



# ICAR-ATARI. Kanpur



## Newsletter

भाकृअनुप-कृषि प्रौद्योगिकी अनुप्रयोग अनुसंधान संस्थान, कानपुर

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### National Conference on KVK and Krishi Unnati Mela - 2018



National Conference on KVK (16-17 March, 2018) and Krishi Unnati Mela 2018 was organised at ICAR-IARI Campus, New Delhi during 16-18 March, 2018. On the first day i.e. on 16.3.2018, Dr. V.P. Chahal, ADG(AE) welcomed all the participants. A brief introductory remarks regarding conference was given by Dr. A.K. Singh, DDG(AE). Remark of this conference was also been given by Shri C.Raul, Special Secretary (DARE) & Secretary(ICAR). Opening address was given by Dr. T. Mohapatra, Secretary (DARE) & DG (ICAR). Dr. Randhir Singh, ADG(AE), proposed vote of thanks.

In this conference total five technical sessions were organised. Technical Session-I was Chaired by Dr. T. Mohapatra, Secretary(DARE) & DG(ICAR); Dr. A.K. Dalwai, CEO, NRAA and Rapporteurs were Dr. Keshava, PS(AE) and Dr. Arvind Kumar, PS(AE) Zone-I. In this session, lectures were given by different dignitaries on the topic 'DOUBLING FARMERES' INCOME'. After tea Technical Session-II was held which was Chaired by Dr. A.K. Shrivastava,

Chairman, ASRB & Dr. A.K. Singh, DDG(Hort & Crop Sci.); Rapporteurs were Dr. SRK Singh, Pr. Scientist(AE), Zone-IX and Dr. S.K. Roy, PS(Agron)-Zone-V. In this session total four lectures were delivered by different dignitaries/expert. Livestock for sustained income support to farmers; Composting and recycling of farm waste for organic farming; Emerging technologies in Horticulture sector for economic enterprises and Up scaling the models of climate smart villages were the major and important need based topics.

Technical session-III was Chaired by Dr. Alagusundram, DDG(Engg & NRM) and Dr. JK. Jena, DDG(Fish & Animal Sci) jointly and Rapporteurs were

Dr. M.S. Meena, PS(AE)-Zone-II & Dr. A.K. Singha, PS(AE)-Zone-VII. In this session very emerging topics on IFS model for different agro-climatic zones were delivered and shared among all participants. Technical Session-IV was jointly Chaired by Dr. A.K. Singh, DDG(AE) and Dr. NS Rathore, DDG(Edu.) and rapporteurs were Dr. P. Adhiguru, PS(AE), Dr. Haldhar, PS(AS)-Zone-IV. In this session total 9 KVKs including KVK Kaushambi & Lucknow made their presentations on said theme.

On second day i.e. on 17.3.2018,, technical session-V was Chaired by former Chairperson, PPV&FRA and DDG(AE) and rapporteurs were Dr. N. Girdhar, PS(AE), Dr. S.K. Dubey, PS(AE)-Zone-III. In this session total 5



KVKs gave their presentations.

On this day the Prime Minister, Shri Narendra Modi, visited the Krishi Unnati Mela at the IARI Mela Ground, Pusa Campus, in New Delhi. He visited the theme pavilion, and the Jaivik Mela Kumbh. He laid the Foundation Stone for 25 Krishi Vigyan Kendras. He also launched an e-marketing portal for organic products. He gave away the Krishi Karman Awards and the Pandit Deen Dayal Upadhyaya Krishi Protsahan Puraskar. Addressing the gathering, the Prime Minister said that such Unnati Melas play a key role in paving the way for New India. He said that today, he has the opportunity to simultaneously speak to two cardinal pillars of New India – farmers and scientists. He said farmers and scientists have to work together to transform agriculture.

Prime Minister specially mentioned the State of Meghalaya, which received an award for its achievements in agriculture, in the period under review. Hon'ble Prime Minister appreciated the spirit and the hard work of our farmers, for their achievements in agriculture since independence. He said that today, there is record production of foodgrains, pulses, fruits and vegetables, and milk. He further stated that there are important challenges in agriculture today, which reduce the farmer's income, and increase his losses and expenditure. He emphasized the Government is working with a holistic approach to deal with these challenges. He said the aim remains to double farmers' incomes, and make the farmers' lives easier. Speaking about the progress towards this resolution, Hon'ble Prime Minister said that more than 11 crore soil health cards have been distributed so far. 100 percent neem coating of Urea has also resulted in lowering expenditure on fertilizer, apart from raising productivity.

He said that through the Pradhan Mantri Fasal Bima Yojana, premiums have been lowered, capping on insurance removed, and claims amounts disbursed to farmers have gone up. He said the Pradhan Mantri

Krishi Sinchai Yojana envisions water for every farm. 80,000 crore rupees are being spent to complete pending irrigation projects. He said the Kisan Sampada Yojana is helping strengthen the supply chain from the farm to the market, and creating modern agriculture infrastructure. He said Operation Greens, announced in the recent budget, will be beneficial for farmers growing fruits and vegetables, especially Tomato, Onion and Potato.

He said several Model Acts related to farmers' welfare have been prepared, and States have been urged to implement them. The Prime Minister said that the Government is working to ensure that farmers get modern seeds, adequate power supply, and easy market access. He said that the Union Government has decided that for all notified crops, MSP will be at least one and a half times the cost. He said that for this purpose the cost will include elements such as labour, rent for machinery, cost of seeds and fertilizers, revenue being given to State Government, interest on working capital, and rent of leased land.

The Prime Minister said comprehensive steps are being taken for Agriculture Marketing Reforms. It is important to connect Rural Retail Markets with wholesale and global markets. He said that in the recent Union Budget, Grameen Retail Agriculture Markets have been envisaged. 22,000 rural haats will be upgraded with necessary infrastructure, and integrated with APMC and the e-NAM platform.

The Prime Minister also emphasized the importance of Farmer Producer Organizations. He said Farmer Producer Organizations, would be given relief on tax, on the lines of cooperative societies. He said a new chapter in Agriculture Marketing Reform is being added in this programme, with the e-marketing portal for organic products.



*Best Zonal level Award received by KVK Kaushmabi*



**Best Zonal level Award received by KVK Lucknow**

He said that along with the Green Revolution and White Revolution, we must stress on Organic Revolution, Water Revolution, Blue Revolution, and Sweet Revolution.

He said the Krishi Vigyan Kendras (KVKs) will play a key role in this regard.

The Prime Minister explained how honey-bees could be an important source of additional income for farmers.

Similarly, he spoke of the benefits of solar farming. He said about 2.75 lakh solar pumps have reached farmers in the last three years. The Prime Minister also spoke of the Go-Bar Dhan Yojana for creating compost, bio-gas etc from bio-waste.

The Prime Minister said crop residue burning has harmful effects, and if the crop residue is instead returned to the soil through machines, it will have beneficial effects.

The Prime Minister said that the Government is working to ensure that adequate Agriculture Credit is available.

The Prime Minister said that such events should also be held in far-flung areas. He also called for impact analysis of such events.

**Zonal Award**

Hon'ble Prime minister Shri Narendra Modi also awarded Zonal level Award to KVK Kaushambi and Lucknow for their outstanding contribution work in the benefit of farming community.



**Showing Direct Telecast at KVKs of Uttar Pradesh**





One day workshop on PFMS was organised at ICAR-ATARI, Kanpur on 10 Jan 2018. Welcome address and importance of this workshop was briefed by Shri S.N. Yemul, CTO of ICAR-ATARI, Kanpur. Total 69 KVKs of U.P. participated in this workshop. From each KVK, one Head, one Scientist and one Computer Assistant also participated. From ICAR-ATARI, Dr. U.S. Gautam, Director, ICAR-ATARI, Kanpur ; Dr. Atar Singh, PS(Agro); Dr. S.K. Dueby; Mr. Kanta Prasad, AF&AO; Mr. R.B. Verma, AAO; Mr. Raman Tripathi, Assistant; Ms. Kratika Sharma, Assistant; Mr. Amit Verma, from SPMU, Lucknow; Dr. Dhoom Singh, DE from CSAUA&T, Kanpur also participated.

Mr. Kanta Prasad discussed major issues with KVKs for running PFMS admin & financial work in KVK. Problems while entering data in PMFS were also discussed.

Mr. Amit Verma from SPMU, Lucknow solved the queries of KVKs related to PFMS. He shared that total 24 lakh agencies were registered till date. PFMS software has been made to keep transparency by controlling the fund flow expenditure, advances, transfers etc. Importance of three major task such as (i) Know your payment (ii) Manage vendor and (iii) Dummy server /real server were also discussed.

Mr. Vinay Dhar Shukla, YCP-II presented step by step procedure for entering data in the PFMS.

Vote of thanks was given by Dr. S.K. Dubey, PS(AE) of this institute.



## Review meeting of CFLD Pulses – Oilseeds and Other Projects



ICAR-ATARI, Zone-III, Kanpur organized two days workshop on Cluster FLD on Oilseed-Pulses, Mobile App, NICRA, IFS, TSP and ARYA during 7-8 February 2018 ICAR-ATARI, Kanpur. This review meeting was inaugurated by Dr. U.S. Gautam, Director, ICAR-ATARI, Kanpur. Dr. Atar Singh, PS (Agron), Dr. S.K. Dubey, PS(AE) and Dr. Jitendra Singh, Directorate of Extension, CSAUA&T, Kanpur, Dr. S.B. Pal, Associate Director Extension, CSAUA&T, Kanpur, and Sr. Scientist & Head with two scientist of 69 KVKs of Uttar Pradesh have also participated in this meeting. On the first day discussion on Mobile App & NICRA KVK performance was made. Director ATARI presented the mandates and guidelines of pulse & oilseed programme.

On the second day, 7 oilseed crops (Sesame, Soybean, Groundnut, Rapeseeds-Mustard, Linseed, Toria & Sunflower) was done. Out of 3180 ha area allotted by DAC/ICAR the net sown area was 3021ha. Total Fund and area allotted for said crop were also taken place.

### Sowing details of Cluster Frontline Demonstrations of Kharif, Rabi & Summer oilseed 2017-18

Name of Crops	Season	Sown Area (ha.)
Sesame	Kharif	740
Groundnut		90
Soyabean	Rabi	10
Mustard		1571
Linseed		70
Toria	Summer	50
Sunflower		80
Goundnut		410
<b>Total</b>	<b>K+R+S</b>	<b>3021</b>

## Cereal Systems Initiative for South Asia (CSISA)



The Cereal Systems Initiative for South Asia (CSISA) was established in 2009 with a goal of benefiting more than 8 million farmers by the end of 2020. The project is led by the International Maize and Wheat Improvement Center (CIMMYT) and implemented jointly with the International Food Policy Research Institute (IFPRI) and the International Rice Research Institute (IRRI).

One day workshop on CSISA project was organized at ICAR-ATARI, Kanpur on 16 February, 2018. Total 10 KVKs from Uttar Pradesh participated. In this meeting Dr. A.K. Singh Vice-Chancellor, BAU, Sabour, Bihar and Dr. U.S. Gautam, Director, ICAR-ATARI, Kanpur acted as Chairman and Co-chairman of this important programme. Dr. R.K.Sohane Director Extension BAU, Sabour, Bihar acted as Convener. Dr. A.K.Dubey Senior Scientist and Head, KVK, Kushinagar, U.P. and Dr. Narendra Singh, Associate Director, BAUT, Banda, U.P given the responsibility for Reporting of this event. Dr S.K. Dubey, PS (AE) steered the session.

Welcome address was given by Dr. U. S. Gautam, Director and he also Presented the learning from CSISA Project of Kushinagar and Deoria. The major points involved –

1. Performance of long duration and short duration varieties of wheat under different sowing schedule across ecologies.
2. Assessing the role of additional irrigation during terminal heat stress period in the month of March at the time of grain filling to beat the heat stress and its effect on wheat productivity.
3. Improving the efficiency of wheat herbicide.
4. Boron application studies to observe its effect on yield and yield attributes of wheat.
5. Response of nitrogen and phosphorous.
6. Residue management in rice-wheat system.



Dr. Alwin Keil, IRRI, New Delhi presented a practical approach from robust M & E&L – (i) Quantitative data collection approach. (ii) Random sampling procedure. (iii) PPS Method for Village selection. (iv) Important aspects and methods for collecting data with accuracy. (v) Also presented alternative Random Walk approach of the village for create accuracy.

Dr. Andrew Mc Donald, Country Head from CSISA New Delhi presented CART flowchart for survey in ODK in his deliberation.

Dr. Arindam Samaddar, CSISA, New Delhi, Presented the Understanding the nature of spreading and adoption of technologies besides such as different aspect and steps from collecting data through ODK. 2. Key points to capture data from wheat survey.

Dr. Anurag Ajay, CYMMIT, New Delhi Presented on For steering Field Surveys through open data kit: - 1. An efficient data generating system making a choice for time saving as well as accuracy 2. Paper Survey vs digital data survey. 3. Rate of efficiency in digital data collection. 4. Different steps of operating ODK app.



Dr. R.K. Mallik, Country Coordinator CSISA project:- Convergence and synergies from participatory extension research and development with major emphasis on the facts that KVKs are accelerators and brakes while DOA is just like engine thus showing the importance of KVKs and the small changes of fertilizers use can bring a big change in productivity.

Dr. A.K. Singh, VC, BAU, Sabaour, Bihar said that the real approach of solving the problems with correlating the changes in farming atmosphere and time has come to discuss why tested and best technologies are not found in the field level on large scale.

Dr. Anjani Kumar, Director, ICAR-ATARI, Patna said the Data bank is very important for making strategy and importance aspect is that to bring information from data bank.

The session was closed with presentation of Souvenir to Chairman, Co-Chairman, Convener and lead speakers and the whole programme was coordinated by Dr. S.K. Dubey PS(AE), ICAR-ATARI, Kanpur.



## Participation of ATARI officials in International Conference organised at CSAUAT, Kanpur



International Conference on “Sustainability of Smallholder Agriculture in Developing Countries Under Changing Climatic Scenario” was organised at CSAUAT, Kanpur during 14-17 Feb., 2018. Hon’ble President of India Shri Ram Nath Kovind inaugurated this conference. Dr. A.K. Singh, DDG (AE) & President of this Conference welcomed all the delegates and participants. From ICAR-ATARI, Kanpur Dr. U.S. Gautam, Director; Dr. Atar Singh, PS(Agron); Dr. S.K.

Dubey, PS (AE) and Shri S.N. Yemul, CTO participated. In this conference the scientists of ATARI, Kanpur presented their research work .

In this workshop following points were mainly emerged-

- More than half of the world’s population is engaged in agriculture, directly or indirectly, is irrefutable. While 40 % of the agricultural workforce (about 440 million workers) is wage employed; remaining 60% are self-employed as farmers and mostly as small farmers. Out of the 2.5 billion population in afro-asian countries depending directly on agriculture sector, nearly 60% people live in smallholder households.
- Smallholders (small-scale farmers, pastoralists, forest keepers, fishers who manage 1 ha or less ara) are characterized by family-focussed motives such as favouring the stability of the farm household system, using mainly family labour for production and using part of the produce for family consumption.

- The impact of the climate change will be multifaceted ranging from fundamental threats to the region's food and energy security to socio-economic issues.
- Social and economic progress of developing nations will run into peril unless immediate action is taken to tackle the impact of climate change.

In this conference important dignitaries such as Dr. Mangla Rai, Former DG ICAR; Dr. P.Das, DDG(AE) and other respected personalities delivered their talk on burning subject.



## Celebration of Republic Day

ICAR-ATARI celebrated 69<sup>th</sup> Republic Day on 26<sup>th</sup> January, 2018. After flag hosting, all staff members assembled in conference hall. One by one all the officials of ATARI presented their views on different topic such as cleanliness of office, work culture, food wastage etc. At last Dr. U.S. Gautam, Director; Dr. Atar Singh, PS(Agron); Dr. Shantanu Kumar Dubey, PS(AE) also delivered their talk on the said topic. Director also boost-up keeping of silent and hard work culture among all staff. He also emphasized on Cleanliness and office work culture etc.



## IMC Meeting organised



7<sup>th</sup> IMC (Institute Management Committee) meeting was held on 26 March, 2018 at ICAR-ATARI, Kanpur. In this meeting following members have been nominated and attended –

1. Dr. P. Adhiguru, PS(AE), ICAR, Div of AE, New Delhi
2. Dr. R.N. Padaria, PS, ICAR-IARI, New Delhi
3. Dr. D.R. Malaviya, PS, ICAR-IISR, Lucknow
4. Dr. V.K. Mishra, Head, ICAR-CISS, Lucknow
5. Mr. D.K. Agnihotri, FAO, IIPR, Kanpur

In this important meeting discussion and presentation were made on Achievements of the Institute by Dr. Atar Singh, PS (Agron) and various outcome of In-house projects (2015-18) by respective ATARI officials namely Mr. S.N. Yemul, CTO, Dr. Chandan, Mr. Manoj, Mr. Rajiv and Dr. (Mrs) Saurabh from KVK Sitapur-II gave their presentations on (i) Digitization of Krishi Vigyan Kendras (dKVK) for efficient management information system: An Action Research (ii) Improving production efficiency through situation specific farm mechanization : A diagnostic investigation (iii) Externally Funded Research Project under Extramural funding by ICAR on Value chain analysis of selected agribusiness enterprises in the states of Uttar Pradesh and Uttarakhand (iv) Inter-institutional research project on “Combating Drudgery for Enhancing Farm Women’s Efficiency in Different Agro-climatic of Uttar Pradesh and Uttarakhand, respectively.



Dr. U.S. Gautam, Director, ATARI also presented ATARI Networking Project on ‘Developing location specific livelihood security frontline models integrating with credit and marketing of farmers and

farm women of disadvantage district of UP & Uttarakhand”. emphasized on Generating knowledge and better understanding of livelihood interventions and farming systems in selected district.

## Medical Checkups camp at ATARI



ICAR-ATARI, Kanpur organised medical check ups for their families by CGHS on 02.02.2018

### Demonstration of Raised bed sowing of pigeon pea through raised bed planter (RCT): Experience in NICRA Project

**Problem identified :** The plant of pigeon pea is damaged due to un-drained water in the field.

**Interventions :** Raised bed sowing of pigeon pea through raised bed planter

Comparison of	Variety	Seed yield	Gross cost	Gross returns	Net returns	BC
Raised bed sowing	NA-1	13.15	59460	105200	45740	1.77
Broadcasting sowing	NA-1	9.85	60135	78800	18665	1.31



Raised bed sowing of pigeon pea



Performance of crop on Raised bed



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