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NEWSLETTER

ICAR-Central Research Institute for Dryland Agriculture

July - December, 2018

Hon'ble Vice President of India visited ICAR-CRIDA on 3rd July, 2018

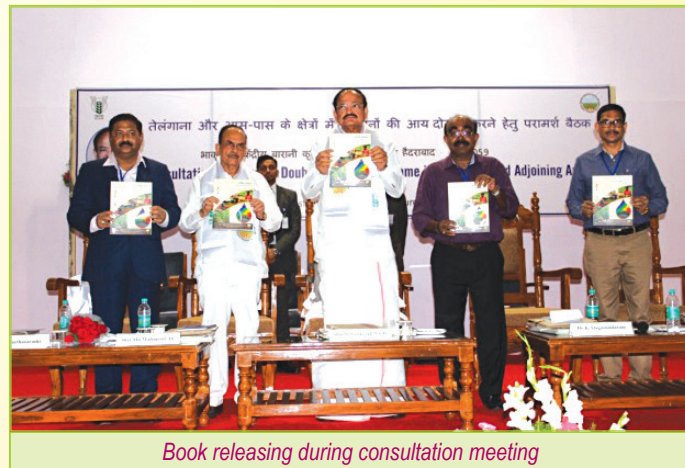
The Hon'ble Vice President of India Shri. M. Venkaiah Naidu visited ICAR-Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad on 3rd July, 2018. He was the Chief Guest for the "Consultative Meeting on Doubling of Farmers' Income in Telangana State and Adjoining Areas". Shri. Md. Mahmood Ali, Deputy Chief Minister, Telangana State was the Guest of Honour. Dr. K. Alagusundaram, Deputy Director General (NRM), ICAR, New Delhi, Shri. C. Parthasarathi, APC & Principal Secretary (Agriculture), Telangana State; Dr. K. Sammi Reddy, Director (Acting), CRIDA; Directors and scientists of local ICAR institutes, senior officials of PJTSAU, senior officials from Telangana State, NGOs, Industrialists, Bankers and progressive farmers participated in the meeting.

Deputy Director General (NRM) Dr. K. Alagusundaram, ICAR, New Delhi welcomed the dignitaries and the participants while briefing about the various rainfed technologies developed by CRIDA for the benefit of farmers of dryland agriculture.

Hon'ble Vice President Shri. M. Venkaiah Naidu, chaired the interactive session with scientists, research scholars, farmers and representatives of NGOs. He stated that the multifaceted strategy is needed to protect agriculture as agriculture is now under distress. During interactive session, farmers of Ranga Reddy district mentioned that their farm income has been substantially increased due to the interventions of ICAR-CRIDA, KVKs and SAUs.



Hon'ble Vice President addressing participants of consultation meeting



Book releasing during consultation meeting

New Research Initiatives

CRIDA was awarded a competitive research project entitled "Innovative and contextual agromet. advisory services for climate smart agriculture" funded by Indian Institute of Tropical Meteorology, Ministry of Earth Sciences under Monsoon Mission-II with budget outlay of the Rs. 311.48 lakhs. ICRISAT and ICAR-IIPR, Kanpur are the partner institutes.

Dr. P. Vijaya Kumar, Project Coordinator, AICRPAM, ICAR-CRIDA is the Principal Investigator of this project. Dr. AVM Subba Rao and Dr. Santanu Kumar Bal are the Co-Principal Investigators from ICAR-CRIDA and Dr. Anthony Whitbread and Dr. R.K. Mishra are the Co-Principal Investigators from ICRISAT and ICAR-IIPR, respectively.

Research Highlights

Minimum tillage with crop residue retention on soil surface produced higher crop yields while maintaining better health of rainfed Alfisol

The results of 6 year old experiment on conservation Agriculture (CA) in rainfed Alfisol showed that the surface retention of crop residues @ 2-6 t/ha produced 5-13% higher sorghum yield and 28-45% higher cowpea yield as compared to no residue application control. About 56% higher organic carbon (6.80 g/kg) content was recorded with the application of sorghum stover @ 6 t/ha as compared to control (4.36 g/ kg). The increase in available N with the application of 6t and 4t crop residue was to the extent of 19.5 and 28% respectively while significantly higher contents of soil available P (10.67 kg/ha) and K (288.8 kg/ha) were observed with application of sorghum residue @ 4 t/ha. Significantly higher microbial biomass carbon (MBC) and dehydrogenase activity (DHA) were recorded with the application of sorghum stover @ 4 t/ha. Besides reducing the bulk density, the application of residues had a significant influence on the mean weight diameter (MWD) of the soil aggregates. The highest overall soil quality index (SQI: 9.58) was observed with the residue application @ 6 t/ha. A significant positive relationship was observed between SQI and pooled cowpea seed yield ($R^2=0.82$) and pooled sorghum grain yield ($R^2=0.69$). This study also clearly indicated that the adoption of minimum tillage in combination with adequate crop residue cover, the soil moisture increased and soil temperature decreased which in-turn made the crops to withstand the mid season dry spells without much adverse effects.



Crop residue retention in the field

Development of track width & ground clearance enhancing platform and matching Implements for low horse power tractor

A reconfigured platform for small horse power tractor with matching weeding and spraying implements was developed. Such new developments will increase effective use of tractor for weeding and spraying operations in crops like maize, castor, red gram, cotton, chillies etc. The developed platform basically consists of three components (i) Front wheel axle (ii) Rear drive wheel axle and (iii) Reworked steering set system for enhanced track width.

The prototype high clearance platform fitted mini tractor matching rotary weeder consists of a main frame with hitch mast, gear box housing with power transmission provision, rotor shaft assembly with soil working tools. The developed boom sprayer unit basically consists (i) Base frame to give support / fix various components (ii) Pump with manifold for flow control and pressure regulation (50 lpm & 30kg / cm² rating) (iii) Boom with height adjustable frame work and (iv) High pressure hose pipes. The pump gets the required power from tractor. The nozzles on the boom were fitted with spacing adjustable provision to use for different types of rainfed crops. The weeding efficiency of rotary machine varied 74 to 82.5.% and 78.5 to 86.8% for castor and pigeon pea, respectively. In case of maize crop, the weeding efficiency observed to be 73.9%, which was low compared to other two crops due to narrow row spacing. The boom sprayer was operated in cotton crop at two growth stages; the first one at flowering stage (75 DAS) and second operation in bolls expansion stage (90 DAS). The operator can steer the tractor comfortably and sprayer worked satisfactorily. The field capacity of the machine ranged from 1.7 - 2.0 ha/hr. The newly developed implements shown significant advantage in monetary terms when compared with traditional practice of bullock operated blade harrow and hand labour spray operation (15 - 20% lower cost).



Track width and ground clearance enhanced platform fitted low horse power tractor with matching weeding and spraying implements

Scientific Activities

XXVIIth Research Advisory Committee (RAC) meeting

The XXVIIth meeting of the Research Advisory Committee of the institute was held during 10-11 November, 2018 under the chairmanship of Dr. Panjab Singh, former Secretary, DARE & Director General, ICAR. The committee reviewed the progress and recommended for strengthening of farming systems research with horticulture and livestock components, scaling up of NICRA interventions to more villages and restructuring of the institute by creating divisions of Social Sciences and Climate Change. Further, RAC suggested to align the research programmes with the challenges and development needs of dryland farmers.



RAC meeting in progress

Field Institute Research Council (IRC) meeting

Field Institute Research Council (IRC) Meeting for 2018-19 was held on 25th September, 2018 at Gunegal Research Farm (GRF) and on 5th October, 2018 at Hayathnagar Research Farm (HRF) under the chairmanship of Dr. K. Sammi Reddy, Director (Acting). The chairman IRC, Dr. K. Sammi Reddy, Director (Acting), Project coordinators, Heads of Divisions / Sections and scientists visited various experiments and discussed thoroughly on various treatment effects.



Interaction during field IRC

Various suggestions like displaying of the experimental and treatment boards at the experimental site, periodical monitoring of soil moisture in CA related experiments, rainfall amount, rainy days and crop yields needs to correlated for all the experiments etc., were made in field IRC.

Quinquennial Review Team (QRT)

Under the Chairmanship of Dr. J.C. Katyal, former Vice Chancellor, CCS Haryana Agriculture University & former DDG (Education), ICAR, two review meetings were conducted. QRT meeting was held during 18-19 June, 2018 at UAS, Bengaluru and reviewed the work done by both AICRPDA and AICRPAM centers located in Karnataka, Andhra Pradesh, Kerala & Tamil Nadu. Another meeting was held at ICAR-CRIDA, Hyderabad during 16-18 August, 2018 to finalize the QRT report.



QRT visit to AICRPDA center, Bengaluru

Dr. J.C. Katyal presented the salient recommendations of QRT to DG, ICAR and other officials in presence of DDG (NRM) and ADG (A, AF & CC) on 13th September, 2018 at ICAR, New Delhi. Honorable DG, ICAR has appreciated the work done by the QRT.



QRT meeting in progress

Hindi fortnight celebrations

The Hindi fortnight was organized from 1st to 14th September, 2018 at ICAR-CRIDA, Hyderabad. On this occasion, Hindi Noting & Drafting, Hindi-English technical terminology and other Hindi competitions were organized. Winners were awarded on concluding day, 14th September, 2018.

Contingency Plans

Interface meeting on agricultural contingencies for Andhra Pradesh

In view of the low rainfall and its poor distribution in some parts of Andhra Pradesh, at the behest of ICAR-CRIDA, an interface meeting was organized by ICAR-CRIDA on August 3, 2018 with Department of Agriculture and ANGRAU under the chairmanship of special Commissioner of Agriculture, Government of A.P. to review and develop mid-course action plans for Rayalaseema (Anantapuramu, Kurnool, Kadapa and Chittoor), Prakasham, Nellore and Guntur districts. The participants included Director of Research, ANGRAU, Special Commissioner of Agriculture, A.P., Joint Collector, Kadapa, Senior scientists from ANGRAU, JDAs, ADAs, Scientists from KVKs and farmer representatives. Dr. NV Naidu, Director of Research ANGRAU, conducted the proceedings of the meeting. Dr. KV Rao, ICAR-CRIDA and Dr. S Malleswari, ANGRAU made detailed presentations on current rainfall scenario and forecast for the forthcoming weeks. Sri D. Muralidhar Reddy, Special Commissioner in his address emphasized that department should gear up to rescue the crops in the field, plans to cover unsown area and preparation of documents for early drought declaration procedures. Dr. NDRK Sharma, Consultant, Department of Agriculture, highlighted the implementation of agriculture contingency plans during past years and requested the officers to prioritize the interventions based on the uptake of preferred technology options by the farmers.



Interface meeting in progress

Sensitization on district agricultural contingency plans for Mizoram

In an interface meeting of ICAR-Mizoram State held on 24.09.2018 to sensitize the Senior officers of the State on District Agricultural Contingency Plans (DACPs). This is the first meeting on sensitization of DACPs to senior officials in the North-Eastern states of India. Mr. Lalsawta, Cabinet Minister for Finance & Planning chaired the meeting. Mr. Lalthanliana, Cabinet Minister for Horticulture, LAD & SWD and Mr. Lalmingthanga, Commissioner & Secretary, Agriculture were guests of honour. Secretaries from Horticulture, Sericulture, Animal Husbandry & Veterinary Science; Directors of various line departments; Director, ICAR - Research Complex, NEH Region and Director, ATARI, Umiam also attended the meeting. Dr. N. Prakash presented the technologies developed by ICAR RC for NEH and Dr. Deka highlighted how KVK set up is actively participating in dissemination of technologies. The Commissioner of Agriculture highlighted that only 30% of the food grains are produced in Mizoram. Mr. Lalthanliana mentioned that farming community in Mizoram are facing multi-faceted problems. Mr. Lalsawta emphasized on developing viable alternatives to *Jhum* cultivation which is responsible for meager yields. Dr. S. Desai, Principal Scientist, ICAR-CRIDA made a presentation on "Sensitization on District Agricultural Contingency Plans to meet the weather aberration impacts on agriculture in Mizoram". The Commissioner & Secretary, Agriculture appreciated the efforts and emphasized on more sensitization about DACPs among district officials. The meeting ended with vote of thanks by Ms. Shakuntala, JD, ICAR Research Complex, Kolasib centre.



Interface meeting at Mizoram

Technology Transfer

Hon'ble Prime Minister's interaction with SHGs & women groups at ICAR-CRIDA

Web telecasting of Hon'ble Prime Minister's interaction with SHGs & Women's groups was organized by Krishi Vigyan Kendra – Ranga Reddy District, ICAR-CRIDA on 12.07.2018 in KVK Campus, Hayathnagar Research Farm, ICAR-CRIDA. About 74 SHG women from four different villages of Ranga Reddy District, Telangana State participated. The Hon'ble Prime Minister's interaction with SHG women emphasized on improving the economic status of farm families through supporting SHG women by strengthening the Self Help Groups. The Prime Minister highlighted about DAY-NRLM programme (Deen Dayal Antyodaya Yojana-National Rural Livelihood Mission). Almost 30 lakh SHG women are being supported under Mahila Kisan Sashaktikaran Pariyojana (MKSP) to promote sustainable agriculture practices and the objective of Mission Antyodaya is to develop poverty free panchayats.



Web telecasting of Hon'ble Prime Minister's interaction with SHGs & women's groups

Parthenium awareness week organized

Training cum awareness programme on integrated management of Parthenium was organized by KVK-CRIDA, Ranga Reddy District on 21st August, 2018. About 50 participants from Agriculture College, farmers, teaching and extension officials attended the programme. Subject matter specialists from KVK-CRIDA highlighted the technical aspects of Parthenium management, invasion of Parthenium in India, plant physiology-spread, impact and harmful effects of weed on crop, composting of weed. Displayed posters and removed weeds from demo plots and office premises of KVK.

National nutrition month organized

The theme for National Nutrition Month for 2018 was "Go Further with Food". On this occasion, organized 3 training programmes and method demonstrations i.e. (i) Prevention of anaemia – preparation of low cost nutritious recipes on 6th September, 2018,

(ii) Value addition to millet products as food security & income generating activity on 11th September, 2018, (iii) Demonstration on dried green leafy vegetables – different recipes to prevent Iron & Calcium deficiency on 18th September, 2018 in KVK adopted villages Gummadvelli, Kolanguda and Nerrapally, for about 291 women. These programmes involved total 291 women, of which 67 were SC /ST, 224 were others. Distributed 200 drumstick plants as part of National Nutrition Week to women of self help groups.

National women farmers' day (Mahila Kisan Divas) & technology day

National Women Farmers' Day (Mahila Kisan Divas) and Technology Day was organized by Krishi Vigyan Kendra-Ranga Reddy District, ICAR-CRIDA on 15th October, 2018 at Hayathnagar Research Farm with the participation of women farmers from Ranga Reddy district. Dr. V. Maruthi, Head & Principal Scientist, KVK briefed the importance of the day and women's role in agriculture. Dr. K. Sammi Reddy, Director (Acting), ICAR-CRIDA, presided over as Chief Guest and addressed about the women farmers' role in agriculture, drudgery management practices to be followed by women farmers, nutritional disorders and health issues. Dr. Y. G. Prasad, Director, ATARI, Guest of honour, requested the women farmers to utilize skill training programmes of KVK related to dairy and floriculture and NARI (Nutri sensitive agri-resources and innovations) programme of ICAR through KVK. The resource persons Dr. K. Aruna, Professor and Head (Retd.), AICRP (Home Science) informed the women farmers about the health, nutrition, diet, nutritive value of millets and gave a detailed presentation on nutritional disorders and remedies. Sri DGP Sharma, Senior Executive officer, Khadi and Village Industries Commission (KVIC) has explained different schemes in KVIC, loan facilities and Honey production and rearing techniques.

Two brochures on Good management practices of chickpea and redgram cultivation, pamphlets on fall army worm in maize, pink bollworm in cotton, hydroponics in fodder cultivation, balanced nutrition diet for livestock were released. Five progressive women farmers and women entrepreneurs from Ranga Reddy District were felicitated on this occasion.



National women farmers' day celebration

World soil day organized

ICAR-CRIDA celebrated world soil day on 5th December, 2018 at ICAR- CRIDA under the Chairmanship of Dr. G. Ravindra Chary, Director (In charge), ICAR-CRIDA, Hyderabad. Around 200 participants comprising of students, scientists, technical officers, KVK officials attended the awareness programme.

Dr. G. Ravindra Chary explained historical background of World Soil Day, the usage of Soil Health Cards and its interpretation for effective nutrient management in the field crops for sustainable crop yields. Dr. K.L. Sharma, Principal Scientist, educated the participating students about the importance of soils and clarified the doubts raised by the students. The students were sensitized about the importance of soils through demonstrations, posters and exhibits and practical insights to laboratories. On this occasion posters on “Know your soils”, “Soil profile” and “Identification of Nutrient deficiencies in Plants and Crops” were displayed for the benefit of the students.



Dr. G. Ravindra Chary, Director (In-Charge) addressing students

Kisan Diwas organized during Swachhtha Pakhwada

KVK-CRIDA, Ranga Reddy District organized one day *Kisan Diwas* on 23rd December, 2018 as a part of *Swachhtha Pakhwada* (16-31st December, 2018). Dr. V. Maruthi, Principal Scientist & Head, KVK welcomed the invited farmers from 12 mandals of

Ranga Reddy District and enlightened the objectives of the *Kisan Diwas*. Dr. K. Sammi Reddy, Director (Acting), ICAR-CRIDA, Hyderabad was the Chief Guest. He explained to the farmers about the importance of *Swachhtha* and also emphasized to prepare manure from the wastes generated on farmers' fields.

Dr. K. Srinivas, Principal Scientist & OIC, HRF shared experiences on *Swachhtha* initiatives by farmers and civil society officials. Farmers were felicitated based on the initiatives/adoptable measures expressed during the interaction. SMSs from KVK gave lectures on Good Agricultural Practices in horticulture, agriculture, women empowerment and animal husbandry. Farmers visited demonstration units, exhibition, posters presentation of KVK and gained knowledge. About 107 members including farmers, farm women, ADAs, AOs, AEOs, ATMA officials attended the programme and got handful information with printed literature.



Felicitating to farmer during Swachhtha Pakhwada

Around 200 farmers including farm women and school going children participated in the awareness campaign of *Swachhtha Pakhwada* in Farmers First Village. The people were trained in the knowledge about segregation of biodegradable and non-degradable wastes.

AICRPs

XV Biennial workshop of AICRPAM organized

The XVth Biennial workshop of the AICRP on Agrometeorology (AICRPAM) was organized at Regional Agricultural Research Station, University of Agricultural Sciences, Vijayapura, Karnataka during 15-17 November, 2018.



Participants of XV Biennial workshop, AICRPAM

The objective of the workshop was to review the research progress made during 2017-18 and finalization of the technical program for the year 2018-2020.

Monsoon mission II project meeting at ICRISAT

Monsoon mission II project meeting was held at ICRISAT, Patancheru, Hyderabad on 10th September, 2018. Dr. Peter Carberry, DG, ICRISAT, Dr. G. Ravindra Chary, Director (In-charge), Dr. P. Vijaya Kumar and Dr. AVM. Subba Rao from AICRPAM, ICAR-CRIDA, Dr. Suryachandra Rao, Associate Mission Director, Shri S.M.D. Jeelani, Indian Institute of Tropical Meteorology, Pune, Dr. Anthony Whitbread, Research Program Director, Dr. AVR Kesava Rao, Dr. K.P.C. Rao and Dr. D. Ram, ICRISAT

participated in this meeting and discussed on developing a farmer-friendly app and web site for disseminating agromet advisories.

AICRPDA centres organized stakeholder consultation workshops

Stakeholder consultation workshops were organized in the adopted villages by 9 AICRPDA centres viz. Akola, Arjia, Anantapuramu, Bengaluru, Kovilpatti, Phulbani, SK Nagar, Solapur and Vijayapura to discuss on strengthening the traditional rainfed integrated farming systems (TRIFS). Dr. S. Bhaskar, ADG (A, AF&CC), Dr. G. Ravindra Chary, Project Coordinator (AICRPDA), scientists from AICRPs/ICAR Institutes/SAUs/KVKs, officials from state line departments, ATMA, NGOs

and most importantly farmers participated and gave feedback for identifying component-wise suitable interventions for strengthening traditional RIFSs in the respective agroclimatic zones of the centres.



National Innovations in Climate Resilient Agriculture (NICRA)

Sixth NICRA Annual Review Workshop Organized

A two day Annual Review workshop of National Innovations in Climate Resilient Agriculture (NICRA) was inaugurated by Dr. T. Mohapatra, Secretary, DARE & Director General, ICAR at NASC, New Delhi on 7th August, 2018. Chhabilendra Roul, Special Secretary, DARE & Secretary, ICAR, Shri B. Pradhan, FA & Additional Secretary, DARE & ICAR, Dr. K. Alagusundaram, DDG (Agril. Engg. & NRM I/c), Dr. AK Singh, DDG (Agril. Extn.), Dr. Anand Kumar Singh, DDG (Hort. Science & Crop Sciences I/c), Dr. Joykrushna Jena, DDG (Fisheries), Dr. S Bhaskar, ADG (A, AF&CC), Dr. SK Chaudhari, ADG (SWM), Dr. K Sammi Reddy, Director (Acting), ICAR-CRIDA, Hyderabad and NICRA Expert Committee Members viz., Dr. B Venkateswarlu, Ex-VC, Vasant Naik Marathwada Krishi Vidyapeeth Krishinagar, Parbhani; Dr. V Praveen Rao, Vice Chancellor, PJTSAU, Hyderabad; Dr. CL Acharya, Ex-Director, ICAR-IISS, Bhopal; Dr. KK

Singh, ADG (Farm Engg.), ICAR; Dr. YS Ramakrishna, Ex-Director, ICAR-CRIDA, Hyderabad; Dr. HE Shashidhar, Retired Professor of Genetics, UAS, GKVK, Bengaluru; Dr. RC Upadhyay, Principal Scientist (Retd.) NDRI, Karnal; Dr. AG Ponniah, Ex-Director, ICAR-CIBA, Chennai; Prof. UC Mohanty, Professor IIT, Bhubaneswar; Dr. NK Krishna Kumar, Coordinator, Biodiversity International, New Delhi; Dr. Praduman Kumar, Ex-Head, Economics, IARI, New Delhi, Dr. N. Sudhakar, Ex-Director, ATARI and Dr. H. Senapati, Former Dean, OUAT, Bhubaneswar, Chairmen of Zonal monitoring teams and Directors of NICRA partner institutes participated in the review workshop. Dr. K. Sammi Reddy, Director (Acting), ICAR-CRIDA presented the highlights of achievements of NICRA Project during the last two years (2016-17 to 2017-18).



Various events during sixth NICRA annual review workshop

Dr. T. Mohapatra in his inaugural address suggested to make the 151 Climate Resilient Villages (CRVs) to CRV Cluster Villages and the need to actively involve State Governments for successful upscaling of CRVs. There were eight Technical sessions under different themes viz., Resilience through Natural Resources Management, Resilience through Crop Improvement and Adaptation, Technology Demonstration Component Session: Lessons from Technology Demonstration and Future Roadmap, Resilience through Adaptation in Horticultural Crops, Pests, Diseases & Pollinators, Assessment of Impacts

on Fisheries-Adaptation and Mitigation Options, Vulnerability Assessment, Socio-Economic Impacts and Farm Advisories, Adaptation Strategies for Climate Resilient Livestock Production, Integrated Modeling Framework. Each session chaired by concerned DDGs and co-chaired by NICRA Expert Committee members and concerned ADGs from ICAR, New Delhi. A detailed session-wise recommendations was presented by Dr. M Prabhakar, PI, NICRA, ICAR-CRIDA, Hyderabad in the plenary session chaired by Dr. K Alagusundaram, DDG (NRM), ICAR.

Zonal Monitoring Committee Visits

During the period, zonal monitoring committee visits were organized in the KVKs of ATARI zones viz. Guwahati, Barapani, Kolkata, Jodhpur, Jabalpur, Bengaluru and Hyderabad. Zonal monitoring committee's visits to various zones were organized

to review the technical progress of different modules like NRM, crop production, livestock & fishery and institutional interventions in the NICRA villages and for making appropriate suggestions for improvement.



ZMC with VCRMC members, Dimapur



ZMC with VCRMC members, Malda

Important Visitors

Ms. Arnella Trent, Senior Crop Analyst, International Production Assessment Division, U.S. Department of Agriculture / Foreign Agriculture Service along with Mr. Dhruv Sood, Agricultural Specialist from U.S. Consulate, Mumbai visited ICAR-CRIDA on 4th September, 2018 to discuss the cotton crop production, planting area and general assessment of the crop in Telangana State. During their visit information regarding dryland agriculture,

soils, watershed management and extension activities was exchanged with them.

A total of 1637 students from Karnataka, Tamil Nadu & Andhra Pradesh, 40 Scientists from NAARM, Hyderabad, 283 Agricultural Officers from Tamil Nadu & Telangana and 328 farmers from Karnataka, Maharashtra, Madhya Pradesh & Tamil Nadu visited ICAR-CRIDA, Hyderabad during the period.

Visits Abroad

Dr. K. Sammi Reddy, Director (Acting), ICAR-CRIDA visited Katowice, Poland to participate in the UNFCCC COP-24/CMP14/CMA1.3 and to organize the side event at Indian Pavilion at COP24 during 30th November - 5th December, 2018. During the visit, he has organized the Side Event at Indian Pavilion @ COP24 on the theme “Scaling up Adaptation Strategies for Climate Resilient Agriculture” on 5th December, 2018. This side event was Chaired by Dr. Anthony Simons, Director General, World Agroforestry Centre (WAC), Nairobi and Co-Chaired by Prof. N.H. Ravindranath, Indian Institute of Science, Bengaluru. In this side event Dr. Reddy has presented two papers and Dr. R.S. Sinha, Additional Commissioner (NRM), Department of Agriculture and Farmers’ Welfare, Government of India presented a paper. The side event was very successful as about 25 Indian and foreign delegates were present. After thorough deliberations, the following conclusions were drawn,

- There is a need to revise the vulnerability atlas of India taking into consideration the dimensions and definition of vulnerability and risk in the recent Assessment Report of IPCC.
- NICRA project was successful in establishing 151 model climate resilient villages in 151 vulnerable districts. But there is a need to upscale the climate resilient villages in highly and medium vulnerable districts.
- There is a need to scaling up successful IFS models developed for different agro-climatic regions of India by taking into consideration the resources available with farmers.



Dr. K. Sammi Reddy organizing side event at Indian Pavilion, COP24, Katowice, Poland

Dr. Suseelendra Desai, Principal Scientist (Plant Pathology) participated in the Regional Conference on “Role of Soil and Plant Health Towards Achieving Sustainable Development Goals in Asia-Pacific” held during 20-24 November, 2018 at Bangkok, Thailand. APAARI, Department of Agriculture, Thailand and Indian Phytopathological Society jointly organized the conference and the participants included diverse experts from research, development, extension, policy makers, private sectors, professional societies, civil society organizations and donor organizations, to share specific long-term experiences on the neglect of soil and plant health in the Asia-Pacific region. Dr. Desai was invited to deliver a lead lecture on “Potential impacts of climate change on plant pathogens and biocontrol agents and adaptation strategies”. He also chaired a technical session on “Plant health management – case studies” along with Dr. GD Sinniah from Sri Lanka. The conference deliberated on soil and plant health aspects in detail and agreed to formulate a group to address these issues in the years to come.



Dr. Desai delivering lecture

Dr. K.V. Rao, Principal Scientist (Soil and Water Conservation Engineering), Division of Resource Management visited United Kingdom (UK) to participate in Workshop on "Advancing Drought Monitoring, Prediction and Management Capabilities" during 18th - 20th September, 2018 at Lancaster University, Lancaster, UK .

Human Resource Development

DOE sponsored Model Training Course on “Extension Strategies for Participatory Natural Resource Management in Rainfed Agriculture”

Model Training Course sponsored by DOE was organised at ICAR-CRIDA during September 24 - October 1, 2018. Twenty eight officials from eight different states viz., Telangana, Andhra Pradesh, Maharashtra, Odisha, Tamil Nadu, Goa, Punjab and Karnataka attended the model training course. The course covered various extension strategies of Soil and water conservation measures for enhanced productivity in drylands, Technologies for sustainable NRM in Rainfed areas, Horticulture systems in Rainfed Agriculture for sustainable NRM and enhanced productivity, Enhancing productivity of crops and cropping systems through effective use of natural resources, Farming systems approach for sustainable NRM in drylands, Role of Livestock and their management for enhancing productivity and income in drylands, Gender mainstreaming in NRM, Communication tools and techniques for sustainable NRM.



Inaugural session of Model Training Course on “Extension Strategies for Participatory Natural Resource Management in Rainfed Agriculture”

ICAR-Short Course on ‘Assessment of Vulnerability and Adaptation to Climate Change in Agriculture’

A ten day short course on ‘Assessment of vulnerability and adaptation to climate change in agriculture’, sponsored by the Agricultural Education Division of the ICAR, was conducted during 28th November to 7th December, 2018 at ICAR-CRIDA. The short course has provided the participants with various concepts, approaches and methods used in assessing vulnerability and adaptation. Twenty one participants from five ICAR institutes and eight state agricultural universities participated. A majority of the participants expressed that their expectations from the short course were fulfilled to a large extent.



Participants of ICAR Short Course on “Assessment of Vulnerability and Adaptation to Climate Change in Agriculture”

KVK Programmes

About 34 training programmes were organized during the period July to December, 2018 on different aspects of agriculture, horticulture, animal husbandry, farm mechanization and women empowerment to farmers and farm women from Ranga Reddy district. 1142 farmers and farm women were benefitted from these training programmes.

Forthcoming Events

Sl. No.	Title of the event	Dates
1.	XXVI Biennial Workshop of AICRP for Dryland Agriculture, at AICRPDA Bengaluru Centre, UASB	16-19 th January, 2019
2.	Republic Day	26 th January, 2019
3.	National Science Day	28 th February, 2019
4.	ICAR-CRIDA Foundation Day	12 th April, 2019
5.	IRC meeting	23-25, April, 2019, 9-10 th May, 2019
6.	World Environment Day	5 th June, 2019

Participation in Seminars and Symposia

Name of the Personnel	Workshop / Seminar / Symposium / Meeting	Duration	Venue
K. Sammi Reddy	International Consultation Workshop on Adapting agriculture in semi-arid India to a global temperature rise by 1.5°C.	3-4 October, 2018	WOTR, Pune
	National Workshop on Sustainability of Indian Agriculture, Natural Resource Perspective with special reference to water.	11 October, 2018	IIBM, Bhubaneswar
	83 rd Annual Convention of the Indian Society of Soil Science.	27-28 November, 2018	AAU, Anand
	UNFCCC COP-24 / CMP14 / CMA1.2 Meeting.	30 November to 5 December, 2018	Katowice, Poland
G. Ravindra Chary & B.M.K. Raju	Brainstorming workshop on "Prioritization of Rainfed Districts in India" organized by NRAA & ICAR-CRIDA.	11-12 December, 2018	NASC, New Delhi
C.A. Rama Rao	Stakeholders Consultation Meeting on NICRA.	20 July, 2018	NASC, New Delhi
	Expert consultation meeting for Impact Assessment of the AP Drought Mitigation Project of Govt. of A.P.	14 August, 2018	WASSAN, Hyderabad
	National Workshop on Promotion of Developing Climate Resilient Villages for Sustainable Food and Nutritional Security.	4-5 October, 2018	MANAGE, Hyderabad
	26 th Annual Conference of Agriculture Economics Research Association (India) on 'Agriculture and Sustainable Development Goals.	15-17 November, 2018	ICAR-NDRI, Karnal, Haryana
	Brainstorming meeting conducted by NRAA.	11-12 December, 2018	NASC, New Delhi
B.M.K. Raju & R. Nagarjuna Kumar	Consultation Meeting on 'Risk and vulnerability of agriculture to climate change: A district level assessment'.	20 July, 2018	NASC, New Delhi
B.M.K. Raju	72 nd Annual Conference of Indian Society of Agricultural Statistics (ISAS) organized with a broader theme of 'Statistics, Informatics, Engineering Interventions and Business Opportunities: A Road-Map To Transform Indian Agriculture Towards Prosperity'	13-15 December, 2018	ICAR - CIAE, Bhopal, Madhya Pradesh
Boini Narsimlu	International Conference on "Global Water Security for Agriculture and Natural Resources" organized by ASABE USA & ISAE India.	3-6 October, 2018	Hotel, Taj Krishna, Hyderabad
R. Nagarjuna Kumar	ICAR-ICT Road map.	6 July, 2018	IIMR, Hyderabad
	National Workshop on Artificial Intelligence in Agriculture: Status and Prospects.	30-31 July, 2018	NASC, New Delhi
Josily Samuel and P.K. Pankaj	'Workshop on CLEM-Crop Livestock Enterprise Modelling'.	22-23 October, 2018	ICRISAT, Hyderabad
D. Sudheer	Indian International Science Festival-Agriculture Conclave.	5 -7 October, 2018	Lucknow, Uttar Pradesh
G. Sri Krishna	Hands on Training to Master trainers of KVKs on TCS-ICAR-KVK Sandesh.	3 August, 2018	ATARI, Zone X, Hyderabad
	Training of Trainers for KVKs, SAUs and ICAR institutes.	25-27 September, 2018	PJTSAU, Hyderabad
	Annual Zonal Workshop of KVKs Zone X	20-22 September, 2018	ATARI-CRIDA
G. Nirmala, K. Nagasree & Anshida Beevi C.N.	9 th National Extension education Congress on "Climate Resilient Agriculture – Innovations and Technologies"	15-17 November, 2018	CAEPHT, Ranipool, Sikkim

Awards and Recognition

1. Dr. K. Sammi Reddy, Director (Acting), ICAR – CRIDA was inducted as the Fellow of the Indian Society of Soil Science (ISSS), New Delhi. He received “ISSS Fellow Award” from His Excellency Honorable Governor of Gujarat Shri O.P. Kohli at 83rd Annual Convention of the ISSS held at Anand on 27.11.2018.



Dr. K. Sammi Reddy receiving ISSS Fellow Award from Shri O. P. Kohli, Honorable Governor of Gujarat

2. AICRPDA-Vijayapura centre received “ICAR-Vasanthrao Naik Award” for Outstanding Research and Application in Dryland Farming Systems for 2017” during ICAR Foundation Day and Award Ceremony on July 16, 2018 at NASC, New Delhi.



AICRPDA Vijayapura centre receiving ICAR-Vasanthrao Naik Award

3. Dr. G. Ravindra Chary, Project Coordinator (DLA) received “Indian Society of Agronomy Gold Medal Award” on 24.10.2018 during XXI Biennial National Symposium on Doubling Farmers’ income through Agronomic Interventions under Changing Scenario at MPUAT, Udaipur, Rajasthan.



Dr. G. Ravindra Chary receiving Indian Society of Agronomy Gold Medal Award

4. Dr. G. Nirmala, Principal Scientist (Agril. Extension) & Head, TOT was honored with “SEE Fellow Award” during 9th National Extension Education Congress organized by Society of Extension Education Agra at CAEPHT, Ranipool, Sikkim during 15-17 November, 2018.



Dr. G. Nirmala receiving SEE Fellow Award

5. Dr. K. Nagasree, Principal Scientist (Agril. Extension) received “Best Extension Professional Award” during 9th National Extension Education Congress organized by Society of Extension Education Agra at CAEPHT, Ranipool, Sikkim during 15-17 November, 2018.



Dr. K. Nagasree receiving Best Extension Professional Award

6. Dr. B.M.K. Raju, Principal Scientist (Agril. Statistics) was included as “Member of Task Force” constituted by NRAA, DAC & FW, Govt. of India for ‘Prioritization of rainfed districts in India’.
7. Dr. R. Nagarjuna Kumar, Scientist received the “Best Paper Award” for the paper “Spatial Rice Decision Support System (SRDSS) for effective rice crop management”, Current Science Vol. 116, No. 3 by IIRR, presented during Annual day Celebrations of IIRR organized at ICAR-IIRR, Hyderabad on 15th December, 2018.
8. Dr. R. Nagarjuna Kumar, Scientist received the “Outstanding Scientist Award 2018” during the International Conference on Agriculture, Horticulture and Food Science held at Hotel Hans, New Delhi during 29-30 December, 2018.
9. Dr. Anshida Beevi C.N., Scientist (Agril. Extension) conferred with “Ganga Singh Chauhan Memorial Award-2018” for outstanding research contributions in the field of Extension Education during 9th National Extension Education Congress organized by Society of Extension Education Agra at CAEPHT, Ranipool, Sikkim during 15-17 November, 2018.



Dr. Anshida Beevi C.N. receiving Ganga Singh Chauhan Memorial Award

10. Dr. Anshida Beevi C.N., Scientist (Agril. Extension) received “Best Paper Presentation Award-2018” for the paper “Drudgery Reducing Technologies for Women Empowerment in the Rainfed Areas” during 9th National Extension Education Congress
11. Sri Mula Mahender Reddy of KVK, Chandippa village of Ranga Reddy district received “Best Farmer Award” by Aaj Tak News Channel on 24th October, 2018 for outstanding contribution in “Raised Platform / Elevated Animal Shed in Semi-Intensive Goat Farming”.



Sri. Mula Mahender Reddy receiving “Best Farmer Award” by Aaj Tak News Channel

Personnel Information

Appointments / Promotions / Transfers / Joining

Name and Designation	Joined/ Transferred/ Promoted/ Appointed	Date w.e.f
Transfers/ Joinings		
Shri Rajkumar Dhakar, Scientist, ICAR-CRIDA	Transferred as Scientist, ICAR- IARI, New Delhi	25.08.2018
Dr. B. Krishna Rao, Principal Scientist, ICAR-CRIDA	Joined as Director (A&R), WALAMTARI, Hyderabad on deputation (12.09.2018 to 11.09.2021)	12.09.2018
Dr. A. Amarender Reddy, Principal Scientist	Transferred to ICAR-CRIDA, Hyderabad	06.09.2018
Smt. D. Lakshmi Aruna Gayathri	T-3 (Farm Assistant)	22.12.2018
Shri Bandi Srikanth Goud	T-3 (Farm Assistant)	26.12.2018
Shri Awinash Brahamwanshi	T-1 (Fieldman)	28.12.2018
Promotions		
Shri Rajkumar Dhakar, Scientist (Agricultural Physics)	Promoted to next higher pay Rs. 7000/-	02.05.2016
Shri G. Venkatesh, Scientist (Agro-forestry)	Promoted to next higher pay Rs. 8000/-	01.01.2014
	Promoted to next higher pay Rs. 9000/-	01.01.2017
Shri Sarath Chandran M. A., Scientist (Agricultural Meteorology)	Promoted to next higher pay Rs. 7000/-	01.01.2018

Dr. (Smt.) K. Salini, Scientist (Genetics & Plant Breeding)	Promoted to next higher pay Rs. 7000/-	15.09.2015
Dr. Prabhat Kumar Pankaj, Sr. Scientist (Livestock Production & Management)	Promoted to next higher pay Rs. 9000/-	08.05.2015
Dr. (Smt.) R. Rejani, Sr. Scientist	Principal Scientist	30.08.2017
Dr. S. M. Vidya Sekhar, Chief Technical Officer (T-9)	Advance increment	03.02.2017
Dr. (Smt.) D. Anantha V. Rao, Chief Technical Officer (T-9)	Advance increment	03.02.2017
Shri Ram Kumar, Assistant Chief Technical Officer (T-7-8)	Chief Technical Officer (T-9)	24.02.2018
Shri S. Vijaya Kumar, Senior Technical Officer (T-6)	Assistant Chief Technical Officer (T-7-8)	25.10.2015
Shri K. Surender Rao, Chief Technical Officer (T-9)	Advance increment	03.02.2017
Shri G. Prabhakar, Senior Technical Officer (T-6)	Assistant Chief Technical Officer (T-7-8)	03.11.2017
Appointment		
Dr. K.L. Sharma	Appointed as Vigilance Officer	15.11.2018

ICAR-CRIDA extends best wishes to them

Retirements

Name	Designation	Date of superannuation
Dr. (Smt.) K. Usha Rani	Assistant Chief Technical Officer	04.10.2018
Shri B. Anjaiah	SSS	31.10.2018
Shri Buchaiah Ennapally	Senior Technician	30.11.2018
Shri Jainender	Assistant Chief Technical Officer	31.12.2018

Our best wishes for happy and peaceful retired life to all of them

Cultural and Welfare Activities

Swachhtha Pakhwada

Swachhtha Pakhwada was celebrated by ICAR-CRIDA during 16-31 December, 2018. The date-wise activities set out in the programme were implemented at ICAR-CRIDA main office, Hayathnagar Research Farm, Gunegal Research Farm and surrounding residential areas and in villages, involving all the employees of ICAR-CRIDA, farmers and civil society members, VIPs, media persons.



Swachhtha Pakhwada Celebration at farmers first village

The concluding function of Swachhtha Pakhwada was organized on 31st December, 2018. A brief account of the Swachhtha Pakhwada activities carried out from 16th – 31st December, 2018 was presented. Prizes for debate and essay writing competitions held during the fortnight were distributed. The event received good media coverage.

Vanamahotsavam

ICAR-CRIDA Cultural and Recreation Club organized Vanamahotsavam at Hayathnagar Research Farm of the institute on 20th November, 2018. All the CRIDA staff members actively participated in the cultural activities. The events generated great enthusiasm and unity among staff.



Director (Acting), ICAR-CRIDA distributing prizes to winners

XIV Meeting of ICAR-CRIDA IJSC

Second meeting of XIV IJSC was held on 20th October, 2018 in Director's Committee room under the Chairmanship of Dr. K. Sammi Reddy, Director (Acting) and Chairman, IJSC, ICAR-CRIDA. The meeting was attended by following official side members Dr. K.L. Sharma, Dr. R. Nagarjuna Kumar, Sri B.D. Phansal, CAO, Sri A. Srinivasa Murthy, SFAO and Dr. Ravikanth V. Adake, Official side Secretary and

staff side members Sri V. Venunath, CJS Member, Sri B. Krishna, Secretary, Staff side, Sri S. Ratnashankar Rao, Sri D. Srinivas, Sri A. Mallesh Yadav and Sri S. Shankar Reddy. Agenda points were discussed in the meeting.

क्रीडा, हैदराबाद में स्वर्गीय श्री अटल बिहारी वाजपेयी जी, भूतपूर्व प्रधानमंत्री, भारत सरकार का प्रथम मासिक श्रद्धांजलि दिवस आयोजित

भारतीय कृषि अनुसंधान परिषद (आईसीएआर) के दिशा-निर्देशानुसार केंद्रीय बारानी कृषि अनुसंधान संस्थान (क्रीडा-CRIDA), हैदराबाद के प्रांगण में रविवार दिनांक 16 सितंबर, 2018 को भारत रत्न स्वर्गीय श्री अटल बिहारी वाजपेयी जी, भूतपूर्व प्रधानमंत्री, भारत सरकार को प्रथम मासिक श्रद्धांजलि दिवस के अवसर पर श्रद्धा सुमन अर्पित किए गए। इस अवसर पर आयोजित विशेष कार्यक्रम में कार्मिकों को संबोधित करते हुए संस्थान के निदेशक महोदय डॉ के सम्मी रेड्डी ने स्व. वाजपेयी जी को महान कवि, समाज सेवी, सर्वप्रिय जननेता तथा देश-विदेश में भारत की छवि को निखारने वाला राजनेता बताते हुए उनके सिद्धांतों को अपनाने पर बल दिया। आपने स्व. वाजपेयी के संघर्षों से परिपूर्ण जीवन का उल्लेख करते हुए देश को नई ऊंचाइयों पर पहुंचाने हेतु उन्हें प्रेरणा स्रोत बताया। इस कार्यक्रम में डॉ पी के जैन, वैज्ञानिक-एफ, एआरसीआई, हैदराबाद ने मुख्य अतिथि के रूप में पधारकर वाजपेयी जी की प्रसिद्ध इक्यावन कविताओं का संक्षिप्त परिचय दिया तथा उनकी श्रेष्ठ कविताओं का वाचन करते हुए भावार्थ समझाते हुए वर्तमान परिदृश्य में उनकी उपयोगिता को सिद्ध करते हुए उनके उद्देश्यों का अनुपालन करने का अनुरोध किया। आपने कौरव कौन कौन पांडव; ऊंचाई के साथ विस्तार भी हो; मुझे इतनी ऊंचाई कभी मत देना; मौत से ठन गई; सामने वार कर फिर मुझे आजमा; बिखरे नीड; सवेरा है मगर पूरब दिशा में; सच्चाई यह है कि; ऊंचाई; आओ मन की गांठें खोलें; नामक कविताओं का विस्तृत रूप से भावार्थ समझाया। इस विशेष कार्यक्रम का संचालन डॉ नागार्जुन कुमार, वैज्ञानिक ने, धन्यवाद ज्ञापन डॉ एस आर यादव ने तथा डॉ पंकज कुमार ने कार्यक्रम के आयोजन में विशेष भूमिका निभाते हुए संपूर्ण सहयोग प्रदान किया। इस अवसर पर संस्थान के अधिकांश वैज्ञानिक एवं अन्य कार्मिक उपस्थित थे।

South zone sports meet

ICAR-CRIDA sports contingent comprising 31 participants and 1 CDM participated in the ICAR South Zone Sports Meet - 2018 organized by ICAR-CTRI, Rajahmundry at DSA stadium, Kakinada, Andhra Pradesh during 5th-9th September, 2018. In this tournament, Mr. B. Kiran Kumar, SSS, secured 1st place in javelin throw and Mr. Mukund, Senior Technical Assistant secured 2nd place in cycling.



Mr. B. Kiran Kumar receiving 1st prize in Javelin throw

Mr. Mukund receiving 2nd prize in cycling

Independence day celebrations

The 72nd Independence Day was celebrated on August 15, 2018 with pride and patriotic zeal. The Director hoisted the flag and addressed the staff of CRIDA. In this occasion, Director distributed cash awards (CCS & CCRC) to the X class toppers of CRIDA staff children and motivated the staff with his message to work with dedication and boost institute's growth.



Director (Acting), ICAR-CRIDA addressing the staff

Published by : Dr. G. Ravindra Chary,
Director (Acting), ICAR-CRIDA

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BOOK-POST

To

From the Director's Desk.....



Dr. K Sammi Reddy, Director (Acting), ICAR-CRIDA

Small Farm Mechanization is the Key for Successful Adoption of Climate Resilient Technologies by Farmers in Rainfed Areas

Over the years, the National Agricultural Research System (NARS) has contributed significantly to development and transfer of technologies for a more viable and sustainable rainfed agriculture. Of late, timely farm operations has become an expensive proposition due to shortage of agricultural labour in rainfed areas. To obtain the proper response from the rainfed crops, small farm mechanization is the key to meet the timeliness of operations in quick session for establishment of crop and enhancing inputs and moisture use efficiency. Realizing the fact, CRIDA and AICRP on dryland agriculture have identified small farm mechanization as one of the prioritized research area and made continuous untiring efforts to develop dryland farm implements. So far, CRIDA has developed nearly 23 dryland farm implements which are being widely adopted by rainfed farmers. More than 3 lakh units of CRIDA BBF Planters have been sold to farmers during the last 5-6 years in states of Maharashtra, Madhya Pradesh, Telangana etc. Since about 85% of the rainfed farmers are small and marginal who can't afford to procure farm implements, rainfed farm mechanization is not happening at desired pace. Therefore, CRIDA under its flagship programmes, NAIP and NICRA has conceptualized the Custom Hiring Centre (CHC) and implemented successfully in 151 climate resilient villages (CRVs) of vulnerable districts under NICRA. Suitable farm implements were identified for each CRV through focused group discussions with the farmers pertaining to their farm operations. To oversee the requirements, service and maintenance aspects of these machines, a village climate risk management committees (VCRMC) have been constituted. This approach has showed many positive results in enhancing the crop productivity in climate resilient village clusters due to timely availability of improved implements at affordable cost for the small and marginal farmers in their own village or nearby village.

Dr. K. Sammi Reddy, Director (Acting), ICAR-CRIDA

निदेशक की कलम से

वर्षा आधारित क्षेत्रों में किसानों द्वारा जलवायु समुत्थान प्रौद्योगिकियों को सफलतापूर्वक अपनाने में छोटे कृषि यंत्रों की मुख्य भूमिका

पिछले कुछ वर्षों में, राष्ट्रीय कृषि अनुसंधान प्रणाली (एनएआरएस) ने अधिक व्यवहार्य एवं टिकाऊ वर्षा आधारित कृषि के लिए प्रौद्योगिकियों के विकास एवं हस्तांतरण में महत्वपूर्ण योगदान दिया है। वर्षा आधारित कृषि में कृषि श्रमिकों की कमी के कारण कृषि कार्यों में देरी से कृषि कार्य अधिक खर्चीला होता जा रहा है। वर्षा आधारित फसलों की सही प्रतिक्रिया के लिए, फसलों की बुआई एवं निवेशों तथा नमी उपयोग क्षमता को बढ़ाने के लिए सब में समयबद्ध रूप से कृषि कार्यों को पूरा करने में छोटे कृषि यंत्रों की प्रमुख भूमिका होती है। इस बात को ध्यान में रखते हुए, क्रीडा एवं अखिल भारतीय समन्वित बारानी कृषि अनुसंधान परियोजना ने छोटे कृषि यंत्रों को प्राथमिक अनुसंधान क्षेत्र के रूप में पहचाना है एवं बारानी कृषि उपकरणों के विकास में निरंतर अथक प्रयास जारी है। अब तक, क्रीडा द्वारा करीब 23 बारानी कृषि उपकरणों का विकास किया गया है जिन्हें वर्षा आधारित किसानों द्वारा व्यापक रूप से अपनाया जा रहा है। महाराष्ट्र, मध्यप्रदेश, तेलंगाना आदि राज्यों में पिछले 5-6 वर्षों के दौरान क्रीडा बीबीएफ प्लांटर्स की 3 लाख से अधिक इकाइयां बेची जा चुकी हैं। करीब 85 प्रतिशत वर्षा आधारित किसान छोटे एवं सीमांत हैं जो कृषि उपकरणों को खरीद नहीं सकते, जिसके कारण वांछित गति से वर्षा आधारित क्षेत्रों में यांत्रिकीकरण नहीं हो पा रहा है। अतः क्रीडा के प्रमुख कार्यक्रमों के अंतर्गत एनएआईपी एवं निक्का ने कस्टम हायरिंग केंद्र की अवधारणा को अपनाते हुए निक्का के अतिसंवेदनशील जिलों के 151 जलवायु समुत्थान गांवों (सीआरवी) में इसे सफलतापूर्वक कार्यान्वित किया है। उपयुक्त कृषि उपकरणों की पहचान प्रत्येक जलवायु समुत्थान गांव के कृषि कार्य में जुड़े किसानों से विचार-विमर्श के उपरांत की गई है। इन उपकरणों की आवश्यकताओं, सेवाओं एवं रख-रखाव के विभिन्न पहलुओं को पूरा करने के लिए, गांव जलवायु जोखिम प्रबंधन समितियों (वीसीआरएमसी) का गठन किया गया है। इस कदम से कई सकारात्मक परिणाम देखने में आए हैं जैसे कि उनके अपने गांव या समीपवर्ती गांव में छोटे एवं सीमांत किसानों को सही समय पर उन्नत उपकरण सस्ती कीमतों पर उपलब्ध होने के कारण जलवायु समुत्थान गांवों की फसलों की उत्पादकता में बढ़ोत्तरी हुई है।

डॉ. के. सम्मी रेड्डी, निदेशक (कार्यकारी), भाकृअनुप-क्रीडा