



## **Directorate of Extension for Dissemination of Agricultural Technology**

**Prof. A.P. Rao, Director Extension**



Extension is one of the three major functions of the Narendra Deva University of Agriculture and Technology. The Directorate of Extension inherited its farm advisory services and vocational trainings in 1977 with few Subject Matter Specialists at the University headquarter. Since then, the Directorate has grown into full-fledged into University Headquarter with twenty three Krishi Vigyan Kendras and three Krishi Gyan Kendra located in twenty two districts of Eastern Uttar Pradesh. Directorate of Extension is the hub of whole extension activities of the region. All extension programmes of the University are planned, organized and monitored by the Directorate in close collaboration with different departments of the constituent colleges of the University, different departments of the State Govt., ICAR and other extension agencies.

The Directorate of Extension Education shares the responsibility for planning, implementation and coordination of various extension education programmes of all the departments of six constituent colleges and research stations in close collaboration with the State Departments of Agriculture, Animal

Husbandry, Fisheries and other concerned departments and institutions. It conducts a large number of trainings for farmers, livestock keepers, farm women, rural youth, etc. at main campus and at its twenty three Krishi Vigyan Kendras (Farm Science Centres) at Bahraich, Ballia, Basti, Mau, Varanasi, Siddharthnagar, Gorakhpur, Maharajganj, Faizabad, Sonbhadra, Azamgarh, Barabanki, Jaunpur, Chandauli, Balrampur, Ambedkar Nagar, Sant Kabir Nagar, Amethi, Gonda and Sultanpur with the vision of self-reliant, healthy rural populous with rich agricultural knowledge and good marketing intelligence. Directorate also blessed with three Krishi Gyan Kendra financial support of State Government at Amethi, Ghazipur and Deoria district. Agricultural Technology Information Centre is also established at the entrance of university headquarter serving as single window service to the farmers.

The main aim of Directorate is to transfer the well proven/tested technology to the farmers (males and females), livestock owners, rural youth, field staff of State Govt. and other personnel engaged in developmental and professional



agencies in the sphere of agriculture, animal husbandry, horticulture, home agencies and other allied areas through its well planned, skill-oriented and need based programmes. An excellent collaboration/linkage is maintained with the State Govt. Department of Agriculture, Horticulture, Animal Husbandry, Social Welfare (Woman and Child Development) etc. and non-government organization so that technologies may reach to the beneficiaries at their door steps. The approach is educational with major emphasis on whole farm and family development. Since its inception the university has conceived and implemented a unique system of extension education for transfer of technology to its ultimate users. The Directorate acts as bridge between the research scientist and the farmers and other beneficiaries to provide feedback, therefore, the role of the Directorate is of two fold, i.e., transfer of technologies from scientists to the ultimate clients through field functionaries and to find out the problems of the field to be passed on to various research departments for working on a solution to the problem.

Due to the arduous hard work during the past forty one years of the University, the State has traversed new paths of progress in the area of farming and it has become almost self sufficient on the food front. Harvests have become plentiful and the socio-economic status of the farming community has undergone a sea change. During its legendary journey, the University's extension model in front line areas has been recognized nationally and internationally.

## Agriculture Technology Information Centre (ATIC)

Agricultural Technology Information Centre

### Details of activities conducted at ATIC

	Information category	No. of farmers benefitted
1.	Kisan Call Centre / other Phone calls from farmers	595
2.	Visited Farmers	2757
3.	Published material sold	156

is a single window delivery system of the University from where the farmers can purchase the required inputs and also get latest technology related to different aspects of agriculture. Scientists/Subject Matter Specialists of different constituent colleges also provides solution of farmers' problem at ATIC with the objectives:

- Providing single window delivery system of all agricultural inputs and technology to the farmers.
- Diagnostic services related to agriculture and allied fields.
- Seeking feedback from farmers.
- Help Line Service to the farmers.

The University is implementing major projects/programmes in order to facilitate strong linkages with the farmers directly and also through various line departments and agencies involved in transfer of technology task. The Director Extension is the Chief Executive of the Directorate. He is assisted by one Additional Director, One Senior Extension officer, One Associate Director, three Extension Specialists, nine SMSs and supporting staff. The Directorate is disseminating the technically feasible, economically viable and socially acceptable agricultural technologies among the rural people and stake holders in the best possible manner. It is serving through Farm Advisory, Information and communication Services, Training and Agricultural Technology Information Centre (ATIC) as given here under;

### Extension0 Planning and Execution:

- KVKs selects five villages, one each named as



## Training organized at Directorate of Extension (HRD)

S.No.	Information category	Course	Participants
1.	Farmers Training	5	190
2.	HRD Training (KVKs scientists)	3	67
3.	National Training	1	80
4.	Farmers Exposure Visits	1	23



Hon'ble VC flagging off to the group of farmers for Exposure Visit



University Scientists giving technical lecture to the participants

## Technology Products Provided

S.No.	Product	Beneficiaries	Value (Rs)
1.	Books sold	86	2112
2.	Technical Inventory member	105	23100
3.	Diary/Tech. Bulletin	800	120000
4.	Tech. Product Vermi -Compost (Kg)	375	1875

'Adrash Krishi Gaon' in five blocks (One village in each block) have been selected in each district to carry out all the extension activities keeping in view saturating whole villages with latest technologies in a holistic approach. To make the system more effective and viable, mobile numbers of selected farmers of front line demonstration (FLD) and on farm trials (OFT) programmes have been kept for record purposes. Similarly, Vocational Trainings schedule has been uploaded on

university website for public domain so that needy farmers or youths may get acquaint about the programme to be organized in near future.

- All the Subject matter specialists (SMS) /Programme Assistants (PA) visited the selected village on every Thursday and Friday of a week and conducted various extension activities for speedy technological dissemination.



- Farm Production is one of the major activities of the KVK. Therefore, Farm Management Committee (FMC) on each KVK has been constituted to advise and monitor farm activities and provide suggestion to improve the productivity/revolving fund of the KVK farms. Farm Management Committee includes, Programme Coordinator as chairman, all subject matter specialists as member and farm manager as member secretary.

### Krishi Vigyan Kendra

Initially, Directorate had six Farm Science Centres (KVKs) in Bahraich (1985), Basti (1985), Ballia, (1989), Mau (1989), Varanasi (1990) and Siddharthnagar (transferred from a NGO in 2002) district with the financial assistance of ICAR, New Delhi. In the year 2004, all the four re-mandated KVKs Gorakhpur, Maharajganj, Sonbhadra and Faizabad running under NATP were converted into full-fledged KVKs and in further years, seven more KVKs have been added in the year 2005, 2009 and 2010 namely, Barabanki, Azamgarh, Jaunpur, Chandauli, Balrampur, Sant Kabirnagar and Ambedkarnagar.

Recently, the Government of India has approved for setting up of 109 more KVKs in the

country, out of which University got 8 more KVKs during the 12th Plan. The location wise details of districts under jurisdiction of this Directorate for setting up of new KVKs are given below:

This is a great achievement for us and farming community of eastern Uttar Pradesh that more KVKs added to the Directorate. Concerted efforts were taken to functionalize these newly KVKs and presently, Krishi Vigyan Kendra of Amethi, Gonda II, Bahraich II, Sultanpur II and Azamgarh II has been functional with few Scientists and officiating staffs.

The KVK is an innovative institution for transfer of technology, which has been launched with the aim to reduce the time gap between the generation of technology and its adoption. Therefore, according to need and importance, farmers and farm women are being trained with the latest technical know-how through seasonal and vocational trainings. Under the farm advisory services, front line demonstrations and technological trials for testing in newer areas are being organized at farmers' field. These institutions also provide farm information services through literature, exhibition, training, camps, radio and television talks as well as print and electronic media.

Name of Districts approved till XI Plan for setting up of KVKs in XII Plan	Name of new Districts created in XII Plan for setting up of KVKs	Name of larger Districts where additional KVKs are to be set up in XII Plan	Total
Shravasti	Amethi	Azamgarh Jaunpur Sultanpur Bahraich Gonda Ghazipur	08





## Mandate

The mandate of KVK is Technology Assessment and Demonstration for its Application and Capacity Development. To implement the mandate effectively, the following activities are envisaged for each KVK.

- a. On-farm testing to assess the location specificity of agricultural technologies under various farming systems.
- b. Frontline demonstrations to establish production potential of technologies on the farmers' fields.
- c. Capacity development of farmers and extension personnel to update their knowledge and skills on modern agricultural technologies.
- d. To work as Knowledge and Resource Centre of agricultural technologies for supporting initiatives of public, private and voluntary sector in improving the agricultural economy of the district.
- e. Provide farm advisories using ICT and other media means on varied subjects of interest to farmers.

## Summarized View of KVKs Activities during last year (2017-18)

### 1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	1929	39163	9153	48316
Rural youths	244	4332	1060	5392
Extension functionaries	182	3654	306	3960
Sponsored Training	89	3817	535	4352
Vocational Training	75	1200	339	1539
<b>Total</b>	<b>2519</b>	<b>52166</b>	<b>11393</b>	<b>63559</b>

### 2. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
<b>Technology Assessed</b>			
Crops	86	112	405
Livestock	14	14	74
Various enterprises	4	4	18
<b>Grand Total</b>	<b>104</b>	<b>130</b>	<b>497</b>



### 3. Frontline Demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	451	145.00	-
Pulses	1445	433.60	-
Cereals	1525	417.80	-
Farm implements	207	92.30	-
Hybrid crops	63	08.60	-
<b>Total</b>	<b>3691</b>	<b>1097.30</b>	<b>-</b>
Livestock & Fisheries	127	-	372
Other enterprises (Mushroom Production, Value addition, Kitchen Garden, Drudgery reduction, Farm Machinery)	90	-	80
<b>Total</b>	<b>217</b>	<b>-</b>	<b>452</b>
<b>Grand Total</b>	<b>3908</b>	<b>1097.30</b>	<b>452</b>

### 4. Mobile Advisory Services

Name of KVKs	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	Total
Ambedkar Nagar, Azamgarh, Bahraich, Ballia, Barabanki, Basti, Chandauli, Faizabad, Gorakhpur, Sonbhadra	Text only	321	97	21	29	93	12	573
	Voice only	1574	469	50	28	89	49	2259
	Voice & Text both	0	0	0	0	0	0	0
	<b>Total Messages</b>	<b>1895</b>	<b>566</b>	<b>71</b>	<b>57</b>	<b>182</b>	<b>61</b>	<b>2832</b>
	<b>Total farmers Benefitted</b>	<b>4753</b>	<b>714</b>	<b>145</b>	<b>240</b>	<b>320</b>	<b>450</b>	<b>6622</b>



## 5. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	11100	305081
Other extension activities	4475	-
<b>Total</b>	<b>15575</b>	<b>305081</b>

## 6. Soil, water & plant Analysis

	Samples	No. of Beneficiaries	Value Rs.
Soil	8088	10006	4230.00
Plant	150	150	2500.00
<b>Total</b>	<b>8238</b>	<b>10156</b>	<b>6730.00</b>

## 7. HRD and Publications

Sr. No.	Category	Number
1	Workshops	28
2	Conferences	16
3	Meetings	28
4	Trainings for KVK officials	18
5	Visits of KVK officials	26
6	Book published	13
7	Training Manual	11
8	Book chapters	22
9	Research papers	90
10	Lead papers	03
11	Seminar papers	29
12	Extension folder	28
13	Proceedings	04
14	Award & recognition	17
15	Ongoing research projects	07



## 8. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	2855.78	7214041
Planting material (No.)	448499	483003
Bio-Products (kg)	81506.35	24872
Livestock Production (No.)	32	113750

## Celebration of Important Days “World Soil Day”

The “World Soil Day” was inaugurated by the Hon’ble Minister for Agriculture, Agriculture Education and Research Govt. of U.P. Sri Surya Pratap Shahi at KVK Haidergarh, Barabanki on 5<sup>th</sup> December, 2017. The all 17 KVKs were celebrated



the importance of soil and distributed the soil health card on occasion of “World Soil Day” on 5<sup>th</sup> of December, 2017.

## Agriculture Education Day

Agriculture Education day was celebrated on 3<sup>rd</sup> December, 2017.

## Kisan Samman Diwash

Kisan Samman Diwas was organized on 23 December, 2017

## State Level Kisan Mela and Gosthi :

State level kisan mela and gosthi was organized on 05-06 April 2018. Sri Surya Pratap Sahi Ji hon’ble minister of agriculture, agriculture research and education Government of Uttar Pradesh was the chief guest of the inaugural function. In this mela more than 45-50 thousand of



farmers have participated and got benefitted. This is for the first time more than 15 ICAR institutions with in the state and out of state have participated. More than 100 stalls of various national and international agencies related to agriculture, seed, farm implements, chemicals, fertilizers etc have displayed their exhibition stall in the kisan mela.



Exhibition stall of line departments various government departments have also exhibited their stalls. Next day, on the occasion of

closing ceremony Sri Ranvendra Singh ji Hon’ble State minister of agriculture, agriculture research and education was the chief guest.





## New Krishi Vigyan Kendra:

On the occasion of national conference of Krishi Vigyan Kendra in India on 18-20 May 2017 Sri Narendra Modi Ji, Hon'ble Prime minister of our country has announced to established 20 Krishi vigyan Kendra in a view to increase and double the farmers income by 2022, of which eight KVK are proposed to establish in eastern Uttar Pradesh.



In continuation to the above programme a new KVK was established at Kathaura in Amethi District followed by mankapur in Gonda and Nanpara in Bahraich district. Smt. Smriti Zubin Irani ji, Hon'ble Union minister of Textile, Information and Broadcasting, Government of India under the able chairmanship of Sri

Surya Pratap Sahi Ji, hon'ble minister of agriculture, agriculture research and education Government of Uttar Pradesh was the chief guest of the Bhumi Pujan ceremony of KVK Kathaura, Amethi, Uttar Pradesh on 13 May, 2018. Sri Surya Pratap Sahi Ji, hon'ble minister of agriculture, agriculture research and education Government of Uttar Pradesh was the chief guest of the Bhumi Pujan ceremony of KVK Mankapur, in Gonda and KVK Nanpara in Bahraich district of Uttar Pradesh on 19<sup>th</sup> July and 20<sup>th</sup> July 2018 respectively. besides this five more



Krishi vigyan Kendra at barasin in district Sultanpur, bhagwargarh in distt, Azamgarh,

akushpur in distt Ghazipur, kerakat in jaunpr distt and Shravasti districts have also started.

## Face lift of the KVKs:

In order to give them an enthusiastic working culture and presentable ambience of the KVKs all heads of KVKs have advised to make a face lift of their respective centers.



As a matter of fact the union ministers have expressed their willingness to visit the KVKs in the respective constituencies of their electoral areas. Our KVKs are ready to welcome them on

board with a total changed working culture and atmosphere.

## Instructional Farm of Directorate of Extension

To demonstrate crop cafeteria of university and other institutions varieties, the directorate of extension maintains an instructional farm during Kharif 2018. Varieties of rice like NDR 3112, NDR 2064, NDR 2065, NDR 97, MTU 7029, Swarna Sub-1 and promising variety released from PAU Ludhiana as PR 126, PR 121 and PR 114 are planted. Various establishment methods of paddy viz. line sowing, system of rice intensification (SRI), sowing by drum seeder and traditional methods of planting (viz. transplanting, broadcasting and SANDA ie. double transplanting method) were also established at Instructional farm





which is being observed commonly practiced by the farmers on a larger scale of eastern Uttar Pradesh.

## Tree Plantation

On the occasion of 15<sup>th</sup> August 2018 (72 independence day) of our country, the directorate of Extension has participated and joins the hand to gather to plant in tree in the university campus and at the KVKs of our university. On the day more than 8000 saplings of teak plant has been planted in the university campus. At the same time all the KVKs have planted more than 3000 tree and set target of planting 1000 tree at each centre till 31 August.



## Training programme

A one day farmers training programme on safe and judicious use of pesticides and integrated pest management (IPM) was organized in the auditorium hall of agribusiness management in the university campus on 18 August 2018. Prof. J. S. Sandhu, Hon'ble VC Sir was the chief guest, Dr. Sain Das, Consultant, HIL, Dr. Ram Prakash, Advisor, HIL, and Er. A. K. Singh, former SGM, NSC, were the guests of



honor, Dr. A. P. Rao, Director Extension, Chaired the technical session on the occasion, Dr. Ravi Prakash Maurya was the training organizer.

The training program was financially supported by Hindustan Insecticides Limited (a Unit of Govt. of India). Dean, directors and senior officials of all the college of this university have participated in this training program. Besides, post graduate, Ph.D. students and more than 250 farmers of district Amethi, Sultanpur, Barabanki, Gonda and Faizabad have participated in this training programme.

## One day Workshop:

A one day workshop on Role of KVKs in increasing farmer's income was organized in the high tech hall of VIP Guest house in the university campus on 18 August 2018.



Prof. J. S. Sandhu, Hon'ble VC Sir was the chief guest, Dr. Jai Kumar Singh, vice-president, Dayal group was guests of honor, Dr. A. P. Rao, Director Extension, chaired the session. This workshop was one of its kind which has received participation of heads of all KVK along with all SMS and farm managers of all

the KVKs for the first time.

In this workshop different methods and need based meaningful modules have



been discussed which can help and promote the farmers income were discussed in detailed. Modifications in the modules have been suggested before implementing them in the field level for testing.

## Projects being run through KVKs

### In situ management of Crop Residue (CRM)

- The project is being Started in sixty Krishi Vigyan kendra of Punjab, Haryana, Uttar



Pradesh and National Capital Territory (NCT of Delhi) states of India.



- Operating at four KVKs namely Azamgarh, Jaunpur, Chandauli and Varanasi in eastern Uttar Pradesh.
- All the centres have ensured their participation in training programme at PAU, Ludhiana (Punjab).
- Efforts for purchasing equipments through e-tendering before 10 august got failed due to appearing only one qualified bid.
- However, the process of e-tendering has been re initiated and is in final stage.
- Funded by Government of India

#### **Cereal Systems Initiatives for South Asia (CSISA)**

- Operating in six KVKs at Gorakhpur, Mahrajganj, Chandauli, Ballia, Mau and Siddharth nagar.
- CSISA and its KVK partners strive to intensify cereal-based cropping systems by facilitating the adoption of better agronomic management practices.
- Participating KVKs have got trained twice at KVK Buxur and at NDUAT Kumarganj.
- Scientists trained to use an Open Data Kit (ODK), an Android-based mobile data collection tool that increases the speed, efficiency and quality of data collection in the field.
- Survey works of on-going crops is in progress
- Funded by CIMMYT, with IFPRI and IRRI

#### **Cluster demonstration (on pulses & oilseeds)**

- Funded by ICAR under NFSM
- With objective to produce quality seeds and fast spread of newer varieties among farmers.
- Demonstration of crop organized in cluster approach
- Varieties to be demonstrated will not be older than 10 years.
- Out of total, demonstration on pigeon pea organized at 12 KVKs, chick pea and lentil on 10 KVKs.



- Among oilseeds, mustard demonstration on 07 KVKs, sesamum on 03 KVKs and toria on 02 KVKs
- All 17 KVKs organized CFLDs

#### **Tribal Sub-Plan (TSP)**

- Operating at KVK Balrampur and Sonbhadra.
- Considerable amount of fund is being mobilized for organizing training programme for the benefit of the tribal community.

#### **National Innovations on Climate Resilient Agriculture (NICRA)**

- Projects is being funded by Central Research Institute for Dry-Land Agriculture (CRIDA), Hyderabad
- Operational at KVK Mahrajganj, Gorakhpur, Bahraich and Sonbhadra.
- The project activities have been geared up.





- Four young professional / SRF have been appointed.

### **ASPIRATIONAL DISTRICT PROJECT:**

Out of total 115 remotest districts of 28 states in India, Six district namely Balrampur, Bahraich, Chandauli, Sonbhadra, Siddhrth Nagar and Shravasti of Eastern Uttar Pradesh Have been identified with the aim to transform the remotest of the remote districts into the developed districts and bring them into the race of



economic development. There are three core aspects which frame the structure of this programme

- Convergence (of Central and State Schemes),
- Collaboration (of Central, State-level 'Prabhari' officers & District Collectors), and
- Creating Competitive atmosphere among districts.

It is indubitable that the Transformation of Aspirational Districts initiative envisioned by the Hon'ble Prime Minister is a giant leap towards transforming India for the New India 2022 vision.