

भाकृअनुप-कृषि प्रौद्योगिकी अनुप्रयोग अनुसंधान संस्थान, कानपुर
ICAR-AGRICULTURAL TECHNOLOGY APPLICATION RESEARCH INSTITUTE, KANPUR

An ISO 9001:2015 Certified Institute

Contents

1. Jal-shakti Abhiyan	2
2. Launching of biotech Kisan Project	2
3. Participation in Plant Genome Savior Awards Ceremony	2
4. Visit of QRT Team	3
5. Kisan Gosthi & Exhibition	6
6. Celebration of Constitution Day	6
7. Celebration of World Soil Health Day	6
8. TOT training programme at ATARI, Kanpur	7
9. Training under NEMA project	7
10. SAC Meetings at KVKs	8
11. Participation in workshop on implementation of FMS & other financial issues	8
12. 7th Annual Review Workshop of NICRA	9
13. 4th National Workshop of Officers In charge, Data Management	10
14. Participation in ICAR Inter Institutional Sports	10
15. Meeting on e-NBAT System	10
16. Celebration of Kisan Samman Diwas	11
17. Other Meetings/Programmes	12
18. Quarterly Progress Report	12

Director's Desk

The year ended with good note as we got the appreciation letter from our Hon'ble DDG (AE), Dr. A.K. Singh regarding residue management in Western Uttar Pradesh, ICAR-ATARI, Kanpur took lead to address the problem of paddy straw burning through *In-situ* crop residue management. KVKs of Western U.P. created mass awareness amongst various stakeholders by conducting technology demonstrations on farmers' fields, mobilising school & college students, involving social leaders and by using social, electronic and print media. Kisan Melas on CRM theme were also organised to mobilize farmers in this campaign. Awareness programme at village and block levels were arranged to encourage farmers to adopt machines to manage paddy straw. KVKs also conducted hands-on training of farmers, tractor owners, machine operators, CHC owners for operation of machines. Demonstrations laid out at strategic locations in adopted villages on new methods of direct sowing of wheat were able to convince the farmers. Organisation of exposure visits, field days and harvest days were also arranged for farmers. He congratulate KVKs and their team in taking the lead on this important issue of national importance.



I would like to mention here that QRT team also appreciated the works of KVKs. During their visit at KVKs of Badaun, Rampur, Pilibhit and Bareilly, they interacted with farmers and rural youths who are taking training by Nehru Yuva Kendra and realised that youths may be torch bearers to other for self employment.

During the period, some important programmes were also organised at KVK level, they are *Jal-Shakti Abhiyan*, *Swatchata Pakhwada*, *Constitution Day*, *World Soil Health day* and *Kisan Samman Diwas*. By these programmes KVKs are able to spread importance of soil fertility analysis, SHCs and balance fertilizers use, bio-intensive insect pest, weed and malnutrition management. TOT training programme also organised by this institute to develop skill for job creators as *SHG*, *FPO* needs more profitable venture in the grass root level. At 7th Annual Review Workshop of *NICRA*, the TDC was very much appreciated by DG, DDG(AE) and other higher officials of ICAR. This quarter was very much fruitful in terms of KVK achievements, implementation of programmes, review of experts in this Zone.

Wishing everybody all good things in this new year 2020. We wish more joy, peace love, care and success ahead. **Happy New Year** to all my colleagues and higher officials of ICAR and SAUs.

- Atar Singh

Jal-Shakti Abhiyan

Jal Shakti Abhiyan program was organized at Kanpur Nagar by KVK Daleep Nagar on 2nd October 2019 for creating awareness among the farmers. In the program 9 village pradhan and farmers participated. In the beginning the KVK Scientists gave lectures to the farmers for not using the plastic and proper disposal of the garbage. Secondly, the water saving and it's proper use for drinking and irrigation purpose was also emphasized. The farmers also share their experiences and raised issues of animal grazing and health hazards in rural areas. It was suggested that self participation will lead to solution of problem.



Launching of Biotech Kisan Project

Biotech kisan Project inauguration program was held on 14 October 2019 at KVK Chitrakoot. In this program IARI Joint Director (Extension), Dr J P Sharma and his team in collaboration with of DRI KVK Ganiwan Chitrakoot were present. In this project 5 villages and 200 farmers to be involved for demonstrations of pulses, oilseeds and vegetables. The processing units will be made available to the community. In the beginning, technology related information provided by scientists of IARI. In this program Honorable VC, BUAT, Banda Dr. U S Gautam was invited as Guests of honor. Valuable information to the farmers for doubling their income by value addition of pulses, oilseeds, seed production and crop diversification were given by the resource persons.

To conserve the water and its proper utilization for high value crops, need based and demand driven technology interventions are the need in relation to climate change. The inaugural function was chaired by Dr Vinay Mahajan, General Secretary of DRI. In this function about 300 farmers and rural youth participated with full zeal. The vote of thanks was given by Dr (Mrs) Tripathi.



Participation in “Plant Genome Savior Awards Ceremony”

The germplasm available with farmers may be utilized for further multiplying, though the production is low but rich in Zn, Fe and vitamins for nutritional food security. The greetings to the farmers at plant genome savior awards ceremony was held at IARI Pal Auditorium at Pusa on 22 October 2019. In this program honorable Agriculture and farmer welfare minister Sh Narendra Singh Tomar and both minister of state GOI Shri P Rupala ji and Sh Kailash Chaudhary were present. On this occasion, Secretary Agriculture, Govt. of India, Sh Sanjai Agrawal and Secretary DARE and DG, ICAR Dr T. Mohapatra gave their valuable remarks. President of PPVFRA & General Secretary, Dr. K.V. Prabhu and Dr. R.C. Agrawal organized the programme.



Visit of QRT Team

KVK Rampur on 18.10.2019

QRT team visited KVK Rampur on 18 October 2019. The Chairman of QRT team Dr Gayaprasad ji addressed the farmers of the district. He suggested to take up the new technology interventions for demonstrations for benefiting the farmers. The other members Dr O. P Singh, Dr Mathura Rai, Dr SRK Singh from ATARI, Jabalpur, Dr S K Sachan Director (Extension) and Dr R K Singh Head KVK Bareilly were also present during the meeting. The farmers were also told about the benefits from the knowledge gained from the KVKs.



KVK Bareilly on 19.10.2019

At KVK Bareilly QRT team interacted with youth who were under training for 10-24, October 2019 which was organized by Nehru Yuva Kendra. This training was for youth leaders from rural level for innovations for self employment. Both boys and girls were in this batch. The trainees were from three districts of Budaun, Rampur and Pilibhit. Very interesting to note that most of them were graduates, post graduates and intermediate. These youths may be torch bearers of the other rural youth's for self employment. Chairman boosted up the participants by giving example of many successful personalities. To take lesson for choosing right path. In the

beginning the coordinator of NYK welcome the QRT team members.



CSAUAT, Kanpur on 15.11.2019

QRT meeting was held at CSAUAT, Kanpur on 15 November, 2019 regarding the technology application by the KVKs of CSA area jurisdiction wef 2011-2012 to 2018-2019. The chairman and the members seen the technology application by the KVKs on need based, it's benefits and diffusion in the district. Total 23 KVKs presented their work. The issues were also discussed regarding improvement the difficulties. Chairman made valuable remarks for improvement in scientific analysis for the focused programs. The committee also visited the selected KVKs and interacted with the farmers for benefits to the community. Meeting ended with vote of thanks.



BUAT, Banda on 13-14, November, 2019

QRT Meeting was held at BUAT, Banda during 13-14 November, 2019. This meeting was held at VC Conference room, BUAT, Banda on 13th Nov, 2019. All members of QRT assembled and the meeting was started with the formal introductory session with all KVKs, University officials, ATARI, Kanpur and Jabalpur officials. Dr. Sadhna Padey, PS (Home Sc.) participated in this meeting. In this meeting following general and technical recommendations given by the QRT team –



General Recommendations:

- In EFC, there should be provision of Rs. 4 to 5 lakh for each KVK to purchase implements for crop residue management.
- Timely promotion and pension should be given to all KVK staff.
- Special packages of Rs. One crore should be provided to Bundelkhand KVKs.

Technical Recommendations to KVKs

- Goat and poultry should be kept in IFS model in case of Bundelkhand zone.
- Economics of IFS model should also be calculated.
- Use of Revolving fund at KVK may be used for development purpose.
- Productivity increase by use of soil health card at farmers' field should be calculated and compared with nearby farmers.
- Public sector variety of vegetables should be tested at KVK, then given for demonstration at farmer's field.
- New varieties should be popularized among farmers and impact should be assessed.
- Impact of organic fertilizers should be assessed as it may reduce the yield. Organic fertilizers

should be used only on those specific crops which can be grown organically.

- New and notified varieties should be tested
- Mousambi should be promoted in suitable districts.
- Publications in NAAS rating Journals with more than 6 score should be attempted by KVK Scientists.
- Area where intervention given and not given should be compared.

NDUAT, Ayodhya on 3-6, December, 2019

The last QRT meeting was held at NDUAT, Ayodhya during 3-6, December, 2019. On 3rd Dec., QRT Team visited two KVKs namely Gonda and Basti. Next day on 4th December, the QRT meeting was started at 10.00 AM in ANDUAT, Ayodhya. All members of QRT assembled and the meeting was started with the formal introductory session with all KVKs, University officials, ATARI, Kanpur (Dr. Sadhna



Pandey) and Jabalpur officials followed by the presentations of KVKs. On 5th December, the meeting was started at 10.00 AM with presentation of remaining KVKs. Meeting ended at 12.00 AM and QRT team departed to KVK Barabanki, Lucknow. On this occasion, various recommendations given by honorable QRT members are as follows:

- Impact should be projected in terms of area spread, number of farmers adopted and increase in income. At least 5 technologies should be assessed. Technology should also be in terms of it 5-6 characteristics.
- Record of expenditure of revolving funds in different heads should be kept and contribution of different activities in revolving fund generated should also be recorded.

- Nutrients supplied by vermi compost should be analyzed.
- In OFTs, problems should be prioritized on the basis of major commodity, severity of the problem, major area covered by that commodity, economic losses by that problem etc. Notified and released technologies should be selected for OFTs.
- Authenticity of data recorded is also important. There should be some mechanism.
- Area increased through OFTs and FLDs should be recorded every year.
- Soil health card impact should be assessed since 2014. It should include saving in terms of different nutrients, increase in yield, economic benefits etc.
- Occupancy in farmers' hostel should be reported and fund generated should also be reported.
- Honorable VC, NDUAT urged ICAR to increase the funds of DES to improve their work efficiency. He also informed that technology generated will be tested and validated by KVKs under UPCAR projects.
- In many KVKs data reported on employment generation need to be rectified.
- Director Extension, NDUAT, Ayodhya reported that more than 82% farmers are small land holders, so, technologies should be tested for them.
- DE demanded funds from ICAR for hi-tech nursery of fruits and vegetables. So that farmers will get authentic fruit plants.
- Seed processing unit may also be developed and KVK should motivate the farmers for seed production and seed village is a good concept.
- Banana, Litchi, Mushroom etc need to be promoted.
- Pension benefits and salary issues of KVK staff should be materialized.



- Network with other departments within the district is also to be strengthened and their technology should be initiated by KVKs in network mode.

On 6th December meeting was held at IISR, Lucknow under the Chairmanship of Dr. Gaya Prasad, Chairman QRT, ICAR-ATARI, Kanpur. Various members present in meeting were members QRT - Dr. OP Singh, Dr. Mathura Rai, Dr. YPS Dabas; Dr. Bijender Singh, VC, ANDUAT, Ayodhya; Dr. ATAR Singh, Director, ICAR- ATARI, Kanpur; Dr. Anupam Mishra, Director, ICAR- ATARI, Jabalpur; Dr. A.D. Pathak, Director, ICAR-IISR, Lucknow; DE's Extension- CSAUA&T, Kanpur; BUAT, Banda; NDUAT, Faizabad; SVPUAT, Meerut; Dr. Sadhna Pandey, Principal Scientist ICAR- ATARI, Kanpur; Comptroller, SVPUAT, Meerut and accountants. On this occasion, issue of grade pay of SMS and timely utilization funds by the KVKs has also been raised. QRT Team also visited KVK Lucknow and Unnao on same day.



Kisan Goshti and Exhibition

Mahayogi Gorakhnath Krishi Vigyan Kendra Gorakhpur has conducted Kisan Goshti and exhibition on 17th November, 2019 . Dr. A.K. Singh, DDG(AE) from ICAR, New Delhi was the special guest in this important event. Officials from ICAR-ATARI Kanpur Dr. Atar Singh and Dr. Shantanu Kumar Dubey also participated. Under the headship of Dr. R. P. Singh , all the dignitaries visited their cafeteria, demo units etc.



Celebration of Constitution Day

ICAR-ATARI, Kanpur celebrated Constitution Day. In this program the 50 participants taken oath on this auspicious day. The 30 heads of KVK took part in this activity.



Celebration of World Soil Health Day

The World Soil Day was celebrated on 5 December 2019 at CSAUT, Kanpur. The program was jointly organized by Department of Soil Conservation and KVK, Kanpur Dehat. In this program farmers, students, line department officials participated. In this program Dr S P Singh from Indogulf fertilizers has shared his views. Dr Dhoom Singh ,Director (Extension), Dr Poonam Singh Dean (Agriculture)



shared their views for better soil health. Dr S Soloman Vice Chancellor was the chief guest of the program and he gave many important views for saving our future and to stop erosion. Dr Munish Gangwar coordinated the program. The income, production and livelihood should be improved by Soil management. 50 farmers of Kanpur Dehat, students and staff members of the University attended the programme.



TOT training programme at ATARI, Kanpur



TOT training program was organized at ICAR-ATARI, Kanpur from 11-13 December, 2019. In this training 53 participants taken part from ICAR,SAU, ICAR KVKs from Uttar Pradesh, Rajasthan, J&K, Chhattishgarh. 21 job roles were there for entrepreneurs, farmers for skill development and taking courses for DFI. To develop skills for job creators. Create SHG,FPO for more profitable venture in the grassroot level. The program was coordinated by Dr S K Dubey and vote of thanks was given by Dr Raghwendra Singh.



Training under NEMA Project

Dr. Sadhna Pandey, PS (HSc. Ext.), attended the training on "Impact assessment methodology and techniques" under NEMA project at Division of Agricultural Extension, IARI in collaboration with

IFPRI, New Delhi during October 14-19, 2019.

There were lectures of Mr. Devesh Roy (*propensity score matching (PSM) and coarsened exact matching (CEM)*), Mr. Avinash Kishore (*randomized control trials, Difference in difference method*) and Ms. Shweta Gupta (*CTO/ODK*) from IFPRI and Mr. Girish Jha (*exercise on sampling and power calculation*) from, IARI.

Following points were finalized for NEMA project:

- All the institutes should recruit SRF and data enumerator as soon as possible as the work should be initiated from the month of October 2019 itself.
- Check list of all the 7 technologies each from 7 research institutes should be given to KVKs to explore their area of adoption.
- By the end of October schedule finalization, sampling plan etc. should be finalized.
- Data collection work will be done by both ATARIs and research institutes and started by 10th November, 2019.
- By the end of January 2020, data collection work will be completed. Report writing work should also be initiated side by side and it will be wind up by the March 2020.

SAC Meetings at KVKs

KVK Ghaziabad

SAC meeting was held at KVK Ghaziabad on 13.12.2019. The progress was reviewed and ANNUAL ACTION PLAN 2020-2021 was discussed with SAC members. The DDA,DAO,VO, progressive farmer's took part in this meeting. The need based training were suggested and impact of training may be visible at farmer's end. Some activities on income generating interventions may be taken by farmer such as mushroom cultivation, beekeeping, poultry, floriculture, fruits and vegetables, dairy farming, and nutritional gardening for household level. It was suggested for quality seed and planting materials production at KVK. The generation of revolving



funds and it's proper use as desired was focussed. Director (Extension) of SVPDAT, MEERUT and Scientists also taken part in SAC. Last recommendations should be properly taken for action for better function.

KVK Hastinapur (Meerut)

SAC meeting was held at Hastinapur KVK on 16 December 2019. in this meeting Director Extension, Head KVK, Joint Director, CPCRI, Modipuram, DDA, Lead Bank manager, line department officials, farmers were present. The progress of work done and annual action plan 2020-21 was discussed and the suggestions given by the members. KVK Scientists were also present. The KVK displayed the technologies in most scientific manner. The meeting ended with vote of thanks.



Participated in the Workshop on Implementation of FMS and Other Financial Issues”

Workshop on “Implementation of FMS and Other Financial Issues” was organized at ICAR-IASRI, New Delhi on 15-10-2019. In this workshop, Mr. R.B. Verma, AAO, Mr. V.D. Shukla, YCP-II and Mr. Ajay Singh Gautam, YP-I participated from ICAR-ATARI, Kanpur. On this occasion Secretary DARE & DG ICAR Dr Trilochan Mohapatra shared his views on development of transparent online system for movement of the files among officers to avoid delay in the processing of files at every ICAR Institute. He also added regarding payment of bills should be processed timely. Dr. Anil Ray, ADG (ICT) given his remarks regarding promotion of ICT for better functioning of the institute. Dr. G. P. Sharma, Director (Finance) ICAR also placed the timeline for implementation of FMS in every ICAR Institute before 31th March 2019.



Participation in 7th Annual Review Workshop of NICRA



7th Annual Review Meeting of NICRA was organized by CRIDA, Hyderabad. The chief guest of the program was Secretary DARE and DG, ICAR Dr Trilochan Mohapatra. DDGs (Ag. Engg, Horticulture, Agricultural Extension), ADG, NRM, Director, CRIDA, Hyderabad, Dr Sami Reddy Coordinated the program. ATARI, Directors and Directors of ICAR, Institutes and Nodal officers of NICRA Were present during inaugural function. In the technical session all ATARI Directors made their presentation. The valuable suggestions were given by Chairmen of the ZMC and monitoring committee. On 18 December 2019 a brain storming session was there for future road map of NICRA.

ICAR-ATARI, Kanpur zone III, Annual Progress Report was released during 7th Annual Review Workshop of NICRA by Deputy Director General (AE) Dr A K Singh at NASC, New Delhi on 17 December 2019. This was released during TDC NICRA presentation by all eleven ATARI Directors and Nodal officers. The TDC was very much appreciated by the dignitaries who were involved since inception of the project, the ZMC Chairmen, NICRA Experts Secretary DARE and DG, ICAR. Other Zone publications were also released.

7th Annual Review Workshop of NICRA on 18 December 2019 also organized the Brain Storming session. In this session NICRA Experts shared their



views from different departments, NABARD. In the beginning, a setting note tone was given by Dr S K Chaudhary, ADG and further presentations was given by Dr B Venkateswarlu, Dr H. Pathak, Director. DDG (Fisheries, Engg. and Agril. Extn) also gave remarks for way forward. Open discussion was invited from all the delegates. Workshop ended with vote of thanks.



Participation in “Fourth National Workshop of Officers Incharge, Data Management”

Mr S.N. Yemul, CTO & Mr. V.D. Shukla, YCP-II of ICAR-ATARI, Kanpur, participated in “4th National Workshop of Officers Incharge, Data Management” during 10-11 December, 2019. This workshop was conducted at NASC complex, New Delhi in the leadership of Dr Rajendra Prasad, PS, IASRI. All ICAR institutes' Nodal officers have participated. In this workshop there was discussion on importance of data, storage and its retrieval. Every ICAR Institute has to uploads repositories like publications, technologies, audio, videos, photographs etc for better retrieval. On the occasion of inaugural address



DG, ICAR Dr Trilochan Mahopatra who said that every institute has to ensure regular uploading of publications. He has emphasized on technologies developed by different institutes and importance of their digitization. KRISHI team did remarkable work. Dr AK Singh, DDG (AE) was chairman in the Technical session on second day. He also shared the importance of data and repositories. At the end, Dr Alagusunderam, DDG (Ag. Engg.) shared his experiences and also emphasized on e-office. Dr Prasad given away the vote of thanks.



Participation in ICAR Inter Institutional Sports

Employees of ICAR-ATARI, Kanpur participated in ICAR Inter Institutional Sports for North Zone organised by IIPR, Kanpur at IIT, Kanpur during 12-14 December, 2019.



Meeting on e-NBAT System

The meeting on e-NBAT was conducted at Krishi Vistar Sadan, IARI Campus, Pusa, New Delhi on 10.10.2019. Mr S.N. Yemul, CTO, ICAR-ATARI, Kanpur participated in this meeting. The e-National Bank for Agricultural Technologies (e-NBAT) enables a single window technology for creating a Knowledge platform on Agricultural Technologies generated across the Institutions such as ICAR, SAUs, Research stations, KVKs etc. the knowledge platform will enable to capture the agricultural technologies in details with specifications and validations by competent authorities. The e-NBAT may also have facility to search for the technology by any extension functionary/farmers.

Following are the e-NBAT implementation partners—

- Department of Agriculture, Cooperation and Farmers Welfare, MOA&FW
- National Institute of Agril. Extension Management (MANAGE)
- State Agril. Management and Extension Training Institutes (SAMETIs)

In this meeting welcome address was given by Shri Arun Kumar, Director Extn, DAC&FW. After the introduction of all participants, opening remarks was given by Shri Atish Chand, IAS, Joint Secretary (Extension), DAC&FW. Importance of e-NBAT system given by Smt V.Usha Rani, DG, MANAGE, Hyderabad.

Celebration of Kisan Samman Diwas

KVKs of Zone-III, Kanpur celebrated Kisan Samman Diwas on 23.12.2019. In this event total 11091 farmers and 644 government officials participated. Also public representative like MLA, MP, Gram Pradhan, District Magistrate, President of Kisan Union, Party representative, Block pramukh and officials of Agriculture Department (CDO, DDA etc) attended the programme.



KVK Agra



KVK Azamgarh



KVK Goda-II



KVK Hampur



KVK Mirzapur



KVK Lalitpur



KVK Badhoi



KVK Allahabad

Participation in other events	
1.	Visit of Site Selection Committee for the establishment of Additional KVK in district Prayagraj during 09-10 October, 2019.
2.	Visit of Site Selection Committee for the establishment of New KVK in district Shrawasti during 10-11 October, 2019.
3.	Workshop of implementing DBT funded Biotech KISAN project on 14/10/2019 at DRI, Chitrakoot
4.	High Level Monitoring Committee of the Central Sector Scheme on 'Promotion of Agricultural Mechanization for in-situ Management of Crop Residue in States of Punjab, Haryana, Uttar Pradesh, and NCT of Delhi held on 17/10/2019, 19.11.2019 and on 20/12/2019 at ICAR-Krishi Bhawan, New Delhi.
5.	Interview for the selection of SMS (Agrometeorology) and Agro-met Observer under Gramine Krishi Mausam Sewa Project (District Agro-met units) held on 23 rd Oct., 2019 at SVBPUAT, Meerut.

6.	Participated in the Inaugural function of Administrative building of Agril College of CSAUAT, Kanpur, Lakhimpur kheri which was inaugurated by the Hon'ble CM, Govt. of UP on 14th Nov., 2019.
7.	Court Case of KVK, Budaun at Hon'ble High Court Prayagraj on 29.11.2019
8.	Participated as Special Guest in the Farmers & Agriprenures Fair at Rajkiya Paudhshala, Civil Line, Dabrai, Firozabad, U.P. on 30th November, 2019.
9.	Three Mid Term Review Workshops of KVKs of U.P. conducted at ICAR-ATARI, Kanpur during 21-22 Nov. 2019, 25-26 Nov. 2019 and 29-30 Nov. 2019 under the area jurisdiction of CSAUAT, Kanpur, NDUAT, Ayodhya and SVPUAT, Meerut University respectively.
10	Swacchata Pakhwada organised from 16.12.2019 to 31.12.2010 at ATARI, Kanpur

Quarterly Progress Report during October-December, 2019

1	Technologies assessed and refined (Nos.)	76
2	On- Farm Trials Conducted (Nos.)	329
3	Frontline Demonstrations Conducted (Nos.)	20483
4	No. of Farmers and farm women Trained (Nos.)	35126
5	No. of Extension Personnel Trained (Nos.)	5325
6	Production of Seeds (in Quintals)	7854
7	Production of Planting materials (in lakhs)	37.93
8	Production of livestock strains and fingerlings (in lakhs)	0.85
9	Soil and water samples tested (Nos.)	6537
12	Nos. of Farmers provided mobile agro-advisory (in lakhs)	08.15
13	Farmers and other stakeholder Benefitted/Awareness created through various Extension Activities (in lakhs)	4.24

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Published by: Director, ICAR-ATARI, Kanpur

Edited by: Atar Singh, S.K. Dubey, Sadhna Pandey, Raghwendra Singh & S.N. Yemul