interface meeting farmers wanted information regarding the varieties suitable to the coastal region, application of fertilisers as well as pest and disease management. Scientists discussed with the farmers on the varieties suitable to the region, regarding scientific management of Cashew and the scope of value addition of Cashew Apple. An important concern raised by the farmers during the interface meeting was regarding the low price for raw cashewnuts which makes cashew farming less profitable. Following the interface meeting, around 2000 cashew grafts were distributed to 14 farmers under the TSP programme of the Directorate.



ICAR-Directorate of Cashew Research, Puttur -574202

#### Field Day on Gladiolus-a high end flower under coconut plantation for livelihood security of tribal communities in Lakshadweep Islands

18 August 2022, Lakshadweep. Regional Station, Minicoy of ICAR-CIARI Port Blair, conducted a "Field Day on "Gladiolus-a high end flower under coconut plantation for livelihood security of tribal communities in Lakshadweep Islands".

Speaking on the occasion, the Chief Guest Shri Hussain Manikfan, Chairperson Village Dweep Panchayat, Minicoy expressed his happiness on the new initiatives, ie. flower cultivation, and entrepreneurship development through floriculture for the tribal farmers by ICAR-CIARI, Regional Station.

The scientific team comprising of Dr Ajina S Mand Dr Gladston Y interacted with the farmers and impressed upon the package of practices for gladiolus farming under coconut plantation as intercrop.Shri. Shareefuddeen Hassan, Senior Technical Assistant and Shri Arif M I, Senior Technician the Coordinator of the programme informed about the technical knowhow and do how to the participants in '*Mahl*' (the local language). Practical session on bouquet making and post-harvest management of cut flower was also Coordinator. Thereafter the participatingfarm women were exposed to institute on-going activities.

A total of 31 participants from Bouduathiri and South Bandaram villages attended the field day in which they were exposed to gladiolus cultivation under coconut plantation at the institute station.

Dr Ajina S M, Convener and Co-Conveners, Dr Gladston Y Coordinator, Shri Shareefuddeen Hassan and Shri Arif M I, Dr S K Zamir Ahmed, Nodal Officer, Lakshadweep coordinated the overall conduct of programme under the Chairmanship of Dr Eaknath B Chakurkar, Director, ICAR-CIARI, Port Blair.



Source: Dr Jai Sunder Pr Scientist & I/c PME Cell ICAR-CIARI, Port Blair A & N Islands Email ID:- pme.ciari@icar.gov.in

#### Celebration of Parthenium Awareness Day

18-19 August 2022, CRIDA main campus. To apprise about the harmful effects of the Parthenium and its management, the ICAR-Central Research Institute for Dryland Agriculture organized Parthenium Awareness day on 18 and 19 August 2022 in the main campus also at KVK, Hayathnagar Research Farm (HRF) on 19-8-2022

This dreaded weed is spreading at an alarming rate in India and all our efforts for its management are falling short. In view of the seriousness and magnitude of the threat posed by this weed, on 18<sup>th</sup> August 2022, the students of the RAWE training programme were educated about Parthenium.

On 19 August 2022, Dr V K Singh Director, ICAR-CRIDA addressed CRIDA scientists, staff and RAWEP students about the importance of celebrating the parthenium week. He also highlighted the harmful effects of parthenium like skin allergy (dermatitis), high fever and asthma in human beings and stressed the need to manage this weed an integrated mode i.e through mechanical, cultural and biocontrol methods. He said Parthenium besides hampering crop production becoming nuisance in non-cropped areas like residential areas, parks, road sides, railway tracks.

All the CRIDA scientists, staff and RAWEP students participated in uprooting of parthenium plants in and around the CRIDA main campus and helped in making it parthenium free campus.



ICAR-CRIDA, Santoshnagar, Hyderabad-500059, Telangana

#### Parthenium Awareness day in KVK -Hayathnagar Research Farm

*19 August 2022, Hyderabad.* Krishi Vigyan Kendra-Ranga Reddy district, of CRIDA conducted Parthenium awareness programme at KVK, Hayathnagar Research Farm.

Shri G Krishna, SMS (Horticulture), KVK explained identification, spread of parthenium, harmful effects of weed, management practices for control of parthenium, *etc.* Dr D Sudheer, SMS (Veterinary Science) explained about the adverse effects of parthenium on animal health. A wide range of activities were conducted to spread maximum awareness among staff members at KVK and to RAWE students.

Staff of KVK along with RAWE students were actively participated and removed parthenium weeds in fruit crop plantations at KVK farm.

KVK Staff and RAWE students eradicating the parthenium at KVK, Hayathnagar Research Farm (HRF).



ICAR- Central Research Institute for Dryland Agriculture, Santoshnagar, Hyderabad-500059, Telangana.

### Parthenium awareness week & Sensitization on its integrated management by Regional Station Minicoy, Lakshadweep of ICAR- CIARI Conducted

16-22 August 2022, Lakshadweep. Minicoy. Regional Station, Minicoy of ICAR-CIARI Port Blair, conducted "Parthenium awareness week" and sensitization on its integrated management for the school students andtribal farmers of Minicoy.

On 20 August 2022, the Chief Guest Shri Ibrahim Manikfan L G, District Panchayat Representative, Lakshadweep Islands expressed his happiness on new initiative of ICAR-CIARI Regional Station, Minicoy. Healso expressed his views on parthenium harmful effects to human and other animals and itsimpact on soil productivity and biodiversity. The scientific team comprising of Dr Gladston Y and Dr Ajina S M interacted with the school students and teachers and impressed onthe subject namely integrated management of parthenium, how to eradicate parthenium by uprooting, biological control and composting. Shri Shareefuddeen Hassan, Senior Technical Assistant and Shri Arif M I, Senior Technician the Coordinator of the programme informed about the technical know-how and do how to the participants in '*Mahl*' (the local language).

An on station demonstration was also carried out on composting of parthenium in participatory mode. The students and teachers were also exposed to farm and other technologies of ICAR-CIARI, RS Minicoy. A total of 25 students and 4 teachers participated the program.

The scientific team visited Bada, Aoumagu, Boduathiri, New Boduathiri, Rammedu, Sadivalu, Aloodi, Funhilol, Kudehi, Fallessery and Kendiparty villages and South Pandaram and conducted awareness on harmful effects of parthenium and its management during the period.A total of 35 male and 40 female totaling to 75 participated.

Dr Gladston Y, Convener and Co-Convenors Smt Ajina S M,Coordinator Shri Shareefuddeen Hassan and Shri Arif M I, Dr S K Zamir Ahmed, Nodal Officer, Lakshadweep coordinated the overall conduct of programme under the Chairmanship of Dr Eaknath B Chakurkar, Director, ICAR-CIARI, Port Blair.

Dr Jai Sunder Pr Scientist & I/c PME Cell ICAR-CIARI, Port Blair A & N Islands Email ID:- pme.ciari@icar.gov.in



#### 17<sup>th</sup> Parthenium hysterophorus awareness week organized by Indian Institute of Soybean Research, Indore

16-22 August 2022, Indore. Parthenium hysterophorus is known by different names in different parts of the country, the ill effects of which have been seen mainly in the form of reduction in crop production and diseases like eczema, asthma, and allergies etc. in humans. To get rid of the problems caused by this grass a week long awareness program was organized across the country. In the past years, its outbreak is increasing rapidly in food crops, vegetables, and gardens. This grass is mainly found in abundance in vacant places, unusable lands, industrial areas, etc. In this awareness week program, a session was organized at ICAR-Indian Institute of Soybean Research, Indore, in which Dr Rakesh Kumar Verma scientist of the institute informed the personnel about the problems caused by *parthenium hysterophorus*. Discussing the measures to control the grass, he added that in the rainy season, the grass should be uprooted before flowering, composted, to control its spread growing plants like marigold around the house and in fields can also be taken up. In addition to this, he advised the use of herbicide (chemicals glyphosate and metribuzin) before flowering in uncultivated areas.

ICAR-Indian Institute of Soybean Research, Khandwa Road, Indore-452001



### Batch 123<sup>rd</sup> of Certificate Course on Soil and Water Conservation and Watershed Management

20 August 2022, Dehradun. Passing out function of 123<sup>rd</sup> batch of 4 - month training "Certificate Course on Soil & Water Conservation & Watershed Management" was organized at ICAR-Indian Institute of Soil & Water Conservation, Kaulagarh Road, Dehradun (Uttarakhand). The 4 month programme was organized from 22 April 2022 to 21 August 2022 at the Institute Hqrs., Dehradun. A total of 27 Officers representing six states (Punjab-9; Madhya Pradesh-5; Meghalaya-4; Chattisgarh-4; Nagaland-2; Kerala-1) and two Scientists from ICAR-IISWC participated in the programme of which seven women Officer Trainees were there.

Dr Subash Singh, Director Soil Conservation, Jharkhand graced the occasion as Chief Guest and gave away the merit certificates to the merit holders for their outstanding performance during the training. The overall merit certificate of 123rd batch was bagged by Ms Deepika from Punjab for her excellent performance who was also awarded merit for her performance in **Conservation Engineering**. The Certificate of Merit for Integrated Watershed Management, Conservation Agronomy and Soil Management for Controlling Land Degradation was awarded to Dr Abhimanyu Jhajhria, Scientist, ICAR-IISWC, Dehradun. Dr Matber Singh, Sr Scientist, ICAR-IISWC, Dehradun was awarded Merit certificate for **Conservation Forestry** while the Merit for **Study** tour was bagged by Mr Prince T Kurian from Kerala.



H&E Division/AKMU Cell ICAR-IISWC, Dehradun-248195, Uttarakhand

#### Skill Development Training on Manufacture of Jute Diversified Products

22 August 2022, Kolkata. A 08-days training programme on "Production and value addition in jute fibre through manufacture of diversified products" sponsored by Agricultural Technology Management Agency (ATMA), Katihar, Bihar was inaugurated at ICAR-NINFET, Kolkata.

Dr D B Shakyawar, Director highlighted upon various innovative technologies of the institute and its importance in getting quality fibre as well as production of value added products. He also emphasised upon the collaboration of ICAR-NINFET, Kolkata and ATAMA, Katihar, Bihar for betterment of stakeholders associated with jute production & processing. Dr A N Roy, Head, TOT Division briefed the trainees about the market demand of jute goods and entrepreneurship development opportunities in this sector. Shi S K Jha, Deputy Project Director, ATMA, Katihar, Bihar spoken about the scope of value addition and product diversification in jute growing areas of Katihar District.

Thirty (30) progressive jute farmers of Katihar District, Bihar associated with jute crafts work participated in the handholding training.

ICAR-National Institute of Natural Fibre Engineering & Technology, Kolkata





A Mass Awareness Campaign on Cow-Compost-Carbon and Climate (NC4Cs) under theme of Organic and Natural farming

22 August 2022, Bhopal. ICAR-Indian Institute of Soil Science, Bhopal under the All India Network Programme on Organic Farming Centre, organized a mass awareness campaign on "Cow-Compost-Carbon and Climate under Theme: Organic/Natural Farming" as a commemoration of 75 years of India's Independence, with the intention of bringing awareness and importance of cow and composting to enrich the soil with carbon, which is linked to mitigate climate change. The event was jointly organized by ICAR- Indian Institute of Farming System Research (IIFSR), Modipuram, and Indian Institute of Soil Science, Bhopal. The chief guest of the program, Hon'ble Agril Minister, Shri Kamal Patel Ji, Madhya Pradesh Govt. informed the audience that cow based farming and product can provide solutions informed that the government is promoting and incentivising desi cow-based farming through different schemes. The Guest of Honour Shri Shalendra Singh, IAS, Agriculture Production Commissioner, Govt of Madhya Pradesh, urged the institute to provide a simple model that farmers can adopt. Dr A K Patra, Director, ICAR-Indian Institute of Soil Science, Bhopal, explained the institute's technology developed on composting/enriched compost, microbial consortia for in-situ recycling of residue/management, climate change mitigation, and soil health. Dr Suman Prasad (DDA, ATMA, Bhopal) informed about the status of organic farming in the state and requested to provide the institute technology that can be taken to the farmers field. Dr Prakash Shastry, Ex-D ean, College of Agriculture, Khandwa, Dr Brij Lal Lakaria, Principal Scientist, ICAR-IISS, Dr A K Prusty (Senior Scientist) IIFSR, Modipuram shared his views and covered various aspects of organic and natural farming among participants.



The progressive farmers Shri Narayan Singh Patel, Shri Krishna Pal Singh Lodhi, and Shri Ashok Meena Ji shared their experiences on natural farming and preparation jeevamrit and Ghanjeevamrit. An interactive session was also held to discuss and listen to farmers' views and problems. More than 250 participants, including farmers, scientists, students, extension workers, and other officials, participated in the virtual platform program. The event ended with a vote of thanks by Dr J K Thakur.



ICAR-Indian Institute of Soil Science, Bhopal

#### Vigilance Officers Training at ICAR-NAARM

26 August 2022, Hyderabad, Three days Training Workshop for Vigilance Officers of ICAR Institutes was organized by ICAR-NAARM from August 24-26, 2022 for 20 Vigilance Officers of various institutes of ICAR. The participations were nominated by ICAR, New Delhi. They were sensitized on different vigilance management activities such as preventive vigilance, duties and responsibilities of vigilance officers, disciplinary procedures, recruitment process, RTI and purchase procedures etc.

Dr Ch Srinivasa Rao, Director, ICAR - NAARM addressed in the valedictory session. He suggested the Vigilance Officers to take major role on Preventive Vigilance Mechanism rather than post vigilance activities. Further, he emphasized that the Vigilance Officers have to see that the process adopted in purchase and other developmental activities of the organization is in a transparent manner.

The programme was earlier inaugurated by Dr G Venkateshwarlu, Joint Director, ICAR-NAARM. In his inaugural address, he emphasized the role of vigilance officers in enhancing the status of ICAR Institutes.





ICAR-National Academy of Agricultural Research Management, Hyderabad

### Training on Automobile Maintenance, Road Safety and Behavioural Skills for Regular Drivers of ICAR

22-27 August 2022, Bhopal. ICAR-Central Institute of Agricultural Engineering, Bhopal organized a ICAR sponsored training programme on "Automobile Maintenance, Road Safety and Behavioural Skills" for regular drivers in technical grade in offline mode. The aim of the programme was to make the participants aware of new knowledge of the vehicle materials, advanced technologies in vehicles, traffic rules, safety measures, vehicle insurance system, first-aid management and upgaring behavioural & communicaton skills. Twenty three (23) participants from 12 ICAR institutes and its KVKs participated in the training. The states comprised of Rajasthan, Telangana, Himachal Pradesh, Uttar Pradesh, Arunachal Pradesh, Nagaland, Manipur, Sikkim, Haryana, Gujarat, Bihar and Tamil Nadu. Eight participants were from the north-eastern states. Seven lectures and four practical classes were scheduled, besides, four number of visits. The valedictory function of the training was held on 26 August 2022. Dr C R Mehta Director, ICAR-CIAE was the Chairperson of the function. The function was graced by Dr Anil Kumar Rai, ADG (ICT) ICAR, New Delhi as a Chief Guest. Dr Mehta appreciated the particiapnts for their particiaption Dr Rai in his address highlighted the need of such training programmes, keeping in view, the rapid changing technologies in vehicle. Feedback from the participants were highly satisfactory and all of them informed that they have attended this kind of training programmes for the first time in their career. The detailed overview and the activities happened during training programme was presented by Dr R K Singh, HRD Nodal officer, ICAR-CIAE Bhopal. The programme was conducted by Dr Adinath Kate as a Course Director while Dr S P Singh, Course-Coordinator offered the vote of thanks.



PME Cell, ICAR-CIAE Bhopal

#### ICAR-CIPHET provided 3 days skill development training to Scheduled Caste

31 August 2022, Ludhiana, Punjab. ICAR-Central Institute of Post-Harvest Engineering and Technology, Ludhiana organized a three-days training program under the Scheduled Caste Sub Plan scheme of Government of India on Post-harvest processing and value addition of food grains including millets and pulses from 29 to 31 August 2022. The programme was aimed to strengthen Scheduled Caste poor families and nurture them to initiate activities in the field of cereals, millets and pulses processing with special emphasis on value added food products. 50 Scheduled caste participants with over 90% women participants from villages Ghumnewal and Maniewal of Jagraon tehsil, district Ludhiana participated in the program. Dr Mridula D and Dr Swati Sethi, of ICAR-CIPHET, Ludhiana were the coordinated the training program. The experts from PAU and ICAR-ATARI also delivered lectures during the training program on various government schemes and marketing strategies. The valedictory program was chaired by the Director, ICAR-CIPHET Dr Nachiket Kotwaliwale. Dr Kotwaliwale highlighted that the processing facilities of ICAR-CIPHET can be utilized by interested participants to initiate entrepreneurial activities; and attain experience for entering into the processing field. He also motivated the participants to form FPO/groups and start processing in the area of grain processing. A training manual on the subject was also released and distributed to the participants for knowledge sharing.

#### Dr Renu Balakrishnan

I/c Media Management & Scientist (Agricultural Extension), Transfer of Technology Division, ICAR- Central Institute of Post-Harvest Engineering & Technology Ministry of Agriculture & Farmers' Welfare, Govt of India, Ludhiana-141004, Punjab, India



#### National webinar for awareness of protrection of plant varieties and farmer's rights (PPV and FR) Act 2001

1 September 2022, Hybrid. The ITM unit of the Indian Institute of Soybean Research in collaboration with Krishi Vigyan Kendra, Kasturbagram, Indore organized an online webinar to spread the awareness on "Rights and Protection of Plant Varieties and Farmers act 2001" among the farming community. Farmers from all over the country participated in this programme. Dr Dinesh Kumar Agrawal, Registrar General, PPV and FR, Guest speaker, highlighted that farmers can register the traditional varieties as well as the variety developed by them so that their rights are protected. He added that out of more than 17000 applications, 11000 received were for protection of the varieties developed by the farmers. Out of which 200 farmers were protected by PPV & FRA. Dr Agrawal answered all the doubts and questions of the farmers. Dr Nita khandekar, Director of the Institute, presided over the session, Dr M P Sharma was the convener, Dr Mrinal Kuchlan, Scientist, ICAR-IISR and Dr Alok Deshwal, KVK, Kasturbagram were the co-convener.

ICAR-Indian Institute of Soybean Research, Khandwa Road, Indore-452001



# Management of Horticulture & Nursery at KVK, Ramagirikhilla, TS

5 September 2022, Hyderabad. ICAR-NAARM organized a 3 days training programme on "Management of Horticulture & Nurseries" under SCSP in collaboration with Krishi Vigyan Kendra (KVK), Ramagirikhilla, Peddapalli (Dist) affiliated by Shri Konda Laxman Telangana State Horticultural University (SKLTSHU) at Seminar Hall, JNTUH College, Ramagikhgilla from 3 -5 September 2022. Total 205 farmers were trained including 102 women farmers on the aspects related to "Management of Horticulture & Nurseries". Dr A Kiran Kumar, Director of Extension, SKLTSHU participated in the inaugural function as a chief guest and highlighted the present status of production and productivity of horticulture fruit crops in our country. Also emphasized anent the good practices for management of horticultural nurseries for higher production of fruit crops.

Shri Gone Shyamsunder Rao, RAC & IMC Member, ICAR-NAARM graced the inaugural function as Guest of Honour, stressed upon the need to develop skills for becoming an entrepreneur. Dr M Balakrishnan, Principal Scientist, ICAR-NAARM in his address highlighted the role of horticultural product and its role in building national productivity in the horticultural sector.

Delivering the valedictory address, Dr Sridhar Reddy, Vice-Principal, JNTUH, Ramagirikhilla was urged all the participants to become a job provider by establishing different horticulture based entrepreneurs.

The programme was ended with formal vote of thanks by Shri A Srinivas, Head & Programme co-ordinator, KVK, RGK. The program was co-ordinated by Dr M Ramesh Naik, Scientist, ICAR-NAARM.



ICAR-National Academy of Agricultural Research Management, Hyderabad.

#### Skill development training on recent advances in seed production and farming of brackishwater finfishes to the stakeholders

1-9 September 2022, Chennai. ICAR-Central Institute of Brackishwater Aquaculture (ICAR-CIBA), Chennai conducted 2 hands-on training programme on 'Seed production and farming of brackishwater finfishes' during 5 to 9 September 2022, at its headquarters Chennai and during 1-7 September 2022 at its Kakdwip Research Centre in West Bengal respectively. 20 participants consisted of fish farmers, start-up entrepreneurs, State Fisheries Department Officials and aquaculture consultants attended the training. Dr K P Jithendran, Director, ICAR-CIBA, who inaugurated the trainings, elucidated the importance of species diversification and location specific farming systems to attain sustainability in brackishwater aquaculture sector. Dr M Kailasam, Principal Scientist & Scientist-in-Charge, Fish Culture Division, briefed that his team has covered the subject matter topics on broodstock development, induced breeding, larval raring, live feed culture, nursery rearing, grow out culture systems, fish health management, fish nutrition and feed development of candidate finfish species such as seabass, milkfish, grey mullet and ornamental fishes during the skill development.

The trainees were taken to seabass fish nursery rearing and ornamental fish hatchery as field visits and interacted with the women self-help groups who are operating these farming systems to get practical training. Certificates were distributed to the participants.

In his concluding remarks, the director stated that handholding of potential farmers and youth by progressive farmers, state departments and research institutions is needed to augment seed production and finfish farming in the country.



# 3 days training programme on Natural farming for its KVKs

7-9 September 2022, Guwahati. ICAR-Agricultural Technology Application Research Institute, Guwahati, Zone organized "3 days training programme on Natural farming" from 7-9 September 2022, at Krishi Vigyan Kendar, Kamrup, Assam for the Krishi Vigyan Kendars officials under Zone VI. Dr R S Chandel, Hon'ble Vice Chancellor, Dr Y S Parmar University of Horticulture & Forsestry, Solan Himachal Pradesh was the Chief Guest of the Inaugural Session and addressed the house virtually. In his address, he stated that, Natural Farming is the future of agriculture in India.

Dr Subhash C Verma, Principal Scientist and Dr Usha Sharma, Senior Scientist from Dr Y S Parmar University of Horticulture & Forsestry, Solan Himachal Pradesh provided the hands-on-training on Natural farming to the KVK officials. The training were exhaustive in nature which included the theory on all the dimensions of natural farming and practical on the preparation of various inputs of natural farming.

The valedictory session were attended by Dr Bidyut C Deka, Hon'ble Vice Chancellor, Assam Agricultural University, Jorhat as the Chief Guest. He stressed on the importance of natural farming and its inclusion in the agriculture courses.

Dr Rajesh Kumar, Director, ICAR-ATARI, Zone VI, Guwahati emphasized on benefits of the adoption of natural farming in the North East due to its agroecological advantages.



Dr Rajesh Kumar Director ICAR-Agricultural Technology Application Research Institute, Zone - VI, Guwahati, Assam

#### On-campus Trainings and Exposure Visits of Farmers to CAZRI organized under Schedule Caste Sub Plan

7, 8 and 12 September 2022, Jodhpur. Three oncampus trainings of one day duration each were organized at ICAR-CAZRI under SCSP. 300 farmers from Utambar, Balarwa, Dudhabera, Bhatelai, Lunawas Kalan, Sar and Sinli villages in Jodhpur district were benefitted from the programmes. Exposure visits were organized to different research and demonstration units at CAZRI farm such as ATIC, horticulture and agro-forestry nursery, crop cafeteria of *kharif* crops, protected cultivation of vegetables, alternative and new fodder crops unit, animal feed technology unit, arid horticulture block, integrated farming system, organic farm, KVK, tharparkar cow based dairy unit and agri-voltaic system. Farmers were also exposed to emerging fruit crops such as fig and kamalam (dragon fruit). Various interactive lectures and practical sessions on soil testing, weather based agro-advisory services and plant protection measures were also organized.

Dr O P Yadav, Director, CAZRI, in his valedictory address, highlighted that agriculture has changed significantly in the last few decades and called upon the farmers to adopt modern technologies to keep pace with the changing circumstances. On the occasion, battery operated sprayers were distributed to the SC farm families. Dr Mahesh Kumar, Principal Scientist and Nodal Officer, SCSP, presented a detailed note on the input distribution and extension activities undertaken at different districts in Rajasthan and Gujarat under SCSP. Quality seeds, fertilizers, agricultural implements and sprayers were distributed to these farmers along with capacity building programmes from time to time on improved agricultural technologies. Farmers expressed satisfaction over the implementation of the scheme and were happy to be associated with CAZRI, known for arid agriculture in the whole world. The programmes were coordinated by Dr Mahesh Kumar, Dr B L Manjunatha, Dr R R Meghwal, Dr R S Yadav, Dr H M Meena, Dr Shrvan Kumar and Dr Dipika Hajong.



Dr O P Yadav FNA, FNAAS Director ICAR-Central Arid Zone Research Institute (CAZRI) Jodhpur, Rajasthan 342 003 (India) Website: www.cazri.res.in Email: director.cazri@icar.gov.in, opyadav21@yahoo.com

#### Capacity Building Program on Micro Irrigation Systems for Uttar Pradesh State Horticulture Officials

13 September 2022, Bhopal. In order to promote micro-irrigation system under PMKSY, Uttar Pradesh

State Horticulture and Food Processing department has realized the importance of capacity building of their officials in this area. 3 batches of training programs on Micro-irrigation are being organized for identified officials from 75 districts of the state Department of Horticulture & Food Processing at the ICAR-Central Institute of Agricultural Engineering, Bhopal. 2 batches of training program (25 each) sponsored by the department have been organized at ICAR-CIAE, Bhopal during 13-15 September and 20-22 September 2022. The second batch of training was concluded on 22 September, 2022, in which Dr VP Singh, Director, ICAR-NIHSAD was Chief Guest and Director of the institute Dr CR Mehta was Chairman of the valedictory session.



The topics covered in the training program include critical components of micro-irrigation system (MIS), crop water requirement, appropriate irrigation schedules for different crops, fertigation, operation and maintenance, design and layout of different MIS etc. The participants were provided with practical exposure on all types of micro-irrigation systems and their different overhead components such as filters, fertigation gadgets, etc. installed at Micro-Irrigation Park of the institute. The participants also got an exposure and hands-on-experience on addressing troubleshooting in MIS, operation of different fertigation gadgets, identifying critical components etc. A positive feedback was received from the participants on how the training will help them in implementing programme on "Per drop more crop" under PMKSY. The training was coordinated by Irrigation and Drainage Engineering Division of the institute. The next batch of training program for 25 participants has been scheduled during 18-20 October 2022.



PME Cell ICAR-CIAE Bhopal

# Development of Ornamental fish cluster for rural women in Nimpith

28 September 2022, Nimpith, ICAR-CIFRI initiated development of ornamental fish cluster in adopted villages of KVK Nimpith Ashram in collaboration with Ramkrishna Ashram KVK, Nimpith and Rotary international, Kolkata Mahanagar by adopting 50 Scheduled caste women for ornamental fish farming. Under the guidance of Dr B K Das, Director, ICAR-CIFRI an ornamental cluster was planned for Nimpth area for the livelihood development of rural SC women.

Swami Asheshananda ji Maharaj of Ramkrishna Ashram graced the occasion as chief guest and highlighted that women in the region are generally busy with household chore work. He suggested the women fish farmers to take up the activity seriously for their development and hoped that more women will be interested for ornamental fish culture activities in future.

Dr B K Das, Director, ICAR-CIFRI in his address advised the women fish farmers to take up ornamental fish farming for their livelihood development and extra earning with little extra effort. 50 units of FRP ornamental tanks with fish-feed, ornamental fish and other accessories were distributed to SC women beneficiaries.

ICAR- Central Inland Fisheries Research Institute, Barrackpore, Kolkata-700120



#### Five days training programme on Invasive Weed Management

26-30 September 2022, Jabalpur, Madhya Pradesh The ICAR-Directorate of Weed Research, Jabalpur, Madhya Pradesh in collaboration with ICFRE, Dehradun organized a 5 days training programme on "Invasive Weed Management". The programme was inaugurated by Dr J S Mishra, Director and in his inaugural address, he highlighted the importance of different weeds, their problems and effect on forest ecology and plant biodiversity. Dr Sushil Kumar, Pr. Scientist, Entomology addressed on problematic weeds which destroy the forest ecology and alters biodiversity.

The training programme included 15 ICFRE scientists from different forest research institutes of the country. In this training altogether 18 deliberations were scheduled with eminent weed scientists from ICAR-DWR, Jabalpur. Weed scientists delivered comprehensive lectures designed especially on invasive weeds, their characteristics, menace and management under forest ecosystem. Dr J C Tiwari, resource person form ICAR-CAZRI also shared his expertise on the same through online lecture. During the training programme, a field visit was arranged for demonstration of ongoing experiments on weed management.





During the closing ceremony Director, ICAR-DWR, Jabalpur addressing the scientists explained the importance, problems, utilization, and management of invasive weeds under changing climate in different forest ecosystems i.e. tropical, sub-tropical, humid, per-humid and temperate. He suggested the timely management of the weeds for their optimum control. At the end, certificates were distributed to the trainees and formal vote of thanks was proposed by Dr V K Choudhary.

ICAR-Directorate of Weed Research, Jabalpur, Madhya Pradesh-482004

## Success Story

# TSP activity: Success story of tribal farmer Shri Mangi Lal Garasia

Shri Mangi Lal Garasia S/o Shri Gama Ram Garasia, is a tribal farmer residing in tribal village Goria, Teh. Bali, Dist. Pali (Rajasthan). Traditionally, he was cultivating local variety of crops viz. Maize, green gram and cowpea during kharif and wheat and gram during Rabi season and vegetables viz. lady figure, bottle gourd, ridge guard, Balam Khera in hilly area, taking low yield for the survival of the family. He was also rearing goat (15), cows (20), and buffalo (2) taking low yield of milk. He was not aware about the improved varieties of crops and vegetables, and improved cultivation practices, therefore, cultivating in traditional way and earning only ₹ 39000 per annum from crops vegetables and livestock. Under Tribal Sub Plan (TSP) of CAZRI- Regional Research Station-Pali (Rajasthan), he was selected with the aim to uplift his income through productivity of crops and vegetable for nutritional security. He participated in all the scientist- farmers interface meetings and off campus training programmes organized for the benefit of tribal farmers. In order to popularize high yielding improved varieties, demonstration of improved variety of green gram (IPM-205-07) was laid on farmer's field. 4.0 kg seed of improved variety of green gram (IPM205-07) was given to him for sowing in 2.0 Bigha land and scientists of CAZRI-Regional

Research Station- Pali (Rajasthan) imparted technical knowhow to him for getting higher production of green gram as well as other crops. Shri Mangilal obtained 3.85 qt of green gram (IPM-205-07) from demonstration of 2.0 Bigha land which is 21.5% higher over the yield of green gram obtained in local variety. Besides use of high yielding varieties, he was also trained on the proper use of FYM. Vermi compost, vermi-wash and microbial fertilizers, etc. Other technical intervention suggested to the farmer were, raised bed plantation of vegetables, stacking of tomato, integrated nutrient management, off season vegetable cultivation in open field, papaya cultivation, threshing of crops on Trauplin floor and safe storage of grain, retail marketing of vegetables, addition of concentrate in animal feed, Shri Mangi Ram adopted most of the technological interventions suggested for enhancing yield of crops, vegetables and live-stock for improvement in nutritional security and livelihood. He has started cultivation of chillies. tomato, peas in backyard. With the introduction of technological intervention, the yield of crop increased from 12 to 17% and yield of vegetable also increased by 15-20%. Milk yield of cow, buffalo and goat also increased due to supplementation of concentrate in livestock feed. Earlier Sh Mangilal was earning only ₹ 39000 per annum but after coming in contact with the scientist of CAZRI-Regional Research Station- Pali under TSP, now he earning ₹ 47000 per annum from crops, vegetable and live-stock.



Habitation of tribal farmers



For safe threshing on tarpaulin floor



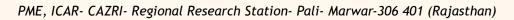
For safe storage of grain



Efficient management of insect pest by use of power sprayer



Field day on demonstration of green gram



### Success Story of an Innovative Farmer

Particulars	Details	
Title	Shift in technologycal approach of Vermicompost in Fatehpur	
Thematic area	Agriculture Diversification	
Farmer	Shri Diwan Deo Hansh	F .
Details	S/o- Shri Shubh Karan Sing Sing	
	Village- Bilauna, Post- Chhichha	Carle Car
	Block- Khajuha, Bindki	SZ CA
	District- Fatehpur (212655)	Sel al
	Mob. No 6393307571	A
	Adhaar Card No 778649784064	- And
	Age-31 years	
	Education- B.Sc (Maths)	
	Land Holding- 2.0 Hectare	

Da atti avrila av		
Particulars Problem addressed	Details Being Graduate, it was difficult to start career in farming but due to unemployment and family financial problem, Shree Diwan Deo Hansh decided to help his father in agriculture in 2016, because his father was doing traditional farming method and its source of earning was not desirable.	
Description of Adopted Technology	He started mechanized farming system from old traditional method. Earlier his father practiced broadcasting method of sowing seed. After training at KVK in 2017, he understood the importance of line sowing and then he opted to practice it in his field. Since he has 3 buffaloes and dung was not properly utilized, he constructed 7 Vermicompost unit and started commercial breeding of worms to sell the compost.	
Practical Utility	Shree Diwan Deo Hansh was able to convert the buffaloes' dungs in commercial worm breeding and Vermicompost production. He uses the Vermicompost in his field to enhance soil fertility and reduced cost of cultivation and increased moisture retain. Earlier only Paddy and Wheat crop was taken but he started growing Gram and Mustard in <i>Rabi</i> and Urd/ Moong in <i>Zaid</i> Season. He started value addition by establishing Floor mill and Oil Extraction unit of his produce and also started Banana cultivation in the year 2019.	
Source of Technology	Since he is Graduate and his curiosity regarding each aspect in agriculture helped him taking better knowledge and quick decision. He always participates in training and farmers fair organized at KVK-Fatehpur. He was Inspired by Vermicompost unit established at KVK Fatehpur.	
Economic	Before adopting diversified agriculture his annual income was around ₹ 140,000 (from 4 acre land) in 2016. In 2017 ₹ 10,000 additional income from Urd/Moong (1.5 acre land). Dairy Unit ₹ 100,000/year. Total Income in 2017 was 265,000/year. In 2018 by selling 70kg @ ₹ 600/kg worms and 10 Qtls Vermicompost @ ₹ 8/kg he gained ₹ 50,000/year, rest 25 qtls Vermicompost was used in his own field. The Total income from all sources in 2018 was ₹ 315,000/year. Total Net income ₹ 315,000 which is 48% higher over traditional methods. By floor mill and Oil Extraction unit around ₹ 10,000/month and from Banana cultivation around ₹ 275,000/crop.	
Horizontal Spread of Technology	More than 35 villages have been covered by selling Worms, establishing Vermicompost unit, and Training farmers for organic agriculture. More than 400 farmers are guided for Vermicompost production units establishment under Shree Diwan Deo Hansh.	



Dr Naushad alamL, Scientists Ag. Extension, KVK Fatehpur (UP)

#### Inauguration of National Laboratory for Assessment of Trash and Contamination in Cotton

12 July 2022, Mumbai. Dr S N Jha, Deputy Director General (Agricultural Engineering), ICAR, inaugurated the National Laboratory for Assessment of Trash and Contamination in Cotton (NLATCC) in the presence of Dr Sujata Saxena, Director (Acting), ICAR-CIRCOT.

On 13 July 2022, DDG chaired ICAR-CIRCOT Stakeholder's Meeting with industry participants namely representatives from Cotton Corporation of India Ltd., Cotton Association of India, KVIC, AICOSCA, machinery manufacturers, incubatees and Agri startups participated in the meet. Dr Sujata Saxena, Director, ICAR-CIRCOT, Mumbai welcomed the dignitaries and provided brief description of different research activities, skill and entrepreneurship development and funding support programmes to Agri startups being carried out at the institute.

During the meeting, discussion was held on present trends in cotton research, cotton marketing and future expectations from CIRCOT in view of the prevailing industry trends and technology upgradation.

Dr A J Shaikh, Former Director, ICAR-CIRCOT opined that more scientific research should be undertaken in value addition to cottonseed.

Dr S N Jha, DDG emphasized that technology developed by the institute needs to be popularized among different stakeholders and student community. He also suggested participation of cotton sector institutions in various activities to be undertaken for ICAR-CIRCOT Centenary Celebrations in 2024.

#### ICAR-CIFRI Celebrates National Fish Farmers Day 2022 at Moyna Fisheries Hub, West Bengal

#### 10 July 2022, Moyna, East Medinipur, West Bengal.

ICAR-CIFRI, Barrackpore celebrated the National fish farmers' Day, 2022 at Moyna fisheries hub, East Medinipur, West Bengal in collaboration with Moyna Ramkrishnayan Association. On this day CIFRI also celebrated the National Campaign on 'Emerging Aquaculture Systems and practices' with the sub theme of intensive and industrial aquaculture systems to promote innovation and entrepreneurship initiatives in aquaculture sector.

Dr B K Das, Director, CIFRI along with the guests paid homage to the revered scientist Prof. Hiralal Chaudhary with garlands and lamp lighting. Dr Aparna Roy welcomed all the dignitaries and shared the significance of celebrating National Fish Farmers' Day on 10<sup>th</sup> July 2022. He offered the establishment of a water quality testing center at Moyna and also assured of expert guidance from CIFRI as and when required. In today's programme technology partners of CIFRI were also felicitated to acknowledge their role in materializing the products from the research lab to be used by the farmers in the fields.

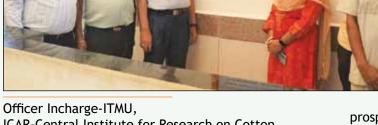
Shri Sasanka Maity, Scretary, Moyna Ramkrishnayan Association thanked the Director and the team from CIFRI for their presence and their contribution in development of fisheries in Moyna fisheries hub and also requested for conduction of monthly water and soil quality analysis to deal with fish disease and subsequent mortality. Prof S K Das, WBUAFS, addressed the farmers on the "Emerging trends in

Aquaculture". Dr B K Mahapatra, Retd. Pr Scientist, CIFE, Kolkata RRS stressed on the scopes of ornamental fishery. Dr S Samanta, HoD, REF Division, CIFRI spoke on "Importance of soil and water quality management for sustainable fisheries management". Dr B K Behera, HoD, AEBN Division, CIFRI spoke on "Importance of Biofloc/RAS technology" as adapting measure in resource limited conditions.

Approximately 500 farmers attended the programme including 150 women farmers. The event started with a farmer-scientist interactive session in which the experts discussed the

prospects and problems of inland fishery sectors and mitigation challenges. On this occasion, diagnostic camp was organised with experts in technology, environmental monitoring, aquaculture, and health





ICAR-Central Institute for Research on Cotton Technology (ICAR-CIRCOT), Matunga, Mumbai Maharashtra-400019

to facilitate fish farmers to advance toward scientific fisheries management where samples of diseased fishes were collected along with chemical analysis of sample waters for informing the farmers about the health of the water body.

The programme gained large media exposure in print, electronic and digital media. Also programmes were organised through the community radio centers to ensure its reach to a large number of local populace.

Director, ICAR- Central Inland Fisheries Research Institute, Barrackpore. Kolkata-700 120



#### ICAR-CIFA observed National Fish Farmers Day 2022

11 July 2022, Bhubaneswar. The National Fish Farmers day was observed in remembrance of scientists Dr K H Alikunhi and Dr H L Chaudhuri who had successfully induced bred one of the carp species on 10 July 1957. To commemorate this epoch making discovery National Fish Farmers' Day is observed throughout the country. This had eventually revolutionized the Indian Aquaculture industry.

Prof Sasmita Rani Samanta Vice Chancellor, KIIT (Deemed University) was the Chief Guest on this occasion. Prof Samanta in her speech appreciated the institute for the service to the nation and urged the scientists to bring innovations for the small scale aqua farmers of the country.

Dr Dilip Kumar, Former Fisheries and Aquaculture Sector Planning and Policy Adviser, FAO and former

Vice Chancellor, ICAR-CIFE was the Guest of honour on this occasion. He underlined hat credit should go to all scientists, farmers and stakeholders for the development of the technologies on this important day. He appreciated the efforts by ICAR-CIFA in designing the Matsya Setu app for farmers. Dr K Janardhana Rao, Former Principal Scientist, ICAR-CIFA, Bhubaneswar the other guest of honour focused on skill development of fish farmer's through hands on training and called for strengthening extension services.

Addressing the gathering, ICAR-CIFA Director Dr Saroj K Swain said the invention of induced breeding is hailed as a landmark achievement in the history of fishery in India and abroad.

In the second session as a part of the Azadi Ka Amrit Mahotsav - National Campaign, a interaction was held on the theme "Emerging Aquaculture Systems and Practices". Over 200 farmers especially farm women, progressive farmers, entrepreneurs, and Govt. officials from Odisha and other parts of the country were participated at the event and the aquaculture experts from the institute had a detailed discussion on various problems faced by the farmers. 15 fish farmers/entrepreneurs from different parts of India were felicitated for their contributions in adopting and promoting ICAR-CIFA technologies across the country. The awardees also shared their experience in fish farming with the audience. Six publications and a video film on carp feed were also released on this occasion. Dr G S Saha, Principal Scientist, proposed the vote of thanks.

#### Press and Media

ICAR-Central Institute of Freshwater Aquaculture Kausalyaganga, Bhubaneswar-751002 ICAR-CIFA<icarcifapressmedia@gmail.com>



National Campaign on Emerging aquaculture systems and practices and celebration of 22<sup>nd</sup> National Fish Farmers' Day

July 11 2022, Umiam, Meghalaya. The Division of Animal & Fisheries Sciences (DAFS), ICAR Research Complex for NEH Region, Meghalaya organized National Campaign on Emerging aquaculture systems and practices and celebrated 22<sup>nd</sup> National Fish Farmers' Day today at Fish Farm Complex of the institute as a part of Azadi Ka Amrit Mahatsab. The programme was attended by Dr Vinay Kumar Mishra, Director, ICAR NEHas Chief guest, Dr Samarendra Hazarika, Principal Scientist and Nodal Officer (STC) as Guest of Honour, Dr SK Das, Principal Scientist and Head (DAFS), Dr Chandan Debnath, Sr. Scientist (FRM), Smt Peetambari Devi, Scientist SS (FRM) and Shri Tasso Tayung, Scientist (Aquaculture) and Technical and contractual staff of the Division. Total 50 fish farmers participated (20 were nominated by the KVK, Ri Bhoi, 15 by RiBhoi Farmers Union and 15 from ICAR adopted villages) and they were imparted knowledge about emerging aquaculture technologies through classroom training and demonstrations.

The welcome address was delivered by Dr SK Das where He highlighted the importance of fisheries in the livelihood development of NE India and contribution of ICAR NEH in the development of location-specific technologies, fish seeds for enhancing the fish production of the region. Dr S Hazarika, he urged all thestakeholders engaged in agricultural, animal husbandry and to work in an integrated manner to ensure that farmers' income is doubled by 2022.

Speaking on this occasion, Dr Vinay Kumar Mishra urged the farmers, Scientists and other stakeholders to work in a mission mode to make NE India selfsufficient in fish production. The programme came to end with distribution of fish seeds and pH papersto the farmers. The programme was organized under the financial assistance from Schedule Tribe Component (formerly TSP) and overall programme was coordinated by Dr C Debnath and Dr S K Das with assistance from Smt Peetambari Devi, Shri Tasso Tayung, Shri Alakesh Das, Shri Prasanta Mahanta & Shri Pynhun J Ryntathiang.



Dr C Debnath Sr. Scientist (FRM) Division of Animal & Fisheries Sciences ICAR NEH, Meghalaya

### National Fish Farmers Day and National Campaign on Emerging Aquaculture Systems and Practice

11 July 2022, Chennai. ICAR-Central Institute of Brackishwater Aquaculture (ICAR-CIBA) observed the National Fish Farmers Day and the National Campaign on 'Emerging Aquaculture Systems and Practices' as part of the Azadi Ka Amrit Mahotsav on 11 July 2022.

Two parallel progammes, an-online webinar and an interaction meet with fish farmers at the field level were organized to celebrate the day.

In the virtual mode, Dr Manoj M Sharma, a progressive shrimp farmer from Gujarat state presented a talk on "Recent advances in shrimp farming and scope for brackishwater finfish farming". About 150 participants including farmers, technicians, marketing officials, scientists, and students participated in the event. Dr K P Jithendran, Director, ICAR, CIBA in his opening remarks highlighted the significance of brackishwater aquaculture sector, importance of shrimp farming and facilitating the aqua farmers in getting successful crops. Dr Manoj Sharma in his farmer-friendly talk emphasized the multi-phase shrimp farming concept, advantages and the economics of it vis-à-vis conventional shrimp farming. The virtual programme was organized by the Navsari Gujarat Research Centre of ICAR-CIBA. Shri Pankaj Amrut Pail along with Shri Jose Antony and Shri Tanveer Hussain, Scientists at NGRC coordinated the event.

A field level interaction was organized at Karangadu village in Ramanathapuram district, Tamil Nadu on Integrated Multi-trophic Aquaculture in which 130 fish farmers and fishers participated. Shri Gopinathan, Assistant Director of Fisheries, Government of Tamil Nadu, Ramanathapuram and Dr Sesh Serebiah, Chairman, Jehovah Sammah Centre for Marine and Wildlife Research participated in the event as guests of honour and interacted with the fish farmers. Dr D Deboral Vimala, Principal Scientist, Social Science Division organized this field interaction.



ICAR Central Institute of Brackishwater Aquaculture, Chennai, Tamil Nadu-600028

#### NIANP, Bengaluru bags prestigious Sardar Patel Outstanding Institution Award

16 July 2022, Bengaluru. The National Institute of Animal Nutrition and Physiology (NIANP), Bengaluru, a unit of Indian Council of Agricultural Research (ICAR) under the Ministry of Agriculture & Farmers Welfare was awarded **"Sardar Patel Outstanding Institution Award"** for the year 2021, during the 94<sup>th</sup> ICAR Foundation Day of ICAR, held at New Delhi on 16 July 2022. At a glittering ceremony held at AP Shinde Hall at New Delhi, Dr Raghavendra Bhatta, Director of ICAR-NIANP received the Award from the Hon'ble Union Minister for Agriculture and Farmers Welfare, Shri Narendra Singh Tomar. Other dignitaries present on the occasion were Shri Parshottam Rupala, Hon'ble Minister for Fisheries, Animal Husbandry and Dairying, Shri Kailash Choudhary, Hon'ble Minister of State for Agriculture and Farmers Welfare and Dr Ramesh Chand, Member, NITI Ayog, and Dr Trilochan Mohapatra, Secretary to Govt. of India (DARE) & Director General, ICAR and other senior officers of ICAR.

The recipient of the Award, Dr Raghavendra Bhatta, Director, NIANP expressed his happiness over receiving the Award for the second time in a decade. The scientists of the Institute have been bestowed with many other prestigious awards for their work in the past.



ICAR-NIANP, Chennakeshava Nagar, Bengaluru, Karnataka-560030

# One of the oldest KVK of the region gets its facelift

19 July 2022, West Garo Hills. Dr S K Chaudhari, Deputy Director General, (Natural Resource Management) Indian Council for Agriculture research, (ICAR), New Delhi, Smt Rajeshree Sunil, deputy secretary (NRM) along with Dr V K Mishra Director ICAR Research complex for NEH Region Umiam and heads of divisions visited the Krishi Vigyan Kendra (KVK) Tura, West Garo Hills. The KVK was established way back in 1970.



Dr S K Chaudhari inaugurated the Farmer's Training Hostel of the KVK and laid the foundation stone for the administrative building, in presence of the other dignitaries as well. On this occasion an input distribution programme under the Tribal Sub Plan (TSP) was also organised where more than 100 farmers of Tura and neighbouring villages attended the programme. The other dignitaries who attended the programme were Director ICAR RC for NEHR, Director ATARI-VII, Dean College of Home Science, Nodal Officer TSP & Nodal Officer KVK.

The DDG NRM while addressing the gathering urged upon the farming community to disseminate the knowledge and to be aware how to achieve through ICAR & its KVKs and pass on the same to their fellow farmers. He also realised several publications on the occasion.



The dignitaries also distributed inputs worth 15 lakhs to about 105 farmers who received Knapsack Sprayer, silpaulin sheets, sewing machine, drip irrigation kits improved seed materials, poultry, poultry birds, medicines, feed, feeders, water pump etc.

V K Mishra Director ICAR RC-NEH, Umiam (Barapani) Meghalaya - 793103 vkmishra\_63@yahoo.com

#### ICAR- CCARI, Goa celebrated Van Mahotsav in collaboration with Goa Forest Department @AKAM

1 August 2022, Goa. ICAR - Central Coastal Agricultural Research Institute (CCARI), Goa and ICAR - Krishi Vigyan Kendra (KVK), North Goa celebrated the Van Mahotsav in collaboration with the Forest Department Goa under the Azadi Ka Amrit Mahotsav. Shri Rajiv Kumar Gupta, IFS, Principal Chief Conservator of Forests, Goa was the Chief Guest of this function. Dr Parveen Kumar, Director of ICAR-CCARI, Goa welcomed the guests. On the occasion of Van Mahotsav tree planting was done in the newly developed field in the B block by the Chief Guest, Shri Rajiv Kumar Gupta, Dr Parveen Kumar, staff of ICAR-CCARI and Forest Department, Goa. The Chief Guest visited the lab and experimental fields of the Institute and appreciated the Institute for its good work. A total of 100 participants were present on the occasion and actively participated in the tree seedling planting of Sandalwood (Santalum album), Red Sanders (Pterocarpus santalinus) and Malabar Neem (Melia dubia). The programme was coordinated by Dr A Raizada, Principal Scientist (Agroforestry) and Dr Uthappa, A R, Scientist (Agroforestry).



AKMU ICAR-CCARI, Old Goa - Goa

#### KVK Kaneri organized Wild Vegetables Mahotsav (Ranbhaji Mahotsav)

10 August 2022, Kaneri. ICAR-Shri Siddhagiri Krishi Vigyan Kendra, Kaneri, Kolhapur organized "Wild Vegetables Mahotsav" at KVK Kaneri, Kolhapur in collaboaration with State Department of agriculture, Kolhapur, ATMA, Kolhapur, MPKV, Rahuri and Shivaji University, Kolhapur.

The chief guest, Shri Sanjay singh Chavan, CEO, Zila Parishad, Kolhapur stresses upon mass awareness on wild vegetables and importance of nutrient qualities of wild vegetables. Shri Chavan urged the farmers to conserve and identify and documentation of wild vegetables in the region.

Dr U B Hole, Associate Dean, College of Agriculture, Kolhapur urges the farmers and researchers to build a strong extension linkage for spread of important information on wild vegetables. Dr Madhukar Bachulkar, Botanist, Kolhapur deleiver his lecture on wild vegetables importance and identification along with Dr. Vinod Shimple, Botanist, New College, Kolhapur. Dr Ravindra Singh, head, Shri Siddhagiri Krishi Vigyan Kendra, Kaneri, Kolhapur stresses on creating database on wild vegetables and linking the consumers for selling these wild vegetables by direct sell and Linking to FPOs. Shri Ashok Kumar Pisal, Extension Agronomist, REC, Kolhapur, talks about adopting extension methoslogies and documentation of wild vegetables.

In the program Shri Jalinder Pangare, DSAO Kolhaour along with Shri Umesh Patil, Pricipal, RAMETI, Kolhapur and Shri Bhimashankar Patil, ADO, Zila Parishad, Kolhapur were present. In the program 168 farmers and farm women participated.

ICAR-Shri Siddhagiri Krishi Vigyan Kendra, Kaneri, Kolhapur, Maharashtra



ICAR-NINFET organized Cardinal Programme on Mass Media Campaign of NINFET-Sathi and Inaugural Ceremony of Nation Wide Campaign on Potential of Natural Fibre for Replacement of Single-use Plastic

12 August 2022, Kolkata. ICAR- National Institute of Natural Fibre Engineering and Technology (ICAR-NINFET), Kolkata organized the Cardinal Programme on the Mass Media Campaign on the Accelerated Retting Technology using the formulation NINFET-Sathi® and inaugurated the Nation- wide Campaign on Potential of Natural Fibre for Replacement of Singleuse Plastic on 12 August 2022. On this event around 150 participants including the farmers from various jute growing areas, representatives of industry, Institute, academia and media participated.

Shri Moloy Chandan Chakrabortty, IDAS, Jute Commissioner, Govt. of India, graced the programme as Chief Guest, applauded the Institute for its achievements in the area of natural fibres. He appreciated the efforts of the Institute for popularizing and providing NINFET-Sathi<sup>®</sup> getting technology among the jute farmers.

Dr D B Shakyawar, Director, welcomed all the dignitaries and briefed about the institute achievements and future activities and its roadmap for exploring natural fibres as an alternative to single-use plastic. Dr Debasis Nag, Former Director of the Institute in his address, highlighted the role of the Institute, in reaching the institute's technology to the farmers' front. He also enlightened on various policies required for awareness and promotion of natural fibres for sustainable environment. Shri Bikram Naskar, IMC member of the Institute appreciated the institute activities to reach the technologies to the lab to land.

A technical bulletin and few technology profiles were released on the occasion to propagate the institute technologies among the farmers and other stakeholders. A compendium on year-long activities under "Azadi ka Amrut Mahotsav" was also documented and released by the dignitaries.

On this occasion the scientists of the institute deliberated on the themes and interacted with the participants. MoUs were signed with the three Farmers Producer Companies (FPC) to extend the institute activities in the rural areas in a meaningful manner.

AKMU ICAR-NINFET, Kolkata



#### Celebration of Independence Day on 15 August 2022, at ICAR-CIRCOT, Mumbai

13-15 August 2022, Mumbai. The **76<sup>th</sup> Independence Day was celebrated** with full vigor and pride across the nation and ICAR-CIRCOT staff members actively participated in the Har Ghar Tiranga campaign by hashtaging #harghartiranga on their social media platform as well as uploading of their selfies with Tiranga on http://harghartianga.com/ website of Gol. The office website was updated with Har Ghar Tiranga banner.

Honorable Director Dr Sujata Saxena hoisted the National Flag and accepted the salute and guard of honour. She applauded the Institute technologies that benefited Cotton producers and processors in the last 97 Years of its establishment and with centenary year of the Institute 2024 nearing, ie. she told that it is time for everyone to and gear up and take up the challenges faced by cotton farmers and cotton industry through focused R&D projects and develop the technologies which will help in removing drudgery from life of cotton farmers and workers.

A short cultural program was also arranged. Around 50 Staff members along with their children participated in the celebration.

ICAR-Central Institute for Research on Cotton Technology (ICAR-CIRCOT), Adenwala Road, Matunga, Mumbai-400 019



### ICAR- CCARI, Goa celebrated 76<sup>th</sup> Independence Day @AKAM

15 August 2022, Goa. ICAR-Central Coastal Agricultural Research Institute (CCARI), Goa celebrated the 76th Independence Day with traditional fervor, gaiety and great enthusiasm under Azadi ka Amrit Mahotsav. Dr D C Verma, MLA, Meerganj, Uttar Pradesh and Dr Vinod Tiwari, Retd Principal Scientist, Directorate of Wheat Research, Karnal, Harvana were the Special Guests for the function. In the welcome address, Dr. Parveen Kumar, Director ICAR- CCARI, Goa welcomed the guests and in detail explained the importance of celebrating the Azadi ka Amrit Mahotsav. In his speech, he also gave the scientific directions and vision for the next 25 years (Amrit Kal). Dr D C Verma in his speech remembered India's glorious past and its achievements especially in the field of education. He further stressed India has now become Atmanirbhar in many sectors and with the help of youth power India will be Vishwa guru soon. Dr. Vinod Tiwari, appreciated the achievements of the Institute and urged the staff to work towards fulfilling the ICAR Vision of 2050. During the programme, the Director felicitated the staff of the Institute who had immensely contributed for the development of the institute. The dignitaries also distributed prizes to the winners of Annual ICAR-CCARI Games-2022. A cultural programme on this occasion was also organized at the Institute in which the children of Institute staff actively participated and performed various activities like patriotic songs, dance, speeches and fancy dress of patriotic leaders. Around 200 people participated in this programme. The programme was coordinated by the Institute Staff Recreation Club.



AKMU ICAR-CCARI, Old Goa - Goa

#### Shri Parshottam Rupala launched National Ranching Program at Varanasi, Uttar Pradesh

19 August 2022, Varanasi. As a part of "75<sup>th</sup> Azadi Ka Amrit Mahotsav" and on the auspicious occasion of Janmashtami, ICAR-Central Inland Fisheries Research Institute, Barrackpore organized National ranching program and mass awareness campaign at Assi ghat, Varanasi, Uttar Pradesh under the 'Namami Gange' programme for holistic fisheries development of river Ganga. The National ranching programme at Varanasi was launched by Shri Parshottam Rupala, honourable Union Minister of Fisheries, Animal Husbandry, Dairying, Govt of India, in presence of Dr J K Jena, DDG (Fy. Sc.), ICAR, Shri Kaushal Raj Sharma, DM, Varanasi, Dr B K Das, Director, ICAR-CIFRI and other dignitaries.

More than two lakhs artificially bred wild fish seed germplasm of river Ganga (Rohu, Catla and Mrigal) was released by honourable minister and other dignitaries into the river. The event was also marked by mass awareness campaign on Ganga conservation at Assi Ghat, Varanasi.

Honourable Minister, Shri Rupala in his address expressed his gratitude to the Prime Minister Shri Narendra Modi ji, for giving him the privilege of ranching fish fingerlings into the water of Mother Ganga at Kashi.

Dr Joykrushna Jena, Deputy Director General (Fisheries science), ICAR highlighted the importance and significance of Gangetic fisheries in the upliftment of socio economic condition of fishers and ecosystem sustainability.

Dr Basanta Kumar Das, Director, ICAR-CIFRI welcomed the chief guest and guests of honour and briefed them about ICAR-CIFRI activities under Namami Gange project. Dr Sandeep Kumar Behera, from Namami Ganga Program highlighted the need to enhance the State-Central coordination for the conservation of indigenous fish species in the river. In the programme, active participation from all the sections of the society at different Ganga banks was seen. The fishers were sensitized on Ganga rejuvenation and restoration of prized Gangetic fishes.

ICAR- Central Inland Fisheries Research Institute Barrackpore, Kolkata-700 120



#### KVK Washim Celebrates Agricultural Technology Week-2022

18-22 August 2022, Washim. Washim district is among the aspirational district with back wardness in agriculture and allied sector due to low income level of the farmers. On this line KVK Washim is promoting location specific key areas like organic farming and input production, integrated farming system and soil health management for the socio economic upliftment of farmers. To demonstrate the above location specific and need oriented technologies to farmer's agricultural technology week was celebrated at KVK campus. This event was inaugurated by Shri Trustee Chaitanya Deshmukh on 18 August 2022, in chief presence of Project Director ATMA and DSAO, S M Totawar. Addressing the gathering Chaitanya Deshmukh emphasized the role of KVK in making farming enterprise profitable and suggested farmers to be in touch with KVK scientist. In welcome address Dr R L Kale Head and Senior Scientist given over view of the event and requested farmer to visit crop cafeteria and agricultural exhibition arrange at the programme site. On this occasion DSAO S M Totawar, Dr B D Gite I/c. ARS and S S Kokadwar DDM NABARD also express their views and guided farmers about new farm technologies. Daily technical sessions by KVK expert Dr D N Ingole, R S Daware, T S Deshmukh, Shubhangi Watane, Dr R L Kale and S K Deshmukh were conducted on needful topics like doubling farmers income, natural farming, food processing,

Mango and Santra cultivation and freshwater fish farming follow by shiwar pheri coordinated by Farm Manager Pramod Deshmukh.

Official from Agriculture Department D V Kankal, District Planning Officer Sunita Amre, Assistant Director Self Employment Sunanda Bajaj, District Manager KVIB Jivan Bothikar and Extension personnel participated in the event. Attractive exhibition was arranged by support of FPOs, SHGs, Private Companies, KVK, DAMU Project and other stake holders. Concluding programme organized in Chief presence of Trustee Sanjay Ukalkar, and Sabhapati Subhash Kharat on 22 August 2022. In closing remarks Mr.Ukalkar given key consideration to KVK for impactful functioning while Subhash Kharat appeal farmers to adopt new farming technology and focus on reduction of input cost of farming operation. Farmers, Rural youths, FPO volunteers, DFI farmers, Women SHGs and Gram mitra and Gram Sakhi participated in the event in large number. SMS Extension Education S.K.Deshmukh moderated the proceeding of the agriculture technology week.

Krishi Vigyan Kendra, Karda Tq. Risod, Dist. Washim (M.S.) 444506



### Batch 123<sup>rd</sup> of Certificate Course on Soil and Water Conservation and Watershed Management

22 April to 21 August 2022, Dehradun. Passing out function of 123<sup>rd</sup> batch of 4 - month training "Certificate Course on Soil & Water Conservation & Watershed Management" was organized at ICAR-Indian Institute of Soil & Water Conservation, Kaulagarh Road, Dehradun (Uttarakhand) on 20 August 2022. It is one of the unique training programs in the country addressing the issues related to natural resource (soil, water and vegetation) management that mitigate the impact of climate change and helps to ensure livelihood, nutritional and environmental security in the country. The four month programme was organized at the Institute Hqrs., Dehradun. A total of 27 Officers representing six states (Punjab-9; Madhya Pradesh-5; Meghalaya-4; Chattisgarh-4; Nagaland-2; Kerala-1) and two Scientists from ICAR-IISWC participated in the programme.

Dr Subash Singh, Director Soil Conservation, Jharkhand graced the occasion as Chief Guest and gave away the merit certificates to the merit holders for their outstanding performance during the training.

Hon'ble Chief Guest, Dr Subhash Singh in his address highlighted the importance and enormity of the problem of soil and water conservation and urged the Officer Trainees of the 123rd Batch to be the real ambassadors of the Institute. Dr M Madhu, Director, ICAR-IISWC, Dehradun in his address urged that the trainees must understand the need of the people for whom the work is targeted. This would ensure better sucess in the management of watershed and ensure inclusive growth of the farming community. Dr D V Singh, Head Division of HRD&SS presented the over all training report of the four month Certificate Course. Experts in different fields were invited from esteemed Institutes to cover the subjects on the basis of feedback of earlier batches. The module of this training programme consisted of 47% practical and 53% theory.

During the feedback session, the participants acknowledged and appreciated the efforts made by the IISWC, Dehradun in successful organization of the training programme. The 123<sup>rd</sup> Batch Certificate Course was successfully coordinated by Dr Indu Rawat, Sr. Scientist.

H&E Division/AKMU Cell ICAR-IISWC, Dehradun-248195 (Uttarakhand)



### The ICAR-Mahatma Gandhi Integrated Farming Research Institute (MGIFRI), Motihari celebrated its 8<sup>th</sup> Foundation Day

23 August 2022, Motihari. The Chief Guest, Dr. Suresh Kumar Chaudhari, Deputy Director General (Natural Resource Management), ICAR, New Delhi in his online lecture, wished and congratulated the Director, Scientists, Administration and Finance staff, and all concerned on this special day of the Institute. Also said that he has nostalgic memories of when the foundation stone was laid on this day, 21 August 2015 in presence of Shri Radha Mohan Singh, Hon'ble MP, Motihari and Ex-Minister, Agriculture & Farmers Welfare, and Dr S Ayappan, Hon'ble Ex-DG, ICAR; subsequently, Dr T Mahapatra, erstwhile Hon'ble DG, ICAR made a lot of efforts to develop this institute to cater to the needs of the farmers.



The DDG (NRM) also said that the location has historical importance as it is the place where Champaran Satyagraha was led by Mahatma Gandhi.

Dr S Bhaskar, Hon'ble ADG (AAF & CC), NRM, ICAR, New Delhi conveyed his best wishes to scientific, technical, administrative and supporting staff.

Earlier, in his welcome address, Dr K G Mandal, Director, ICAR-MGIFRI, Bihar apprised the dignitaries about the progress of the Institute's infrastructure development, more facilities to be created, on-going research activities, future plans and programmes. Dr S K Purbey, Principal Scientist and the Organizing Secretary presented the Glimpses of the Institute and successfully conducted the brainstorming session, where Dr P S Bramhanand, Director Research, Dr RPCAU, Pusa, Samastipur, Bihar delivered the lead lecture.

ICAR-Mahatma Gandhi Integrated Farming Research Institute, Motihari, Bihar

### ICAR-NBSS&LUP celebrates its 46<sup>th</sup> Foundation Day

27 August 2022, Nagpur. ICAR- National Bureau of Soil Survey and Land Use Planning, Nagpur is celebrating its 46<sup>th</sup> Foundation day on 27 August 2022. During the Press conference on the eve of Foundation Day on 25.08.2022, Dr B S Dwivedi, Director of the Bureau informed that the Chief Guest of the function will be Hon'ble Cabinet Minister, Shir Nitin Gadkari Ji, Minister for Road Transport & Highways and Honourable Director General and Secretary DARE, Dr Himanshu Pathak Ji will be the Guest of Honour on the occasion. Dr CD Mayee, Former Chairman Agricultural Scientist Recruitment Board (ASRB) and Dr SK Chaudhari, Deputy Director General (NRM) ICAR New Delhi will grace the function as special invitees.

Dr Dwivedi cited few examples like technical assistance in watershed development planning to the Karnataka Government that benefitted millions of farmers in raising agricultural productivity with sustainable management of soil and water resources. He elaborated further that the soil data are also used for infrastructure development like power transmission, internet connectivity, laying rail tracks in the country. The Bureau was bestowed with several awards, notable among which are the ICAR-Best Annual Report Award for the year 2017-18, Ganesh Shanker Vidhyarthi *Puruskar* (2006, 2008, 2014, 2015, and 2016).

Smt Hemlata, CTO, NRM Division-for information, The Incharge, PME, ICAR-NBSS&LUP, Nagpur



#### ICAR-NAARM Celebrates its 47<sup>th</sup> Foundation Day

1<sup>st</sup> September 2022, Hyderabad. ICAR-National Academy of Agricultural Research Management celebrated 47<sup>th</sup> foundation day on 1 September 2022, in hybrid mode with fervour and enthusiasm.

Dr Himanshu Pathak, Secretary DARE and DG, ICAR joined virtually and appreciated the activities and achievements of the academy in terms of expanded capacity building programmes, Think-tank research policy, a-IDEA, Technology Business Incubator (TBI) and Post Graduate Diploma on Agri Business management. Earlier in the day, the Secretary DARE and DG, ICAR also joined virtually in the renaming ceremony of International Guest House I as "Haritha IGH I" to cherish Green Revolution and International Guest House II as "Sagarika IGH II" to cherish Blue revolution.

On behalf of the Chief Guest, the Director, ICAR-NAARM felicitated the awardees in various categories of staff. Besides, the innovative farmers from across the India having close linkages with NAARM, best performing Start-ups, Farmer Producer Organizations (FPOs), collaborating institutes and Print and electronic media who have active engagement with NAARM have been felicitated on the occasion.

Dr Ch. Srinivasa Rao, Director, ICAR-NAARM welcomed all the guests and highlighted salient achievements of the Academy since last Foundation Day in the areas of capacity building, research, policy support and Think Tank activities and acknowledged the roles of QRT, RAC and IMC members for their guidance and motivation.

Dr G. Venkateswarlu, Joint Director, ICAR-NAARM proposed the words of thanks. The program was attended by former Directors of NAARM, Directors of various ICAR Institutes, Vice Chancellors from SAUs and retired NAARM staff.



Dr Himanshu Pathak, Secretary DARE and DG, ICAR addressing on the occasion of the  $47^{\rm th}$  Foundation Day of ICAR-NAARM



Award Winners with the Dignitaries on the occasion of the  $$47^{\rm th}$$  Foundation Day of ICAR-NAARM

ICAR-National Academy of Agriculture Research Management, Hyderabad

#### ICAR-Indian Institute of Pulses Research, Kanpur celebrated 30<sup>th</sup> foundation day

5 September 2022, Kanpur. ICAR-Indian Institute of Pulses Research, Kanpur celebrated 30<sup>th</sup> foundation

with fervour and enthusiasm. Dr Tilak Raj Sharma, Deputy Director General (Crop Sciences) ICAR graced the occasion as the Chief Guest on the occasion and presented the foundation day lecture. He appreciated the efforts and achievements of institute towards achieving ever highest pulse production in the country. He urged scientists and staff of the institute for continued efforts for sustaining the current growth of pulse.

Dr Bansa Singh, Director, ICAR-IIPR presented the salient achievements of the institute in fields of research, extension and infrastructure development.

On the occasion, awards for best performing staff in scientific, technical and supporting categories were given. Five progressive farmers were also awarded on the occasion.

The Chief Guest also laid the foundation stone of the speed breeding facility at the institute and unveiled the high protein and fibre biscuits brand -Delomeo of Mahodaya Agriworks- an Incubatee of ABI unit of the institute. In addition, three research bulletins and one folder were released on the occasion.

#### ICAR-IIPR, Kalyanpur, Kanpur, Uttar Pradesh-208024



Deputy Director General (Crop Science) laid the foundation stone of IISR Biological Centre new building at Pravaranagar

29 September 2022, Pravaranagar, Maharashtra. Dr T R Sharma, Deputy Director General (Crop Science), ICAR laid foundation stone of new building of ICAR-IISR, Lucknow Biological Control Center at Pravaranagar (Maharashtra) on 29 September 2022. At this auspicious occasion Dr R K Singh, ADG (CC), ICAR; Dr Sharmila Roy; Dr A K Sah; Dr M K Singh; Dr D N Borase and Dr. Yogesh Thorat (Scientists of IISR) were also present there. The proposed building and facilities of Biological Control Center will be constructed on about 1.25 acre land with the total cost of about  $\gtrless$  5.0 crore sanctioned by the Govt. of Maharashtra under RKVY scheme. DDG (CS) and ADG (CC) also monitored the ongoing research projects and experiments in the sugarcane fields and discussed in details about the research work and outreach activities of the centre for the benefit of sugarcane farmers of the Maharashtra.

At this occasion a farmer goshthi and felicitation function was also organized in Kamgar Sanskrutik Bhavan of Pravaranagar sugar mill. While addressing the farmers and sugar mill officers, Dr T R Sharma said that in view of the increasing demand for sugar and ethanol in the country, sugarcane farmers need to obtain high production of sugarcane by using modern technology developed and advocated by the ICAR-Indian Sugarcane Research Institute. Dr Sharma also advocated the use of bio agents for the management of pests and diseases in sugarcane. He appreciated the efforts taken by Pravaranagar sugar factory for extending all support to the centre in facilitating the research work. Smt. Shalinitai Vikhe Patil, former president, Zilla Parishad, Ahmednagar Chaired the farmers' goshthi. In the goshthi more than 250 farmers and factory personnel participated and interacted with the Scientists.

The program ended with a formal vote of thanks by Dr A K Sah, Principal Scientist & Incharge Extension and Training.

ICAR-IISR, Lucknow Biological Control Center, Pravaranagar, Maharashtra



### Visit

#### Dr Suresh Kumar Chaudhari, Deputy Director General (Natural Resource Management) visited ICAR-IISWC



1-2 July 2022, Chandigarh. The ICAR-Indian Institute of Soil and Water Conservation (ICAR-IISWC) Research Centre, Chandigarh hosted the visit of Dr Suresh Kumar Chaudhari, Deputy Director General (Natural Resource Management) on 1-2 July 2022 the Centre organized a visit to the iconic watershed management project, Sukhomajri (Haryana) where Dr S K Chaudhari interacted with local residents, and beneficiaries in the presence of Dr M Madhu, Dr O P S Khola, and the present scientists. He was apprised about how the concept of participatory watershed management was evolved by the Research Centre during the watershed project which played a major role, along with the technological interventions, for successful implementation of the watershed management project. In a similar visit to Mandhala watershed management project (Himachal Pradesh),

also executed by the Research Centre, he interacted with the Secretary of the Water Users Association and discussed in depth the various aspects of the project.

A formal function for celebrating 75 years of India's Independence "AzadiKaAmritMahotsav" was organized on 2 July 2022 at the Research Centre's Research Farm, Panchkula in the form of planting of mango saplings by Dr S K Chaudhari, DDG (NRM); Dr M Madhu, Director; Dr O P S Khola, Head; and, all the staff of the Research Centre. The DDG (NRM) was apprised of the on-going plantation drive at the Research Farm since the past 3 years to replace old plants, fill gaps due to mortality and utilizing vacant areas of the Farm for their conservation and productive utilization. The celebration was followed by visit to experimental plots / sites where the concerned scientist presented in detail the background, the objectives, treatments implemented and results so far of the experiment being conducted at the plot or site. A visit was also made to the first sediment monitoring station site, installed in 1964, and its pond, which was the genesis of the watershed management concept leading to the Sukhomajri project. After the field visit, the DDG (NRM) was apprised of the other initiatives and progress of the Centre. For supporting the initiatives and further progress of the Research Centre by the ICAR, a few teething problems faced by the Centre were brought to his kind notice.

The DDG (NRM) expressed his appreciation for the work done by the ICAR-IISWC Research Centre. He also suggested that the women staff of the Centre and

the Institute should get congenial environment for contributing to their progress. He advised long term monitoring of the historical watershed management projects executed by the Institute for assessing ecosystem services from them.

H&E Division/AKMU Cell ICAR-IISWC, Dehradun-248195 (Uttarakhand) Amit Chauhan <amit.cswcrti@gmail.com>

### Hon'ble Minister of State, Agriculture and Farmers Welfare, Govt. of India, Shri Kailash Choudhary Ji graced 'Field Day-cum-Kishan Sammelan'

4 July 2022, Barrackpore. Hon'ble Minister of State, Agriculture and Farmers Welfare, Govt. of India, Shri Kailash ChoudharyJi graced the programme on 'Field Day-cum-Kishan Sammelan' organized at ICAR-Central Research Institute for Jute & Allied Fibres (CRIJAF).

During the interaction with the farmers in *Kisan Sammelan*, Shri Kailash Choudhary, Hon'ble Minister and the Chief Guest of this programme said the farmers have huge scope of natural fibres like jute, mesta, sisal, flax, ramie, sunnhemp, etc., to create self-employment opportunities and make clean and green India. The minister expressed concern that due to climate change and continuous use of chemicals, synthetics and plastic the environment is deteriorating day by day. He urged FPOs Self Help Groups to generate off farm income through handicrafts products, shopping bags, office stationeries, carpets, etc., to check labour migration to replace plastic items.

To disseminate the viable jute and allied fibre farming technology, the mister told the scientists that the literature and the videos on agro-technology needs to be shared within the farming community in local languages for their better understanding which will be helpful to bridge the gap between farmers yield and potential yield and will facilitate to create doubling farmers' income.

Dr Gouranga Kar, Director of ICAR-CRIJAF briefed the different research, development and extension activities of the institute for popularization of improved jute cultivation practices and jute-based micro-enterprises in rural area for socio-economic development of jute farmers as well as empowerment of the rural women and youth. He motivated the farmers to adopt improved jute production technologies as well as the several beneficial services offered by the government for the farmers.

Hon'ble Minister and other dignitaries also visited Exhibition Hall, Fibre Museum, farm pond based integrated farming system, improved jute retting complex and the machineries, laboratories and experimental farm, Krishi Vigyan Kendras of ICAR- CRIJAF. Around 250 farmers, farm women and SHG members, dignitaries of other institutes, Press & Media and Institute Staffs participated in the programme.



Gouranga Kar, DIRECTOR ICAR-Central Research Institute for Jute and Allied Fibres (ICAR-CRIJAF) Barrackpore, Kolkata-700121

#### Honourable Union Minister for Agriculture and Farmers' Welfare Shri Narendra Singh Tomar ji visited ICAR-IIHR and inaugurated the stateof-the-art facilities

15 July 2022, Bengaluru. Honourable Union Minister for Agriculture and Farmers' Welfare Shri Narendra Singh Tomar ji visited ICAR-Indian Institute of Horticultural Research, Bengaluru along with Shri Kailash Choudhary, Minister of State for Agriculture and Farmers' Welfare, Shri Surya Pratap Shahi, Minister of Agriculture, Govt. of Uttar Pradesh and Shri Dinesh Pratap Singh, Minister of Horticulture, Govt of Uttar Pradesh. Honourable Agriculture Minister inaugurated two state-of-the-art facilities - Centre of Excellence (COE) for Protected Cultivation on Horticultural Crops and Business Entrepreneurship and Start-up Support through Technology in Horticulture (BESST-HORT). All the dignitaries visited both the facilities which would be beneficial to large number of stakeholders. An exhibition on institute technologies developed were displayed. All dignitaries appreciated the progress made in the research on horticultural sciences by the institute. Honourable Minister also addressed famers, staff members and students. Dr Debi Sharma, Director, welcomed all dignitaries, and Dr A K Singh, Deputy Director General (Hort. Sci.) highlighted the contribution of the institute in last 55 years with highlights viz. dog ridge rootstock of grapes, multiple disease resistant varieties, microbial formulations, micronutrient specials, honeybee assisted pollination success in commercialization of horticultural technologies *etc.* New videos on the honey bee assisted pollination, COE, BESST-HORT, three technical bulletins *viz.*, Success Stories of ICAR-IIHR Interventions in NEH Region, Avocado cultivation and Dragon Fruit were released. Honourable Agriculture Minister addressed the gathering and he lauded the progress made by IIHR and other horticultural institutes of ICAR. He mentioned the importance given by the government for the promotion of horticulture in the country. Honourable Minister encouraged the scientists and students to continue with the same spirit and expressed his support for the organization. The programme ended with the vote of thanks.



Dr Prakash Chandra Tripathi, IN Charge,PME & Principal Scientist (Horticulture) ICAR-Indian Institute of Horticultural Research Hessaraghatta Lake Post, Bangalore- 560089 Prakash.Tripathi@icar.gov.in

#### Visit of DDG (NRM) to ICAR Research Complex for North Eastern Hill Region, Umiam

17 July 2022, Umiam, Meghalaya. The Hon'ble Deputy Director General (NRM), Dr S K Chaudhari along with Smt Rajashree Sunil, Deputy Secretary (NRM) as Liaison Officer of ICAR visited ICAR Research Complex for North Eastern Hill Region, Umiam, Meghalaya. The Hon'ble DDG inaugurated the recently renovated Agri-Business Incubation (ABI) center at ATIC Building of the institute; later they also interacted with the scientific, technical, administrative and supporting staff of the Institute. During the interaction he was keen to know the ongoing projects handle by each Scientist and its progress, stressed on the publication domain. He also advised to develop some vaccine for African swine fever which is one of the major concerns for the pig farmers in NEH Region. He also directed all the staffs to work together with belongingness for this institute.

On the very next day The Hon'ble Deputy Director General (NRM) visited the various farms of Institute; during his visit he appreciated the heads and staffs for maintaining and adherence to research at the field.



V K Mishra, Director, ICAR RC-NEH, Umiam (Barapani), Meghalaya - 793103. vkmishra\_63@yahoo.com

### Visit of Shri Satpal Ji Maharaj, Honb'le Cabinet Minister, Govt. of Uttarakhand on the occasion of Valedictory Function of twelve day training program for IFS Probationers

18-29 July 2022, Dehradun. The valedictory Function of twelve day training program on Soil and Water Conservation and Watershed Management organized by ICAR-Indian Institute of Soil and Water Conservation, Dehradun for Indian Forest Service (IFS) Probationers Batch 2021-23 and sponsored by Indira Gandhi National Forest Academy (IGNFA), Dehradun, was organized at IGNFA, Dehradun on 29 July 2022. The occasion was graced by Honb'le Shri Satpal Ji Maharaj, Union Cabinet Minister, Govt. of Uttarakhand as the Chief Guest. Dr M Madhu, Director, ICAR-IISWC, Dehradun, Shri Bharat Jaoti, Director, IGNFA, Prof. Mukul Trivedi, Prof. Academics, IGNFA, Dr D V Singh, Course Coordinator, I/C head HRDSS and Shri Amit Kumar, Course Director, IGNFA were among the other dignitaries who attended the function. In the Chief Guest's address, Shri Satpal Ji Maharaj lauded both the organizations for joining hands in organizing the Training Program which was indeed the need of the hour. Dr M Madhu, Director, ICAR-IISWC in his address urged the IFS probationers to understand the importance of the natural resources and incorporate the concepts and techniques learnt during the training. Shri Bharat Jaoti, Director, IGNFA, Dehradun in his address expressed gratitude towards Chief Guest for his gracious presence. He congratulated the probationers on successful completion of the module and wished that they apply the knowledge gained during the course in their practical field.

All probationers received the Certificate of Completion from the Chief Guest on successful completion of the 12 day module. IGNFA, the sponsoring agency of this training, felicitated Chief Guest on this occasion and also felicitated the faculty members from ICAR-IISWC, Dehradun who were a part of this training. The program concluded with a formal Vote of Thanks by Sh. Amit Kumar, Course Director, IGNFA, Dehradun who expressed his heartfelt thanks to the Chief Guest, the Directors of both the organizations, faculties, trainees and all members involved for successful completion of the twelve day module.

H&E Division/AKMU Cell ICAR-IISWC, Dehradun-248195 (Uttarakhand)



#### Chairman, Capacity Building Commission visits ICAR-NAARM

23 July 22, Hyderabad. Shri Adil Zainulbhai, Chairman, and Shri Hemang Jani, Secretary, Capacity Building Commission (CBC) visited the Academy on 23 July, 2022 along with CBC team mebers. An Interactive summit was held with the Faculty of the Academy. Shri Adil Zainulbhai, elaborated about the Mission Karmayogi, mandate of the Commission and India's capacity building framework, the National Standards for Civil Service Training Institutions (NSCSTI) and its eight pillars of excellence.

Shri Hemang indicated that the Academy can contribute to various areas of the CBC especially on MOOCs and developing common training courses as a central repository for leadership cases and training resources for all the training institutes.

Dr Ch Srinivasa Rao, Director, ICAR-NAARM, welcoming the guests, gave an overview of the Academy's achievements. Dr G Venkateshwarlu and the Faculty presented the capacity building initiatives of the Academy. Commission also visited TelAge lab and other facilities at the academy.



Shri Adil Zainulbhai, Chairman, CBC addressing the Faculty at the Academy

ICAR-NAARM, Hyderabad ICAR-Indian Institute of Soil Science Nabibagh, Berasia Road, Bhopal-462038 Madhya Pradesh, India

#### Shri Rahul Kumar Reddy, IAS, Asst. Secretary, Department of Fisheries, visits Mandapam Regional Centre of ICAR-CMFRI

27 August 2022, Kochi. Shri Rahul Kumar Reddy, IAS, Asst. Secretary, Department of Fisheries, Ministry of Fisheries, Animal Husbandry & Dairying visited the Mandapam Regional Centre of ICAR- Central Marine Fisheries Research Institute (CMFRI) to study activities of the region, especially cage farming, seaweed farming and sea-ranching. He interacted with the scientists of the Centre and visited the marine hatchery complex which includes live feed production units, finfish & marine ornamental fish brooders and larviculture facilities.

He was the chief guest for the sea ranching programme at Munaikadu, Palk Bay, and also visited the seaweed & the sea cage farming, and IMTA activities. A total of 0.9 million green tiger shrimp seeds of PL 20 were sea ranched on the ocasion. He also interacted with the seaweed & sea cage farmers. Dr. G. Tamilmani, Senior Scientist & Head-in-Charge, Dr. M. Sakthivel, Senior Scientist and Dr. B. Johnson, Senior Scientist coordinated the programme.

Media Cell ICAR-CMFRI, Kochi, Kerala-682018





Shri Biplab Roy Chowdhury, Hon'ble Minister of Fisheries, Govt. of West Bengal visited Kakdwip Research Center of ICAR-CIBA

6 September 2022, Tamil Nadu. Shri Biplab Roy Chowdhury, Hon'ble Minister of Fisheries, Govt. of West Bengal visited Kakdwip Research Center of ICAR-CIBA. Dr. Debasis De, Officer-in-Charge, KRC-CIBA briefed the research activities of the centre and its importance for the eastern region of the country. The Hon'ble minister witnessed the ongoing activities such as pond reared hilsa broodstock developed at the centre besides various resources and facilities available at the centre. Later, he interacted with scientists working at the centre and expressed his satisfaction over the research achievements of the institute in the state.



ICAR-CIBA, Chinnai, Tamil nadu-600028

#### Minister for Horticulture and Food Processing, Govt of Punjab visits ICAR- CIPHET

9 September 2022, Ludhiana. Shri Fauja Singh Sarari, Hon'bl Minister for Horticulture and Food Processing, Govt. of Punjab visited ICAR- Central Institute of Post-Harvest Engineering and Technology (CIPHET) today. Shri K A P Sinha, Additional Chief Secretary, Government of Punjab and Shri Rajnish Tuli, MD, Punjab Agro Industries Corporation Limited were also present during the occasion.

Dr Nachiket Kotwaliwale, Director, ICAR-CIPHET welcomed and elaborated on the scope as well as the work conducted by ICAR and ICAR-CIPHET. He highlighted that the technologies developed by the institute which includes machineries, equipment, process protocols and value-added products can boost the income of farmers through processing and reducing post-harvest losses. He also informed about activities of ICAR-CIPHET with special reference to the land of Punjab.

The Minister applauded the efforts of ICAR-CIPHET and wished that the institute may work as a team to make our country's name proud in the area of processing also. The Minister also visited the Agro Processing Centre, Agri Business Incubation Center and interacted with few entrepreneurs promoted by the institute.

Shri K A P Sinha, Additional Chief Secretary, advised ICAR-CIPHET to collaborate with Punjab Agricultural University, GADVASU, Punjab State Government Departments and bankers, to convert farmers into entrepreneurs.

Dr DN Yadav and team from Transfer of Technology Division coordinated all the activities and visit.

ICAR- Central Institute of Post-Harvest Engineering & Technology, Ludhiana-141004, Punjab, India

### Honourable Minister of Sunderban Affairs, West Bengal launched SCSP and TSP programme of ICAR-CIFRI at Sagar island

29 September 2022, Sagar island, West Bengal. Shri Bankim Chandra Hazra, honourable Minister of Sunderban Affairs, Govt of West Bengal inaugurated the livelihood support cum mass aquaculture input distribution and awareness programme organised by ICAR-CIFRI for 400 SC and ST families of Sagar islands. He appreciated the effort of ICAR-CIFRI for livelihood enhancement of small and marginal fish farmers in the last 5 years in Sunderbans areas and the efforts taken by the institutes in post-cyclonic intervention. He emphasised that though Sundarbans is rich in water resources but fish production is not enough to meet the local market demand. He advised the farmers to adopt scientific fish farming with the technical and input support of ICAR-CIFRI. He distributed inputs like ICAR-CIFRI Cagegrow fish feed (42 ton), Fish fimgerlings (1.80 lakh nos), and other inputs to 400 fish farmers.

Shri Nimai Maharaj, Secretary Bharat Sevashram Sangha, Gangasagar addressed the fish farmers and motivated the fish farmers for scientific fish farming in their backyards for enhancing their income from these ponds. Shri Swapan Pradhan, Chairman, Panchayat Samiti, Gangasagar thanked ICAR-CIFRI on behalf of all the Sagar Island fish farmers and advised the fish farmers to work hard and improve their production utilizing the inputs and guidelines of ICAR-CIFRI for fish farming.

Dr B K Das in his address, motivated fish farmers to adopt scientific guidelines for fish farming. He advised the fish farmers to save some of their income from fish farming for future investment. In this initiative, approximately 25 lakhs were spent by the institute, and it is envisaged that there will be an income of 1.0 crore within a year from this initiative.



ICAR-CIFRI, Barrackpore, Kolkata, West Bengal-700120.

# ICAR's New DG

#### Dr Himanshu Pathak joins as Secretary (DARE) and Director General (ICAR)

The Indian Council of Agricultural Research (ICAR) has a new chief, Dr Himanshu Pathak as its new Secretary, Department of Agriculture Research and Education (DARE) cum Director General (DG), ICAR. He took over the charge of Secretary, DARE and DG, ICAR on 29 July 2022.

Dr Pathak, a renowned scientist, was born on 2 February 1965 in Purulia district of West Bengal. He obtained his school education in West Bengal; BSc (Ag) from Banaras Hindu University, Varanasi; and MSc and PhD in Soil Science and Agricultural Chemistry from Indian Agricultural Research Institute (IARI), New Delhi. He joined Agricultural Research Service of Indian Council of Agricultural Research (ICAR) as a Scientist in 1992 and became to Senior Scientist in 2001 and Principal Scientist in 2009. Before joining as Secretary (DARE) and DG (ICAR) Dr Himanshu Pathak was serving as the Director, ICAR-National Institute of Abiotic Stress Management (NIASM), Baramati, India. Prior to this, he was the Director, ICAR-NRRI, Cuttack, India.

He has extensive international exposure and was a visiting scientist in the prestigious institutions namely University of Essex, United Kingdom; International Rice Research Institute (IRRI), Philippines; CSIRO Land and Water, Australia and Institute of Meteorology and Climate Research, Germany. During 2007-2009, he worked as the Co-Facilitator, Rice-Wheat Consortium (RWC), IRRI-India, New Delhi. He was the Lead Author of Inter-Governmental Panel on Climate Change (IPCC) 5<sup>th</sup> Assessment Report. Currently he is leading the baton of the DARE/ICAR as Coordinator for the climate negotiations in the United Nation Framework Convention on Climate Change.

Dr Pathak has a vast portfolio which reflects in his work. Dr Pathak was the Principal Investigator, Climate Change Challenge Programme at IARI, New Delhi. He has contributed significantly in quantification of greenhouse gas (GHG) emission from soil, evaluation of the effects of management practices and biotic and abiotic factors on GHG emission and development of inventories of methane and nitrous oxide emission from Indian agriculture. His research has helped in rationalizing the estimates of GHG emission from Indian agriculture. He has developed simulation models such as InfoSoil, InfoFert, InfoCrop, TechnoGAS and InfoRCT for predicting the impacts of management and climate on crop yield and optimizing resource use for increasing production and minimizing environmental pollution.

Dr Pathak has several prestigious awards to his credit. He is the Fellow of the Indian National Science Academy (INSA), National Academy of Agricultural Sciences (NAAS) and West Bengal Academy of Science and Technology (WBAST). He is the recipient of the Alexander von Humboldt Fellowship (AvH) of Germany, Dr B C Deb Memorial Award of the Indian Science Congress Association (ISCA), Golden Jubilee Commemoration Young Scientist Award of the Indian Society of Soil Science, BOYSCAST Fellowship of Department of Science and Technology, Government of India, Young Scientist Award and Prof. S K Mukherjee Commemoration Award of ISCA. He has published more than 200 research papers and 10 books and has h-index of 41, i10-index of 85 with more than 5500 citations in international literature.

Dr Pathak has a vast portfolio which reflects in his work. Dr Pathak was the Principal Investigator, Climate Change Challenge Programme at IARI, New Delhi. He has contributed significantly in quantification of greenhouse gas (GHG) emission from soil, evaluation of the effects of management practices and biotic and abiotic factors on GHG emission and development of inventories of methane and nitrous oxide emission from Indian agriculture. His research has helped in rationalizing the estimates of GHG emission from Indian agriculture. He has developed simulation models such as InfoSoil, InfoFert, InfoCrop, TechnoGAS and InfoRCT for predicting the impacts of management and climate on crop yield and optimizing resource use for increasing production and minimizing environmental pollution.

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