

# ANNUAL REPORT 2020



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भाकृअनुप-कृषि प्रौद्योगिकी अनुप्रयोग अनुसंधान संस्थान (अटारी), कानपुर  
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INSTITUTE (ATARI), KANPUR

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## EXECUTIVE SUMMARY

### Training Programmes

KVKs organized 6666 training courses with the participation of 146052 farmers, farm women, rural youths and extension functionaries. The farmers and farm women were represented in a proportion of 78.62% and 21.38% respectively. In all 113635 farmers and farm women and 18226 rural youths were provided skill training in different enterprises. Similarly, 14191 extension personnel were also trained in different areas.

### Frontline Demonstrations

A total of 20502 frontline demonstrations were organized out of which on crops (15252), horticulture (1385), farm implements (1001), livestock strains (1607 demo on 5816 units) and other enterprises (1194). Total area covered was 6754.32.

### Technology Assessment

Total 783 technologies were assessed and 3922 trials conducted under three categories namely, crop (638), livestock (84) and other enterprises (61).

### Extension Programmes

A large number of extension activities were organized by KVKs of Uttar Pradesh. In all 45157 extension activities with 10.84 lakh beneficiaries, 52168 mass communication extension activities, 155135 mobile advisories through text and voice for 64.87 lakh farmers, 51775 soil samples covering 83246 farmers, 3193 technology week celebrations with 1.07 lakh beneficiaries, 1926 publications by KVKs and 34 by ATARI, 167 HRD activities by KVK and 5 by ATARI, 119 trainings and demonstrations under rain water harvesting & micro irrigation system with 21113 beneficiaries have been reported.

### Seed Production

Seed production is one of the important activity of KVKs. They undertake quality seed production which may play a greater role in enhancing production and productivity of different crops. During the year 2020, KVKs of Uttar Pradesh produced 27715.83 q seed of cereals (13181.05 q), oilseeds (1380.80 q), pulses (2487.35 q), vegetables (75.69 q), commercial crops (10288.50 q), spices (10.01 q) and fodder (292.44 q).

### Planting Material Production

The planting material/sapling production of vegetables, fruits, ornamentals, forestry, medicinal & fodder plants developed by KVKs. During this year KVKs produced 51.37 lakh planting materials including vegetable seedlings (38.82

lakh), fruit saplings (3.98 lakh) & ornamental (0.81 lakh), medicinal & aromatic (0.12 lakh), forestry (0.28 lakh) and fodder plants (2.20 lakh).

### Bio-products

The KVKs of Uttar Pradesh produced 140947.65 kg of bio-products. It included vermi compost (93091 kg) and NADEP compost (38560 kg). Besides, KVKs also produced 1681 kg bio pesticides, 90 kg bio-fungicide and 1192.65 kg other bio-products.

### Livestock & Fingerling Production

KVKs of Uttar Pradesh produced 72.58 lakh livestock strains including 175 dairy animals including cows, buffaloes, calves, goat etc by 17 KVKs; poultry (2852) including broilers, layers, duals, ducks etc by 16 KVKs; piglets (12) and fisheries (72.55 lakh) by 9 KVKs respectively.

### Hrd and Publications

ICAR-ATARI, Kanpur organized 4 training programmes and 48 workshop/meetings at ATARI level. Most of the programmes were organised by virtual mode. A total 30 publications have been developed by the ICAR-ATARI, Kanpur including research papers (15), books (1), Technical reports (4), Quarterly magazine (1), news letters (4), popular articles (4) and abstracts (1).

KVKs of different SAUs have organised 167 programmes for 2037 participants. Such programmes were organized at the University level to provide technological backstopping in frontier areas of the technologies. In all 1926 publications were developed by all KVKs of Uttar Pradesh. Publications such as 43 books, 106 training manual, 99 book chapter, 335 research papers, 100 seminar papers, 198 technical bulletins, 693 technical reports and 362 other publications including newsletters, abstracts etc has been published during the period under report.

### Infrastructure Facilities

Most of KVKs are having their own infrastructure facilities, in Uttar Pradesh availability of infrastructure are Administrative Building (67), Farmers Hostel (59), Staff Quarters (59), Soil Testing Labs (44), Soil Testing Kits (104), IFS (26), Demo Units funded by ICAR (211), Demo Units funded by others (56), e-connectivity (26), Technology Information Unit (23) and Four wheeler (68), Two wheeler (59), Tractor (66).

### Staff Position

ICAR-ATARI, Kanpur have filled up 12 staff personnel out of total 20 vacancies. Out of 6 sanctioned positions in

scientific cadre, 4 positions (1 PS, 3 Sr. Scientist) are filled up and 2 Jr. Scientist positions are lying vacant. Out of 9 positions in administrative cadre, 5 were filled up and 4 positions (Jr. Account Officer, AF & AO, Assistant & LDC) are lying vacant.

Out of total sanctioned post (1392), KVVKs have filled 904 posts including Head (68), Scientist (328), Programme Asstt. (160), Administrative (122), Auxiliary (123), Supporting (114). Filled positions are 65.73% and vacant post lying as 34.27%.

### **Status of Budget**

During the financial year 2019-20, an amount of Rs. 10882.52 lakh was utilized/released against the allotted budget of Rs. 11592.19 lakh.

### **Projects and Special Programmes**

This institute handling different four types of project such as (i) ICAR funded projects (ii) Government of India funded projects (iii) International funded projects (iv) Institute funded projects. Also involve to run Special Programmes

as per ICAR guidelines such as-JSA (Jal Shakti Abhiyan), PKVY (Paramparagat Krishi Vikas Yojna Scheme), Seed Hub Programme, CRM (Crop Residue Management), Aspirational Districts Scheme, NARI (Nutrition-sensitive Agricultural Resources and Innovation)/VATICA (Value Addition and Technology Incubation Center in Agriculture), ASCI (Agriculture Skill Council of India 37 KVK), DAMU (District Agro Meteorological Unit Project), SBA (Swachhh Bharat Abhiyaan) and SCSP (Schedule Caste Sub Plan), TSP (Tribal Sub Plan), KSHMATA (Knowledge Systems and Home Based Agricultural Management in Tribal Areas) ARYA (Attracting and Retaining of Youth in Agriculture), NICRA (National Innovations on Climate Resilient Agriculture), FF (Farmer FIRST), CSISA (Cereal System Initiative for South Asia), MGMG (Mera Gaon Mera Gaurav), SHP (Seed Hub Programme), ADS (Aspirational Districts Scheme), CFLD (Cluster Frontline Demonstrations on Pulses & Oilseeds), NASF-ICT (ICT based extension strategies for nutrition sensitive agriculture), IFS (Integrated Farming System) and NEMA (New Extension Methodologies & Approaches).

## कार्यकारी सारांश

### प्रशिक्षण कार्यक्रम

कृषि विज्ञान केन्द्रों द्वारा 6666 प्रशिक्षण सत्रों का आयोजन कर 146052 कृषकों जिसमें ग्रामीण युवा, महिला कृषक एवं कृषकों की सहभागिता रही। सहभागियों में 78.62 प्रतिशत कृषक तथा 21.38 प्रतिशत कृषक महिलाओं की भागीदारी रही, कुल 113635 कृषक तथा महिला कृषक 18226 तथा ग्रामीण युवाओं को विभिन्न कृषि व्यवसाय में क्षमता विकास में प्रशिक्षित किया साथ ही 14191 प्रसार कार्यकर्ताओं को विभिन्न क्षेत्रों में प्रशिक्षण दिया गया।

### प्रथम पंक्ति प्रदर्शन

कुल 20502 प्रथम पंक्ति प्रदर्शनों का आयोजन किया गया जिसमें 15252 फसल विज्ञान 1385 उद्यान, 1607 पशुधन एवं 1001 प्रक्षेत्र मशीनीकरण/यंत्र एवं 1194 प्रदर्शन अन्य विषयों के अन्तर्गत आयोजित किये गये।

### तकनीकी परीक्षण

इस प्रखण्ड में 3922 कृषकों के यहाँ 783 तकनीकी का परीक्षण किया गया। कृषि विज्ञान केन्द्रों ने 13 समस्याओं पर आधारित प्रक्षेत्र परीक्षण 638 फसलों से सम्बन्धित तकनीकी परीक्षण 3018, कृषकों के खेतों पर किये गये जिसमें खाद्यान्न, दलहनी, तिलहनी, सब्जी, फल एवं नकदी फसलें विशेष रूप से थीं। 84 तकनीकी पशुपालन सम्बन्धी समस्याओं पर परीक्षण किये गये जिसमें 594 लाभार्थी चुने गये। 61 तकनीकी जो व्यवसाय से सम्बन्धित थीं 310 कृषकों के यहाँ तकनीकी का परीक्षण किया गया।

### प्रसार कार्यक्रम

उत्तर प्रदेश के विभिन्न कृषि विज्ञान केन्द्रों के द्वारा बड़ी संख्या में प्रसार कार्यक्रमों का आयोजन किया गया जिनकी संख्या 45157 है। इन कार्यक्रमों में 10.84 लाख की संख्या में कृषक लाभार्थी तथा 30241 प्रसार कार्यकर्ताओं को प्रशिक्षित किया गया। कुल 52168 संचार सेवा में कार्यक्रम आयोजित हुए जिसमें रेडियोकर्ता, फिल्म प्रदर्शन, न्यूजपेपर कवरेज आदि गतिविधियाँ प्रमुख है।

मोबाइल के माध्यम से परामर्शी सेवा में 127788 संदेश तथा 22518 वायस संदेश भेजे गये जिससे 64.87 लाख कृषक लाभान्वित हुए। इस प्रकार की सेवा से दूर-दराज के किसानों

तक लाभ पहुँचाया गया। कृषि विज्ञान केन्द्रों द्वारा 51775 मृदा के नमूनों का परीक्षण कर 83246 किसानों को लाभ पहुँचाया गया, 3193 गतिविधियाँ तकनीकी सप्ताह के अन्तर्गत आयोजित कर 106566 कृषकों को लाभान्वित किया गया।

### बीज उत्पादन

कृषि विज्ञान केन्द्रों का बीज उत्पादन एक प्रमुख कार्यक्रम है। विभिन्न फसलों के उत्पादन एवं उत्पादन क्षमता बढ़ाने में अच्छे बीजों की महत्वपूर्ण भूमिका है। वर्ष 2020 में उत्तर प्रदेश के कृषि विज्ञान केन्द्रों द्वारा 27715.83 कुन्तल बीज उत्पादित किया जिसमें खाद्यान्न (13181.05 कुन्तल), तिलहनी फसलों का (1380.80 कुन्तल), दलहन का (2487.35 कुन्तल), सब्जियों का (75.69 कुन्तल), व्यवसायिक फसलों का (10288.50 कुन्तल), मसाले का (10.01 कुन्तल), तथा चारा वाली फसलों का (292.44 कुन्तल), उत्पादित किया गया।

### प्लांटिंग मैटेरियल उत्पादन

सब्जी पौध, फल पौध, साज-सज्जा, वन प्रजाति, औषधी एवं अन्य पौध तैयार की गई। वर्ष 2020 में 51.37 लाख की संख्या में प्लांटिंग मैटेरियल तैयार हुआ जिसमें सब्जी पौध 38.82 लाख, फल पौध 3.98 लाख साज सज्जा 0.81 लाख, वन प्रजाति 0.28 लाख, सगन्ध एवं औषधीय 0.12 लाख, एवं चारा की 2.20 लाख पौध विकसित की गई।

### जैविक उत्पादन

कृषि विज्ञान केन्द्रों द्वारा 72.58 लाख जैविक उत्पाद जिसमें दुधारु पशु बकरी, सुअर एवं मत्स्य बीज तैयार किये गये।

### मानव संसाधन विकास कार्यक्रम

इस कार्यक्रम के अन्तर्गत विभिन्न कृषि विश्वविद्यालय के कृषि विज्ञान केन्द्रों द्वारा 167 कार्यक्रम आयोजित कर 2037 वैज्ञानिकों को विश्वविद्यालय स्तर पर प्रशिक्षण देकर ज्ञानवर्धन आधुनिक नवीन तकनीक से अवगत कराया गया। इस क्रम में अटारी कानपुर द्वारा 3 प्रशिक्षण आयोजित कर साथ ही 16 कार्यशालाओं के माध्यम से 86 कृषि विज्ञान केन्द्रों के वैज्ञानिकों को प्रशिक्षित किया गया।



## प्रकाशन

वर्ष 2020 में कुल 1926 की संख्या में प्रकाशन विभिन्न कृषि विज्ञान केन्द्रों द्वारा किया गया जिसमें शोधपत्र 335, तकनीकी बुलेटिन 198, तकनीकी रिपोर्ट 693, पुस्तक चौप्टर (99), सेमिनार पेपर 100 और अन्य प्रकाशन 300। भाकृअनुप-अटारी कानपुर द्वारा कुल 30 प्रकाशन प्रकाशित कराये गये। रिसर्च पेपर 15, पुस्तक-1, तकनीकी रिपोर्ट-4, मैगजीन-1, न्यूजलेटर-4, पॉपुलर आर्टिकल-4, अब्स्ट्रक्ट-1 प्रकाशित किये गये।

## इंफ्रास्ट्रक्चर की स्थिति

उत्तर प्रदेश के अधिकांश कृषि विज्ञान केन्द्रों के पास अवस्थापना सुविधाएँ उपलब्ध है। इन सुविधाओं में प्रशासनिक भवन 67, कृषक छात्रावास 59 के.वी.के., स्टाफ आवास 59 के.वी.के, मृदा परिक्षण प्रयोगशाला 44 के.वी.के, प्रदर्शन इकाई 211 जीप 68, मोटर साइकिल 59, ट्रैक्टर 66, की संख्या में कृषि विज्ञान केन्द्रों के पास उपलब्ध है।

## स्टाफ की स्थिति

भाकृअनुप-अटारी, कानपुर में आर.एम.पी. सहित कुल 8 पद रिक्त है जिसमें, वैज्ञानिक-2, प्रशासनिक-4, स्पोर्टिंग-f तथा कृषि विज्ञान केन्द्रों में स्वीकृत पद 1392 में से 477 पद रिक्त है।

## बजट की स्थिति

वित्तीय वर्ष 2019-20 में रुपये 10882.52 लाख की धनराशि अवमुक्त/उपभोग की गई जो कुल उपलब्ध बजट 11592.19 लाख के सापेक्ष उपयोग की गई।

## विशेष कार्यक्रम

भाकृअनुप-अटारी, कानपुर द्वारा चार तरह के परियोजनाएं चलाये जा रहे है जैसे आयसीएआर फंडेड प्रोजेक्ट्स, गवर्नमेंट ऑफ इंडिया फंडेड प्रोजेक्ट्स, इंटरनेशनल फंडेड प्रोजेक्ट्स और इंस्टिट्यूट फंडेड प्रोजेक्ट्स शामिल है। इसके अलावा भाकृअनुप-अटारी, कानपुर द्वारा विशेष कार्यक्रम आयोजित किये जा रहे है जैसे जल शक्ति अभियान, पीकेवीवाई, सीड हब प्रोग्राम, सीआरएम, अस्पिरेशनल डिस्ट्रिक्ट योजना, नारी, वाटिका, अस्कि, दामू, टीएसपी, क्षमता, फार्मर फर्स्ट, सीसा, एससीएसपी, निकरा, एमजीएमजी, स्वच्छ भारत अभियान, आर्या, सीएफडी-पल्सेस और ऑइल सीड, नास्फ-आईसीटी, आईएसएफ और नीमा।

## INTRODUCTION & ACHIEVEMENTS AT A GLANCE

### 1.1 Introduction

The Indian Council of Agricultural Research (ICAR) is an autonomous organisation under the Department of Agricultural Research & Education (DARE), Ministry of Agriculture and Farmers Welfare, Government of India. Agricultural Extension Division is one of the Subject Matter Divisions where the major activities are of Assessment and Demonstration of Technology/Products through a network of 722 Krishi Vigyan Kendras (KVKs).

ICAR-Agricultural Technology Application Research Institute (ATARI), Kanpur is one of the 11 ICAR-ATARIs formerly known as Zonal Project Directorates (ZPDs) functioning under Division of Agricultural Extension. ICAR has established a vast network of KVKs all over the country under the administrative control of various ICAR institutes, State Agricultural Universities (SAUs), State Department of Agriculture, Non-Governmental Organisations (NGOs) and other institutes for implementing the central governmental projects/schemes. In the Zone, 3 Agricultural Technology Information Centres (ATICs) are working for delivering the “Single Window” delivery system. Since, Zonal Project Directorate has been elevated as ICAR-Agricultural Technology Application Research Institute (ATARI).

The major functions of the ICAR-ATARI, Kanpur are:

- Planning, monitoring and reviewing of KVK activities in the zone; to identify, prioritize and implement various activities related to technology integration and dissemination
- Coordinating with SAUs, ICAR institutes/organizations, line departments and voluntary organizations in the zone for implementation of KVK mandated activities and
- Facilitating financial and infrastructural support to KVKs for effective functioning.

### KVK and its mandate

In Zone-III, 87 KVKs have been established by the ICAR in Uttar Pradesh out of 75 districts.

### 1.2 KVKs at A Glance

Table 1.2: KVKs in Uttar Pradesh at a Glance

No. of Districts in U.P.	No. of KVKs under				Total KVKs
	SAU	ICAR	NGO	Other (Educational)	
75	65	7	13	3	88

The mandate of KVK is - Technology Assessment and Demonstration for its Application and Capacity Development (TADA-CD).

- Provide farm advisories using ICT and other media means on varied subjects of interest to farmers.
- To produce quality technological products (seed, planting material, bio-agents, livestock) and make it available to farmers, organize frontline extension activities, identify and document selected farm innovations and converge with ongoing schemes and programmes within the mandate of KVK.

### Projects and Special programmes

This institute handling different four types of project such as (i) ICAR funded projects (ii) Government of India funded projects (iii) International funded projects (iv) Institute funded projects. Also involve to run Special Programmes as per ICAR guidelines such as –JSA (Jal Shakti Abhiyan), PKVY (Paramparagat Krishi Vikas Yojna Scheme), Seed Hub Programme, CRM (Crop Residue Management), Aspirational Districts Scheme, NARI (Nutrition- sensitive Agricultural Resources and Innovation)/VATICA (Value Addition and Technology Incubation Center in Agriculture), ASCI (Agriculture Skill Council of India 37 KVK), DAMU (District Agro Meteorological Unit Project), Sankalp Se Siddhi, SBA (Swachchh Bharat Abhiyaan) and SCSP (Schedule Caste Sub Plan), TSP (Tribal Sub Plan), KSHMATA (Knowledge Systems and Home Based Agricultural Management in Tribal Areas) ARYA (Attracting and Retaining of youths in Agriculture), NICRA (National Innovations on Climate Resilient Agriculture), FF (Farmer FIRST), NIFTD (National Innovations on Fodder Technology Demonstration), CSISA (Cereal System Initiative for South Asia), MGMG (Mera Gaon Mera Gaurav), SHP (Seed Hub Programme), ADS (Aspirational Districts Scheme), CFLD (Cluster Frontline Demonstrations on Pulses & Oilseeds), NASF-ICT (ICT based extension strategies for nutrition sensitive agriculture), IFS (Integrated Farming System) and NEMA (New Extension Methodologies & Approaches).

**Table 1.3: Host institution wise list of KVKs with their establishment year**

S.N.	Name of the KVK	Year of establishment	S.No.	Name of the KVK	Year of establishment
<b>NDUA&amp;T, Faizabad</b>					
1	Bahraich	1983	14	Chandauli	2005
2	Ballia	1989	15	Jaunpur-I	2005
3	Basti	1984	16	SantKabir Nagar	2009
4	Mau	1989	17	Ambedkar Nagar	2010
5	Varanasi	1989	18	Amethi	2018
6	Siddharthnagar	1992	19	Bahraich-II	2018
7	Faizabad	2004	20	Gonda-II	2018
8	Gorakhpur	2004	21	Sultanpur-II	2018
9	Maharajganj	2004	22	Jaunpur-II	2018
10	Sonbhadra	2004	23	Ghazipur-II	2018
11	Azamgarh-I	2004	24	Shravasti	2020
12	Barabanki	2004	25	Azamgarh-II	2021
13	Balrampur	2005			
<b>CSAUA&amp;T, Kanpur</b>					
26	Raebareli	1984	33	Firozabad	2004
27	Fatehpur	1989	34	LakhimpurKheri	2005
28	Aligarh	1992	35	Farrukhabad	2005
29	Kannauj	2004	36	Hardoi-I	2005
30	Etawah	2004	37	Mahamaya Nagar	2009
31	Mainpuri	2004	38	Kasganj	2018
32	Kanpur Dehat	2004			
<b>BUAT, Banda</b>					
39	Jhansi	1984	43	Lalitpur	2005
40	Mahoba	2004	44	Banda	2007
41	Hamirpur	2005	45	Prayagraj-II	2021
42	Jalaun	2005			
<b>SVPUA&amp;T, Meerut</b>					
46	Bijnor	1992	56	Moradabad-I	2005
47	Rampur	1992	57	Gautam Budha Nagar	2005
48	Badaun-I	1992	58	Bulandshahar	2004
49	Saharanpur	1992	59	Badaun-II	2018
50	Ghaziabad	1992	60	Sambhal	2018
51	Sahajahanpur	1994	61	Shamli	2018
52	Meerut	1994	62	Amroha	2018
53	Muzaffarnagar-I	1994	63	Hapur	2018
54	Pilibhit	1998	64	Muzaffarnagar-II	2019
55	Baghpat	2004	65	Moradabad-II	2020

U.P. Pt. DeenDayalUpadhyayaPashuChikitsaVigyanVishwaVidyalayaEvam Go AnusandhanSansthan, Mathura					
66	Mathura	1984			
Kamla Nehru Memorial Trust, Sultanpur					
67	Sultanpur	1976			
RBS College, Agra					
68	Etah	1992	69	Agra	2002
BHU, Varanasi					
70	Mirzapur	1984			
Deendayal Research Institute, Gonda					
71	Gonda-I	1989	72	Chitrakoot	1992
SHIAS&T, Allahabad					
73	Allahabad	1992			
Raja Avadesh Singh Memorial Society, Pratatgarh					
74	Pratapgarh	1999			
Kunwar Ram Bux Singh Educational Society, Lucknow					
75	Unnao	1999			
Indian Veterinary Research Institute, Bareilly					
76	Bareilly	1985			
Indian Institute of Sugarcane Research, Lucknow					
77	Lucknow	1994	78	Lakhimpur Kheri-II	
Post Graduate College, Gazipur					
79	Gazipur	2002			
Indian Institute of Vegetables Research, Varanasi					
80	Kushinagar	2005	81	St. Ravidas Nagar	
82	Deoria	2009			
ManavVikasEvamSevaSansthan, Lucknow					
83	Sitapur-I	2005			
Dr. BhimraoAmbedkar Welfare Society, Allahabad					
84	Kaushambi	2006			
SarpanchSamaj, New Delhi					
85	Auraiya	2007			
RanvirRananjay Degree College Association, Sultanpur					
86	Sitapur-II	2011			
Guru GorakshnathSewaSansthan					
87	Gorakhpur-II	2016			
ICAR-Central Soil Salinity Research Institute, Karnal					
88	Hardoi-II	2018			

### 1.3 Linkages and Coordination

- SAUs (SVBPUAT, CSAUAT, NDUAT & BUAT) linked for technological backstopping to KVKs of Uttar Pradesh
- Linkage with MANAGE Hyderabad for Agri-business & Agri Clinic Scheme & also knowledge up gradation of KVK staff in ICT.
- Interface on KVK-ATMA linkage held at State level with Principal Secretary Agriculture & Director Agriculture for effective linkage.
- IIVR, Varanasi for providing suitable technologies for vegetable production.
- Linkage with CRIDA, Hyderabad for promoting climate resilient technologies in 11 districts of U.P.
- Fodder development programme initiated in collaboration with IGFRI, Jhansi.
- Linkage with National Rain fed Area Authority for development of Bundelkhand region.
- Senior level interactions and meetings organized with line department officials for better convergence & linkage.





### 1.4 Agro-climatic Zones

Uttar Pradesh is divided into 9 agro climatic zones (South Western Semi Arid, Bhabhar and Tarai, Western Plain, Mid Western Plain, Central Plain, Bundelkhand, North Eastern Plain, Eastern Plain and Vindhyan Zone), depicted as in figure 1.



**Distribution of KVKs in U.P.**

<span style="border: 1px solid black; border-radius: 50%; padding: 2px;">○</span>	SAU KVKs	65
<span style="color: green; font-weight: bold;">◆</span>	ICAR KVKs	07
<span style="border: 1px solid orange; border-radius: 50%; padding: 2px;">○</span>	NGO KVKs	13
<span style="border: 1px solid blue; padding: 2px;">□</span>	Educational KVKs	03
	<b>Total</b>	<b>88</b>

**Note:** Districts with two KVKs : Azamgarh, Gonda, Bahraich, Sultanpur, Jaunpur, Ghazipur, Budaun, Moradabad, Muzaffarnagar, Lakhaimpur Kheri, Hardoi, Sitapur, Gorakhpur, Prayagraj

## 1.5 Achievements at A Glance During 2020

### 1.5.1 Achievements of Technical Programmes

1.	Training programmes	Courses	Participants
	• Farmers & farm women	5243	113635
	• Rural Youths	766	18226
	• Extension Functionaries	657	14191
	<b>Total</b>	<b>6666</b>	<b>146052</b>
2.	Frontline Demonstrations	Farmers	Area (ha)/Units (No.)
	• Pulses	5345	1717.56
	• Oilseeds	5026	2062.30
	• Cereals	3553	1089.11
	• Fodder	860	91.46
	• Hybrids	100	224.08
	• Commercial	211	71.05
	• Spices	88	16.32
	• Millets	132	32.00
	<b>Total (Crops)</b>	<b>15315</b>	<b>5303.88</b>
	• Vegetables	1283	200.11
	• Fruits	102	27.60
	<b>Total (Hort)</b>	<b>1385</b>	<b>227.71</b>
	• Livestock	1607	5816 Units
	• Farm Implements	1001	525.63
	• Other Enterprises	1194	697.10
	<b>Total (Other)</b>	<b>3802</b>	<b>1222.73/5816 units</b>
	<b>Grand Total</b>	<b>20502</b>	<b>6754.32/5816 units</b>
3.	Technology Assessment	Technologies	Trials
	• Crops	638	3018
	• Livestock	84	594
	• Other Enterprises	61	310
	<b>Total</b>	<b>783</b>	<b>3922</b>
4.	Extension Programmes	Number	Beneficiaries
	• Extension activities	45157	1084738
	• Other extension programmes (mass comm.)	52168	Mass
	• Mobile advisories	155135	6487234
	• Soil samples	51775	83246
	• SACs	69	897
	• Technology week celebration	3193	106566
	• RWHS & MIS	119	21113
	• Technology backstopping by DE	198	1988
	• ATIC	7243	24391
<b>5.</b>	<b>Seed Production (quintal)</b>	<b>27715.83</b>	<b>14964</b>
<b>6.</b>	<b>Planting materials (lakh)</b>	<b>51.37</b>	<b>26858</b>
<b>7.</b>	<b>Bio-Production (quintal)</b>	<b>1409.48</b>	<b>2901</b>
8.	Livestock strains	Quantity	Beneficiaries
	• Livestock (No.)	3039	952
	• Fisheries (lakh)	72.55	202
9.	Publications (No.)	By KVKs	By ATARI
		1926	30
10.	HRD/meetings Programmes	By KVK	By ATARI
	• No. of Programmes	167	52
	• No. of Participants	2037	2500

### 1.5.2 Achievements of Special Programmes

	Programme Name	Achievements
1.	<b>Attracting &amp; Retaining of Youth in Agriculture (ARYA)</b>	<ul style="list-style-type: none"> <li>• Training programmes: 37 courses with 549 participants</li> <li>• Entrepreneurial Units established: 155</li> </ul>
2.	<b>Tribal Sub Plan (TSP)</b>	<ul style="list-style-type: none"> <li>• Training programmes: 94 courses with 2419 participants</li> <li>• OFT: 22, FLD : 2102</li> <li>• Mobile agro – advisories provided: 631</li> <li>• Participation in extension activities: 2224</li> <li>• Seed Production: 228 q, fingerlings: 0.44 lakh</li> </ul>
3.	<b>Knowledge Systems and Home Based Agricultural Management in Tribal Areas (KSHAMTA)</b>	<ul style="list-style-type: none"> <li>• Villages covered: 22, FLDs: 2970</li> <li>• Training programmes: 52 courses with 1795 participants</li> </ul>
4.	<b>Schedule Caste Sub Plan (SCSP)</b>	<ul style="list-style-type: none"> <li>• Training programmes: 918 courses with 8773 participants</li> <li>• OFT: 20, FLD : 437</li> <li>• Mobile agro – advisories provided: 11582</li> <li>• Participation in extension activities: 26251</li> <li>• Seed production: 312.32 q, planting material: 0.79 lakh</li> </ul>
5.	<b>Agriculture Skill Council of India (ASCI)</b>	<ul style="list-style-type: none"> <li>• Training courses organised: 30 courses with 600 participants (each course has 200 hour duration)</li> </ul>
6.	<b>Mera Gaon Mera Gaurav (MGMG)</b>	<ul style="list-style-type: none"> <li>• Total groups made: 61 with 346 villages covered</li> <li>• Total 277 scientist involved in 309, field activities</li> <li>• Total 454 advisories sent covering 1524 farmers</li> <li>•</li> </ul>
7.	<b>Crop Residue Management (CRM)</b>	<ul style="list-style-type: none"> <li>• Machines procured: 26,</li> <li>• 3903 activities conducted covering 63406 participants</li> </ul>
8.	<b>Pulses Seed Hub</b>	<ul style="list-style-type: none"> <li>• Total pulses seed production: 2385.08 q</li> </ul>
9.	<b>Aspirational District Scheme</b>	<ul style="list-style-type: none"> <li>• Trainings programmes: 32 courses with 774 participants</li> <li>• Total 1025 q seed and 5024 planting material distributed to 429 farmers</li> </ul>
10.	<b>Cereal System Initiative for South Asia (CSISA)</b>	<ul style="list-style-type: none"> <li>• Survey of 18 districts covered for paddy cultivation</li> <li>• 3780 farmers were interviewed</li> <li>• KVKs Deoria and Kushinagar conducted trials on paddy and wheat</li> </ul>
11.	<b>NARI programme (Nutrition-sensitive Agricultural Resources and Innovation)</b>	<ul style="list-style-type: none"> <li>• Total 1385 activities organised which includes OFT, FLD, Trainings &amp; extension activities etc. covering 17700 active participants</li> </ul>
12.	<b>CFLD on Pulses &amp; Oilseed</b>	<ul style="list-style-type: none"> <li>• CFLD Pulses: 5345 demonstrations covering 1717.56 ha area</li> <li>• CFLD Oilseeds: 5026 demonstrations covering 2062.30 ha area</li> </ul>

## TRAINING PROGRAMMES

KVKs organized 6666 training courses with the participation of 146052 farmers, farm women, rural youths and extension functionaries. The farmers and farm women were represented in a proportion of 78.62 % and 21.38 % respectively. In all 113635 farmers and farm women and 18226 rural youths were provided skill training in different enterprises. Similarly, 14191 extension personnel were also trained in different areas. Details of ON and OFF campus trainings of each clientele are given in Table-2.2.

**Table 2.1 Physical achievement of Training Programme at a glance**

Clientele	Courses	Male	Female	Total
Farmers & Farm women	5243	88225	25410	113635
Rural Youths	766	14722	3504	18226
Extension Functionaries	657	11876	2315	14191
<b>Total</b>	<b>6666</b>	<b>114823</b>	<b>31229</b>	<b>146052</b>
Sponsored Trainings	609	24417	4553	28970
Vocational Trainings	312	5729	1604	7333

### 2.1 Farmers and Farm Women

Under trainings for farmers and farm women category, total of 5243 courses were conducted by KVKs of the Uttar Pradesh with the participation of 113635 farmers and farm women (Table 2.3). Maximum courses (1297) and participants (27087) were related to crop production. The other areas of trainings were horticulture (891 courses and 20762 participants); livestock production management (627 courses and 14236 participants); women empowerment (579 courses and 12968 participants); soil health and fertility management (532 courses and 10497 participants); agricultural engineering (248 courses and 4757 participants); plant protection (514 courses and 11138 participants); fisheries (77 courses and 758 participants); production of input at site (155 courses and 3761 participants); capacity building & group dynamics (274 courses and 6628 participants); agro forestry (49 courses and 1043 participants).

**Table 2.2 Clientele wise ON/OFF Campus training programmes**

Clientele	Type of Campus	No. of courses	Participants								
			Others			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
Farmers & Farm Women	ON	2077	28010	6530	34540	8660	3584	12244	36670	10114	46784
	OFF	3166	39911	9897	49808	11644	5399	17043	51555	15296	66851
	<b>Total</b>	<b>5243</b>	<b>67921</b>	<b>16427</b>	<b>84348</b>	<b>20304</b>	<b>8983</b>	<b>29287</b>	<b>88225</b>	<b>25410</b>	<b>113635</b>
Rural Youths	ON	509	6443	878	7321	1931	752	2683	8374	1630	10004
	OFF	257	4753	1191	5944	1595	683	2278	6348	1874	8222
	<b>Total</b>	<b>766</b>	<b>11196</b>	<b>2069</b>	<b>13265</b>	<b>3526</b>	<b>1435</b>	<b>4961</b>	<b>14722</b>	<b>3504</b>	<b>18226</b>
Extension Functionaries	ON	447	6377	1136	7513	1533	393	1926	7910	1529	9439
	OFF	210	3085	551	3636	881	235	1116	3966	786	4752
	<b>Total</b>	<b>657</b>	<b>9462</b>	<b>1687</b>	<b>11149</b>	<b>2414</b>	<b>628</b>	<b>3042</b>	<b>11876</b>	<b>2315</b>	<b>14191</b>
<b>Grand Total</b>	ON	3033	40830	8544	49374	12124	4729	16853	52954	13273	66227
	OFF	3633	47749	11639	59388	14120	6317	20437	61869	17956	79825
	<b>Total</b>	<b>6666</b>	<b>88579</b>	<b>20183</b>	<b>108762</b>	<b>26244</b>	<b>11046</b>	<b>37290</b>	<b>114823</b>	<b>31229</b>	<b>146052</b>
Sponsored		609	18753	2829	21582	5664	1724	7388	24417	4553	28970
Vocational		312	4319	863	5182	1410	741	2151	5729	1604	7333

**Table 2.3 Training of farmers and farm women**

Area of training	Courses	Male	Female	Total
Crop Production	1297	23960	3127	27087
Horticulture	891	17940	2822	20762
Soil Health & Fertility Management	532	9133	1364	10497
Livestock Production & Management	627	12230	2006	14236
Home Science/ Women empowerment	579	940	12028	12968
Agril. Engineering	248	4017	740	4757
Plant Protection	514	9901	1237	11138
Fisheries	77	638	120	758
Production of Input at site	155	3203	558	3761
Capacity Building & Group Dynamics	274	5413	1215	6628
Agro forestry	49	850	193	1043
<b>Total</b>	<b>5243</b>	<b>88225</b>	<b>25410</b>	<b>113635</b>



### 2.1.1 Crop Production

With respect to crop production, 1297 training courses were organized in Uttar Pradesh with the participation of 27087 farmers and farm women. Integrated crop management related 217 courses were organized in which 4472 farmers and farm women participated; followed by 170 courses on seed production (3127 participants), 205 on weed management (4050 participants), 133 courses on Integrated nutrient Management (2425 participants). The other important areas like cropping systems, crop diversification, integrated farming, integrated nutrient management, nursery management, production of organic inputs, etc. were also taken up.

**Table 2.4: Training programmes related to crop production**

Area of training	Courses	Male	Female	Total
Weed Management	205	3513	537	4050
RCT	93	1989	186	2175
Cropping Systems	110	1806	203	2009
Crop Diversification	50	1050	127	1177
Integrated Farming	77	1784	148	1932
Micro irrigation/irrigation	34	684	46	730
Seed production	170	2701	426	3127
Nursery management	48	996	150	1146
Integrated Crop Management	217	4025	447	4472
Soil & water conservation	31	635	51	686
Integrated nutrient Management	133	2165	260	2425
Production of organic inputs	54	1090	252	1342
Others	75	1522	294	1816
<b>Total</b>	<b>1297</b>	<b>23960</b>	<b>3127</b>	<b>27087</b>

### 2.1.2 Horticulture

Training on production technologies of vegetables, fruits, ornamental plants, plantation crops, tuber crops, spices and medicinal plants were organized. 443 courses on vegetables involving 10536 and 264 courses on fruit with the participation of 6055 were held. Similarly, in case of ornamental plants, organization of 45 courses with participation of 1002 persons was ensured. In the area of plantation crops, tuber crops, spices, medicinal & other crops 24, 45, 41 and 29 courses were organized with participation of 635, 1019, 807 and 655 farmers and farm women.

### 2.1.3 Soil Health and Fertility Management

Total of 532 courses were attended by 10497 participants. The courses in the area of soil fertility management (130), integrated nutrient management (27), soil & water testing (99), production & use of organic inputs (56), balanced use of fertilizer and micro-nutrients deficiency in crops (38), management of problem soils (17), etc. were organized with the objectives to create awareness, knowledge and skill

**Table 2.5: Training on horticulture including sponsored training**

Area of Training	Courses	Male	Female	Total
<b>a) Vegetable Crops</b>				
Production of low value & high volume crops	132	2800	313	3113
Off-season vegetables	60	1246	178	1424
Nursery raising	103	1917	432	2349
Exotic vegetables	12	213	30	243
Export potential vegetables	23	459	64	523
Grading and standardization	17	323	76	399
Protective cultivation	58	1273	345	1618
Others	38	727	140	867
<b>Total (a)</b>	<b>443</b>	<b>8958</b>	<b>1578</b>	<b>10536</b>
<b>b) Fruits</b>				
Training and Pruning	44	908	115	1023
Layout and Management of Orchards	58	1125	120	1245
Cultivation of Fruit	39	762	126	888
Management of young plants/orchards	24	543	54	597
Rejuvenation of old orchards	41	772	134	906
Export potential fruits	4	85	4	89
Micro irrigation systems of orchards	22	535	42	577
Plant propagation techniques	23	477	62	539
Others	9	178	13	191
<b>Total (b)</b>	<b>264</b>	<b>5385</b>	<b>670</b>	<b>6055</b>
<b>c) Ornamental Plants</b>				
Nursery Management	25	504	84	588
Management of potted plants	3	49	7	56
Export potential of ornamental plants	3	62	7	69
Propagation techniques of ornamental Plants	5	96	20	116
Others	9	157	16	173
<b>Total (c)</b>	<b>45</b>	<b>868</b>	<b>134</b>	<b>1002</b>
<b>d) Plantation crops</b>				
Production and Management technology	17	366	25	391
Processing and value addition	5	127	8	135
Others	2	105	4	109
<b>Total (d)</b>	<b>24</b>	<b>598</b>	<b>37</b>	<b>635</b>
<b>e) Tuber crops</b>				
Production and Management technology	42	832	128	960
Processing and value addition	2	40	5	45
Others	1	14	0	14
<b>Total (e)</b>	<b>45</b>	<b>886</b>	<b>133</b>	<b>1019</b>
<b>f) Spices</b>				
Production and Management technology	32	567	109	676
Processing and value addition	6	91	33	124
Others	3	60	0	60
<b>Total (f)</b>	<b>41</b>	<b>718</b>	<b>142</b>	<b>860</b>
<b>g) Medicinal and Aromatic Plants</b>				
Nursery management	5	88	9	97
Production and management technology	18	327	89	416
Post harvest technology & value addition	5	87	25	112
Others	1	25	5	30
<b>Total (g)</b>	<b>29</b>	<b>527</b>	<b>128</b>	<b>655</b>
<b>GT (a-g)</b>	<b>891</b>	<b>17940</b>	<b>2822</b>	<b>20762</b>

**Table 2.6: Training on soil health and fertility management**

Area of training	Courses	Male	Female	Total
Soil fertility management	130	2145	265	2410
Integrated water management	27	533	89	622
Integrated nutrient management	88	1955	189	2144
Production and use of organic inputs	56	941	243	1184
Management of problematic soils	17	360	58	418
Micro nutrient deficiency in crops	36	752	46	798
Nutrient use efficiency	22	435	59	494
Balance use of fertilizer	38	741	138	879
Soil & water testing	99	998	253	1251
Others	19	273	24	297
<b>Total</b>	<b>532</b>	<b>9133</b>	<b>1364</b>	<b>10497</b>

among farmers to address various issues. These trainings involved 2110, 622, 1251, 1184, 879 and 418 beneficiaries respectively were benefitted.

### 2.1.4 Livestock Production Management

All together 627 courses were organized with the participation of 14236 participants. The courses related to disease management (155) were organized with the participation of 3428 cattle owners. Dairy management (159) was second preferred programme attended by 3544 participants. Feed and fodder management, animal nutrition, poultry, quality animal products, etc were other priority areas.

**Table 2.7: Training on livestock production and management**

Area of training	Courses	Male	Female	Total
Dairy Management	159	3011	533	3544
Poultry Management	60	1068	315	1383
Piggery Management	7	139	12	151
Rabbit Management	4	46	36	82
Animal Nutrition Management	85	1770	319	2089
Disease Management	155	3024	404	3428
Feed & fodder technology	110	2155	283	2438
Production of quality animal products	21	452	79	531
Others	26	565	25	590
<b>Total</b>	<b>627</b>	<b>12230</b>	<b>2006</b>	<b>14236</b>

### 2.1.5 Women Empowerment

A range of courses (579) related to women empowerment were organized with the participation of 12968 farm women. Value addition courses (87) were attended by highest number of farm women (1820), followed by courses on women and child care (64) attended by total of 1370 participants, household food security by kitchen gardening (118) attended by 2814 farm women, etc. The farm women also showed interest in courses like storage losses, women &

child care, rural craft, developing high nutrient efficient diet, drudgery reduction, diet related courses, etc. were also conducted.

**Table 2.8: Training on Home Science/Women Empowerment**

Areas of training	Courses	Male	Female	Total
Household food security by kitchen gardening	118	378	2436	2814
Design & development of low/minimum cost diet	37	48	784	832
Development of high nutrient efficiency diet	44	112	945	1057
Minimization of nutrient loss in processing	33	86	646	732
Processing & cooking	31	31	691	722
Gender mainstreaming through SHGs	14	11	246	257
Storage loss minimization techniques	34	66	666	732
Value addition	87	35	1785	1820
Women empowerment	36	3	809	812
Location specific drudgery reduction technologies	42	49	832	881
Rural crafts	17	0	413	413
Women and child care	64	46	1324	1370
Others	22	75	451	526
<b>Total</b>	<b>579</b>	<b>940</b>	<b>12028</b>	<b>12968</b>

### 2.1.6 Agricultural Engineering

Total of 248 courses in various aspects related to farm machinery, implements and its maintenance, post harvest and value addition were organized by KVKs, benefiting 4757. farmers and farm women. Maximum courses on repair & maintenance of farm machinery & implements (103) were organized benefiting 1831 persons. Newer areas like installation and maintenance of micro irrigation system, use of plastics, small tools, etc. were also taken up in training programmes.

**Table 2.9: Training on agricultural engineering**

Areas of training	Courses	Male	Female	Total
Farm machinery & its maintenance	49	937	256	1193
Installation and maintenance of micro irrigation systems	39	412	53	465
Use of plastics in farming practices	13	248	44	292
Production of small tools & implements	2	37	13	50
Repair and maintenance of farm machinery and implements	103	1712	119	1831
Small scale processing & value addition	12	165	101	266
Post harvest technology	18	313	116	429
Others	12	193	38	231
<b>Total</b>	<b>248</b>	<b>4017</b>	<b>740</b>	<b>4757</b>

### 2.1.7 Plant Protection

Under Plant Protection total 514 courses were organized with the participation of 11138 persons. The highlights of these programmes and others each course were on IDM

(155), IPM (236), bio control of pests and diseases (71), production of bio control agents & bio pesticides (39).

**Table 2.10: Training on plant protection**

Areas of training	Courses	Male	Female	Total
Integrated Pest Management	236	4268	462	4730
Integrated Disease Management	155	3176	385	3561
Bio-control of pests and diseases	71	1419	212	1631
Production of bio control agents & bio pesticides	39	781	153	934
Others	13	257	25	282
<b>Total</b>	<b>514</b>	<b>9901</b>	<b>1237</b>	<b>11138</b>

### 2.1.8 Fish Production

The courses on integrated fish farming (38) and composite fish culture (30) were mainly organized with the participation of 360 and 221 persons respectively. Overall 77 courses attracted participation of 758 persons.

**Table 2.11: Training on fish production**

Areas of training	Courses	Male	Female	Total
Integrated fish farming	38	295	65	360
Carp breeding and hatchery management	1	17	8	25
Carp fry and fingerling rearing	6	109	3	112
Composite fish culture	30	179	42	221
Portable plastic carp hatchery	1	18	2	20
Pen culture of fish and prawn	1	20	0	20
<b>Total</b>	<b>77</b>	<b>638</b>	<b>120</b>	<b>758</b>

### 2.1.9 Production of inputs at site

Total 155 courses on this theme attracted participation of 3761 persons were organized. Seed production, vermi composting and organic manures attracted maximum participation.

**Table 2.12: Training on production of input at the site**

Areas of training	Courses	Male	Female	Total
Seed Production	46	1013	83	1096
Planting material production	8	161	29	190
Bio-agents production	6	116	63	179
Bio-pesticides production	5	99	24	123
Bio-fertilizer production	6	110	25	135
Vermi-compost production	31	657	145	802
Organic manures production	19	355	102	457
Production of Bee-colonies & wax sheets	3	73	5	78
Small tools and implements	2	55	7	62
Production of livestock feed and fodder	7	129	26	155
Mushroom Production	7	131	43	174
Apiculture	4	84	6	90
Others	11	220	0	220
<b>Total</b>	<b>155</b>	<b>3203</b>	<b>558</b>	<b>3761</b>

### 2.1.10 Capacity Building and Group Dynamics

274 courses were organized benefiting 6628 persons. The topics covered in the programmes included leadership development, group dynamics, SHGs, entrepreneurship development, WTO & IPR, etc.

**Table 2.13: Training on capacity building and group dynamics**

Areas of training	Courses	Male	Female	Total
Leadership development	47	980	138	1118
Group dynamics	32	624	155	779
Formation and Management of SHGs	61	1203	337	1540
Mobilization of social capital	24	404	117	521
Entrepreneurial development of farmers/youths	63	1307	258	1565
WTO and IPR issues	7	148	40	188
Others	40	747	170	917
<b>Total</b>	<b>274</b>	<b>5413</b>	<b>1215</b>	<b>6628</b>

### 2.1.11 Agro-forestry

In this area, 49 courses were organized benefiting 1043 farmers. The topics covered in the programmes included production technology, nursery management, integrated farming systems, etc.

**Table 2.14: Training on agro-forestry**

Areas of training	Courses	Male	Female	Total
Production technologies	15	260	46	306
Nursery management	16	281	57	338
Integrated Farming Systems	16	272	87	359
Others	2	37	3	40
<b>Total</b>	<b>49</b>	<b>850</b>	<b>193</b>	<b>1043</b>

## 2.2 Training of Rural Youths

Total of 766 courses involving 18226 persons were conducted. The highest participation was attracted towards the programmes like seed production (106), nursery management of horticultural crops (42), vermi culture (64), mushroom production (75) and organic inputs production (34). Other courses viz protected cultivation, commercial fruit production, planting material production, bee keeping, value addition, rural crafts, dairying, poultry, etc were preferred by the youth. Similarly, livestock and fisheries, crop production and management and post harvest management related programmes were also organized.

### 2.3 Training of Extension Personnel

Total of 657 courses involving 14191 extension personnel were organized in the by the KVKs of Uttar Pradesh. Major areas in which extension personnel were trained were productivity enhancement in field crops (101), integrated pest management (78), INM (66), production of organic inputs (41), livestock feed & fodder (51), women & child care (35) etc. Details are shown in Table 2.16.

**Table 2.15 Training on Rural youths**

Areas of training	Courses	Male	Female	Total
Nursery Management of Horticulture crops	42	918	128	1046
Training and pruning of orchards	11	216	30	246
Protected cultivation of vegetable crops	34	707	79	786
Commercial fruit production	20	478	129	607
Integrated farming	34	885	112	997
Seed production	106	2012	148	2160
Production of organic inputs	34	630	162	792
Planting material production	9	188	32	220
Vermi-culture	64	792	105	897
Mushroom Production	75	1471	286	1757
Bee-keeping	54	1124	88	1212
Sericulture	1	25	0	25
Repair & maintenance of farm machinery & implements	28	609	64	673
Value addition	47	114	586	700
Small scale processing	10	31	101	132
Post Harvest Technology	11	86	110	196
Tailoring and Stitching	16	29	285	314
Rural Crafts	13	35	177	212
Production of quality animal products	4	51	21	72
Dairying	35	617	90	707
Sheep and goat rearing	41	781	126	907
Piggery	9	139	1	140
Poultry production	29	693	99	792
Ornamental fisheries	1	0	15	15
Composite fish culture	7	284	46	330
Pearl culture	1	9	0	9
Fish harvest and processing technology	1	20	0	20
Other	29	1778	484	2262
<b>Total</b>	<b>766</b>	<b>14722</b>	<b>3504</b>	<b>18226</b>

**Table 2.16 Training for extension personnel**

Areas of training	Courses	Male	Female	Total
Productivity enhancement in field crops	101	1942	60	2002
Integrated Pest Management	78	1453	41	1494
Integrated Nutrient management	66	1407	82	1489
Rejuvenation of old orchards	30	570	11	581
Protected cultivation technology	37	796	76	872
Production and use of organic inputs	41	1026	24	1050
Care & maintenance of farm machinery & implements	18	352	5	357
Gender mainstreaming through SHGs	6	130	25	155
Formation and Management of SHGs	7	48	122	170
Women and Child care	35	168	625	793
Low cost and nutrient efficient diet designing	17	58	337	395
Group Dynamics and farmers organization	10	164	42	206
Information networking among farmers	10	153	56	209
Capacity building for ICT application	7	178	7	185
Management in farm animals	36	739	26	765
Livestock feed and fodder production	51	1047	126	1173
Household food security	25	59	364	423
Other	82	1586	286	1872
<b>Total</b>	<b>657</b>	<b>11876</b>	<b>2315</b>	<b>14191</b>

## 2.4 Sponsored Training Programmes

Under sponsored training programmes, total 609 courses were organised by involving 28970 participants. Details are shown in Table 2.17.

**Table 2.17: Sponsored Training Programmes organised**

Areas of training	Courses	Male	Female	Total
<b>Crop production, management &amp; Value addition</b>				
Increasing production & productivity of crops	115	6341	767	7108
Commercial production of vegetables	48	2312	375	2687
Fruit Plants	44	1638	383	2021
Ornamental plants	8	302	45	347
Spices crops	4	107	15	2368
Soil health and fertility management	52	2109	262	2371
Production of Inputs at site	16	564	122	686
Methods of protective cultivation	17	691	97	3057
Others	81	3277	440	3717
<b>Total</b>	<b>385</b>	<b>17341</b>	<b>2506</b>	<b>19847</b>
<b>Post harvest technology and value addition</b>				
Processing and value addition	30	1194	478	1672
Others	15	641	157	798
<b>Total</b>	<b>45</b>	<b>1835</b>	<b>635</b>	<b>2470</b>
<b>Farm machinery</b>				
Farm machinery, tools and implements	10	327	34	361
Others	12	545	0	545
<b>Total</b>	<b>22</b>	<b>872</b>	<b>34</b>	<b>906</b>
<b>Livestock and fisheries</b>				
Livestock production and management	45	907	207	1114
Animal Nutrition Management	5	70	38	108
Animal Disease Management	4	100	40	1222
Fisheries Nutrition	5	72	21	93
Others	6	171	4	93
<b>Total</b>	<b>65</b>	<b>1320</b>	<b>310</b>	<b>1630</b>
<b>Home Science</b>				
Household nutritional security	21	734	410	1144
Economic empowerment of women	18	731	369	1100
Drudgery reduction of women	7	222	80	2244
Others	1	35	0	35
<b>Total</b>	<b>47</b>	<b>1722</b>	<b>859</b>	<b>2581</b>
<b>Agricultural Extension</b>				
Capacity Building and Group Dynamics	29	745	168	913
Others	16	582	41	623
<b>Total</b>	<b>45</b>	<b>1327</b>	<b>209</b>	<b>1536</b>
<b>Grand Total</b>	<b>609</b>	<b>24417</b>	<b>4553</b>	<b>28970</b>

## 2.5 Vocational Training Programmes

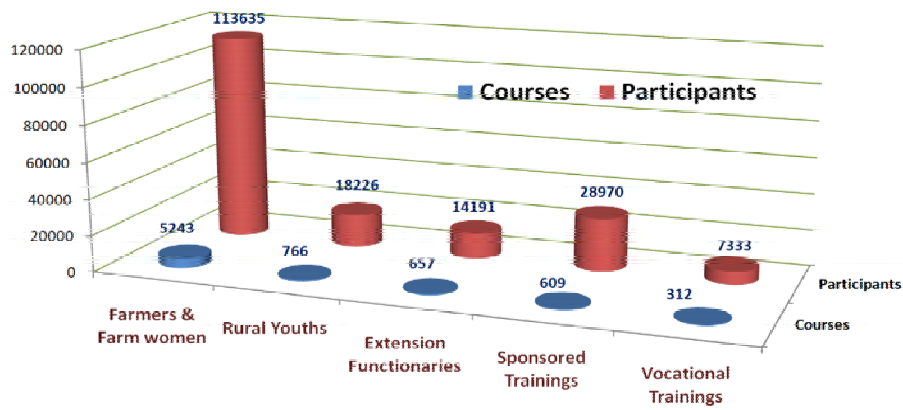
Under vocational training programmes, total 312 courses were organised by involving 7333 participants. Details are shown in table 2.18.

Table 2.18 Vocational Training Programmes organised

Areas of training	Courses	Male	Female	Total
<b>Crop production and management</b>				
Commercial floriculture	7	133	30	163
Commercial fruit production	12	229	54	283
Commercial vegetable production	12	245	25	270
Integrated crop management	14	218	54	272
Organic farming	12	250	44	294
Others	5	97	20	117
<b>Total</b>	<b>62</b>	<b>1172</b>	<b>227</b>	<b>1399</b>
<b>Post harvest technology and value addition</b>				
Value addition	13	102	139	241
Others	11	13	120	133
<b>Total</b>	<b>24</b>	<b>115</b>	<b>259</b>	<b>374</b>
<b>Livestock and fisheries</b>				
Dairy farming	20	471	69	540
Composite fish culture	9	282	11	293
Sheep and goat rearing	14	311	87	398
Piggery	6	151	2	153
Poultry farming	13	261	67	328
Others	2	49	1	50
<b>Total</b>	<b>64</b>	<b>1525</b>	<b>237</b>	<b>1762</b>
<b>Income generation activities</b>				
Vermi composting	18	341	28	369
Production of bio-agents, bio-pesticides, bio-fertilizers etc.	7	127	21	148
Repair and maintenance of farm machinery	4	67	14	81
Rural Crafts	11	201	1	202
Seed production	2	0	47	47
Seed production	26	467	68	535
Sericulture	1	37	0	37
Mushroom cultivation	46	892	262	1154
Nursery, grafting etc.	16	238	194	432
Tailoring, stitching, embroidery, dying etc.	3	0	70	70
Others	16	297	115	412
<b>Total</b>	<b>150</b>	<b>2667</b>	<b>820</b>	<b>3487</b>
<b>Agricultural Extension</b>				
Capacity building and group dynamics	5	123	15	138
Others	7	127	46	173
<b>Total</b>	<b>12</b>	<b>250</b>	<b>61</b>	<b>311</b>
<b>Grand Total</b>	<b>312</b>	<b>5729</b>	<b>1604</b>	<b>7333</b>



## TRAINING PROGRAMMES



On campus training for farm women: KVK Mahoba



Off campus training : KVK Hamirpur



On campus training : KVK Ghazipur-I



Training under NARI project: KVK Kaushambi



On Campus training on vermi composting : KVK Prayagraj



## FRONTLINE DEMONSTRATIONS

Frontline demonstration (FLD) is one of the important activities of KVKs. It shows the production potential of improved technologies to the farmers. KVKs played important role to showcase and promote the latest varieties and other technologies related to cereals, oilseeds, pulses, vegetables, fruits, etc. to enhance the production and productivity. A total of 20502 frontline demonstrations were organized out of which on crops (15315), horticulture (1385), farm implements (1001), livestock strains (1607) and other enterprises (1194). Total area covered was 6754.32 ha.

in local checks which was 27.72 % higher. A net return of Rs. 35537.66/ha was realized in demonstrations which was about Rs. 23510.46 higher over local check. Performance of different component demonstrations was found satisfactory under WE (13.52q/ha) followed by under ICM component (10.42 q/ha).

**Green gram:** Green gram related technologies were demonstrated by 22 KVKs with 874 demonstrations on 326.18 ha area. This crop is mainly grown as summer crop with

**Table 3.1 : Physical achievement of frontline demonstrations**

S.No.	Enterprise	Demo	Area (ha)/units
1	Pulses	5345	1717.56
2	Oilseeds	5026	2062.30
3	Cereals	3553	1089.11
4	Fodder	860	91.46
5	Hybrids	100	224.08
6	Commercial	211	71.05
7	Spices	88	16.32
8	Millets	132	32.00
	<b>Total (Crops)</b>	<b>15315</b>	<b>5303.88</b>
9	Vegetables	1283	200.11
10	Fruits	102	27.60
	<b>Total (Hort)</b>	<b>1385</b>	<b>227.71</b>
11	Livestock	1607	5816 units
12	Farm Implements	1001	525.63
13	Other Enterprises	1194	697.10
	<b>Total (others)</b>	<b>3802</b>	<b>1222.73/5816 units</b>
	<b>Grand Total</b>	<b>20502</b>	<b>6754.32/5816 units</b>

### 3.1 Cluster FLD on Pulses and Oilseeds

Technology demonstrations on pulses were organized on an area of 1717.56 ha involving 5345 farmers and on oilseeds on an area of 2062.30 ha involving 5026 farmers. The crop wise and thematic area wise information is exhibited in tables.

#### 3.1.1 Cluster FLD on Pulses

**Pigeon pea:** The 25 KVKs conducted 974 demonstrations on pigeon pea by covering an area of 320.60 ha, exhibited yield realization of 11.09 q/ha which was 42.08 % higher than local check with net return of Rs. 36813.21/ha. 18 KVKs attained more than 14 q/ha of yield and 7 KVKs reported yield of more than 7.52 q/ha in all the components. Performance of component demonstrations was considerably better under Varietal (14.66 q/ha) followed by ICM (7.52 q/ha).

**Black gram:** 18 KVKs laid out 604 demonstrations on 235 ha area, exhibited yield levels of 10.82 q/ha against 8.47q/ha

average yield of 8.46 q/ha in demonstrations against 5.97q/ha in local check with 41.69 % increase. A net return of Rs. 33626.98/ha was obtained from demonstrations. In other component demonstration the highest yield was observed under Varietal (7.99 q/ha) followed by ICM (8.93 q/ha).

**Chickpea:** The 25 KVKs conducted 952 demonstrations on chickpea by covering an area of 310.01 ha, exhibited yield of 13.55 q/ha against 11.05 q/ha of local check showing an increase of 22.63% higher than local check with net return of Rs. 31380.24/ha. 2 KVKs realized more than 15.8q/ha. In other component demonstration the highest yield was observed under IPM (15.8 q/ha followed by under Varietal (14.33 q/ha).

**Field pea:** 19 KVKs conducted 879 demonstrations on an area of 181.22 ha. On an average 13.65 q/ha yield of field pea was recorded in demonstrations, which was 28.08 % higher over local check. Net return of Rs. 45586.45/ha was reported. Performance of different component demonstrations was found satisfactory under Varietal (13.39 q/ha).

**Table 3.2: Thematic area wise physical achievement of CFLD on pulses**

Name of crop	No. of KVKs	Thematic area	No. of Farmers	Area (ha)	Demo Yield (q/ha)	Check yield (q/ha)	% increase in yield
Pigeonpea	7	ICM	262	100.6	7.52	5.58	34.72
<b>Total/Avg.</b>	<b>25</b>		<b>974</b>	<b>320.6</b>	<b>11.09</b>	<b>7.8</b>	<b>42.08</b>
Blackgram	11	Varietal	345	145	8.53	6.32	34.91
	6	ICM	232	80	10.42	8.15	27.85
	1	WM	27	10	13.52	10.95	23.47
<b>Total/Avg.</b>	<b>18</b>		<b>604</b>	<b>235</b>	<b>10.82</b>	<b>8.47</b>	<b>27.72</b>
Greengram	17	Varietal	712	276.18	7.99	5.55	43.86
	5	ICM	162	50	8.93	6.39	39.81
<b>Total/Avg.</b>	<b>22</b>		<b>874</b>	<b>326.18</b>	<b>8.46</b>	<b>5.97</b>	<b>41.69</b>
Chickpea	15	Varietal	504	163.01	14.33	11.54	24.16
	8	ICM	390	123.8	10.52	8.21	28.16
	2	IPM	58	23.2	15.8	13.4	17.91
<b>Total/Avg.</b>	<b>25</b>		<b>952</b>	<b>310.01</b>	<b>13.55</b>	<b>11.05</b>	<b>22.63</b>
Fieldpea	16	Varietal	570	141.22	17.13	13.39	27.96
	3	ICM	309	40	10.18	7.93	28.28
<b>Total/Avg.</b>	<b>19</b>		<b>879</b>	<b>181.22</b>	<b>13.65</b>	<b>10.66</b>	<b>28.08</b>
Lentil	21	Varietal	797	260.75	12.88	9.65	33.5
	7	ICM	245	81.8	8.4	6.68	25.63
<b>Total/Avg.</b>	<b>28</b>		<b>1042</b>	<b>342.55</b>	<b>10.64</b>	<b>8.17</b>	<b>30.27</b>
Cowpea	1	Varietal	10	1	13.1	10.3	27.2
	1	INM	10	1	13.5	12.2	10.65
<b>Total/Avg.</b>	<b>2</b>		<b>20</b>	<b>2</b>	<b>13.3</b>	<b>11.25</b>	<b>18.22</b>
<b>Grand Total/Avg.</b>	<b>74</b>	<b>-</b>	<b>5345</b>	<b>1717.56</b>	<b>11.64</b>	<b>09.05</b>	<b>30.10</b>

**Lentil:** 28 districts laid out 1042 demonstrations by covering an area of 342.55 ha with lentil crop, exhibited 10.64 q/ha of productivity in demonstrations which was 30.27% higher than local check (8.17 q/ha). A net return of Rs. 30640.37 q/ha was realized in demonstrations. Performance of different component demonstrations was found satisfactory under Varietal (12.88 q/ha).

### 3.1.2 Cluster FLD on Oilseeds

**Groundnut:** A total of 123 demonstrations were organized on 60 ha area in groundnut crop (summer & kharif season) with productivity level of 26.55q/ha which was 30.77 % higher over local practice. The net return of Rs. 95082.05 was realized in demonstrations while it was Rs. 65655.75 in

**Table 3.3: Thematic area wise physical achievement of CFLD on oilseeds**

Name of crop	No. of KVKs	Thematic area	No. of Farmers	Area (ha)	Demo Yield (q/ha)	Check yield (q/ha)	% increase in yield
Groundnut	1	VE	60	35.00	14	11.00	27.27
	1	ICM	25	10.00	33.8	26.70	26.59
	1	IDM	13	5.00	25.8	16.71	62.27
	1	IWM	25	10.00	32.6	26.8	21.65
		<b>Total</b>	<b>123</b>	<b>60.00</b>	<b>26.55</b>	<b>20.30</b>	<b>30.77</b>
Sesame	7	VE	539	233.00	6.29	4.50	39.82
	5	ICM	82	46.00	4.46	3.31	34.71
		<b>Total</b>	<b>621</b>	<b>279.00</b>	<b>5.38</b>	<b>3.91</b>	<b>37.65</b>
Mustard	31	VE	2961	1197.30	10.86	7.67	41.69
	7	INM	100	20.00	12.87	8.20	56.95
	5	IPM	20	10.00	14.8	11.20	24.3
	3	ICM	970	426.00	11.86	9.73	21.84
		<b>Total</b>	<b>4051</b>	<b>1653.30</b>	<b>12.60</b>	<b>9.20</b>	<b>36.94</b>
Linseed	1	INM	25	10.00	8.23	7.23	19.23
	1	ICM	25	10.00	14.43	11.24	24.43
		<b>Total</b>	<b>50</b>	<b>20.00</b>	<b>11.33</b>	<b>9.24</b>	<b>22.69</b>
Toria	2	VE	131	40.00	7.18	4.73	51.69
	1	INM	50	10.00	10.90	8.48	28.54
		<b>Total</b>	<b>181</b>	<b>50.00</b>	<b>9.04</b>	<b>6.61</b>	<b>36.83</b>
<b>Grand Total/Avg</b>	<b>49</b>	<b>-</b>	<b>5026</b>	<b>2062.30</b>	<b>12.98</b>	<b>9.85</b>	<b>32.98</b>

local check. A total of four component demonstrations were conducted. The highest yield of 33.08 q/ha was obtained in Kharif groundnut under ICM component at Hardoi-II followed by 26.8q/ha in IWM (application of Imazathyper + imidachloprid) at Kasganj district.

**Sesamum:** The demonstrations on sesame were laid out by 13 KVKs at 621 farmers' fields on 279 ha area. On an average 5.38 q/ha of yield was recorded in demonstrations, which was 37.65 higher over local check (3.91 q/ha). A net return of Rs. 37725.97 /ha was realized in demonstrations. The highest yield was obtained under VE component at Sultanpur-II (8.35 q/ha) followed by 7.97 q/ha in Manipuri district.

**Mustard:** The demonstrations on mustard were laid out at 4051 farmers' fields at 1653.30 ha area by 46 KVKs. On an average 12.60 q/ha of yield was recorded in demonstrations, which was 36.94% higher over local check (9.20 q/ha). A net return of Rs. 35944.72/ha was realized in demonstrations. The highest yield of 26.98 q/ha was recorded under VE in district Firozabad followed by 20.04 q/ha in Hamirpur district.

**Linseed:** The Two KVKs namely Jaunpur-II and Banda conducted 50 demonstrations on linseed by covering an area of 20 ha, exhibited yield of 11.33 q/ha against 9.24 q/ha of local check showing an increase of 22.63 % higher than local check with net return of Rs. 5218 /ha.

**Toria:** Three KVKs namely Bahraich-II, Kaushambi and Jhansi conducted demonstrations in an area of 40ha area with involvement of 131 farmers. On an average 6.65 q/ha yield of Toria was recorded in demonstrations, which was 36.83 % higher over local check. Net return of Rs. 12128/ha was reported.

## 3.2 FLD other than oilseeds and pulses

### 3.2.1 FLD on Cereal crops

A total of 3553 demonstrations were demonstrated in an area 1089.11 ha on cereals and 132 demonstrations on 32.00 ha area in millets were laid out, covering important cereal and millets crops like paddy, wheat, barley, maize and bajra in all the cropping seasons.

**Table 3.4: FLD on Cereals and Millets**

Crop/ No. of KVK	Thematic area	No. of Farmers	Area (ha)	Demo Yield (q/ha)	Check Yield q/ha)	% increase
<b>Cereal crops</b>						
Paddy (86)	ICM	102	29.00	54.30	40.32	34.68
	IDM	96	30.00	52.99	30.59	73.22
	INM	172	65.00	55.11	40.63	35.64
	IPM	130	42.00	51.66	40.21	28.47
	RCT	50	20.00	39.53	35.72	10.69
	VE	632	220.00	46.42	37.15	24.96
	WM	68	31.40	53.86	43.66	23.36
	<b>Total</b>		<b>1250</b>	<b>437.40</b>	<b>50.55</b>	<b>38.32</b>
Scented Rice (3)	VE	24	5.20	56.71	43.88	29.24
	<b>Total</b>	<b>24</b>	<b>5.20</b>	<b>56.71</b>	<b>32.54</b>	<b>74.26</b>
Coarse Rice (5)	VE	18	5.00	36.915	32.32	14.22
	WM	4	1.00	66.97	46.37	44.43
	<b>Total</b>	<b>22</b>	<b>6.00</b>	<b>51.9425</b>	<b>39.35</b>	<b>32.02</b>
Wheat (86)	FM	40	42.00	45.9	35.1	30.77
	ICM	112	45.50	43.32	41.34	4.79
	IDM	45	18.00	46.83	40.94	14.40
	INM	330	80.23	40.10	34.64	15.77
	RCT	340	68.21	50.21	32.54	54.30
	VE	1100	268.32	41.48	34.55	20.08
	WM	181	76.65	43.57	36.06	20.82
	<b>Total</b>		<b>2148</b>	<b>598.91</b>	<b>44.49</b>	<b>36.45</b>
Barley (2)	VE	10	4.50	33.95	30.09	12.83
<b>Total</b>		<b>10</b>	<b>4.50</b>	<b>33.95</b>	<b>30.09</b>	<b>12.83</b>
Maize (7)	ICM	28	13.00	68.80	54.80	25.55
	INM	24	10.00	61.30	48.60	26.13
	IPM	5	1.90	50.02	44.08	13.48
	VE	42	12.20	33.62	24.62	36.54
	<b>Total</b>		<b>99</b>	<b>37.10</b>	<b>53.43</b>	<b>43.03</b>
<b>Grand Total/Avg.</b>		<b>3553</b>	<b>1089.11</b>	<b>48.51</b>	<b>36.63</b>	<b>32.44</b>
<b>Millet Crop</b>						
Bajra (9)	ICM	20	8.00	27	22	22.73
	VE	112	24.00	29.53	22.81	29.47
	<b>Total</b>		<b>132</b>	<b>32.00</b>	<b>28.27</b>	<b>22.41</b>



**Paddy:** The demonstrations on 7 thematic areas were conducted at 1250 farmers' fields on 437.40 ha area by 86 KVKs. The average yield of 50.55 q/ha was achieved in demonstrations, which was 31.91 % higher over local check (38.32 q/ha).. The highest yield of 55.11 q/ha was recorded in INM component followed by 54.30 q/ha under ICM.

**Wheat:** The wheat demonstrations on different thematic areas were conducted at 2148 farmers' fields covering an area of 598.90 ha. On an average 44.29 q/ha of yield was recorded in demonstrations, which was 22.05% higher over local check (36.45 q/ha). The highest yield of 50.21q/ha was recorded under RCT.

**Barley:** Two KVKs laid out barley demonstrations at 10 farmers' fields covering an area of 4.50 ha. On an average 33.95 q/ha of yield was obtained over local check (30.09q/ha) which was 12.83 % higher over local check.

**Maize:** Seven KVKs laid out maize demonstrations at 99 farmers' field covering an area of 37.10 ha. On an average 53.43 q/ha of yield was obtained over local check (43.03 q/ha) which was 24.19 % . The demonstrations on maize were laid out on varieties and VE at 39 farmers' fields at 12.20 ha area. The highest yield 64.21q/ha was obtained under ICM.

### Millets

**Bajra:** The demonstrations on varietal evaluation and integrated crop management of bajra were laid out at 132 farmers' fields on 32.00 ha area. On an average 28.27 q/ha of yield was recorded in demonstrations, which was 26.16% higher over local check (22.041 q/ha). The highest yield of 24.00 q/ha was recorded under varietal evaluation.

### 3.3.2 FLD on Vegetable crops

A total of 1201 demonstrations on 184.25 ha were laid out on vegetables covering important crops in all the three crop seasons.

**Bitter gourd:** A Total 15 KVKs conducted demonstrations at 105 farmers' fields on 14.71 ha area under different thematic area. Average yield 286.31 q/ha was recorded in demonstrations, which was 25.46 % higher over local check (228.20 q/ha).

**Brinjal:** A total of 97 demonstrations were carried out by twelve KVKs on 21.25 ha area in the field of INM, IPM, ICM, and varietal interventions showed yield potential of 336.44 q/ha against 265.81 q/ha in checks, showing an increase of 26.81 % . The highest yield was obtained under VE (425 q/ha).

**Broccoli:** A total 10 demonstrations were carried out by only one KVK on 1 ha area in the field of ICM showed yield potential of 54.06 q/ha against 44.30 q/ha in checks, showing an increase of 22.03 % .

**Cabbage:** Four KVKs conducted demonstrations at 23 farmer's fields in an area of 3.16 ha on INM and varietal evaluation with yield level of 288.98 q/ha against check yield of 238.15 q/ha showing an increase of 21.34 % .

**Cauliflower:** A total of 123 demonstrations were conducted in an area of 28.16 ha by thirteen KVKs on INM, IPM and VE with yield level of 266.04 q/ha against local check yield of 209.16 q/ha showing an increase of 27.19% Highest yield of 325.50 q/ha was recorded under IPM by 345.50 q/ha.

**Chilli:** Nine KVKs laid out 64 demonstrations on three different components IDM, IPM and varietal evaluation with average yield of 168.78q/ha showing an increase of 32.76% over local check (127.13 q/ha).

**Cowpea:** Four KVKs laid out 61 demonstrations on two different components ICM and varietal evaluation with average yield of 146.31 q/ha showing an increase of 23.01 % over local check (118.94 q/ha).

**Cucumber:** A total of 23 demonstrations were conducted in an area of 4 ha by three KVKs on RCT with yield level of 56.55 q/ha against local check yield of 37.50 q/ha showing an increase of 50.79 % .

**Okra:** Eight KVKs conducted 73 demonstrations on 12.50 ha area with average yields of 386.05 q/ha against 85.07 q/ha in local check with an increase of 353.80 % . The highest yield was recorded in ICM as 897.56 q/ha.

**Onion:** The onion demonstrations on different thematic areas namely ICM, INM and Varietal evaluation were conducted at 166 farmers' fields covering 13.70 ha area by 18 KVKs. The average yield was obtained under demonstration was 254.07 q/ha against local check yield of 192.43 q/ha showing an increase of 32.03% .

**Sponge gourd:** Only one KVK conducted 10 demonstrations in an area of 1ha with yield level of 121.00 q/ha against check yield of 105.00 q/ha showing an increase of 15.24% .

**Tomato:** 173 demonstrations were conducted by 23 KVKs in 26.42 ha area, exhibited 263.84 q/ha of yield against local check (200.58 q/ha) showing an increase of 31.54% higher.

**Vegetable Pea:** A total of 294 demonstrations laid out by 15 KVKs with four interventions namely ICM, IDM, INM and Varietal evaluation on 32.26 ha area. The average yield was observed 106.95 q/ha against 89.81 q/ha in local check with an increase of 18.64 % .

### 3.3.3 FLD on fruit crops

Under FLD on fruits component, a total of ten KVKs conducted 102 demonstrations on 27.60 ha area by conducting demonstrations on banana, guava, mango and papaya with an average yield of 963, 298.32, 109.56 and 621.32 respectively. Percentage increase in yield of banana

Table 3.5: FLD on Vegetables

Crop/ No. of KVK	Thematic area	No. of Farmers	Area (ha)	Demo Yield (q/ha)	Check Yield (q/ha)	% increase
Bittergourd (15)	INM	10	0.50	325.25	265.00	27.17
	IPM	20	4.00	310.00	264.01	23.80
	ICM	10	2.00	178.12	135	34.81
	VE	65	8.21	331.89	248.80	33.39
	<b>Total</b>	<b>105</b>	<b>14.71</b>	<b>286.31</b>	<b>228.20</b>	<b>25.46</b>
Brinjal (12)	ICM	14	2.20	396.00	321.00	26.56
	IPM	22	8.80	187.80	140.70	33.48
	VE	61	10.25	425.53	334.21	24.25
	<b>Total</b>	<b>97</b>	<b>21.25</b>	<b>336.44</b>	<b>265.30</b>	<b>26.81</b>
Broccoli (1)	ICM	10	1.00	54.06	44.30	22.03
	<b>Total</b>	<b>10</b>	<b>1.00</b>	<b>54.06</b>	<b>44.30</b>	<b>22.03</b>
Cabbage (4)	INM	5	1.00	356.00	291.00	22.34
	VE	18	2.16	221.95	185.30	19.78
	<b>Total</b>	<b>23</b>	<b>3.16</b>	<b>288.98</b>	<b>238.15</b>	<b>21.34</b>
Cauliflower (13)	INM	39	5.00	232.67	211.58	9.97
	IPM	10	4.00	345.50	237.10	45.72
	VE	74	19.16	219.95	178.81	23.01
	<b>Total</b>	<b>123</b>	<b>28.16</b>	<b>266.04</b>	<b>209.16</b>	<b>27.19</b>
Chilli (9)	IDM	15	2.00	148.00	112.00	32.14
	IPM	28	10.20	204.25	157.24	29.90
	VE	21	3.50	154.08	112.15	37.38
	<b>Total</b>	<b>64</b>	<b>15.70</b>	<b>168.78</b>	<b>127.13</b>	<b>32.76</b>
Cowpea (4)	ICM	15	1.00	150.50	127.90	17.67
	VE	46	11.50	142.11	109.97	29.23
	<b>Total</b>	<b>61</b>	<b>12.50</b>	<b>146.31</b>	<b>118.94</b>	<b>23.01</b>
Cucumber (3)	RCT	23	4.00	56.545	37.5	50.79
	<b>Total</b>	<b>23</b>	<b>4.00</b>	<b>56.545</b>	<b>37.5</b>	<b>50.79</b>
Okra (8)	ICM	20	6.40	897.56	47.00	1809.69
	IPM	11	1.60	148.63	116.11	28.01
	VE	42	4.50	111.96	92.10	21.55
	<b>Total</b>	<b>73</b>	<b>12.50</b>	<b>386.05</b>	<b>85.07</b>	<b>353.80</b>
Onion (18)	ICM	29	3.00	261.75	200.50	30.55
	INM	10	1.00	249.00	221.00	12.67
	VE	127	9.70	251.47	155.79	61.41
	<b>Total</b>	<b>166</b>	<b>13.70</b>	<b>254.07</b>	<b>192.43</b>	<b>32.03</b>
Potato (13)	IDM	15	3.00	345.00	307.50	12.20
	IPM	46	11.00	329.63	254.94	29.30
	<b>Total</b>	<b>61</b>	<b>14.00</b>	<b>337.31</b>	<b>281.22</b>	<b>19.95</b>
Spongegourd (1)	VE	10	0.75	121.00	105.00	15.24
	<b>Total</b>	<b>10</b>	<b>0.75</b>	<b>121.00</b>	<b>105.00</b>	<b>15.24</b>
Tomato (23)	IDM	21	5.40	295.21	196.00	33.16
	INM	20	4.00	260.6	200.21	15.24
	IPM	15	5.00	110.00	95.00	15.79
	VE	117	12.02	389.54	311.11	33.49
	<b>Total</b>	<b>173</b>	<b>26.42</b>	<b>263.84</b>	<b>200.58</b>	<b>31.54</b>
Vegetable pea (15)	IDM	81	13.60	70.55	59.55	18.47
	INM	18	2.40	136.24	118.32	12.90
	VE	195	16.26	114.05	91.56	24.56
	<b>Total</b>	<b>294</b>	<b>32.26</b>	<b>106.95</b>	<b>89.81</b>	<b>18.64</b>
<b>Grand Total/ Avg.</b>		<b>1201</b>	<b>184.25</b>	<b>219.48</b>	<b>158.77</b>	<b>50.04</b>



**Table 3.6: FLD on fruits**

Crop/ No. of KVK	Thematic area	No. of Farmers	Area (ha)	Demo Yield (q/ha)	Check Yield (q/ha)	% increase
Banana (2)	INM	14	5.60	963.00	896.32	7.44
	<b>Total/Avg.</b>	<b>14</b>	<b>5.60</b>	<b>963.00</b>	<b>896.32</b>	<b>7.44</b>
Guava (2)	IPM	25	10.00	298.32	271.00	10.08
	<b>Total/Avg.</b>	<b>25</b>	<b>10.00</b>	<b>298.32</b>	<b>271.00</b>	<b>10.08</b>
Mango (4)	IPM	43	11.00	109.56	95.00	15.33
	<b>Total/Avg.</b>	<b>43</b>	<b>11.00</b>	<b>109.56</b>	<b>95.00</b>	<b>15.33</b>
Papaya (2)	VE	20	1.00	621.32	409.72	51.65
	<b>Total/Avg.</b>	<b>20</b>	<b>1.00</b>	<b>621.32</b>	<b>409.72</b>	<b>51.65</b>
<b>Grand Total</b>		<b>102</b>	<b>27.60</b>	<b>498.05</b>	<b>418.01</b>	<b>21.125</b>

(7.44 %), guava (10.08 %), mango (15.33 %) and papaya (51.65 %) were obtained.

### 3.3.4 FLD on spices

Under FLD on spices a total of seven KVKs conducted 88 demonstrations on 16.32 ha area by conducting demonstrations on Chilli, coriander, cucumber, onion and turmeric with an average yield of 203.32 q/ha, 30.23 q/ha, 41.50, 243.46 and 225.41 q/ha respectively. Percentage increase in yield of chilli (5.07%), coriander (0.82%), cucumber (10.67 %), onion (12.20 %) and turmeric (17.74 %) were obtained.

**Table 3.7: FLD on spices**

Crop/ No. of KVK	Thematic area	No. of Farmers	Area (ha)	Demo Yield (q/ha)	Check Yield (q/ha)	% increase
Chilli (1)	VE	13	1.00	203.32	193.50	5.07
	<b>Total/Avg.</b>	<b>13</b>	<b>1.00</b>	<b>203.32</b>	<b>193.50</b>	<b>5.07</b>
Coriander (2)	INM	31	6.00	30.23	29.98	0.82
	<b>Total/Avg.</b>	<b>31</b>	<b>6.00</b>	<b>30.23</b>	<b>29.98</b>	<b>0.82</b>
Cucumber (1)	INM	20	4.32	41.50	37.50	10.67
	<b>Total/Avg.</b>	<b>20</b>	<b>4.32</b>	<b>41.50</b>	<b>37.50</b>	<b>10.67</b>
Onion (2)	INM	9	2.00	196.23	188.40	4.16
	IPM	10	2.00	290.70	245.60	18.36
	<b>Total/Avg.</b>	<b>19</b>	<b>4.00</b>	<b>243.46</b>	<b>217.00</b>	<b>12.20</b>
Turmeric (1)	ICM	5	1.00	225.41	189.00	17.74
	<b>Total/Avg.</b>	<b>5</b>	<b>1.00</b>	<b>225.41</b>	<b>189.00</b>	<b>17.74</b>
<b>Grand Total/Avg.</b>		<b>88</b>	<b>16.32</b>	<b>148.78</b>	<b>133.40</b>	<b>9.30</b>

**Table 3.8: FLD on commercial crops**

Crop/ No. of KVK	Thematic area	No. of Farmers	Area (ha)	Demo Yield (q/ha)	Check Yield (q/ha)	% Increase
Mentha (1)	IPM	10	4.00	129.32	119.23	8.46
	<b>Total/Avg.</b>	<b>10</b>	<b>4.00</b>	<b>129.32</b>	<b>119.23</b>	<b>8.46</b>
Potato(4)	IDM	58	20.00	320.25	291.25	9.96
	INM	12	2.32	315.32	298.5	5.63
	IPM	21	10.00	322.4	291.6	10.56
	<b>Total/Avg.</b>	<b>91</b>	<b>32.32</b>	<b>319.32</b>	<b>293.78</b>	<b>8.69</b>
Sugarcane(12)	ICM	70	22.23	798.65	735.62	8.57
	IDM	10	2.00	908.50	788.00	15.29
	IPM	10	4.00	925.00	810.00	14.20
	WM	10	4.00	956.25	925.00	3.38
	IPM	10	2.50	979.00	815.00	20.12
	<b>Total/Avg.</b>	<b>110</b>	<b>34.73</b>	<b>913.48</b>	<b>814.72</b>	<b>12.12</b>
<b>Grand Total/Avg.</b>		<b>211</b>	<b>71.05</b>	<b>454.04</b>	<b>409.25</b>	<b>10.95</b>

### 3.3.5 FLD on commercial crops

Under FLD on commercial crops, a total of 211 demonstrations were laid out on 71.05 ha by 17 KVKs.

**Mentha:** One KVKs conducted 10 demonstrations in an area of 4.00 ha with IPM intervention. The average yield was obtained 129.32 q/ha in comparison to local checks where it was 119.23 q/ha, showing an increase of 8.46 %.

**Potato:** A total of 91 demonstrations laid out by 4 KVKs with three interventions namely IDM, INM and IPM on 32.32 ha area. The average yield of 319.32 q/ha with an increase of 8.69 % over local check (293.78 q/ha) was obtained.

**Sugarcane:** 12 KVKs conducted demonstration at 110 farmers' fields with five interventions namely ICM, IDM, IPM, WM and IPM in an area of 34.76 ha resulted yield of 913.48 q/ha against 814.72 q/ha in local check showing an increase of 12.12%. The highest yield of 925 q/ha obtained under WM.

### 3.3.6 FLD on Fodder crops

Under fld on fodder crops, a total of 860 demonstrations were laid out on 91.46 ha by 25 KVKs.

**Table 3.9: FLD on fodder crops**

Crop/ No. of KVK	Thematic area	No. of Farmers	Area (ha)	Demo Yield (q/ha)	Check Yield (q/ha)	% increase
Berseem (12)	ICM	93	11.00	730.00	630.00	15.87
	VE	186	16.69	568.32	354.32	60.40
	<b>Total/Avg.</b>	<b>279</b>	<b>27.69</b>	<b>649.16</b>	<b>492.16</b>	<b>31.90</b>
Jower(2)	FM	39	3.20	450.00	295.00	52.54
	<b>Total/Avg.</b>	<b>39</b>	<b>3.20</b>	<b>450.00</b>	<b>295.00</b>	<b>52.54</b>
Maize(2)	VE	318	29.32	549.58	393.58	39.64
	<b>Total/Avg.</b>	<b>330</b>	<b>29.32</b>	<b>450.00</b>	<b>395.23</b>	<b>13.86</b>
Napier(2)	IFM	10	0.25	130.00	85.00	52.94
	<b>Total/Avg.</b>	<b>10</b>	<b>0.25</b>	<b>130.00</b>	<b>85.00</b>	<b>52.94</b>
Oat(1)	VE	22	1.00	466.00	390.00	19.49
	<b>Total/Avg.</b>	<b>22</b>	<b>1.00</b>	<b>466.00</b>	<b>390.00</b>	<b>19.49</b>
Sorghum(6)	ICM	67	10.00	607.40	545.90	11.27
	VE	113	20.00	522.23	403.74	29.35
	<b>Total/Avg.</b>	<b>180</b>	<b>30.00</b>	<b>564.81</b>	<b>474.82</b>	<b>18.95</b>
<b>Grand Total/Avg.</b>		<b>860</b>	<b>91.46</b>	<b>451.66</b>	<b>355.37</b>	<b>27.10</b>

**Berseem:** The twelve KVKs conducted 279 demonstrations on 27.69 ha area with an average yields of 649.16 q/ha against 492.16 q/ha in local check. The yield gain was 31.90% higher over local check.

**Jower:** The two KVKs conducted 39 demonstrations on 3.20 ha area with an average yields of 450 q/ha against 295.00 q/ha in local check. The yield gain was 52.54% higher over local check.

**Maize:** Two KVKs laid out 330 demonstrations on 29.32 ha area on fodder maize. The average yield was obtained by 450.00 q/ha over local check (395.23 q/ha) which was 13.86% higher.

**Napier:** The two KVKs conducted 10 demonstrations on 0.25 ha area with an average yields of 130 q/ha against 85.00 q/ha in local check. The yield gain was 52.94% higher over local check.

**Oat:** One KVKs conducted 22 demonstrations in an area of 1.00 ha with an average yield of 466.00 q/ha against 390.00 q/ha in local check. The yield gain was 19.49% higher over local check.

**Sorghum:** Six KVKs conducted demonstration at 180 farmers' fields in an area of 30 ha resulted average yield of 564.81 q/ha against 474.82 q/ha in local check showing an increase of 18.95%. The highest yield of 607.40 q/ha obtained under ICM intervention.

### 3.3.7 FLD on livestock

Demonstrations on different interventions on livestock were carried out. A total of 1607 demonstrations were laid out on enhancing milk yield, disease management, nutritional management & Dairy, etc. 15 KVKs have conducted 395 demonstrations on cattle, 25 KVKs on Buffalo with 323 demonstrations, 8 KVK on goat and sheep with 59 demonstrations and 2 KVKs on vaccination with 342 demonstrations.

**Table 3.10: FLD on livestock**

Category	No. of KVKs	No. of Demonstrations	No. of Unit/Area
Buffalo	25	323	486
Buffalo calf	5	35	66
Cattle	15	395	602
Cattle calf	20	98	478
Goat & sheep	8	59	1619
Poultry	4	27	225
Vaccination	2	342	1287
Others	3	328	1053
<b>Total</b>	<b>82</b>	<b>1607</b>	<b>5816</b>

### 3.3.8 FLD on hybrid crops

**Hybrid Cereals:** The fourteen KVKs laid out demonstrations on hybrid varieties of bajra, maize and paddy at 278 farmers' fields in an area of 95.32 ha. The demonstration yield of paddy (62.32 q/ha), maize (60.23 q/ha) and bajra (36.33 q/ha) was recorded. The percentage yield increase was 25.52, 29.95, and 17.37 % respectively over local check.

**Hybrid Vegetables & fruits:** The fifteen KVKs conducted 53 demonstrations on important hybrid vegetable crops in 4.49 ha area. Among the vegetables, cabbage registered yield q/ha (356.00), cauliflower (192.00), okra (155.20), and tomato (565.00). The percentage yield increase in yield was 22.34, 23.08, 43.39 and 10.78 respectively over local check. Also one KVK conducted 3 demonstrations on watermelon on 0.40 ha area with yield gain of 51.11%.

**Table 3.11: FLD on hybrid crops**

Crop/No. of KVKs	No. of Farmers	Area (ha)	Demo Yield (q/ha)	Check Yield (q/ha)	% Increase in yield
<b>Crereal crop</b>					
Bajra (2)	44	16.00	36.33	30.95	17.37
Maize (6)	89	34.00	60.23	46.35	29.95
Paddy (6)	145	45.32	62.32	49.65	25.52
<b>Total/Avg.</b>	<b>278</b>	<b>95.32</b>	<b>52.96</b>	<b>42.32</b>	<b>25.15</b>
<b>Fruits</b>					
Watermelon (1)	3	0.40	366.75	242.7	51.11
<b>Total/Avg.</b>	<b>3</b>	<b>0.40</b>	<b>366.75</b>	<b>242.7</b>	<b>51.11</b>
<b>Vegetable</b>					
Bittergourd (1)	1	0.05	159.6	116.42	37.09
Cabbage (3)	5	2.17	356	291	22.34
Cauliflower (3)	19	1.17	192	156	23.08
Okra (2)	3	0.12	155.2	108.24	43.39
Tomato (3)	10	1.00	565	510	10.78
Others (3)	15	0.15	110.00	35.00	214.29
<b>Total/Avg.</b>	<b>53</b>	<b>4.49</b>	<b>252.54</b>	<b>199.69</b>	<b>26.47</b>
<b>Grand Total/Avg.</b>	<b>334</b>	<b>100.21</b>	<b>224.08</b>	<b>161.57</b>	<b>38.69</b>

### 3.3.9 FLD on other enterprises

A total of 53 KVKs conducted 1194 demonstrations on 159 units and 538.00 ha area. Enterprises covering apiculture (5), button mushroom (42), dhingari mushroom (50), kitchen garden (978), oyster mushroom (14), value addition (55),

**Table 3.12: FLD on other enterprises**

Category	No. of KVKs	No. of farmers	Area ha/No. of units
Kitchen Garden	32	978	538.00
Value addition	7	55	45
Button Mushroom	6	42	40
Vermicompost	4	40	40
Oyster Mushroom	1	14	14
Dhingari mushroom	1	50	13
Women Empowerment	1	10	2
Apiculture	1	5	5
<b>Total</b>	<b>53</b>	<b>1194</b>	<b>538.00/ 159 units</b>

vermin compost (40) and women empowerment (10). The highest covering area was under kitchen gardening (538.00 ha) with 978 farmers.

**Table 3.13: FLD on farm implements**

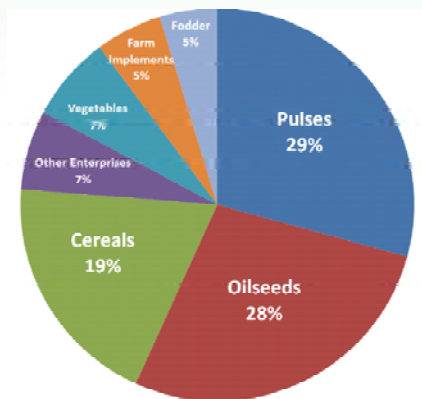
Machinery/No. of KVKs	No. of Farmer	Area(ha)
Zero Tillage (2)	432	172.00
Naveen Sickle (1)	20	20.00
Seed cum ferti drill (1)	15	5.00
Happy seeder (1)	50	50.00
Thresher (1)	40	14.00
Rotavator (1)	168	74.00
Laser land levelor (1)	41	26.00
Paddy Drum Seeder (3)	56	32.63
Others (12)	179	132.00
<b>Grand Total</b>	<b>1001</b>	<b>525.63</b>

### 3.3.10 FLD on farm implements

Twenty three KVKs demonstrated farm implements zero tillage (432), naveen sickle (20), seed cum ferti drill (15), happy seeder (50), thresher (40), rotavator (168), laser land levelor (41) and paddy drum seeder (56) covering an area of 525.63 ha by involving total 1001 farmers.

## FRONTLINE DEMONSTRATIONS

### CFLD ON PULSES



FLDs at a glance



Summer black gram (PU-31): KVK Meerut



Chickpea (KWR-108: KVK Ambedkar Nagar



Green gram (Shweta): KVK Lalitpur



Pigeon pea (Narendra Arhar-2): KVK Prayagraj



Green gram : KVK Hamirpur



## CLUSTER FRONTLINE DEMONSTRATIONS ON OILSEEDS



Mustard (RH-749): KVK Meerut



Toria (Tapeshwari): KVK Kaushambi



Sesame (PB Til-2): KVK Kaushambi



CFLD on mustard (RH725): KVK Etah



Mustard (NDR 8501): KVK Chandauli



## FLD OTHER THAN OILSEED & PULSES



Wheat (HD3226): KVK Meerut



Flower (Gladiolus): KVK Meerut



Sprinkler irrigation in vegetable pea : KVK Gorakhpur-II



Turmaric (Nar. Haldi-1): KVK Ambedkar Nagar



Bottle gourd: KVK Barabanki



Paddy (Narendra Dhan 2065): Ambedkar Nagar



## TECHNOLOGY ASSESSMENT

KVKs of Uttar Pradesh are performing on-farm testing to identify the location specificity of agricultural technologies under various farming systems. Total 783 technologies were assessed and 3922 trials conducted under three categories namely, crop (638), livestock (84) and other enterprises (61) are shown in following Table 4.1.

**Table 4.1 Physical achievement of Technologies Assessed at a glance**

Category of technologies assessed	Technology	Trials
Crop	638	3018
Livestock	84	594
Other enterprise	61	310
<b>Total</b>	<b>783</b>	<b>3922</b>

### 4.1 Crop related technology assessment

KVKs of Zone III of Uttar Pradesh conducted on-farm trials in 112 major thematic areas. Total of 638 technologies were tested with involvement of 3018 farmers. Cereals, pulses, oilseeds, vegetables, fruits, cash crops, etc. were assessed under twelve thematic areas namely Varietal Evaluation (138), integrated pest management (71), integrated nutrient management (64), integrated disease management (46), integrated crop management (33), weed management (33), resource conservation technologies (29), drudgery reduction (18), integrated farming system (13), Information & communication technology (10), Storage Technology (10) and farm mechanization (7), etc.

**Table 4.2 Crop related technologies assessed by KVKs**

Thematic Area	Crop	Technology	Trial
Integrated Nutrient Management (INM)	64	80	348
Varietal Evaluation (VE)	138	200	805
Integrated Pest Management (IPM)	71	92	411
Integrated Crop Management (ICM)	33	46	165
Integrated Disease Management (IDM)	46	73	292
Weed Management (WM)	33	43	178
Integrated Farming System (IFS)	13	10	50
Farm Mechanization (FM)	7	11	35
Drudgery Reduction (DR)	18	19	147
Resource Conservation Technology (RCT)	29	38	171
Information Communication Technology (ICT)	10	16	301
Storage Technology (ST)	10	10	115
<b>Total</b>	<b>472</b>	<b>638</b>	<b>3018</b>

### 4.2 Assessment of Livestock Technologies

A total of 84 technologies were assessed under livestock management by KVKs of Zone III Uttar Pradesh with active participation of 594 beneficiaries (Table-4.3). The technologies related to different thematic areas like feed

and fodder management (26), nutritional management (26) disease management (18), production & management (13), dairy management (9), evaluation of breeds (5), composite fish culture (4) and health management (1) were assessed.

**Table 4.3: Assessment of livestock technologies**

Thematic Area	Enterprises	Technology	Trial
Disease Management	Cow, Buffalo, goat, calf,	18	277
Evaluation of breed	Cow, Buffalo, goat, calf	5	54
Feed and Fodder management	Cattle, Buffalo, fodder	26	190
Nutrition Management	Cattle, Buffalo and Goat	26	213
Production and Management	Goat	13	75
Health Management	Cow, Buffalo, goat, calf,	1	4
Composite fish culture	Fishery	4	19
Dairy Management	Dairy	9	39
<b>Total</b>		<b>84</b>	<b>594</b>

### 4.3 Assessment of technologies related to enterprises

Thematic areas like value addition (20), drudgery reduction (11), household food security (10), women empowerment (9), farm machinery (5), nutritional gardening (4) and small scale income generation (2) were taken up for assessment.

310 beneficiaries were involved in different enterprises (Table-4.4). Kitchen gardening, house hold security, value addition, Agro forestry Management, small scale income generation etc. were considered as an economic activity and to support nutritional security of the farmers.

**Table 4.4: Assessment of various enterprises**

Thematic Area	Enterprises	Technology	Trial
House hold food security	Vegetables	10	67
Value Addition	Paneer, Aonla, <i>Badi</i> , Flour	20	72
Small scale income generation	Honey Production, Composite Fish Culture	2	4
Drudgery Reduction	Drudgery reduction	11	59
Women Empowerment	Women empowerment	9	54
Farm Machinery	Farm Machinery	5	29
Nutritional Gardening	Kitchen Gardening	4	25
<b>Total</b>		<b>61</b>	<b>310</b>

#### 4.4 Results of Selected on Farm Trials

##### 4.4.1 Varietal Evaluation

**Problem definition:** Lower productivity and profitability of Wheat due to use of old & disease prone variety (PBW-550): KVK Muzaffarnagar

**Technology Assessed:** Assessment of timely sown HYV variety of Wheat PBW 725

Wheat is main crop of district Muzaffarnagar. Due to lack of technical knowledge, the brackets like broadcasting method of sowing and use of old variety, the productivity level is low. An On farm trial was conducted during Rabi 2019-20 at three locations to assess high yielding variety of Wheat under irrigated condition. The variety PBW 725 recorded highest tillers (222/sqm), spike length (10.6 cm), grains/spike

(42.0), yield (43.20.00 qt/ha) and 1000 grain weight (40.0 gm) which contributes for increased (10.48 %) yield in comparison to check variety PBW 550. PBW 725 was also not affected by Yellow rust. Maximum net return of Rs. 60160.0/ha was obtained from PBW 725 followed by Rs. 53267.0/ha from PBW 550.

##### Result

1. PBW 725 variety gave highest yield of 43.20 qt/ha with maximum net return Rs. 60160/ha followed by PBW 550 (Rs 53267.00)
2. Variety PBW 725 gave 10.48% more yield in comparison to PBW 550 (39.10 q/ha).

##### Farmers' Reaction

1. Due to higher yield farmers like PBW 725
2. Variety PBW725 was not affected by yellow rust disease
3. There was no lodging seen in PBW 725

##### Problem definition: Low yield of tomato due to use of traditional varieties: KVK Muzaffarnagar

**Technology Assessed:** Assessment of hybrid tomato.

To assess the performance of hybrid varieties of tomato On Farm Trial was conducted with 02 varieties of tomato under field condition. Data collected revealed that Pusa Hybrid-2 was adjudged as better performer with 325.80 qt. production and Rs. 256900 net profit per ha. While other variety Raja produced 256.5 qt. per ha. respectively.

**Table 4.5: Assessment of high yielding variety of wheat on yield and economic parameters**

Technology Option	Yield (qt./ha)	Gross Return (Rs/ha)	Net income (Rs/ha)	B:C Ratio
T1- Farmers practice (PBW-550)	39.10	75267.5	53267.5	3.42
T2- PBW 725	43.20	83160.0	60160.0	3.78

DOS : 18.11.19      DOH 5.4.2020

**Table 4.6: Other observation Recorded**

Technology Option	Tillers/m <sup>2</sup>	Spike length (cm)	No of grains/spike	1000 grain weight (gm)	Maturity duration (days)	Yellow rust incidence (%)	Lodging %
T1- Farmers practice (PBW-550)	207	9.0	39.0	38.0	150	3-4	6
T2-PBW 725	222	10.6	42.0	40.0	150	Nil	Nil

**Table 4.7: Performance of different Hybrid varieties of Tomato**

Technology Option	No. of trials	Yield (q/ha)	Increase in yield (%)	Cost of cultivation (Rs)	Gross income (Rs)	Net returns (Rs)	BC ratio (Rs)
T <sub>1</sub> : Farmer Practice (hyb - Raja)	06	256.50	-	58500	256500	198000	1:4.38
T <sub>2</sub> : – Tomato Pusa Hybrid - 2		325.80	27.0	68900	325800	256900	1:4.72

Sale price of tomato: Rs. 1000/-

**Feed Back:** Fruits of variety Tomato Pusa Hybrid-2 is medium in size, round, deep red after ripening with good keeping quality. It is suitable for processing and distance market

**Problem identified:** Low yield of existing varieties of Okra: KVK Baghpat

**Technology Assessed (as the case may be):** Varietal evaluation of Okra.

KVK Baghpat has conducted On Farm Trial on “Varietal evaluation of Okra” by testing variety of okra Pusa A-4 and Parbhani kranti (under farmer practice). The results obtained from the trial showed that the variety Pusa A-4 performed higher yield 89.20 q/ha than Prabhani kranti with 82.40 qt/ha.

**Table 4.8: Performance of various treatments**

Technology Option	No. of trials	Yield (q/ha)	Increase in yield (%)	Cost of cultivation (Rs)	Gross returns (Rs)	Net returns (Rs)	BC ratio (Rs)
T <sub>1</sub> : Local variety (Parbhani kranti)	03	82.40	17.65	18570	82300	63730	1:4.43
T <sub>2</sub> : Pusa A-4		89.20	20.20	18750	89200	70450	1:4.75

**Farmers Feedback:** The variety of okra Pusa A-4 was found better in terms of high yield and farmers like.



**Potential solution:** Use of newly released wheat variety suitable for the area.

**Farming Situation:** Irrigated

**Cropping system:** Rice- wheat

**Technology Assessed: Variety evaluation of wheat.**

KVK Sohna Siddharthnagar conducted an on farm trial on wheat crop during rabi 2019-20 for evaluation of newly released variety. The results indicated that the wheat variety DPW 621-50 gave 3.22 percent higher over farmers practice.



**Table 4.9: Effect of varieties on yield and economics of wheat**

Technology Option	No. of trials	Yield (q./ha)	Increase in yield (%)	Effective tillers/m <sup>2</sup>	No of grains /panicle
T <sub>1</sub> = HD 2967 (Farmers practice)	5	43.4	-	365	45
T <sub>2</sub> = DPW 621-50		44.80	3.22	367	46

**Table 4.10: Economic analysis of new wheat variety assessed**

Technology Option	No. of trials	Gross Cost (Rs./ha)	Gross Return (Rs./ha)	Net Return (Rs./ha)	B : C Ratio
T <sub>1</sub> = HD 2967 (Farmers practice)	5	34500	83545	49045	2.42
T <sub>2</sub> = DPW 621-50		34500	86240	51740	2.5

**Problem definition:** Evaluation of newly released wheat varieties: KVK Siddharthnagar.

**Problem definition:** Low yield of wheat

- 1) Less no of effective tillers
- 2) Less no of grain /ear
- 3) Low test weight





#### 4.4.2 Home Science/Women Empowerment

**Problem definition:** Malnutrition in farm women and rural children: KVK Meerut

**Technology Assessed:** Assessment of house hold food security through nutritional garden

#### 4.4.3 Integrated Pest Management

**Problem definition:** Low Yield of mustard due to infestation of aphid: KVK Gorakhpur-I

**Technology Assessed :** Use of combination of neem oil fb imidacloprid

**Table 4.11: Performance of technology**

Technology Option	No. of trials	Yield (kg/100 sqm)	Increase in yield (%)	Performance indicators		Cost of cultivation (Rs)	Gross return (Rs)	Net Profit (Rs)	B:C Ratio
				Indicator	Performance				
Production of some leafy and cucurbitaceous vegetables only (Farmers Practice)	10	45	--	> Availability of green vegetables > General health > Disease occurrence	>65 days >Comparatively poor >Comparatively more	250	1125	875	4.5
Enhance household food security through Nutritional Garden throughout the year		120	166	>Availability of green vegetables >General health >Disease occurrence	>245 days >Comparatively good >Comparatively less	450	3000	2550	6.6

Sale Price: @ Rs 25 per kg

**Farmers feedback:** Remarkable acceptance of kitchen gardening due to readily availability of fresh and hygienic vegetables almost free of cost. The practice ensures the regular consumption of vegetables to family members. Save time for purchasing the vegetables from the distant market.

KVK Gorakhpur conducted an on farm trial on mustard for management of aphid during rabi 2020. The results indicated that the use of Neem oil 1500 PPM @ 3.0 ml/lit of water & Imidacloprid 17.8 SL @ 0.5 ml/lit of water spraying at 60,75 & 105 DAS recorded higher yield than farmer practice by 42.85%.

**Table 4.12: Effect of IPM module on incidence of borer and yield of brinjal**

Technology Option	No. of trials	Yield (q/ha)	Incidence of Mustard Aphid (%)		Increase in yield (%)	Gross Cost (Rs./ha)	Gross Return (Rs./ha)	Net Return (Rs./ha)	B:C Ratio
			Leaf	Stem					
T1 : Indiscriminate use of Pesticide (Farmer Practice).	5 (1 ha)	10.5	22.5	15.65	-	25600	42000	16400	1.64
T2: Use Neem oil 1500 PPM @ 3.0 ml/lit of water & Imidacloprid 17.8 SL @ 0.5 ml/lit of water spraying in 60,75 & 105 DAS		15.20	3.90	2.15	42.85	26200	52200	28000	2.32

**Problem definition:** Yield loss of 25-50% due to heavy incidence of shoot gall maker insect in mango orchard: KVK Saharanpur

**Technology Assesse:** Management of shoot gall maker (Psylliasp) insect in mango orchard

Mango is an important cash crop of Western UP. However, there is high incidence of shoot gall maker (Psyllia sp) insect in mango orchard resulting in yield loss. KVK Saharanpur conducted on-farm trial to assess the control measure. The assessed technology of thaimethoxam @ 1gm/lit.+ profenophos @ 2ml/lit. water, two spray 2& 14 August reduced the percentage of insect infestation from 36 to 05 and yield awaited.

m.l./ha 15 days interval as farmer practice along with Buprofezin @ 500 ml/ acre. at 15 days interval up to flowering stage. An appraisal of data collected, Difenturon has quite edge over the chemical insecticides in terms of insect incidence, yield potential and economic returns.

**Farmers Feedback:** Buprofezin is easily available in local markets. It is highly effective to manage white fly in Black Gram crop.

**Problem definition:** Low yield of Rice due to heavy infestation of false smut in Rice: KVK Siddharthnagar

**Potential solution:** Use of Improved fungicide

**Table 4.13: Effect of Thaimethoxam+Profenophosin control of shoot gall maker (Psylliasp) insect in mango orchard**

Technology Option	No. of trials	Incidence of shoot gall (%)	Yield (q/ha)	% Increase in yield over farmer's practice
Application of Imida chloprid 0.5ml/lit. (Farmers practice)	03	24	187	--
Thaimethoxam@1gm/lit.+Profenophos@2ml/lit. water, two spray 2& 14 August.		6	232	19.4

**Recommendation** – The production increase due to spray of Thaimethoxam@ 1gm/lit. + Profenophos @ 2ml/lit and yield increase 23.4%.

**Farmer reaction** – Control of heavy incidence of shoot gall maker insect in mango orchard to spray Thaimethoxam @1gm/lit.+Profenophos@2ml/lit.

**Problem definition:** High infestation of white fly resulting mosaic disease in Black Gram (PU-31): KVK Meerut

**Technology assessed:** Assessment of insecticides to control white fly in Black Gram.

KVK Hastinapur (Meerut) has conducted “On Farm Trial” entitled Assessment of insecticides to control white fly in Black Gram (PU-31) by comparing newer insecticide Spiromecifene @ 200 m.l./ acre with Monocrotophos @ 1000

**Farming Situation:** Irrigated

**Cropping system:** Rice-wheat

**Technology Assessed: Management of False smut in Rice.**

KVK Sohna, Siddharthnagar conducted an on farm trial on rice crop during kharif 2019 for management of false smut through improved fungicide. Result showed that Seed treatment by Thiram 2 gm + carbendazim 1gm fb one spray of propiconazole 0.1% before booting stage resulted 21.43 percent higher yield over farmer practice.

**Table 4.14: Effectiveness, yield and economic parameters of different treatments for the management of white fly in Black Gram**

Technology Option	No. of trials	Insect incidence (%)	Yield q/ha	% age increased	Cost of Cultivation	Gross Return (Rs)	Net Return (Rs)	B:C Ratio
T1- Spraying of Monocrotophos @ 1000 m.l./ha 15 days interval	09	12.5	8.50	-	36172	47600	11428	1:1.32
T2- Spraying of Spiromecifene @ 200 m.l./acre at 15 days interval		3.95	11.20	31.76	37300	62720	25420	1:1.68
T3- Spraying of Buprofezin @ 500 ml/acre. at 15 days interval		1.80	13.10	54.11	36900	73360	36400	1:1.98

Sale price of black gram: Rs 5600/qt.

**Table 4.15: Effect of fungicides on disease incidence and grain yield of rice**

Technology Option	No. of trials	% infested Panicles	Yield (q/ha)	% Increase in yield over farmer's practice
T1=Use of carbendazim @ 2gm/lit (farmers practice)	5	21	44.8	-
T2= Seed treatment by Thiram 2 gm + carbendazim 1gm fb spray of Propiconazole 0.1% at booting stage		6	54.4	21.43

**Table 4.16: Economics of assessed technologies**

Technology	No. of trials	Gross cost (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
T1=Use of carbendazim @ 2gm/lit (farmers practice)	5	35800	80640	44840	2.25
T2=2 Seed treatment Thiram 2 gm + carbendazim 1gm fb Propiconazole 0.1%		37500	97920	60420	2.61

Sale price of Rice @Rs.1800/q, Variety - BPT - 5204.

### Problem definition: Maize stem borer (*Chilo Partelous*) which is known as queen of cereals): KVK Bahraich

**Technology Assessed:** Application of the IPM modules at appropriate stage in Maize to avoid the loss and eco friendly pest management.

KVK Bahraich conducted on farm trial to reduce the pest pressure in maize against maize stem borer (*Chilo parteleus*). Result indicate that yield q/ha was observed 41.85qt in farmers practice whereas in IPM Technology the yield was only 58.4 q/ha. Significant increase in yield of 39.5%, observed in applied IPM practice. As per B:C ratio concern, 1.55 is in farmers practice but in applied technology it is

1.80. Based on observations it was concluded that IPM technology against maize stem borer is highly effective in respect of yield and eco friendly pest management.

#### 4.4.4 Integrated Disease Management

**Problem definition:** Low yield due to severe infestation of Sheath blight in Paddy (Pusa-1121): KVK Meerut

**Technology assessed:** Assessment of fungicide to control sheath blight in Paddy.

KVK Hastinapur (Meerut) has conducted "On Farm Trial" entitled Assessment of fungicide to control sheath blight in Paddy (Pusa-1121) by comparing fungicides Pencycuron @ 800 ml/ha and Azostrobin @ 800 ml/ha 15 days interval

**Table 4.17: Effect IPM technology in Maize against pod borer**

Technology Option	No. of trials	Yield (qt./ha)	Increase in yield (%)	Net Return (Rs./ha)	B:C Ratio
Indiscriminate use of insecticide (Use of Carbofuron3g @30kg/ha or Corazen at bessel dressing) (Farmers Practice)	05	41.85	-	31050	1.55
Use of pheromone trap @ 15 trap/ha with Specific lure, use of bio pesticide neem oil 5ml/lit at ETL (Recommended Practice)		58.4	39.54	37040	1.80

**Table 4.18: Effectiveness, yield and economic parameters of different treatments for the management of Sheath blight in Paddy**

Technology Option	No. of trials	Insect incidence (%)	Yield q/ha	% age increased	Cost of Cultivation	Gross Return (Rs)	Net Return (Rs)	B:C Ratio
T1- Two Spray of Carbendazim @ 1000 g/ha 15 days interval	09	13.60	39.0	-	37400	93600	56200	1:2.50
T2- Two Spray of Pencycuron @ 800 ml/ha 15 days interval		8.50	45.15	15.76	37720	108360	70640	1:2.87
T3- Two Spray of Azostrobin @ 800 ml/ha 15 days interval		7.60	46.20	18.46	39300	110880	71580	1:2.82

Sale price of Paddy: Rs 2400/qt.



with Carbendazim @ 1000 g/ha as farmer practice, two sprays at 15 days interval. An appraisal of data collected, Propeconazole has quite edge over other fungicide the being used as farmer's practice in terms of insect incidence, yield potential and economic returns.

**Farmers Feedback:** Azostrobin is more effective but expensive in respect of net profit application of Pencycuron is cheaper and more profitable however both chemical are significantly effective.

**Problem definition:** Heavy infestation of Brown Planthopper in paddy effecting in a yield loss of 12 to 18%: KVK Pilibhit

**Technology Assessed:** Brown Planthopper Management in paddy (PR-113).

Paddy is an important cereal crop of Pilibhit. However, there is high incidence of Brown Planthopperpest resulting in yield loss. An on farm trial was conducted to assess the control measure.

Farmers appreciated the technology, application of Triflumezopyrim 10 SC @ 235ml/ha to manage the brown planthopper in paddy as it reduced the insect infestation effectively and significantly increased the yield of paddy.

**Problem definition:** Management of root rot and powdery mildew in vegetable pea: KVK Lucknow.

**Technology Assessed:** Vegetable pea in an important vegetable crop of Lucknow district. Root rot and powdery mildew is important diseases, which was severely affected the crop. Generally farmers do not use any control measures for its management. So, the evaluation of efficacy of different fungicides in vegetable pea for overcoming the problems. Result showed that treatment T2-Seed treatment (*Trichoderma viridae* @ 5 gm/kg. seed) and spray of wettable sulphur (3.0 gm./lit.) showed root rot and powery mildew reduced upto 10% and 17-18% and 16.64% yield increased. Cost benefit ratio of demonstration plot and farmers practice were 2.18:1 and 1.60:1. Details are as follows:

**Table 4.19: Effect of different methods in control of Brown Planthopper in paddy**

Technology Option	No. of trials	Infestation of Brown Planthopper (%)	Yield (q/ha)	% Increase in yield over farmer's practice	Cost of Input/ha (Rs.)	Total return per ha (Rs.)	Net Return (Profit)/ ha (Rs.)	CB Ratio
Application of Buprofezin 25 SC @ 1.0 l/ha (Farmers Practice)	05	15.76	46.87	--	56781	77335.0	20554.0	1.36
Application of triflumezopyrim 10 SC @ 235ml/ha		3.65	55.98	19.44	59327	92367.0	33040.0	1.56

(Sale Price. Rs.1700/q)

**Farmers Reactions & Recommendations:** The assessed technology of Application of Triflumezopyrim 10 SC @ 235ml/ha reduced the percentage of insect infestation from 15.76 to 3.65 and yield was increased by 19.44 per cent.

#### 4.4.5 Integrated Crop Management

**Problem Definition:** The lands of mango orchard are not utilized so income is limited: KVK Bhadohi.

**Table 4.20: Technological performance**

Technology Option	No. of trials	Avg. % incidence		Av. Yield (q/ha)
		Root Rot	Powdery Mildew	
T1-Farmers Practices –Not use of pesticides	5	13.6	20.0	64.3
T2- Seed treatment ( <i>Trichoderma viridae</i> @ 5 gm/kg. seed) and spray of wettable sulphur (3.0 gm./lit.)		3.34	2.44	77.14

**Table 4.21: Economic performance of the technology**

Technology Option	Cost of Cultivation (Rs)	Gross Income (Rs)	Net Income (Rs)	B:C
T1-Farmers Practices –Not use of pesticides	60000.0	96,450.0	36,450.0	1.60:1
T2- Seed treatment ( <i>Trichoderma viridae</i> @5 gm/kg. seed) and spray of wettable sulphur (3.0 gm/lit.)	3000.0	115,710.0	62,710.0	2.18:1

Rate:@Rs.1500/q

**Technology Assessed:** Intercropping of turmeric in established mango orchard after center opening.

**Result:** An OFT was conducted at 04 farmers fields in mango orchard after centre opening. The turmeric variety Megha was shown in month of April. At the time of harvesting yield was recorded 160.3 q/ha and net income was Rs. 160300.00 /ha as additional income after the new intervention of intercropping in mango orchard. Whereas farmers practices they using orchard for mango production. The cost benefit ratio was calculated 2.22.

KVK Sohna Siddharthnagar conducted an On Farm Trial on Paddy during Kharif 2020 on weed management in paddy. The results indicated that the use of Cyhalofop + Penaxulan @2500 ml/ha. Gave 14.23% higher yield over farmers practice.

#### 4.4.7 Resource Conservation Technology (RCT)

**Problem definition:** Low production and poor nutritional quality: KVK Sitapur-I.

**Table 4.22: Performance of Turmeric as inter crop in mango**

Technology	No. of trials	Yield q/ha	Cost of Cultivation	Gross Income	Net Income	B.C. Ratio
T-1 Mango( Langra)	4	82.3	37500	164600	127100	4.39
T-2Mango (Langra)		97.9	39800	195800	156000	4.92
+ Turmeric (Megha)		160.3	72350	160300	87950	2.22

#### 4.4.6 Integrated Weed Management

**Problem definition:** Heavy infestation of weeds, low yield, less no of effective tillers in Paddy: KVK Siddharthnagar.

**Potential solution:** Use of combination of new herbicide.

**Farming Situation:** Irrigated

**Cropping system:** Rice-Wheat

**Technology Assessed:** Weed control in paddy by combination of herbicides.

**Technology Assessed:** Soil Health management (Green manuring through Sunhemp with Halo CRD + NPK 75%)

KVK-II, Sitapur, Uttar Pradesh conducted on-farm trial to find out the impact of Green manuring through Sunhemp before Paddy crop and to assess the impact on soil health. The data revealed that Halo CRD + NPK 75% gives better impact in improvement of soil health as well as on paddy yield 54.9 q/Ha and net return Rs 66,943 compared to Control yield 50.7 q/Ha and net return Rs. 59,278.

**Table 4.23: Effect of combination of herbicides on weed control and yield of paddy**

Technology Option	No of trials	Yield (q./ha)	Increase in yield (%)	No Of weed		Effective tillers/m <sup>2</sup>	No of grains/panicle
				Before	After		
T1= Bispyriback sodium10% SC 200ml/ha & Ethoxisulfuron150 gram/ha. (Farmer's Practice)	5	47.6	-	169	07	385	96
T2= Cyhalofop+Penaxulan@2500 ml/ha		54.4	14.23	172	06	396	105
Economics		No of trials	Gross Cost (Rs.)	Gross Return (Rs.)	Net Return	B:C Ratio	
T1= Bispyriback sodium10% SC 200ml/ha & Ethoxisulfuron150 gram/ha. (Farmers Practice)	5	36300	85680	49380	2.36		
T2= Cyhalofop+Penaxulan@2500 ml/ha		37500	97920	60420	2.61		

Sale price of paddy Rs. 1800/q

**Table 4.24: Effect of Green Manuring through Sunhemp in Paddy**

Technology Option	No. of trials	Pre-soil analysis	Post Soil analysis	Yield (q/Ha)	Cost of cultivation	Gross return	Net Return	B:C Ratio
Farmer practice- Normal FYM (Farmers Practice)	05	OC-0.32 N-196.8 P-14.2 K- 137.5	OC-0.29 N-229.3 P-16.3 K-128.3	50.7	34150	91260	592278	2.67
T1: Halo PSB, Halo Azo @ 100ml/ Acre+ FYM		OC-0.32 N-196.8 P-14.2 K- 137.5	OC-0.44 N-232.5 P-17.7 K-153.4	55.9	34890	100620	66943	2.88



T1: Farmers Practice

T2: Recommended Practice

#### 4.4.8 Integrated Farming System (IFS)

**Problem diagnose:** Low income due to Rice Wheat Cropping: Kanpur Dehat

IFS Module for 0.60 ha area

**FP:** T<sub>1</sub> Existing practice of Rice-wheat cropping

**Technology to be assessed:** T<sub>2</sub>-Vegetable + RW system + Dairy Farming

**No. of farmers:** 3

Production of Mushroom is increasing in Bareilly district day by day as the rural youth and self help groups are taking it as an income generating activity. During peak production period price of mushroom goes down and most of the times the material sent to the market comes back without being sold. It causes a heavy loss to young entrepreneurs who find himself helpless under these circumstances. To overcome these problems of wastage and low price in the market an OFT is conducted with the technology of Directorate of Mushroom Research, Solan,

**Table 4.25: Economics of Dairy Farming**

Year	No. of Milking cows	Milking/ animal/day	Milk Prod Lt/day	Total Income (Rs/Year)	Total Cost (Rs/Year)	NetIncome (Rs/Year)
2019-20	3	8 Lt.	24 Lt	207360	105850	101510

Assumptions: Sahiwal Cows = 5 Milking Sahiwal Cows = 3 Milk/Cow = 8 Lt

Price of Milk = Rs.32/Lt., Assuming that 3 Cows are always milking for 270 days/year

Cost of Ration/animal = 58/animal/day, for 5 cows for 365 days+green fodder costing Rs. 20000.00/yr

**Table 4.26: Economics of Dairy Farming Based IFS of 0.60 ha area**

Year	Area	Equiva- lent Yield (q/ha)	Total Income (Rs.)	Total cost (Rs.)	Net Profit (Rs.)	Net Profit by Milk(Rs.)	Total Net Profit (Rs.)	C:B Ratio
	0.60 ha							
T1-Farmer Practice	Rice-Wheat	74	125800	66450	59350	-	59350	1.81
T2- Vegetable+ RW+Dairy Farming	Til-Tomato- Watermelon	191	286500	153600	132900	101510	234410	1.87

Rice yield was calculated as Wheat Equivalent and Selling prices were 1700/q

Yield was pooled as Tomato Equivalent. Selling prices of Equivalent Yield were Rs.15/kg.

**Reaction of the farmers (Profitability and Acceptability by the farmers):** Farmers reacted in positive manner for IFS module as it resulted in more profit than growing their traditional crops (rice and wheat). Farmers are enthusiastic in adopting the technology.

#### 4.4.9 Value Addition

**Problem definition:** Wastage and Low Income from Mushroom Production during Peak Period: KVK Bareilly

**Technology Assessed:** Preservation and Value addition in Mushroom.

Himachal Pradesh in 10 farm families by making mushroom pickle of 5.00 kg. mushroom and sold out @ Rs. 300 per kg.

**Name & Character of Technology:** Value Addition in Mushroom by making Mushroom Pickle

**Farmers Practice (T1):** Sale of Mushroom at very low price and losses due to wastage

**Recommended Technique (T2):** Mushroom Pickle

**No. of Trials (Replication):** 10

**Farmers Reaction:** Farmers observed that their mushroom after coming back from the market is of no value because it is very perishable in nature but making pickle of mushroom provided them opportunity to preserve it for a longer period of time as well as some extra income.



**Table 4.27: Results of OFT**

Treatment	Production (Kg.)	Gross Cost (Rs.)	Gross Income (Rs.)	Net Income (Rs.)	B:C Ratio
T-1 Farmers Practise (Sale on Low Cost/Threw away)	5.00	250.00	350.00	100.00	1.40
T-2 Making Mushroom Pickle	4.75	750.00	1425.00	675.00	1.90

#### 4.4.9 Livestock

**Problem definition:** Low weight gain problem in fishes, Low income of fish farmer: KVK Sitapur-II

**Technology Assessed or Refined (as the case may be):** To assess the enhancement of fish weight gain through mineral mixture

KVK-II, Sitapur conducted on-farm trial to assess the measures by assess the enhancement of fish weight gain through mineral mixture supplements. Mineral Mixture added in fish feed @ 2% of feed.

**Table 2.28: Effect of Mineral Mixture supplements on productivity of Fish**

Technology Option	No. of trials	Fish Yield (Qtls/ha)	Change in Yield (%)	Parameter Body weight gain (g) in 150 days	Gross return	Net Return (Rs.)	B:C Ratio
Farmers Practices – (Rice polish-8 kg + Mustard oil cake-2kg)/ acre/ day	5	38.8	-	550	232800	170800	3.7
Recommended Practice- Mineral Mixture @ 2 % of fish feed		45	15.98	640	270000	204000	4.1

**Problem definition:** Less profit due to CRD disease of broiler in rainy season: Siddharthnagr

**Technology Assessed:** Assessment of Amoxicillin Antibiotics in the feed of broiler.

Krishi Vigyan Kendra, Sohna, Siddharthnagar conducted on farm trial to find out the suitable technology for getting higher net profit from broiler farming. For control of CRD disease Amoxicillin antibiotic added 10 mg /kg body weight at 17, 18 & 19 days and liver tonic 20 ml/ 100 chicks. The recommended technology recorded 19.51 percent higher yield over farmer practice.

**Table 2.29: Effect of Amoxicillin Antibiotics on broilers**

Technology	No. of trial	No. of chicks	Mortality %	Total weight at 45 days (Kg)	% increase over FP
T <sub>1</sub> =No use of proper antibiotic (FP)	5	200	12	2.05	-
T <sub>2</sub> = Amoxicillin Antibiotics 10 mg /kg body weight at 17, 18 & 19 days and liver tonic 20 ml/ 100 chicks	5	200	3	2.45	19.51

**Table 2.30: Economics of OFT**

Technology	Average cost up to 45 days	Gross return (Rs/day)	Net return (Rs/day)	B:C Ratio
T <sub>1</sub> =No use of proper antibiotic ( FP)	32000	36080	4080	1.13
T <sub>2</sub> = Amoxicillin Antibiotics 10 mg /kg body weight at 17, 18 & 19 days and liver tonic 20 ml/ 100 chicks	34200	47040	12840	1.38

(Broiler Rate Rs. 100/- per Kg)

#### 4.4.9 Drudgery Reduction

**Problem definition:** Low work efficiency and injury (backache) in cleaning of grains: KVK Baghpat

**Technology Assessed (as the case may be):** Use of hanging type grain cleaner with sack holder for cleaning cereals (Wheat).

Many agricultural operations are performed by women involve a lot of physical strain. Cleaning of grains (wheat) is one of them. Cleaning of wheat through traditional sieve is very time and energy consuming along with causing drudgery to them. In order to enhance the efficiency and reducing drudgery, krishi vigyan kendra Baghpat, conducted a trial by introducing hanging type grain cleaner as T2 (technology option 2) for cleaning of wheat against traditional sieve as farmer practice T1 (technology option 1) on three locations. Result revealed that in T2 average working heart rate (AWHR) of farm women was 100 beats/minute which was quite less as compared to T1 (126) and energy expenditure in T2 was found 7.18 KJ/min as compared to T1 (16.05 KJ) Thus activity become comparatively light when performed with T2. Drudgery is minimized as its been reduced from very severe to mild (moderate pain) activity when performed with T2. The result also indicated that the hanging type grain cleaner cleaned 200 kg/hr wheat as compared to traditional sieve 50 kg/hr.

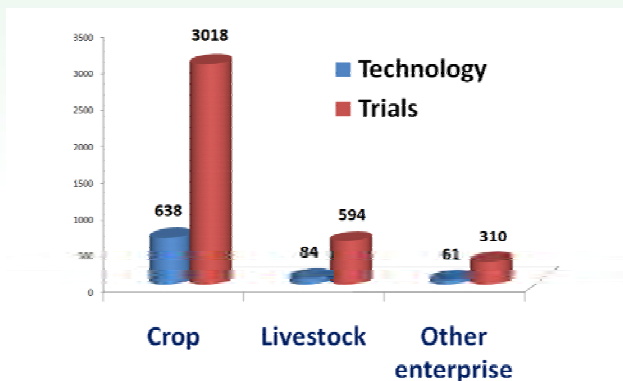


**Table 2.31: Performance of various treatments**

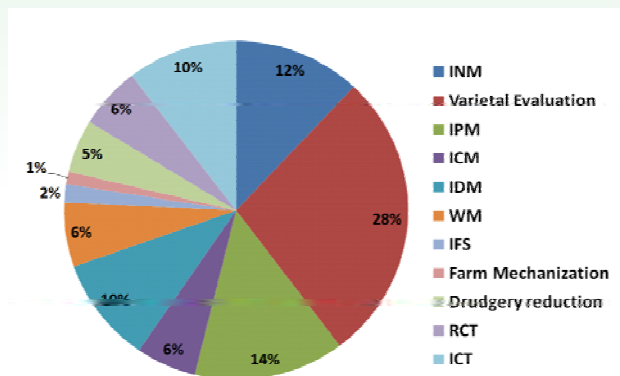
Technology Option	No. of trials	Parameters observed	Data	Remark
T1- Use of traditional sieve (Farmers Practice)	2	1. Average working heart rate 2. Total cardiac cost of work (TCCW) 3. Physiological cost of work 4. Energy consumed (EE) 5. Work efficiency 6. Pain (shoulder)	= 126 beats/min = 420 beats/min = 28 = 16.05 KJ/min. = 50 Kg/hr = very severe	In T <sub>2</sub> AWHR of farm women was 97 beats/min, quite less as compared to T <sub>1</sub> and energy expenditure in T <sub>2</sub> was found less (6.7 KJ/min) as compared to T <sub>1</sub> (11.63 KJ/min). Activity was found comparatively light when performed using T <sub>2</sub>
T2- Use of hanging type grain cleaner with sack holder		1. Average working heart rate 2. Total cardiac cost of work (TCCW) 3. Physiological cost of work 4. Energy consumed (EE) 5. Work efficiency 6. Pain (shoulder)	=100 beats/min = 125 beats/min = 8.33 = 7.18 KJ/min. =200 Kg/hr =mild	



## TECHNOLOGY ASSESSMENT



Technologies Assessed at a glance



Thematic area wise trials conducted under different crops



Assessment of Azolla: KVK Ambedkar Nagar



Assessment of wheat (PBW 725): KVK Muzaffarnagar-I



Assessment of Paddy (Kala Namak): KVK Amethi



Assessment of Brinjal Variety Nankiran



Assessment of sugar beat: KVK Lucknow



Assessment of groundnut: KVK Hardoi



## EXTENSION PROGRAMMES

Extension programs are one of the important mandated activities to be carried out by the KVKs of Uttar Pradesh. In all 45157 extension activities with 10.84 lakh beneficiaries, 52168 mass communication extension activities, 155135 mobile advisories through text and voice for 64.87 lakh farmers, 51775 soil samples covering 83246 farmers, 3193 technology week celebrations with 1.07 lakh beneficiaries, 1926 publications by KVKs and 34 by ATARI, 167 HRD activities by KVK and 5 by ATARI, 119 trainings and demonstrations under rain water harvesting & micro irrigation system with 21113 beneficiaries have been reported.

### 5.1 Extension Activities

A large number of extension activities (45157) were organized by KVKs of Uttar Pradesh. The major activities like advisory service (14456), diagnostic visits (5026), field days (569), group discussions (583), kisan gosthies (1414) film shows (406), self help groups (163), kisan mela (293), exhibitions (240), scientist visit (8590), plant/animal health camps (1072), farm science clubs (55), ex-trainees meet (1001), farmers' seminars (133), method demonstrations (367), celebrations of important days (355), special days celebration (252), exposure visits (665) with the participation of 1051956 farmers and 30241 extension personnel were benefitted.

**Table 5.1: Physical achievement of extension programmes**

S.No.	Programmes	Number	Beneficiaries
1	Extension activities	45157	1084738
2	Other extension programs(mass communication)	52168	mass
3	Mobile advisories	155135	6487234
4	Soil samples	51775	83246
5	Technology week celebrations	3193	106566
6	Publications	By KVK: 1926 By ATARI: 34	mass
7	HRD activities	By KVK: 167 By ATARI: 5	KVK: 2037 ATARI: 83 KVKs
8	Rain water harvesting & micro irrigation system	119	21113

**Table 5.2: Extension activities conducted in KVKs of Uttar Pradesh**

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	Total	No of KVKs
Advisory Services	14456	281660	4412	286229	70
Diagnostic visits	5026	25825	1395	27333	73
Field Day	569	17020	754	17787	67
Group discussions	583	15899	472	16241	55
Kisan Ghosthi	1414	137988	5108	143149	74
Film Show	406	21716	1303	23030	45
Self -help groups	163	4760	236	4992	43
Kisan Mela	293	143804	4434	149041	53
Exhibition	240	108147	3157	112207	48
Scientists' visit to farmers field	8590	49635	1789	51673	70
Plant/animal health camps	1072	11980	337	12667	40
Farm Science Club	55	3964	60	4027	17
Ex-trainees Sammelan	1001	20583	124	20707	28
Farmers' seminar/workshop	133	7409	532	7943	38
Method Demonstrations	367	7329	563	7898	41
Celebration of important days	355	31363	1828	33190	67
Special day celebration	252	23524	1324	24854	66
Exposure visits	665	24211	478	24704	50
Others	9517	115139	1935	117066	47
<b>Total</b>	<b>45157</b>	<b>1051956</b>	<b>30241</b>	<b>1084738</b>	<b>86</b>

## 5.2 Other Extension activities

KVK of Uttar Pradesh has also organized other extension activities (52168) also. The major activities like electronic media (208), extension literature (43682), news paper coverage (4703), popular articles (849), radio talks (386), and TV talks (205), health camps (1877) were performed.

stakeholders towards designing realistic action plan of KVKs. Participatory planning is the main feature of KVK system for enhancing crop production and productivity towards fulfilling the needs of the farmers.

S. No.	Particulars	Number	No. of KVKs
1	Electronic Media (CD./DVD)	208	33
2	Extension Literature	43682	60
3	News paper coverage	4703	73
4	Popular articles	849	61
5	Radio Talks	386	59
6	TV Talks	205	39
7	Animal health amps (No. of animals treated)	1877	40
8	Others	466	21
	<b>Total</b>	<b>52168</b>	<b>86</b>

## 5.3 Mobile Advisory Services

Kisan Mobile advisory services were given by KVKs with 22518 Voice calls and 127788 text messages to 6487234 farmers. Advisories under different type of messages were delivered to all registered farmers. By sending text and voice messages by mobile has enabled the KVKs to reach the unreached farmers in distant and remotely located areas.

### 5.4.3 Technology week celebrations

In Uttar Pradesh, 3193 activities were organized by KVKs by benefiting 106566 farmers. The main activities involved in this program are distribution seeds, bio-fertilizers and bio-products to farmers and other activities like goshies, lectures, exhibition, film show, Fair, farm visits, diagnostic practicals, distribution of literature, distribution of planting

**Table 5.3: Physical achievement of Kisan Mobile Advisory Services provided to farmers**

Category of messages	Number	Farmers covered
Text	127788	6205232
Voice	22518	276542
Text & Voice both	4829	5460
<b>Total</b>	<b>155135</b>	<b>6487234</b>

**Table 5.4: Detail subject wise messages (KMAS) delivered to farmers**

Category of messages	Type of messages						Total	No. of KVKs
	Crop	Livestock	Weather	Marketing	Awareness	Enterprise		
Text	18712	4284	2481	609	99394	2308	127788	86
Voice	8386	2255	1004	819	4103	5951	22518	65
Text & Voice both	2178	371	305	154	1087	734	4829	59
<b>Total</b>	<b>29276</b>	<b>6910</b>	<b>3790</b>	<b>1582</b>	<b>104584</b>	<b>8993</b>	<b>155135</b>	<b>86</b>

## 5.4 Other Extension Programmes

### 5.4.1 Soil samples analysis

In all, 51775 samples of soils, water plant, manures and others were analyzed by 79 KVKs. Those samples were collected from 2731 villages and 83246 farmers' fields in Uttar Pradesh.

### 5.4.2 Scientific Advisory Committee Meetings (SACs)

Total 69 Scientific Advisory Committee meetings were organized by all KVKs in U.P. It is one of the important platform to obtain the suggestions from different

materials, distribution of fingerlings and distribution of livestock specimen.

### 5.5.4 Rain water harvesting & micro irrigation system

In total, 68 trainings and 51 demonstrations were conducted and 20843 farmers and 270 officials visited the system also 41628 plant material produced under the zone in context to rain water harvesting and micro irrigation system.

### 5.5.5 Technology backstopping by Directors of Extension

Technology backstopping is the process of making available ready to use technologies for farm families through assessment, refinement and demonstration processes in order to combat the existing/forecasted technology fatigue. In this connection, Directors of Extension from four SAUs provided or share their experiences to KVKs by following activities –

- (i) Visits: SAC (7), fielddays (17), workshop/seminar (10), technology week (4), training programmes (7), others (13)
- (ii) Overseeing of KVK activities: OFT (33), FLD (36), others (3)
- (iii) Technology product provided to KVKs: Seeds (2), poultry breeds (20), poultry product (46)

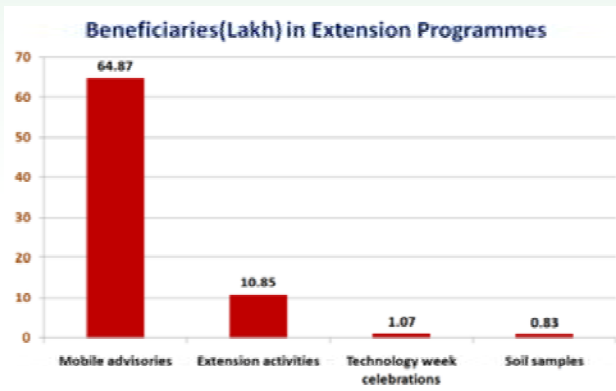
### 5.5.6 ATIC (Agricultural Technology Information Centre)

It is a better interaction between researcher and technology users. This serves as a single window system with an

objective to help the farmers and other stakeholders both to provide solution to their location specific problems and make available all the technological information along with technology inputs and products for testing and use by them. In this zone, there are four ATIC centres and achieved the followings–

- (i) About 5512 farmers visited to ATIC centre and availed the facilities like exhibition, technology museum, touch screen kiosk, cafeteria, sales counter and noted their feed back in the register
- (ii) Total 9436 technology information provided by Kisan call centres, video shows, etc
- (iii) Total 300 publications are distributed
- (iv) Technology products like seed (937 q), planting materials (20.44 lakh), poultry birds (40), bio-product (1.5 q) and others (71.75 lakh) are provided to farming community.
- (v) Technology services like soil & water testing (1459), plant diagnostics (487), services to line departments (5043), others (254) also provided to farmers and others.

## EXTENSION PROGRAMMES



Field Visit at farmers field: KVK Hamirpur



Rabi Goshti: KVK Hamirpur



DE, ANDUAT monitoring at KVK Chandauli



Visit of farm women at KVK Lalitpur



Celebrating World Soil Day: KVK Kasganj



Krishi Mela evam Goshti at KVK Mahoba



Krishi Pradarshani : KVK Chandauli



## SEED & PLANTING MATERIAL PRODUCTION

KVKs of Uttar Pradesh has given emphasis on production of seeds/seedlings/livestock strains/bio products etc, which are important and suitable for the district by ensuring quality of technological products produced at their instructional farm using revolving fund and supplier to the farmers for large scale promotion of quality seed/planting material. Host wise total production of seed (27715.83 q), planting material (51.37 lakh), bio-product (1409.47 q) and livestock strain (72.58 lakh) are shown as below.

included JKRH-401, Sava-127, PR 113, NDR-359, BPT 5204, PB-1509, NDR-2065, Pusa Basmati-1121, Pant Ballabh Dhan -1, HUR-917, HUR-105, Sahbhagi, HUBR 2-14, Shusk Samrat, HUBR 4-3, Sarju-52, Damnni, Mahsuri, Old Kalanamak, DRR 44, DRH-775, Sambha Sub 1, CSR-46, CSR-36, Pusa-2511, PR-113, NDR-3112, AZ 6444 Gold, BH-21, PB-1121, BH-21, PB 1637 etc. The other crop varieties included; Barley-Mahamana-113 (HUB-113), Maize-DKC-9144, Azad Uttam, African tall, Bio 9544, HQPM-1. The detailed crop wise data is given in Table 6.3.

**Table 6.1: Seed, planting material, bio-product and livestock strain production at a glance**

Production type	Quantity	Value in lakh	Distributed to no. of farmers
Seed Production (q)	27715.83	407.05	14964
Planting material production (Lakh)	51.37	60.17	26858
Bio-product production (q)	1409.47	949275	2901
Livestock strain (Lakh)	72.58	32.12	1154

### 6.1 Seed Production

Seed production is one of the important activity of KVKs. They undertake quality seed production which may play a greater role in enhancing production and productivity of different crops. During the year 2020, KVKs of Uttar Pradesh produced 27715.83 q seed of cereals (13181.05 q), commercial crops (10288.50 q), pulses (2487.35 q), oilseeds (1380.80 q), fodder (292.44 q), vegetables (75.69 q), and spices (10.01 q).

### 6.1.2 Commercial crops

Mainly two commercial crops potato and sugarcane were taken by KVKs of Uttar Pradesh. The seed production of potato (173 q) and sugarcane (10050.37 q) was recorded. The important varieties i.e. Kufari Bahar, Kufri Sutlaj, K. Sinduri, Kashi Kanchan, Kufri Chipsona-3, Kufrikhyati, Chipsona-1 of potato selected for seed production and sugarcane varieties were COS-238, Cos-88230 etc.

**Table 6.2: Enterprise wise physical achievement of seed production (U.P.)**

Enterprise	Quantity (q)	Value (Rs. in lakh)	Distributed to farmers	No. of KVKs
Cereals	13181.05	233.76	8484	86
Commercial	10288.50	6.99	153	7
Pulses	2487.35	114.76	2888	60
Oilseeds	1380.80	43.09	2897	59
Fodder	292.44	4.57	137	14
Vegetables	75.69	3.37	312	17
Spices	10.01	51420	93	6
<b>Total</b>	<b>27715.83</b>	<b>407.05</b>	<b>14964</b>	<b>-</b>

#### 6.1.1 Cereals

The KVKs produced 13181.05 q of seeds of cereals as per details given in Table 6.3. The seed of important cereal crops produced included the crop like paddy (4547 q), wheat (8136.58 q), barley (94.05 q), maize (146.50 q), etc. The important wheat varieties included K-1006, PBW 107, K-402, Raj 4120, K-7903, HD-3086, HD-2967, DBW-39, K 1317, H.D-3090, Mandakini, PBW 502, HD-2643, PBW 343, PBW 154, HUW-234, DBW 17, PBW 550, UP 2382, NW-2036, KRL-210, Mahi, Unnat Halna-(K-9423) etc. Important varieties of paddy in seed production programme

#### 6.1.3 Pulses

The total quantity of pulses seed production was 2487.35 q. The important pulse crops like Field pea (916.38), Chick pea (761.58), Lentil (416.45), Cowpea (56.07), Pigeon pea (92.55), Urdbean (42.2), Moongbean (191.74) and Rajmash (2.11) etc were taken up under seed production programme. The important varieties of pulses selected for seed production were chick pea (JG-14, RVG-202, GNG-1581, RVG-203, Ujjwal, Udai, DCP 92-3, Avarodhi, Radhey, Pant Chana -1); pigeon pea (TJT-501, Prakash -IPA 203, N.A-2, Bahar, Mal 13, IPA-203, Pant-291); field pea (Prakash, Aman, IPFD 10-12, Rachna,



Pusa Prabhat, IPFD 4-9, Aman; lentil-KLB 320, IPL-316, IPL-81, HUL-57, PL 406, DPL 62, K-75, PL 406, PL-08, Pusa Masoor Ageti); urd bean (Shekhar-2 & 3, IPU 2-43, PU-40, PU 35) and mungbean (Virat, IPM 2-3, IPM 2-14, HUM-16, PU 36, Narendra Moong-1). Details are given in Table-6.3.

#### 6.1.4 Oilseeds

The KVKs of the zone produced seed **1380.80** quintals of oilseeds. The important oilseed crops like Mustard (432.90), Sesamum (225.25), Groundnut (30.00), Linseed (5.51), Toria (257.04), etc were taken up under seed production

**Table 6.3: Crop wise seed production (U.P.)**

Enterprise	Name of Crop	Quantity (q)	Value (Rs. in lakh)	Distributed to farmers	No. of KVKs
<b>Cereals</b>	Wheat	8136.58	152.14	4403	52
	Paddy	4547	69.67	3704	36
	Maize	146.5	4.80	11	3
	Jower	176.41	4.42	35	3
	Bajra	72.39	0.18	30	4
	Barley	94.055	2.21	244	9
	Mandua	2.16	0.08	36	1
	Barnyard millet	0.29	0.008	5	1
	Finger Millet	1.16	0.003	16	1
	Other	4.5	0.23	0	0
	<b>Total</b>		<b>13181.045</b>	<b>233.76</b>	<b>8484</b>
<b>Commercial crops</b>	Potato	173.00	3.60	50	1
	Sugarcane	10050.37	2.37	76	3
	Onion bulb	2.00	0.07	20	1
	Other	63.13	0.94	7	2
	<b>Total</b>		<b>10288.50</b>	<b>6.99</b>	<b>153</b>
<b>Pulses</b>	Pigeon pea	92.55	7.03	794	13
	Lentil	416.45	16.27	278	11
	Moongbean	191.74	3.76	222	5
	Field pea	916.38	32.96	635	10
	Chick pea	761.58	31.89	450	13
	Cowpea	56.07	20.19	368	1
	Urdbean	42.2	1.99	0	3
	Rajmash	2.11	0.20	102	2
	Horse gram	3.7	0.40	27	1
	Other	4.57	0.06	12	1
<b>Total</b>		<b>2487.35</b>	<b>114.76</b>	<b>2888</b>	<b>60</b>
<b>Oilseeds</b>	Mustard	432.90	18.93	1866	21
	Toria	257.04	9.13	50	4
	Linseed	5.51	0.45	57	4
	Sesamum	225.25	3.55	595	12
	Groundnut	30.00	2.32	100	2
	Soybean	395.88	7.56	0	6
	Other	34.215	1.14	229	10
	<b>Total</b>		<b>1380.80</b>	<b>43.09</b>	<b>2897</b>
<b>Fodder/Fibre crops</b>	Jower	0.01	1.62	1	3
	Berseem	0.43	0.09	19	2
	Sudan	30.48	0.04	15	3
	Napier grass	230.00	0.02	30	1
	Dhaincha	16.20	0.25	0	1
	Other	15.32	2.54	72	4
	<b>Total</b>		<b>292.44</b>	<b>4.57</b>	<b>137</b>
<b>Vegetables</b>	Vegetable Pea	0.52	0.10	3	2
	Okra	56.27	2.57	233	6
	Suran	2.4	0.17	10	1
	Onion	11.06	0.32	23	3
	Chilli	0.01	0.002	2	2
	Other	5.43	0.20	41	3
<b>Total</b>		<b>75.69</b>	<b>3.37</b>	<b>312</b>	<b>17</b>
<b>Spices</b>	Turmeric	7.00	0.30	74	2
	Coriander	2.57	0.20	16	2
	Garlic	0.44	0.013	3	1
	<b>Total</b>		<b>10.01</b>	<b>51420</b>	<b>93</b>
<b>Grand Total</b>		<b>27715.83</b>	<b>407.05</b>	<b>14964</b>	<b>86</b>

programme. The important varieties of mustard selected for seed production were Pitambari, RH-749, RH 406, Pusa Tarak, Varuna, PM 30, Pusa Vijay, CS 56, Bayer Mustard 5210, RH 406, NRCHB-101, YSH-0401, PYS-1 etc; Toria- Bhawani, Tapeswari, Uttara, etc; Til-Pragati, Mau Azad-1, R.T-351, SHEKHAR, RT351, Tarun etc; linseed-Padmini, LMS 9-2 etc.

### 6.1.5 Fodder/Fibre crops

The seed of fodder and fibre crops to the tune of 292.44 q was produced. In Uttar Pradesh Napier grass, Dhaincha, Berseem (Vardan, JB-2, Shipra), and other fodder crops produced seed of 230, 16.20, 0.43 and 15.32 q respectively.

### 6.1.6 Vegetables

The KVKs produced 75.69 q of seeds of vegetables. KVKs tried to help the farmers by producing seeds of important varieties of different vegetables. The important crops were viz. vegetable pea (Arkil, AP 3, Kashi Uday), okra (VRO-6, Ankur-41, VNR 999, Kashi-kranti, Shitla Uphar, Parbhani Kranti, Arka Anamika), Suran (G-1, Gajendra), onion (Pusa red, ADR, N 53, Funsungi, NHRDF Red 3).

NavKiran, Nishant, Pusa Hybrid-6, Pusa purple round, Pusa Shyamala, Pant Rituraj, PPC, Kashi Taru, Kashi Uttam, Kashi Arun, Kashi Sandesh, Mahi Rubi, Kalyanpur Long, Karan, Sapna, Ramnagari), chilli (Tycon, Shola, K-2, Pari hot/ Indum, Mahabharta, Arka Meghana, Kashi Anmol, Arkameghna, Akanksha, Kullu, S-78, G-4, Azad Mirch-1, Pusa Jwala, VNR 200, Kashi anmol, Kasi Tez), tomato (Avinash-3, Kashisharad, Arka Samrath, Pusa Gaurav, Shivalik, Selection 22, Pusa Hybrid-8, Solan Lalima/Roma, Kashi-Aman, Vaishnavi, NP7715, Azad T-6, Kashi Abhiman, Arka Rakshak, Arka Vishal, Hy-Deo, Namdhari, Mahavir, Himsona, Pusa Ruby, Pusa Rasmi, Rohini, NDT-60), Cabbage (Cabbage GA, Pusa Drumhead, NHC-505, KGMR-1, Diamond Express, BC-90, Snowball, Sankar Tej, Pride of India, Golden Acre, Ajanta/S-92, Kaveri, G Ball 65), cauliflower (Pusa Posija, Pusa Early kuwari, GS-75/Girija, PSBKT-25, Girza, Madhav, Snowball, Pusa Kunwari, Pusa Deepali, Hy Empire, Early Winter, Madhuri, SB. 16, Pusa Deepali, Sabour Agrim, Ketaki, Poosi, Maghi), broccoli (Green Mazic, KTS 1, Quistro, Dynasty, Green Hut), capsicum, onion (Bheema Kiran, Bhima Sakti, AFLR, Gauran, Pusared, Agri found light red, Nasik Red, Nasik 53, NHRDF Red-3), cucumber (Green slam, Kamini),

**Table 6.4: Physical achievement of planting production (U.P.)**

Enterprise	Quantity (No)	Value (Rs. in lakh)	Distributed to farmers	No. of KVKs
Vegetables	3882481	15.68	14847	86
Fodder	219769	3.08	1578	16
Ornamental	81090	3.15	1517	81
Fruits	398205	34.53	6474	86
Forestry/plantation	28327	3.08	1997	34
Medicinal & Aromatic	11706	0.58	189	15
Cereals (Paddy seedlings)	515000	0.05	256	2
<b>Total</b>	<b>5136578</b>	<b>60.17</b>	<b>26858</b>	<b>-</b>

### 6.1.7 Spices

The total quantity of spices seeds produced was 10.01 q. The seeds of different spices were produced viz. turmeric (Megha Haldi 1), coriander (ACR-1) and Garlic. The detail spice wise data is given in Table-6.3.

## 6.2 Planting Material Production

The planting material/sapling production of vegetables, fruits, ornamentals, forestry, medicinal & fodder plants developed by KVKs. During this year KVKs produced 51.37 lakh planting materials including vegetable seedlings (38.82 lakh), fodder plants (219769), ornamental (81090), fruit saplings (398205), forestry (28327), medicinal & aromatic (11706), and paddy seedlings (515000). The details of planting material production is given in Table-6.4.

### 6.2.1 Vegetables

KVKs produced large number of vegetable seedlings (3882481) of brinjal (Pusa Kranti, Neelam, Pusa Syamla,

bottle guard (Varuna, Sharad, Narendra Rashmi, Nova, Pusanaveen) and sponge guard (Kashi Divya, Alok) etc. Quality seedlings made available to the farmers for enhancing their profitability and livelihood. The detail of vegetable crops with quantity of seedlings produced are given in Table-6.5.

### 6.2.2 Fruit

The total fruit saplings were 398205 produced by the KVKs of Uttar Pradesh. Different fruit varieties have taken for different crops i.e. mango (Chausa, Kapoori, Gaurjeet, Dushari, Lungra, Amrapali); aonla (Chakaiya, NA-6, 7, 10); guava (Lalit, Sweta, L-49); lemon (Kagzhi Lime, Eureka, Rangpur Lime, Pant Lemon); papaya (Ranchi selection, Sinta-1, Mayuri, Red lady, Madhu, Lalpari, Coorg Honey Due, Pusa Dwarf, Pusa Delicious); lichi (Shahi, China, Rose scented); bael (NB-4, 5, 7, 9, CISH B-1, CISH B-2); pomegranate (Bhagwa); karonda (Gulabi); The detail of fruit saplings produced is given in Table 6.5.

### 6.2.3 Production of ornamental, forestry medicinal & other plant saplings

KVKs of this zone produced ornamental (81090), medicinal and aromatic (11706), forestry plants (28327) and fodder plants (219769). Forestry saplings included Shisham (Deshi), teak (local), poplar (S7-Series pp-5, ph-1, ph-2, G-48, Bareilly

clones, G-48, L-Series), neem (Deshi), eucalyptus (local), Cajurina, etc. Ornamental plants such as rose (Grief template), marigold (African Mariuld, Pusa Narangi, Pusa Basanti, Pusa Narangi), rajnigandha, calendula, crotan, poppy, harshingar etc. This zone also produced lemon grass (Pragati) and alovera (Jafarabad). The details are given in Table 6.5.

**Table 6.5: Enterprise wise and crop wise planting material production (U.P.)**

Enterprise	Name of Crop	Quantity (Number)	Value (Rs. in lakh)	Distributed to farmers	No. of KVKs	
<b>Vegetables</b>	Brinjal	241678	8.85	3680	42	
	Chilli	248334	1.18	1800	32	
	Tomato	388474	2.87	3227	39	
	Cabbage	83065	0.33	1392	38	
	Cauliflower	140659	51270	1358	25	
	Broccoli	7997	0.07	306	9	
	Capsicum	12854	0.06	217	7	
	Onion	2718419	1.37	913	34	
	Cucumber	5026	0.06	86	6	
	Bottle gourd	9229	0.13	395	13	
	Bitter gourd	3651	0.08	108	7	
	Sponge gourd	2109	0.04	228	5	
	Pumpkin	3700	0.03	281	6	
	Knolkhole	4835	0.03	93	5	
	Summer Squash	1500	-	132	2	
	Marrow	500	-	11	2	
	Mushroom	15	0.021	10	1	
	Others	10435	0.04	610	7	
		<b>Total</b>	<b>3882481</b>	<b>15.68</b>	<b>14847</b>	<b>86</b>
	<b>Fruits</b>	Aonla	2956	0.22	378	9
Litchi		88558	0.54	934	18	
Mango		51274	1.39	1200	13	
Papaya		36479	3.81	874	23	
Guava		16015	0.82	584	14	
Jack fruit		9860.8	0.31	338	14	
Beal		990	0.09	201	7	
Citrus		3486	0.41	364	8	
Lemon		1633	0.36	187	8	
Mausammi		1163	0.69	0	1	
Karonda		2855	0.41	391	8	
Pomegranate		392	0.12	36	4	
Custard apple		385	0.17	50	2	
Apple		841	0.25	0	1	
Ber		1986	0.27	60	3	
Jamun		1016	0.12	240	5	
Walnut		158	0.07	0	1	
Others		178158	24.44	637	5	
		<b>Total</b>	<b>398205</b>	<b>34.54</b>	<b>6474</b>	<b>86</b>
<b>Ornamental</b>		Marigold	36212	0.25	370	16
	Rajnigandha	504	0.06	95	5	
	Chrysanthemum	2596	0.01	65	6	
	Rose	400	0.05	56	5	
	Gudhal	150	0.01	24	2	
	Crotan	41	0.007	1	2	
	Calandula	2720	0.02	21	3	

	Verbena	100	0.01	9	1
	Pendula	230	0.02	19	1
	Bougain villa	59	0.01	8	1
	Durenta Golden	256	0.04	12	1
	Gaillardia	11455	0.07	36	3
	Harshingar	6487	2.13	15	13
	Glardia	2500	0.002	15	2
	Ficus benjamina	51	0.007	18	2
	Red erration	500	0.002	8	1
	Poppy	1717	0.03	26	4
	Sweet William	137	0.02	10	2
	Chirata	72	0.01	4	2
	Other ornamental	13442	0.24	695	6
	Others	1461	0.08	10	3
	<b>Total</b>	<b>81090</b>	<b>3.15</b>	<b>1517</b>	<b>81</b>
<b>Medicinal &amp; Aromatic</b>	Lemon Grass	391	0.026	75	4
	Aswagandha	120	0.004	17	2
	Satawar	5050	0.004	7	3
	Turmeric	1515	0.49	50	3
	Others	4630	0.05	40	3
	<b>Total</b>	<b>11706</b>	<b>0.58</b>	<b>189</b>	<b>15</b>
<b>Forestry/plantation</b>	Poplar	170	0.005	90	3
	Arjun	70	-	-	1
	Neem	10322	1.04	611	5
	Teak	8931	0.33	717	6
	Eucalyptus	1909	0.24	105	11
	Saguan	1380	0.02	100	2
	Cosuarina	10	0.007	-	1
	Other forestry	5535	1.43	374	5
	<b>Total</b>	<b>28327</b>	<b>3.08</b>	<b>1997</b>	<b>34</b>
<b>Fodder</b>	Napier	213747	2.51	1448	10
	Para	1000	0.01	20	1
	Setaria	21	0.009	-	2
	Others	5001	0.55	110	3
	<b>Total</b>	<b>219769</b>	<b>3.08</b>	<b>1578</b>	<b>16</b>
<b>Cereals</b>	Paddy seedling	515000	0.05	256	2
	<b>Total</b>	<b>515000</b>	<b>0.05</b>	<b>256</b>	<b>2</b>
	<b>Grand Total</b>	<b>5136578</b>	<b>60.16</b>	<b>26858</b>	<b>86</b>

#### 6.4 Production of Bio-product

The KVKs of Uttar Pradesh produced 140947.65 kg of bio-products. It included vermi compost (93091 kg) and NADEP compost (38560 kg). Besides, KVKs also produced 1681 kg bio pesticides, 90 kg bio-fungicide and 1192.65 kg other bio-products. The details are given in Table-6.6.

#### 6.5 Livestock & Fingerling Production

KVKs of Uttar Pradesh produced 72.58 lakh livestock strains including 175 dairy animals including cows, buffaloes, calves, goat etc by 17 KVKs; poultry (2852) including broilers, layers, duals, ducks etc by 16 KVKs; piglets (12) and fisheries (72.55 lakh) by 9 KVKs respectively. The amount of Rs 32.11 lakh was collected from the produce. The details are given in Table 6.7.

Table 6.6: Livestock and fingerling production

Bio-product category	Bio-product	Quantity (Kg)	Value (Rs)	No. of farmers	No of KVKs
Bio-fertilizer	Vermicompost	93091	505670	914	26
	Nadep compos	38560	46500	50	10
	P.S.B. Culture	916	13740	0	1
	FYM	1000	5000	0	1
	Other	4417	31550	163	2
	<b>Total</b>		<b>137984</b>	<b>602460</b>	<b>1127</b>
Bio-pesticide	<i>Beauveriabassiana</i>	20	0	0	1
	<i>Trichoderma viridi</i>	1100	135000	625	2
	Beauveria bassiana	40	6200	16	1
	Metarrhizium anisoplae	50	5800	11	1
	Botanicals	465	4650	322	1
	Other	6	0	0	1
	<b>Total</b>		<b>1681</b>	<b>151650</b>	<b>974</b>
Bio-fungicide	<i>Trichoderma harzianum</i>	90	7500	14	2
	<b>Total</b>	<b>90</b>	<b>7500</b>	<b>14</b>	<b>2</b>
Other bio-product	Honey	245.5	104500	553	3
	Vermiculture	807	19065	142	2
	Worms	140.15	64100	91	8
	<b>Total</b>	<b>1192.65</b>	<b>187665</b>	<b>786</b>	<b>13</b>
<b>Grand Total</b>		<b>140947.65</b>	<b>949275</b>	<b>2901</b>	<b>62</b>

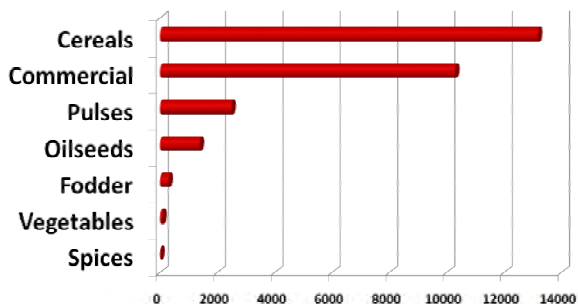
Table 6.7: Livestock and fingerling production

Livestock category	Livestock	Number	Value (Rs)	No. of farmers	No of KVKs
Dairy animals	Cows	7	162000	2	1
	Buffaloes	10	480000	5	2
	Calves	5	15000	0	3
	Goat	152	337500	41	10
	Others	1	25000	0	1
	<b>Total</b>		<b>175</b>	<b>1019500</b>	<b>48</b>
Poultry	Broilers	1528	298822	752	2
	Layers	670	1060160	30	5
	Duals (broiler and layer)	140	54400	23	3
	Japanese Quail	102	10200	0	1
	Ducks	92	15800	40	2
	Others	320	55300	52	3
	<b>Total</b>		<b>2852</b>	<b>1494682</b>	<b>897</b>
Piggery	Piglets	12	36000	7	1
	<b>Total</b>	<b>12</b>	<b>36000</b>	<b>7</b>	<b>1</b>
Fisheries	Indian carp	5273000	415800	126	3
	Exotic carp	1975500	78895	65	1
	Others	6892	167011	11	4
	<b>Total</b>	<b>7255392</b>	<b>661706</b>	<b>202</b>	<b>8</b>
<b>Grand Total</b>		<b>7258431</b>	<b>3211888</b>	<b>1154</b>	<b>42</b>

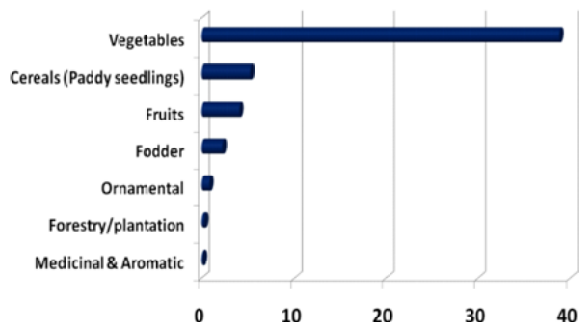


# PRODUCTION OF SEED, PLANTING MATERIAL & LIVESTOCK

Seed Production (q) at glance



Planting Material production (in lakh) at glance



Production of vermicompost: KVK Fatehpur



Planting material Production : KVK Chitrakoot



Seed Production under ARYA : KVK Kaushambi



Livestock production (Chicks): KVK Hamirpur



Livestock production (fish): KVK Barabanki



Distribution of seeds among farmers: KVK Sonbhadra

## CASE STUDIES / SUCCESS STORIES

### 7.1 Scientific tomato cultivation on raised bed and staking method for better production & income: KVK Ambedkar Nagar

**Introduction:** Sri Ram Shankar Maurya is 28 years, Graduate in B.Sc., Math. Previously, he was working in Delhi in a Company of Electronic getting monthly salary Rs.20,000. He returned back to his home during lock down due to Carona virus COVID-19. In Month during March,2020, he cultivated rice-wheat crops and tomato but he faced poor production of tomato due to attack of diseases and poor fruit quality.He has land holding of 3 acre. Previously, he cultivated rice-wheat crops, tomato and some vegetables but he faced poor production due to attack of diseases and poor fruit quality.

**KVK interventions and Support:** KVK, Ambedkar Nagar imparted Capacity building Training for Migrant Labours under P.M.G.K.R.A. on Scientific vegetable production in July,2020 in which Sri Ram Shankar Maura participated and he acquired the knowledge about tomato production on ridge planting, staking method to reduce the weed infestation and moister loss and disease incidence in the spacing of 75X45 cm., fertilizer dose NPK-120:60:50 kg/ha. The ridge planting, staking in tomato, helped yield increase up to 52.33% as compared to flat planting (FP) of tomato and also increased efficient use water, promote the plant growth due to better root development, recued the water loss, disease incidence and added increases income to the farmers.

**Output:** Sri Ram Shankar Maura applied the recommended doses of fertilizers NPK120:60:50 kg /ha in hybrid tomato crop as per suggestion of KVK scientists. He recorded cost of cultivation Rs.62100/ha., gross return- Rs. 280300/ha and B: C ratio-4.5:1. He got total net profit from Tomato Variety- Avinash-1 in one ha. to the value of Rs. 2,18,200/-

**Outcome:** The outcome of this demonstration motivated the farming communities of nearby villages to replace their old varieties by Hybrid Tomato varieties. Sri Ram Shankar Maura is very happy on improvement in their income, livelihood by latest scientific technology of tomato and other seasonal vegetable production.

**Impact:** Sri Ram Shankar Maura is becoming one of the progressive and learned farmers for others with regards to popularization of technology of tomato production on raised bed, staking with improved variety. This technology helps him for livelihood, empowerment. Now this techniques is adopted by 12 farmers in his village adopted this technology by seeing and believing.



Field of Sri Rama Shankar Maurya of tomato production on raised bed and staking method

### 7.2 Nutri garden is becoming popular among farming community for combating malnutrition and stay healthy: KVK Baghpat

**Situation analysis/problem statement:** Smt. Pavitra w/o Shri Neeraj chaudhary, village katha, Block khekra, district- Baghpat is a women farmer who was selected for demonstration of nutrigarden and was provided mini seed kit as input. She was earlier growing some cucurbits like bottlegourd and smoothgaurds and was fetching only these vegetables ie only for 2-3 month for their consumption and rest of the vegetables, she use to purchase from local market or the intake of the vegetables of their family members were limited to these vegetables only.



**Plan, implement and support:** KVK Baghpat tried to make women farmer aware about the importance of fruits and vegetables in their diet .she was explained about the role of fruits and vegetables in their diet and in staying healthy. For the purpose nutria-garden is the sustainable alternative. She was encouraged for Growing nutri garden through out the year i.e rabi, zaid and kharif season and was provided mini seed kit procured from IARI, New Delhi containing latest variety of seed. So that they can have variety of seasonal fruits and vegetables and have micronutrients as per RDA (recommended dietary allowance) and stay healthy and can also save money indirectly which otherwise could have been on purchase fruits and vegetables.



**Output:** Smt. Pavitra adopted the practice of growing nutri garden throughout the year as per suggestion of KVK Scientist in 100 square meter of land. Growing seasonal fruits and vegetables during Rabi, Kharif, and Zaid provided fresh vegetables almost for 319 days i.e almost throughout the year as compared to farmers practice i.e for 121 days. As far as production is concerned in recommended practice 302 kg vegetables were obtained in a year where as in local practice it was only 75 kg. The cost of expenditure in recommended practice was 1625 Rs which was higher than cost of local practice i.e Rs 770. But interesting phenomena is that BC ratio is again noticeable and almost higher in recommendation practice than local practice. It is 5.57 in recommended practice. Whereas 1:2.9 in local practice along with 302% increase in yield in recommended practice over local practice. Apart from that improvement in a general health and comparatively less incidence of diseases like common cold etc were reported with indirectly saving of Rs 9060 annually.

**Impact:** Smt. Pavitra is set forth example for others in district Baghpat. Total 170 families have been adopting recommended practice for nutri garden in 19 village of District Baghpat and combating with malnutrition and they could save indirectly Rs 9000 to 10000 per year by cultivating nutri garden.



Nutri-garden at village-Katha, Baghpat

### 7.3 Successful mushroom production: KVK Hapur

**Introduction:** In case of diversification with large scale promotion of mushroom grower of Sri Vikas Tyagi S/o Sri Chandra Prakash Tyagi vllage & Tahsil –Garh District Hapur prograssive farmer he was selected for demonstration of mushroom cultivation. Earlier he was civil contractor in Govt. of U.P. after this he was started to cultivation of traditional method of mushroom and he earn low income.

**Plan implement and support:** To keen interest of Sri Vikas Tyagi for cultivation of mushroom at large scale he contact to KVK Hapur (earlier to Hapur tahsil of Ghaziabad).KVK hapur provided to technical suport for cultivation and marketing of mushroom, somany time practical demonstration facilitated from Dr Gopal Singh Prof. (Plant pathology) & incharge mushroom production unit

SVPUA&T Meerut U.P. Mr Vikas Tyagi to started large scale mushroom production in Sept 2019.

### Output

Mushroom production was started at small scale with the technical suport of KVK Ghaziabad. Scope and demond of market he started large scale production and established with financial suport of bank Sri Vikas Tyagi started production from 05 Kg mushroom per day and get average rate Rs 125.00-130.00 per Kg total income of Rs 625.00-650.00 per day. Nowadays he produce average 300 Kg per day in whole years got gross income Rs 37500.00perday expenditure Rs 16500.00, take net income Rs 21000.00 perday and employed 8-10 manpower per day.



### Impact

Mr Vikas Tyagi is becoming one of the progressive and learned farmers for other regards to high tech & quality mushroom production, popularization with solar base. This

technology helps him for livelihood, empowerment and make him enthusiastic regards 15 mushroom production unit established in Hapur and neighboring district. He is one of progressive farmer after a becoming a part of KVK activities and get their effectiveness for his own development of high tech production and marketing training centre namely Manyuk Agro processing & production centre Garh Hapur. Mr Vikas Tyagi is very happy with this improved production and management technology and set for the example for other farmer of the district.

#### 7.4 Protected cultivation of horticultural crops and also seed production of paddy and wheat enhance the income in district Jaunpur

**Introduction:** Sh. Ramjeet Maurya is a graduate belonging to village Majhauli under Sikrara block of Jaunpur district in U.P. state. He had been cultivating cereal & vegetable crops on traditional pattern and earned only Rs. 70,000 net income per annum from own 4.5 acre field.

**Plan, Implement and Support:** During 2010 after coming in contact with KVK scientists he had started cultivation of these vegetables in protected condition. He has undergone training on IPM module in vegetable, Mali training and seed production technology in cereal crops from this center. The KVK scientists also conducted the Front Line Demonstration on IPM module in vegetables and INM in cereals on these farmer field

**Output:** Sri Maurya starting cultivation of these vegetables in protected condition and seed production of cereal crops (Wheat and paddy) after achieving technical knowledge from KVK. At this time he have a high tech nursery (1.0 acre), wheat and paddy seed production (2.0 acre), vegetables (1.0 acre), fruit orchard (0.15 acre) and milch animal (3). Income from high tech nursery 425000 per annum, by seed production (cereal) 90000 Rs, By vegetable Rs. 80000, by fruit orchard Rs. 25000 and by milk production Rs. 20000. His socio economic status is recognized as a Progressive Farmers.

**Outcome:** Now this time 59 farmers of the district are impressed and adopt protected vegetable cultivation and seed production of cereals after viewing the result of this technology.

**Impact:** Mr. Maurya is becoming one of the progressive and learned farmers for others with regards to protected cultivation of vegetable and seed production of cereals. This technology helps him for livelihood. He is one of the progressive farmer after a becoming a part of KVK activities and get their effectiveness for his own development. Mr. Maurya is very happy with this technology and set an example for other farmers of the district.



#### 7.5 Large scale dissemination of high yielding variety of Greengram (IPM 2-3): District Kaushambi

**Introduction-** Green gram is excellent source of protein. It is sown in kharif and in Zaid season of district Kaushambi. It is well known that pulses are important to increase soil fertility in rice-wheat cropping system. The total area under this crop is near about 2780 ha with 4.87 q/ha productivity. Old varieties without appropriate cultivation practices may be the reason for the low productivity of Moong crop. The problem of low yield potential of the crop can be overcome by using high yielding newly released variety of the crop and appropriate crop management practices. Keeping in views of these facts, KVK Kaushambi conducted cluster frontline demonstration of Green gram during 2019-20 and 2020-21 to evaluate the performance of high yielding variety of Moong i.e. IPM 2-3 with package of practices at Farmers field at district Kaushambi.

**KVK Intervention-** Krishi Vigyan Kendra Kaushambi conducted the cluster front line demonstration during Zaid 2019-20 and 2020-21 on use of high yielding variety IPM 2-3 and with package of practices. The total area under the demonstration was 40 ha with 110 farmer's field. Newly improved high yielding variety IPM 2-3 was taken in the demonstration. Some of the specific characters of this variety are given below-

Specific characteristic of Variety	Package & Practices	Performance Observed
• Days required to maturity : 60-65	• Seed treatment by FIR package	Plant Height- 36 cm
• Resistance to Yellow Vein Mosaic disease and Phytophthora blight	• Line sowing, (25 X 10 Cm)	No of Branches- 4 to 6.
• Plant Height-35-50 cm, seed color green	• Weed management Use of Pendamethilin @3.3 lit./ha next day of crop sowing	No. of Pad/plant- 49.
• 10-12.0 q/ha	• Use of recommended dose of fertilizer(20 :40 : 20 (NPK)/ha)	Growth-Vigorous growth.
	• Use of Imedachloroprid (@ 1.5 ml/liter of water) for Aphid management.	Avg. Yield –11.70 Q/ha.



**Critical Inputs:** Seed, chemical, weedicide, insecticide and regular monitoring of demo. field by KVK Scientist.

**Output:** The performance of the variety & package of practices were found very encouraging. The yield was observed in demo plot was 11.70 q/ha which was higher as compared to check plot i.e. 9.75 q/ha. The total cost of cultivation was Rs 18200/- in demonstration plot and Rs 17600/- in check plot with net profit of Rs 45050/- in demo and Rs 35450 with local check respectively.

**Outcome:** Adoption of production technologies with high yielding variety IPM 2-3 and regular visits of farmer field by KVK scientist seems to be completion of the success of demonstration Farmers were also showed their knee interest about the programme and many farmers were agreed that use these production technologies with new high yielding variety IPM 2-3 gives higher yield of Green gram.

**Impact:** Besides being a rich source of protein, it maintain soil fertility through biological nitrogen fixation in soil and thus play a vital role in furthering sustainable agriculture, it is become widely adopted practices in the district. This technology is spread neighboring villages and near about 650 farmers were adopted. Innovative Farmers Groups have been developed with the participation of the farmers who are helping each other for cultivation of crop at their own level.



Green gram variety IPM 2-3 under NFSM cluster demonstration on Pulses.

## 7.6 Integrated Farming System model: KVK Banda

**Situation analysis/Problem statements:** Mrs. Ashma Khatoon, W/o shri Aslam Khan resident of village Chhanehara Lalpur, block: Badhokhar Khurd, district: Banda, was given training on different aspect of Integrated farming system. She was earlier involved with traditional agriculture. She used to grow paddy-wheat/Gram/Lentil in his 2.4 hac. Land. She was hardly getting net profit of Rs. 1.25 lakh Per year.

**Plan, Implement and Support:** KVK Bnada given training on different aspect of Integrated farming system model involving crop production, Horticulture, Dairy, Poultry, Goatary, Fisheries, Azolla cultivation and vermin composting, mushroom production, Bee keeing etc. KVK along with line department help to established different unit of IFS model in her farm. She has herself established *Bundelkhand Jaivik Krishi Farm* at her village.

**Output:** Mrs. Ashma Khatoon, adopted the different aspect of IFS model as per suggestion of KVK's scientist for her 2.4 ha land. She allocate 1.18 ha for field crop, 0.3 ha for horticultural crops, 0.3 ha for other units. Under her Farm total 8 units are working in interconnected way. She has taken A2 milk certification from ICAR-National Dairy Research Institute, Karnal. By her innovative move she is now able to sell cow milk @ Rs. 50/ Litre. She used to sell milk, egg, meat, fruits so she continuously earning income in whole year. The economical gain in terms of net return and BCR are recorded. Rs 4.4 lakhs and 3.13 respectively.



Azolla unit at her Farm



Goatary unit at her Farm

**Outcome:** The outcome in terms of daily income by selling different produces motivated the other small farmers to establish IFS model at their farm. She is very happy with improvement in her income, livelihood and set forth example for others. During the year 2020 she received IARI Fellow 2020/IARI-Innovative Farmer award for her outstanding contribution in the field Integrated Farming System model.

**Impact:** Mrs. Ashma Khatoon has become one of the progressive and learned farmers for others with regards to popularization of IFS model in Bundelkhand region. She is also promoted by KVK as well as Different Line departments of Banda. She is very happy with improved production and management technology and set forth example for other farmers of the district. Farmers used to visit her farm. She has motivated approx. 1500 farmers to adopt IFS model.

### 7.7 Success of high yielding mustard variety RH-749 under CFLD oilseed: KVK Chandauli

**Situation analysis/ Problem statements:** Mr. Upendra Singh, village Baraura, block: Sahabganj, district: Chandauli, a farmer who was selected for this demonstration. He was earlier involved with local variety of mustard Moti or Varuna. These varieties were low in yield.

**Plan, Implement and Support:** KVK Chandauli tries to make them aware regarding scientific cultivation of mustard. That starts from land preparation to harvesting. This KVK has encouraged the farmer for soil testing and on the basis of that farmer was advised for balanced dose of chemical fertilizer with high yielding varieties RH-749. That was sown on 05-11-2019 with line sowing and fertilizer application was done with basal application in which half dose of nitrogen full dose of SSP and full dose of MOP as recommended. Rest nitrogen used after first irrigation.

**Output:** Mr. Upendra Singh adopted the balanced dose of chemical, fertilizer (N:P:K:S::150:40:40:30) kg/ha in mustard crop as per suggestion of KVK's scientist for his 0.4 ha land. His local yield was 10.0 qt/ha with recommended technology. His yield increased by 70.00% with yield 17.00 qt/ha. The economical gain in terms of per unit expenditure gross income, net return and BCR are recorded. Rs 25500, Rs. 55250, Rs. 29750 and 2.16 correspondingly.

**Outcome:** Mustard crop is the major oilseed crop of the district Chandauli. KVK Chandauli conducted 375 demonstrations in 10 villages during 2017-18 to 2019-20 in an area of 150 ha. at farmers' field with using HYV NDR-8501, RH-749 and balanced dose of chemical fertilizer (N:P:K:S::150:40:40:30) kg/ha. This variety has been disseminated in 150 villages of the district in area of approximately 740 ha. The outcome of this demonstration motivated the farming communities to replace their old varieties, non-descriptive varieties. Mr. Upendra Singh is very happy on improvement in their income, livelihood and set forth example for others.

**Impact:** Mr. Upendra Singh is becoming one of the progressive and learned farmers for others with regards to popularization of RH-749. This technology helps him for livelihood, empowerment and make him enthusiastic regards oilseed production. He is one of the progressive farmer after a becoming a part of KVK activities and get their effectiveness for his own development. Mr. Upendra Singh is very happy with this improved production and management technology and set forth example for other farmers of the district



A farmers with KVK's scientist



Mustard Crop RH-749

### 7.8 Successful intercropping of coriander in Banana crop: KVK Lakhimpur Kheri-I

**Introduction:** Banana is fourth most important crop grown in the world. The productivity per unit area, beetle infection and gestation period may be reduced by adopting of coriander cv. Azad Dhaniya-1 as intercrop during Rabi season. Intercropping of coriander may break the life cycle of beetle, reduces weed population as well as increases income.

**K.V.K. Intervention:** Banana was planted at distance of 6×6 sq ft. apart during June. K.V.K.has organized training on scientific production of banana at village level and conducted FLDs at 10 farmers' fields during 2018-19 and 2019-20 with the main objective for maximum utilization of natural recourses, reduce insect infection and get the extra income.



## Output:

Method of sowing/plantation	Ten rows of coriander between banana rows	6×6 sqft
Seed rate/number of plant (per/ha.)	4.25	3150
Land use and intercrop (%)	62.5	37.5
Cost of cultivation (Rs/ha.)	203750 + 2850 = 206600	219500
Saving in term of irrigation weedicide, insecticide, cultural operation etc. (Rs./ha)	15750	-
Yield (q/ ha)	875.25 + 5.10	686.5
Gross profit (Rs/ha)	678300 + 35700 = 714000	647000
Net profit Rs./ ha.	507400	427500
B:C Ratio	2.46	1.95
Beetle infection (%)	4.56	12.33

**Outcome:** It has observed that beetle infection 4.56 % with to spray of insecticide in intercropping while 12.33% with four spray of insecticide in check field. It has also observed that intercrop may also effect irrigation schedule, weed population, cultural operation in term of saving of rupees 15750.00. The extra yield of coriander was 5.1 q/ha. with a sum of Rs. 35700.00 without affecting banana yield. Thus, total extra income of coriander and fresh banana fruits were Rs. 79900.00 (15.75 %).



Intercropping of coriander in Banana crop

### 7.9 Successful organic farming of Tulsi, Cheeya, Kemuoil, Piprata, Shatavar: KVK Mahoba

**Situation analysis/problem statements:** Mr. Dhawaj Pal Singh, Village Dadri, block Panwari of Mahoba district of U.P. was involve in traditional agriculture before 2005, which was not much profitable and ultimately, he has decided to convert his agriculture into organic farming and taken

training on different aspect of organic farming from the scientists of KVK and other officials of agriculture and horticulture department. At present, he is growing tulsi/ kemuoil/kinnowa/bhumi aonla/Chandra surya/cheeya seeds/shatavar and hibiscus flower in his 6.8 ha area by adopting organic farming.

**Plan, Implement and Support:** After taken of many trainings on different aspect of organic farming like preparation of vermi and NADEP compost, bio-fertilizers, jeevamrit, panchagvyva, bio-pesticide and organic cultivation of cereals, oilseeds, pulses, medicinal and aromatic plants etc. from KVK Mahoba scientists. Mr. Dhawaj Pal Singh started organic farming of cereals, oilseeds, pulses, medicinal and aromatic plants etc. as well as encouraged other farmers of the district for the organic cultivation. He has taken advantage of Govt. scheme like Paramparagat Krishi Vikas Yojna, PM Krishi Sinchai Yojna etc., Cluster Frontline Demonstration on oilseeds and pulses from KVK.

**Output:** Mr. Dhawaj Pal Singh adopted organic farming in his 6.8 ha area as per suggestion of KVK scientists. He has constructed a animal shed for stray cattle's and poultry unit of Kadaknath breed. He is producing 1000qt. of vermi compost for organic cultivation of meditational and aromatic plants on his farm and produced organic tulsi in tonnes, cheeya seed, kemuoil, piprata, shatabar, Chandra surya, pigeon pea, chickpea, mustard and wheat. The annual economical gain in terms of net return has recorded Rs. 4.5 lakh and BCR 6.3, respectively.

**Outcome:** The outcome in terms of quality and price of organic products like tulsi, cheeya seed, kemuoil, piprata, shatabar, Chandra surya, pigeon pea, chickpea, mustard and wheat. He has PGS organic certification from APEDA. Mr. Dhawaj Pal Singh is very pleased on upgrading of their income, livelihood and set forth example for others. He also promoted by the department of Agriculture, horticulture. He has awarded by the Organic India Company as Dharti Mitra Award, Krishi Vigyan Kendra, Agriculture and Horticulture deptt. of Mahoba and UPCAR, Lucknow for his outstanding work done in organic production of various crops and meditational and aromatic plants.

**Impact:** Mr. Dhwanj Pal Singh is becoming one of the progressive and learned farmers for others with regards to popularization of organic farming in Bundelkhand region through his FPO viz., Bundelkhand Organic Corridor. Organic farming helps him for better livelihood, empowerment and make him enthusiasm regarding farming of other meditational and aromatic plants. He is one of the renowned farmer of the district Mahoba and becoming a part of KVK activities.

**Plan and Implementation and Support:** KVK scientist visited to the field of Sri Ram Lal Verma and suggested to him for adoption of integrated farming system on their field. After visit of scientist he changed their pattern for growing of different crops on their field and also start rearing of milch animals (buffalos) and planted fruit plants on their field. Krishi Vigyan Kendra Varanasi scientists visited time to time on Sri Ram Lal Verma's field for scientifically look after the crops and animals. Scientist also suggested to him for soil



### 7.10: Successful popularization of IFS Model: KVK Varanasi

**Situation analysis/problem statements:** Sri Ram Lal Verma, village Jayapur, block Arazi Line (mobile 7522840407) having 8 acre land. He is followed paddy – wheat cropping system on their field. He was facing the problems of poor yield and low income from their farm. Sri Verma visited KVK Varanasi and discussed with scientists about their problem of poor productivity and low income.



testing, proper irrigation management, improved variety seed of crops, balance use of fertilizers, proper management of weed, insect, pest, and disease of crops with proper health case of animals.

**Outputs:** Sri Ram Lal Verma has started some component of integrated farming system on their farm and proper utilization of farm wastage for the making of organic manures and used for growing of various crops that was helps for minimizing the cost of cultivation and also improving of net income.



## Economics of various crops

Sl. No.	Name of Crops	Area (acre)	Cost of cultivation/acre	Total cost of cultivation	Yield (qt.)	Total income	Net return	B:C Ratio
<b>Kharif crops</b>								
1	Paddy	4.00	12000	48000	80.00	145200	97200	3.03
2	Maize	0.50	10000	5000	9.75	18037	13037	3.61
3	Urd	1.00	6500	6500	3.50	21000	14500	3.23
4	Til	1.25	6500	8125	3.25	22279	14154	2.74
5	Arhar	0.25	28000	7000	2.50	15000	8000	2.14
6	Sugarcane	0.50	20000	10000	110.0	34650	24650	3.47
7	Bitter guard	0.25	55000	18500	50.00	60000	41500	3.24
8	Sponge gourd	0.25	55000	17500	55.00	55000	37500	3.14
<b>Rabi crops</b>								
9	Wheat	5.00	12500	62500	105.0	202125	139625	3.23
10	Mustard	0.25	7000	1750	2.50	11062	9312	6.32
11	Gram	0.25	12000	3000	3.00	14625	11625	4.88
12	Potato	0.25	20000	5000	25.00	20000	15000	4.00
13	Vegetable Pea	1.00	15000	15000	65.00	97500	82500	6.50
14	Cauliflower	0.25	15000	3750	23.00	24150	20400	6.44
15	Brinjal	0.25	18500	4625	22.00	26400	21775	5.71
16	Garlic	0.25	17500	4375	4.50	18000	13625	4.11
17	Onion	0.25	17500	4375	15.00	22500	18125	5.14
18	Coriander	0.25	12000	3000	4.50	9000	6000	3.00
<b>Total</b>				<b>228000</b>		<b>816528</b>	<b>588528</b>	

## Economics of Orchard

Fruit plant	Area (acre)	Operational Cost	Total income	Net income	B:C ratio
Mango	2.50	8000	25000	17000	3.125
Guava					
Orange					
Mausambhi					
Lemon					
Maringa					

## Economics of Animal Husbandry

Animals	Numbers	Operational Cost	Total income from milk	Net income	B:C ratio
Buffalos	2	40000	90000	50000	2.25
Cow	1	10000	18000	8000	1.18
Goat	4	12000	26500	14500	2.21

## Economics of IFS system

Total cost of cultivation per year	Rs. 298000/-
Total income per year	Rs. 976028/-
Net income per year	Rs. 678028/-



## WOMEN EMPOWERMENT

### Training to Women Farmers

#### 1.1 Farm women

Total of 5243 courses were organized by KVKs of the Zone-III with the participation of 25410 farm women. Maximum courses (1297) and participants (3127) were related to crop production. The other areas of trainings, courses and participants were horticulture (891, 2822); livestock production management (627, 2006); women empowerment (579, 12028); and soil health and fertility management (532, 1364) respectively.

**Table 8.1: Training of farm women**

S.No.	Area of training	Courses	No. of farm women
1	Crop Production	1297	3127
2	Horticulture	891	2822
3	Soil Health & Fertility Management	532	1364
4	Livestock Production & Management	627	2006
5	Home Science/ Women empowerment	579	12028
6	Agril. Engineering	248	740
7	Plant Protection	514	1237
8	Fisheries	77	120
9	Production of Input at site	155	558
10	Capacity Building & Group Dynamics	274	1215
11	Agro forestry	49	193
	<b>Total</b>	<b>5243</b>	<b>25410</b>

#### 1.1.1 Crop Production

Crop production, 1297 training with participation of 3127 farm women. The course were organized Integrated crop management (217) for beneficiaries 447; followed by 205 on weed management, 170 on seed production; 133 courses on Integrated nutrient Management and with the participation of 537, 426 and 260 farm women respectively. The other important areas like cropping systems, crop diversification, integrated farming, integrated crop management, nursery management, production of organic inputs, etc. were also taken up.

#### 1.1.2 Horticulture

Training on production technologies of vegetables, fruits, ornamental plants, plantation crops, tuber crops, spices and medicinal plants were organized. 443 courses on vegetables involving 1578 participants and 264 courses on fruit with the participation of 670 were held. Similarly, in case of ornamental plants, organization of 45 courses with participation of 134 persons was ensured. In the area of tuber crops, spices, medicinal and aromatic and plantation crops 45, 41, 29 and 24 courses were organized with participation of 133, 142, 128 and 37 farm women respectively.

#### 1.1.3 Soil Health and Fertility Management

Total of 532 courses were attended by 1364 participants. The courses in the area of soil fertility management (130), integrated nutrient management (88), soil & water testing (99), production & use of organic inputs (56), balanced use of fertilizer (38), micro nutrient deficiency in crops (36) etc. were organized with the objectives to create awareness, knowledge and skill up gradation among farmers on various issues.

#### 1.1.4 Livestock Production Management

All together courses 627 were organized with the participants 2006. The courses related to dairy management (159) were organized with the participation of 533 cattle owners. Disease management (155) was second preferred programme attended by 404 participants. Feed and fodder management, animal nutrition, poultry, quality animal products, etc were other priority areas.

#### 1.1.5 Women Empowerment

Total courses (579) were organized with the participation 12028. Household food security by kitchen gardening (118) were attended by highest number of farm women (2436), followed by courses on value addition (87), women and child care (64) attended by 1785 and 1324 beneficiaries. The women showed interest in courses like storage losses, women empowerment, rural craft, developing high nutrient efficient diet, drudgery reduction, diet related courses.

#### 1.1.6 Agricultural Engineering

Total courses 248 in various aspects related to farm machinery, implements and its maintenance, post harvest and value addition were organized, benefiting 740 farm

women. Maximum courses on repair & maintenance of farm machinery & implements (103) were organized for benefiting 119 farm women. Newer areas like installation and maintenance of micro irrigation system, use of plastics, small tools, etc. were taken up.

### 1.1.7 Plant Protection

Total 514 courses were organized to benefited (1237) farm women. The highlights of these programmes and others each course were on IPM (236), IDM (155), bio control of pests and diseases (71), production of bio control agents & bio pesticides (39).

### 1.1.8 Fish Production

Courses on integrated fish farming (38) and composite fish culture (30) were organized with the participation of 65 and 42 farm women. Overall 77 courses attracted to participation of 120 farm women.

### 1.1.9 Production of inputs at site

Total 155 courses on Seed production, vermi composting and organic manures production benefited to 558 farm women.

### 1.1.10 Capacity Building and Group Dynamics

274 courses were organized by benefiting of 1215 farm women. The topics covered in the programmes as leadership development, group dynamics, SHGs, entrepreneurship development, WTO & IPR, etc.

### 1.1.11 Agro-forestry

In this area, 49 courses were organized by benefiting 193 farm women. The topics covered in the programmes such as production technology, integrated farming systems, nursery management, etc.

## 1.2 Training of Rural Girls

Total of 766 courses were conducted by involving 3503 rural girls. The highest participation was in seed production (106), mushroom production (75), vermi-culture (64), Bee-Keeping (54) and Value addition (47). Other courses were organized on Nursery Management of Horticulture crops, sheep and goat rearing, dairying, poultry production, repair and maintenance of farm machinery and implements and protected cultivation of vegetable crops.

**Table 8.2: Training of Rural girls**

S.No.	Areas of training	Courses	No. of Female participants
1	Nursery Management of Horticulture crops	42	128
2	Training and pruning of orchards	11	30
3	Protected cultivation of vegetable crops	34	79
4	Commercial fruit production	20	129
5	Integrated farming	34	112
6	Seed production	106	148
7	Production of organic inputs	34	162
8	Planting material production	9	32
9	Vermi-culture	64	105
10	Mushroom Production	75	286
11	Bee-keeping	54	88
12	Repair and maintenance of farm machinery and implements	28	64
13	Value addition	47	586
14	Small scale processing	10	101
15	Post Harvest Technology	11	110
16	Tailoring and Stitching	16	285
17	Rural Crafts	13	177
18	Production of quality animal products	4	21
19	Dairying	35	90
20	Sheep and goat rearing	41	126
21	Poultry production	29	99
22	Ornamental fisheries	1	15
23	Composite fish culture	7	46
25	Other	29	484
	<b>Total</b>	<b>766</b>	<b>3503</b>

### 1.3 Training of Women Extension Personnel

657 courses were organized by involving 2315 women extension personnel. Major areas of training were productivity enhancement in field crops (101), integrated pest management (78), INM (66), livestock feed & fodder (51), production and use of organic inputs (41), Protected cultivation technology (37) etc. Details are shown in table-1.3.

### Kitchen Gardening

Suitability of different modules of kitchen garden for medium size rural family (having more than seven members)

KVK, Dariyapur, Raebareli conducted on-farm trial on different kitchen gardening modules. Among all kitchen modules 200 m<sup>2</sup> area was found most suitable to medium sized rural family because the yield of 200 m<sup>2</sup> area was found more than the annual vegetable requirement of medium sized rural family.

**Table-8.3: Training of women extension personnel**

S.No.	Areas of training	Courses	No. of Female participants
1	Productivity enhancement in field crops	101	60
2	Integrated Pest Management	78	41
3	Integrated Nutrient management	66	82
4	Rejuvenation of old orchards	30	11
5	Protected cultivation technology	37	76
6	Production and use of organic inputs	41	24
7	Care & maintenance of farm machinery & implements	18	5
8	Gender mainstreaming through SHGs	6	25
9	Formation and Management of SHGs	7	122
10	Women and Child care	35	625
11	Low cost and nutrient efficient diet designing	17	337
12	Group Dynamics and farmers organization	10	42
13	Information networking among farmers	10	56
14	Capacity building for ICT application	7	7
15	Management in farm animals	36	26
16	Livestock feed and fodder production	51	126
17	Household food security	25	364
18	Other	82	286
	<b>Total</b>	<b>657</b>	<b>2315</b>

## 2. Nari Programme (Nutrition-sensitive Agricultural Resources and Innovation)

ICAR-ATARI has started NARI programme in KVKs for empowerment of women farmers. Under this project, various nutritional programs to encourage women farmers to make significant contributions to Nutrition- sensitive agriculture are being conducted.

**Technology Assessed:** Assessment of house hold food security through nutritional garden

Five units of kitchen garden were assessed at different locations in comparison to often in practice. Planned kitchen garden was found better in respect of production, total days of availability of green vegetables and general health. Production was 166 % higher and availability is 245 days in comparison to 65 days in farmer practice.

Technology Option	No. of trials	Annual Average yield (Kg)	Annual vegetable requirement of medium size family (Kg)	Percent requirements full fill	Cost of production (Rs.)	Gross income (Rs.)	Net income (Rs.)
Kitchen module of 100 m <sup>2</sup> area	5	431	766.5	56.23	2245.00	7720.00	5475.00
Kitchen module of 150 m <sup>2</sup> area	5	664	766.5	86.63	3175.00	12230.00	9055.00
Kitchen module of 200 m <sup>2</sup> area	5	821	766.5	107.11	3745.00	14550.00	10795.00



### Production performance of nutritional garden at household level

Technology Option	No. of trials	Yield (kg/100 sqm)	Increase in yield (%)	Performance indicators		Cost of cultivation (Rs)	Gross return (Rs)	Net Profit (Rs)	B:C Ratio
				Indicator	Performance				
Production of some leafy and cucurbitaceous vegetables only (Farmers Practice)	10	45	-	Availability of green vegetables	65 days	250	1125	875	4.5
				General health	Comparatively poor				
				Disease occurrence	Comparatively more				
Enhance household food security through Nutritional Garden throughout the year	120	166	166	Availability of green vegetables	245 days	450	3000	2550	6.6
				General health	Comparatively good				
				Disease occurrence	Comparatively less				

### Health & Nutrition Management

#### Problem definition: Low Hemoglobin level among adolescent girl

**Technology assessed:** Assessment of drumstick leaf powder as remedy of low hemoglobin level among adolescent girls.

Adolescent girls were suffering from low hemoglobin level therefore this OFT was conducted considering the lower income of farmers/rural people as well as availability of drumstick leaf throughout the year rather than availability of fruits for the season (only once in the year). Here we are using drumstick leaf powder (twigs) as remedy to reduce hemoglobin problem among adolescent girls. T<sub>1</sub> and T<sub>2</sub> treatment doses applied twice in a day (Morning and Evening) by three months. Data analyzed with simple statistical tools. The details of result given in the table.

#### Problem definition: Low Nutritional status and Malnutrition of Farm women

**Technology Assessed:** Assessment of the effective supplementation of fortified wheat flour for improvement of nutritional status of Farm Women through Fortified wheat flour (75%) + Gram Flour (20%) + Barley Flour (5%) for 180 days ((Protein 14-15%, Iron 2.0-2.4 mg/100 gm)

KVK, Hamirpur conducted on-farm trial to assess the effective supplementation of fortified wheat flour for improvement of nutritional status of Farm Women through Fortified wheat flour (75%) + Gram Flour (20%) + Barley Flour (5%) for 180 days ((Protein 14-15%, Iron 2.0-2.4 mg/100 gm). The analysis of data revealed that supplementation of Fortified wheat flour (75%) + Gram Flour (20%) + Barley Flour (5%) for 180 days ((Protein 14-15%, Iron 2.0-2.4 mg/100 gm) increase in Hemoglobin level 20.65% as well as BMI 15.42%. Farm women also complain that rate of exertion also reduce during activities

SN	Technology Option	No. of trials	Hb level (g/dl)		% increase after treatment applied
			Pre blood test (Prevailing Practice) (Av.)	Post blood test	
1.	T <sub>1</sub> - Ironsupplement as aonla powder (10g/day)	10	8.1	9.2	13.58
2.	T <sub>2</sub> - Drumstick leaf powder (10g/day)		8.1	9.9	22.22



**Evaluation of the effective supplementation of fortified wheat flour for improvement of nutritional status of Farm Women**

Parameter observation	No. of Participants	Average (Body Mass Index)	% Change	Hemoglobin level (gm/dl)	% Change	Perceived rate of Exertion		
						Low	Medium	High
Initiation Stage T <sub>1</sub>	10	17.5	-	9.2	-	10	60	30
After 180 days T <sub>2</sub>		20.2	15.42	11.1	20.65	40	40	20

Nutrients (availability,Qty), cost involved



Height measurement of Farm women



Mixing proper proportion of grain

**a. Supplementation of blended wheat flour- In Process**

Product	Title	Problem Identified	No. of Trials	Duration	Treatment	Performance indicator
Blended Wheat flour	Assessment of effect of supplementation of blended wheat flour on nutritional status of farm women	Poor nutritional status and health of farm women	5	4 Month	T1-Farmer's practice T2-Fortified wheat Flour (75% wheat+5% Jau+20% Bengal Gram)	-BMI -Energy adequacy -Nutrient Intake -Sensory Evaluation -Economic Parameter

**Observation: 4 Months**

Technology option	No. of Trials	Physical Parameter			Nutritional parameter/100 gm							Sensory Parameter score				Economic parameter	
		Height (m.)	Weight (kg.)	BMI (Kg/m <sup>2</sup> )	Energy adequacy	Protein gm.	Iron %	Dietary fiber gm.	Calcium %	Sodium mg.	Carbohydrate gm.	Taste	Flavor	Color	Texture	Overall Acceptability	Cost/kg (Rs.)
T1-Farmer's practice (plain wheat flour)	5	1.65	48	17.64	Under weight	13.7	22	12.20	3.00	5.00	72.57	4.4	4.0	3.4	4.6	3.8	30.00
T2-Blended wheat Flour (75% wheat+5% Barley+20% Bengal Gram)	5	1.65	52	19.11	Normal	14.61	26.5	13.05	4.54	8.95	70.16	4.8	4.6	4.2	3.6	4.4	37.25

### Improvement of health status of farm women through blended wheat flour (After 3 months)

Treatments	No. of Trials	Physical Parameters		BMI	Energy Adequacy	Sensory Parameter Score				
		Height	Weight			Taste	Flavour	Colour	Texture	Overall Acceptability
T <sub>1</sub> - Plain Wheat Flour	5	1.63	49	17.65	Underweight	4.2	4.0	3.5	4.5	3.8
T <sub>2</sub> - Blended Flour 65% Wheat + 15% Gram + 10% Jowar + 5% Soyabean + 5% Bajra	5	1.63	52	19.09	Normal	4.7	4.5	4.1	3.7	4.5

#### Problem definition: Malnutrition (Deficiency of Iron & Protein) in farm women and rural children

**Technology Assessed or Refined:** Assessment of food supplements for reducing malnutrition among school going children

KVK, Hardoi conducted on-farm trial to assess the use of groundnut chikki for reducing malnutrition among school going children. School going children are affected by malnutrition which is mainly due to the lack of protein and iron.

To solve aforesaid problem, incidence of pest infestation in stored dehydrated Mango Slices treated with 0.1 Per cent KMS (Potassium Meta bisulphate) solution was assessed. For this 20 families were selected and in each family 30 samples having 100 gm dehydrated Mango Slices in each sample were kept for trial as T<sub>1</sub>, T<sub>2</sub> and T<sub>3</sub>. Every month occurrence of insects in dehydrated Mango Slices was measured and damage percent was calculated which is presented in the table.

#### Performance of food supplement for reducing malnutrition

Treatments	No of Children	Parameter recorded	
		Sensory Evaluation	Clinical observations
T <sub>1</sub> : Farmer's Practice	10	Abnormal	Abnormal
T <sub>2</sub> : Groundnut Chikki		Normal	Normal

#### Value Addition

**Problem Identified:** Pest Infestation in stored dehydrated Mango Slices.

**Technology Assessed:** Incidence of insects in stored dehydrated Mango Slices treated with KMS (Potassium Meta bisulphate) solution.

#### Incidence of insects in stored dehydrated Mango Slices treated with KMS Solution:

Month	No of Trial	T <sub>1</sub> Farmers Practice (No Treatment)		T <sub>2</sub> Treatment of Fresh Mango Slices with 0.1 % KMS Solution		T <sub>3</sub> T <sub>2</sub> + Packing in Poly Bags	
		Damage %	Colour Developed	Damage %	Colour Developed	Damage %	Colour Developed
June	20	-	Light Brown	-	Off White	-	Off White
July		-	Light Brown	-	Off White	-	Off White
August		-	Brown	-	Off White	-	Off White
September		7	Brown	-	Off White	-	Off White
October		10	Dark Brown	-	Light Brown	-	Off White
November		18	Blackish	-	Light Brown	-	Off White
December		24	Blackish	3	Light Brown	-	Off White
January		32	Black	5	Light Brown	-	Off White
February		42	Black	8	Light Brown	-	Off White
March		52	Black	10	Light Brown	-	Off White

The data mentioned in above table indicates that during storage of dehydrated Mango Slices no occurrence of insects was found in any tested sample up to 3 months of storage. Whereas in case of dehydrated Mango Slices treated with



KMS (Potassium Meta bi sulphite) solution and Packed in Poly bags no occurrence of insects were found up to month of March that is after 10 month of storage. This technology was found economic and acceptable by the farm women.





## HRD AND PUBLICATIONS

ICAR-ATARI, Kanpur organized 4 training programmes and 48 workshop/meetings at ATARI level. Most of the programmes were organised by virtual mode. A total 30 publications have been developed by the ICAR-ATARI, Kanpur including research papers (15), books (1), Technical reports (4), Quarterly magazine (1), news letters (4), popular articles (4) and abstracts (1).

Also KVKs of different SAUs have organised 167 programmes for 2037 participants. Such programmes were organized at the University level to provide technological backstopping in frontier areas of the technologies. In all 1926 publications were developed by all KVKs of Uttar Pradesh. Publications such as 43 books, 106 training manual, 99 book chapter, 335 research papers, 100 seminar papers, 198 technical bulletins, 693 technical reports and 362 other publications including newsletters, abstracts etc has been published during the period under report.

### 9.1 Training Programmes

1. Training of Trainers (TOT) training programme organised by ICAR-ATARI, Kanpur (13-15 February 2020)
2. Webinar on “Understanding the Problem Statements under Cyber –Security today! Hack & Reboot” organised by IIT, Kanpur on 7<sup>th</sup> September, 2020. Aailed by Shri S.N. Yemul and Dr Atar Singh
3. Short Term Training Course on “Preparation and Dissemination of Agromet Advisories at Block level under Gramin Krishi Mausam Seva (GKMS) scheme” for Subject Matter Specialists (Agromet) of DAMUs (by Virtual mode on 24 September, 2020)
4. Training on Paddy Residue Management (by virtual mode on 28<sup>th</sup> October)

### 9.2 Virtual Workshops & Conferences & Meetings

1. Participation in QRT Meetings at KVK Raipur, Indore, Ujjain & Bhopal on 5<sup>th</sup> January 2020.
2. Participation in Farmers Science Congress on 6th January 2020 at UAS, Bangalore.
3. Review workshop of TSP/KSHAMTA project organised by ICAR-ATARI Kanpur (16<sup>th</sup> January 2020)
4. Review workshop of ARYA project organised by ICAR-ATARI Kanpur (17<sup>th</sup> January 2020).

5. Visit at KVK Firozabad to Review activities of CRM project on 19<sup>th</sup> January 2020.
6. Review workshop of Farmer First project organised by ICAR-ATARI Kanpur (23<sup>rd</sup> January 2020)
7. Review workshop of NICRA project organised by ICAR-ATARI Kanpur (24<sup>th</sup> January 2020)
8. Participation in Global Potato Conclave on 29 Jan 2019 at Gandhinagar, Gujrat.
9. Participation in First preliminary meeting of Research Advisory Committee (RAC) on 31<sup>st</sup> January & 1<sup>st</sup> February 2020 at New Delhi.
10. Virtual review meeting on CRM Project, Uttar Pradesh (4<sup>th</sup> February, 2020)
11. Participation in High Level Monitoring Committee of the Central Sector Scheme on ‘Promotion of Agricultural Mechanization for in-situ Management of Crop Residue 11<sup>th</sup> Feb., 2020 at New Delhi.
12. Participation in meeting on Rural women technology park at KVK Sitapur-II on 24<sup>th</sup> February 2020.
13. Participation in National Conference on KVK (28 February-1 March, 2020)
14. Participation in Review meeting of CSISA project at Gorakhpur and Mahrajanj on 12 March, 2020
15. Participation by virtual mode in Directors Conference organised by ICAR, New Delhi (19<sup>th</sup> March 2020)
16. Online review meeting with the Heads, KVK and DE, ANDAUAT, Ayodhya organised by ICAR-ATARI, Kanpur (15<sup>th</sup> April, 2020)
17. Online-Review Workshop on Gramin Krishi Mausam Sewa (GKMS) organised by ICAR-ATARI Kanpur (28<sup>th</sup> May, 2020)
18. Virtual workshop on NICRA project - Review of progress and Action plan of KVKs of Uttar Pradesh organized by ICAR-ATARI, Kanpur (9<sup>th</sup> June, 2020).
19. Virtual national review meeting on CFLD Pulses and Oilseeds (10<sup>th</sup> June, 2020)
20. Virtual workshop on ARYA Project (16<sup>th</sup> June, 2020)
21. Virtual Annual Review Workshop on Farmers FIRST Project organised by ICAR, New Delhi. (17<sup>th</sup> June, 2020)

22. Participation in virtual programme on PM Garib Kalyan Rojgar Yojna (20<sup>th</sup> June, 2020)
23. Virtual Annual Zonal Workshop of KVKs of Uttar Pradesh-2020 (25-27<sup>th</sup> June, 2020)
24. Participation in online stone laying programme of new KVK Badaun-II by Hon'ble minister of Agriculture, GOI Shri Narendra Singh Tomer (7<sup>th</sup> July, 2020)
25. Virtual meeting on NICRA Project for KVKs of Uttar Pradesh organised by ICAR-ATARI, Kanpur (8<sup>th</sup> July, 2020)
26. Virtual participation in 92<sup>nd</sup> Foundation Day of Indian Council of Agricultural Research (ICAR) & Award Distribution Ceremony (16<sup>th</sup> July 2020)
27. Participation in Annual Zonal Workshop of ICAR-ATARI, Zone-IV, Patna (20<sup>th</sup> July, 2020)
28. Participation in Virtual consultation meet on **“Fostering Freshwater Aquaculture Technology Dissemination through KVK Network”** Organised by ICAR-CIFA in association with National Fisheries Development Board and ICAR-NAARM (27<sup>th</sup> August 2020).
29. Virtual inaugural of administrative building of CAU, Jhansi by Hon'ble PM (31<sup>st</sup> August, 2020)
30. Agro Climatic Zonal (ACZ) Conferences for Strategic Planning & Development of Agriculture & Allied Sectors under the chairmanship of Agriculture Commissioner through virtual mode (4-9 September, 2020)
31. Virtual review meeting of all ICAR-ATARIs of the Country with Shri Kailash Chaudhary Hon'ble Minister of Agriculture and Farmers Welfare, GoI (9<sup>th</sup> September, 2020).
32. Participation in PMs programme on “Rashtriya Shiksha Niti” (11<sup>th</sup> September, 2020)
33. Virtual Hindi Pakhwada organised by ICAR-ATARI, Kanpur (14-29<sup>th</sup> September, 2020)
34. Participation in revamped programme on Mobile App “FARMS” (Farm Machinery Solution App) organised by DAC & FW, Ministry of Agriculture, New Delhi (30<sup>th</sup> September, 2020)
35. Participation in Virtual meeting on “Farmers Act” with Hon'ble MoS Agriculture Shri Kailash Chaudhary organised by ICAR, New Delhi (7<sup>th</sup> October, 2020)
36. Online meeting organized under the NICRA Project by ICAR-ATARI Kanpur, to share information for making video film by NICRA KVKs in Uttar Pradesh (8<sup>th</sup> October, 2020).
37. Participation by virtual mode in foundation stone laying programme KVK Muzaffarnagar-II (10<sup>th</sup> October 2020).
38. Webinar on CRM Project National (28<sup>th</sup> October, 2020)
39. Participation by virtual mode in 59<sup>th</sup> Foundation Day celebrations of ICAR-IGFRI Jhansi (1<sup>st</sup> November 2020).
40. Virtual Research Advisory Committee (RAC) meeting organised by ICAR-ATARI, Kanpur (6-7<sup>th</sup> November, 2020)
41. Participation by virtual mode in meeting on Third Party Evaluation (12<sup>th</sup> November 2020)
42. Participation by virtual mode in Midterm Review workshop of SVPUAT Meerut KVKs (25-26<sup>th</sup> November 2020)
43. Virtual Midterm Review workshop of CSAUAT Kanpur KVKs organized by ATARI Kanpur (10<sup>th</sup> December 2020)
44. Participation by virtual mode in Agriculture Session of IISF 2020 (24<sup>th</sup> December 2020)
45. Participation in PM Samman Nidhi Transfer Programme (25<sup>th</sup> December, 2020)
46. Participation by virtual mode in Regional Committee Meeting of ICAR (27<sup>th</sup> November 2020)
47. Virtual Mid Term Review Workshop for KVKs of ANDUAT, Ayodhya organised by ICAR-ATARI, Kanpur (29-30<sup>th</sup> December, 2020)
48. Virtual SACs for organised by ICAR-ATARI, Kanpur for 56 KVKs during the period under report.

### 9.3 Publications

#### 9.3.1 Research papers

1. S.K. Dubey, Reshma Gills, U.S. Gautam, A.K. Singh and R.R. Burman (2020). An inquest on strategic fit of market dynamic among value chains-case of capsicum in champawat district of Utrakhhand. *Indian J. Hort.* 77(2). Jun 2020.339-346.
2. Sadhna Pandey, S.K. Dubey, Atar Singh, U.S. Gautam, Kirti M. Tripathi, Saurabh, Anuradha Ranjan Kumari, Archana Singh and Nimisha Awasthi (2020). Occupational Health Hazards and Drudgeries Perceived by the Women Farmers in Western Zone of Uttar Pradesh. *Journal of Community Mobilization and Sustainable Development* Vol. 15(1), 1<sup>st</sup>-7<sup>th</sup>, January-April, 2020.

3. Poonam Singh, V.K. Kanaujia, S.K. Dubey and Sadhna Pandey (2020). Backyard Kitchen Garden as the Viable Tool for Nutritional Security of Rural Families: A Study from Kannauj District (U.P.). *Journal of Community Mobilization and Sustainable Development*, Vol. 15(3), 643-648.
4. Satyapriya, Sitaram Bishnoi, K. N. Singh, Mrinmoy Ray, Shashi Dahiya, Shantanu Kumar Dubey, Atar Singh, Prasannajit Mishra, Sunita Singh Biswaranjan Pattanaik, Monika Yadav, Rubeka, Ravi Shankar, Jaya Pandey, Vaibhav Rai, Swatantra Pratap Singh, Subrat Kumar Mahapatra and Premlata Singh (2020). Competencies and Gap Analysis of the Krishi Vigyan Kendra Extensionists and Barriers in Acquiring ICT Based Competencies. *Indian Journal of Extension Education* Vol. 56, No. 2, 2020 (65-71).
5. Abhishek Mishra, O.P. Yadav, S.K. Dubey, Naveen Kumar and Siddhant Mishra (2020). Extent of use of ICT Tools for Accessing the Agricultural Information in Lucknow District of Uttar Pradesh. *Journal of Community Mobilization and Sustainable Development* Vol. 15(3), 759-763.
6. Shantanu kumar dubey, Reshma Gills, US Gautam, Atar Singh, RR Burman and Rajeev Singh (2020). Value chain mapping: A novel approach for market dynamics analysis in tomato (*Solanum lycopersicum*). *Indian Journal of Agricultural Sciences* 90 (5): 924-9.
7. Satyapriya Sitaram Bishnoi, Sunita Singh, K.N. Singh, Mrinmoy Ray, Shashi Dahiya, Shantanu Kumar Dubey, Atar Singh, Prasannajit Mishra, Biswaranjan Pattanaik, Monika Yadav, Rubeka, Ravi Shankar, Shivani Singh, Jaya Pandey, Vaibhav Rai, Swatantra Pratap Singh Subrat Kumar Mahapatra and Premlata Singh (2020). A Knowledge Test for Agricultural Extension Personnel on Agri-Nutrition. *Journal of Community Mobilization and Sustainable Development*, Vol. 15(3), 649-652.
8. Pawan Kumar, SS Singh, Manoj Kumar, A.K. Pandey, Ram Kumar Singh, Prashant Kumar Srivastava Shantanu Kumar Dubey, Uma Sah, Rajiv Nandan, Susheel Kumar Singh, Priyanshi Agrawal, Akanksha Kushwaha, Meenu Ranig, Jayanta Kumar Biswash, Martin Drews (2020). Multi-level impacts of the COVID-19 Lockdown on Agricultural Systems in India: The Case of Uttar Pradesh. *Agriculture System*, 187 (2021): 1-10.
9. D.K. Pandey, H.K. De and Shantanu Kumar Dubey (2020). Social Media Usage Among Agriculture Collegian in North-Eastern India. *Indian Journal of Extension Education* Vol. 56 (2): 26-30.
10. Ashwani Kumar Verma, R.K. Doharey, Sachchidanand Upadhyay, S.K. Dubey and Kaushik Prashad (2020). Bottlenecks of Potato Growers and Ways to Ameliorate Them: Micro Level Study from Kannauj District of Uttar Pradesh. *Journal of Community Mobilization and Sustainable Development* Vol. 15(1), 130-134, January-April, 2020.
11. Ashwani Kumar Verma, R.K. Doharey, S.K. Dubey, Satyapriya, Sitaram Bishnoi, Om Prakash and Kaushik Prasad. (2020). Extension of Knowledge and adaption of potato growers in Kannauj District of Uttar Pradesh. *Indian Journals of extension education* vol. 55 No. 4: 25-32.
12. Kirti M. Tripathi and S. K. Dubey (2020). Generating Awareness for Health Hazards of Climate Change in Rural Western Uttar Pradesh, India: Application of Difference-in-Differences Method. *Indian Journal of Extension Education* Vol. 56, No. 1, 2020 (122-127).
13. S K Dubey, A K Singh, Lakhan Singh, Atar Singh, V K Kanaujia And Bhupendra Kumar Singh. 2020. Crop diversification and small holders: A micro-level evidence from Uttar Pradesh. *Indian Journal of Agricultural Sciences*, 90 (1): 75-79.
14. S.K. Dubey, Uma Sah and Atar Singh. 2020. Geospatial Experiences in Front Line Extension of Potato Production Technologies in India. Lead paper In: Souvenir, Global Potato Conclave 2020-Roadmap for better world, held from 28-31 January 2020, Mahatma Mandir, Gandhinagar, Gujarat, p: 259-261.
15. Atar Singh, Shantanu Kumar Dubey and Aman Pandey. 2020. Upscaling of crop residue management technology for doubling farmers income. Lead paper in : Nk Sharma et al (2020) edited "Resource Conservation for soil security and jal shakti: Farmers' Perspective in Bundelkhand (Lead paper)", Indian Association of Soil, Conservation, Dehradun, P:114-117.

### 9.3.2 Book

1. Atar Singh, US Gautam, S.K. Dubey, S.N. Yemul, Shankar Singh. "Krishak samruddhi ki aur: Shikh parak navonmoshi krishon ke anubhav. (2019). Pp: 1-53

### 9.3.3 Technical Report

1. Atar Singh, Sadhna Pandey, S.K. Dubey Raghwendra and S.N. Yemul (2019). Annual Progress Report of KVKs Published by ICAR-ATARI, Kanpur.
2. Atar Singh, S.K. Dubey, Sadhna Pandey, Raghwendra Singh, S.N. Yemul Rajeev Singh, Nikhil Vikram Singh and Maneesh Kumar Singh. "Performance of Pulses Demonstrations in Uttar Pradesh by KVKs Under NFSM (2018-19)" P. 1-28.

3. Atar Singh, S.K. Dubey, Sadhna Pandey, Raghwendra Singh, S.N. Yemul, Mohil Kumar and Aman Kumar Pandey. "Effect of Production Technologies on Oilseeds (CFLD-Oilseeds in Uttar Pradesh) 2018-19". ICAR-ATARI, Kanpur Technical Bulletin : 4, 2019. Pp: 1-24.
4. Atar Singh, S.K. Dubey, Sadhna Pandey, S.N. Yemul, KAP Singh, S.P. Singh and Mohil Kumar. Farmer FIRST Programme Annual Report 2017-19 (2020). P: 1-55.

### 9.3.4 Quarterly Magazine

1. Atar Singh, Sadhna Pandey, S.K. Dubey, Raghwendra Singh, Shankar Singh and S.N. Yemul (September, 2020), Krishi Shodh Darpan published by ICAR-ATARI, Zone-III, Kanpur (U.P.) Volume-III, pp: 1-74.

### 9.3.5 News Letters

1. Atar Singh, S.K. Dubey, Sadhna Pandey, Raghwendra Singh & S.N. Yemul (2020). News Letter ICAR-ATARI, Kanpur published by ICAR-ATARI, Zone-III, Kanpur (U.P.). Volume- XVIII, pp 1-15.
2. Atar Singh, S.K. Dubey, Sadhna Pandey, Raghwendra Singh & S.N. Yemul (2020). News Letter ICAR-ATARI, Kanpur published by ICAR-ATARI, Zone-III, Kanpur (U.P.). Volume- XIX, pp 1-15.
3. Atar Singh, S.K. Dubey, Sadhna Pandey, Raghwendra Singh & S.N. Yemul (2020). News Letter ICAR-ATARI, Kanpur published by ICAR-ATARI, Zone-III, Kanpur (U.P.). Volume-XX, pp 1-16.
4. Atar Singh, S.K. Dubey, Sadhna Pandey, Raghwendra Singh & S.N. Yemul (2020). News Letter ICAR-ATARI, Kanpur published by ICAR-ATARI, Zone-III, Kanpur (U.P.). Volume-XXI, pp 1-16.

### 9.3.6 Popular Articles

1. Sadhna Pandey, Atar Singh, S.K. Dubey, Raghwendra Singh, S.N. Yemul, Abhishek Mishra & Mohil Kumar. "Krishak mahilaon ke gyan vardhan mein krishi vigyan kendron ki bhumika". Krishi Shodh Darpan, September, 2020. P: 46-51.
2. Atar Singh. "Samasta Krishi Vigyan Kendra Uttar Pradesh ke madhyam se krishon tak sandesh pahuchane hetu nideshak ATARI ki appeal". Krishi Shodh Darpan, September, 2020. P: 71-73.
3. Atar Singh. Covid 19 mahamari ke drushigat ghoshit lockdown ke Madhya ICAR ATARI Kanpur dwara Uttar Pradesh ke kisanon ko suzav". Krishi Shodh Darpan, September, 2020. P: 74.
4. Sadhna Pandey, Atar Singh, S.K. Dubey, Raghwendra Singh 2020. "Swachch dugdh utpadan ke liye aavashyak Kadam ". Krishak Doot, June 02-08, 2020 P: 10-11.

### 9.3.7 Abstract

1. Sadhna Pandey, SK Dubey, Atar Singh, US Gautam, Kirti M. Tripathi, Saurabh, Anuradha Ranjan Kumari, Archana Singh Nimisha Awasthi. 2020. Contributions and Drudgeries Perceived by the Women Farmers in Crop Production, Post Harvest and Animal Husbandry Operations i. National talk show on skill development dynamics for agripreneurship in post pandemic india organized by Dr. Mamta Tiwari Director, Prioritization Monitoring & Evaluation Agriculture University, Kota, Rajasthan, June 29, 2020. P:78-79.



## PROJECTS AND SPECIAL PROGRAMMES

### Projects Achievement

This institute handling different four types of project such as (i) ICAR funded projects (ii) Government of India funded projects (iii) International funded projects (iv) Institute funded projects.

Achievements of said different projects in brief are given below–

#### 11.1 ICAR Funded Projects

##### 11.1.1 NICRA (National Innovation on Climate Resilient Agriculture)

NICRA is aimed at making the farmers self reliant by use of climate resilient agricultural technologies and management of natural and manmade resources for sustaining agriculture in the era of climate change empowered by four modules of NICRA – natural resource management, improving soil health, crop production and livestock. Scope also covers specific environment assessment and generating meaningful products from crop residues with different energy conversion process.

**Technical Achievements :** Under technology demonstration components through various modules benefited 15272 farmers on 3321.53 ha area (746 Natural Resource Management, 4014 Crop Production, 451 Live stock & Fishries, 1914 Institutional Intervention, 4165 Capacity Building (HRD) and 3982 Extension Activities).

**Table 10.1: Achievements of NICRA project**

S.No.	Module	Beneficiaries	Area (ha)/No. of Courses/Programme	Animals
1	NRM	746	598.3	-
2	Crop Production	4014	1379.52	-
3	Livestock & Fisheries	451	63.93	164
4	Capacity Building	4165	196	-
5	Extension Activity	3982	162	-
6	Institutional intervention (Seed Bank+Fodder Bank+ CHC)	1914	921.78	-
	<b>Total</b>	<b>15272</b>	<b>3321.53</b>	<b>164</b>

**Table 10.2: Achievements of ARYA Project**

S.No.	Name of entrepreneurial units	No. of entrepreneurial units established	No. of Training programs organised	No. of rural youth trained		No. of youth established units	
				Male	Female	Male	Female
1	Mushroom production	50	6	102	7	49	5
2	Horticulture nursery	0	1	1	15	5	5
3	Poultry	55	13	173	6	51	3
4	Goat farming	39	12	129	20	38	8
5	Bee keeping	11	4	75	5	22	3
6	Others (Vermi composting)	0	1	1	15	5	10
	<b>Total</b>	<b>155</b>	<b>37</b>	<b>481</b>	<b>68</b>	<b>170</b>	<b>34</b>

Total 13 KVKs namely Kushinagar, Bahraich, Gorakhpur, Sonbhadra, Maharajganj, Gonda, Jhansi, Hamirpur, Chitrakoot, Muzafarnagar, Baghpat, Kaushambi, Pratapgarh working on this project.

##### 11.1.2 ARYA (Attracting Rural Youths in Agriculture)

The main objective of this project is to (i) To attract and empower the Youth in Rural Areas to take up various Agriculture, allied and service sector enterprises for sustainable income and gainful employment in selected districts. (ii) to enable the Farm Youth to establish network groups to take up resource and capital intensive activities like processing, value addition and marketing and (iii) To demonstrate functional linkage with different institutions and stakeholders for convergence of opportunities available under various schemes/program for sustainable development of youth.

**Technical Achievements :** (i) No. of Training Programs Conducted (Number) : 46 (ii) No. of Rural youth trained (Number): 825 (iii) No. of Entrepreneurial units Established (Number): 380 (iv) No. of Publications published (Number): 28 (v) No. of other farmers/youth visited the enterprise unit (Number): 1814 (vi) Average Employment Generation (No. of days): Per person/ Year: 1814 (vii) Av. Income Generation (Lakh): Per person/Year: 1.41 (viii) Awareness created by the Group (Number of Press release/TV or Radio talk, etc): 84 (ix) Seed Production:11680 q. Business includes were

Vermi compost, nursery production, goat farming, mushrooms, beekeeping, broiler rearing, quality seed production, plating material, farm machinery bank.

Total 10 KVKs namely Muzaffarnagar, Varanasi, Gorakhpur, Kaushambi, Pratapgarh, Saharanpur, Deoria, Basti, Ghazipur and Lucknow are working under this project.

### 11.1.3 Farmers FIRST Project

In order to improve agricultural productivity and livelihood of small and marginal farmers, ICAR has started the scheme in its selected research institutes. Under this scheme, work is done in the risk prone areas to increase production and productivity and reduce the losses in agriculture with the help of agricultural scientists.

**Technical achievements:** During the year 2020-21 all the seven institute together conducted 3279 numbers of demonstration on 6387 Animal & 5400 Birds, 2500 Fingerlings by covering 8496 Farmers in the state of Uttar Pradesh. Total 568 extension activities were also conducted which benefitted 4505 Farmers.

Total 7 ICAR institutes namely ICAR-CISH, Lucknow, ICAR-IVRI, Bareilly, ICAR-IGFRI, Jhansi, ICAR-IIFSR, Meerut, ICAR-CIRC, Meerut, ICAR-IIPR, Kanpur, ICAR-IIVR, Varanasi are working on this project.

### 11.1.4 MGMG (Mera Gaon Mera Gaurav)

**Table 10.3: Achievements of MGMG project**

S.No.	Activities	Number
1	No. of institutes/universities involved	13
2	Total No of Groups/team formed	61
3	No. of Scientists Involved	277
4	No. of villages covered	346
5	No. of field activities conducted	309
6	No. of messages/ advisory sent	454
7	Farmers benefitted	1524

An innovative initiative “Mera Gaon Mera Gaurav” has been planned to promote the direct interface of scientists with the farmers to hasten the lab to land process. The objective of this scheme is to provide farmers with required information, knowledge and advisories on regular basis by adopting villages. The participation of small and marginal farmers in Indian agriculture is very important. Small farmers put forth their desire on various forums to have timely information on investment in agriculture, loans, availability of other basic amenities, market rates, extension activities and facilities provided by different agencies, new research findings and technologies, etc.

**Technical achievements:** Total no. of groups or team formed-61, Number of Scientists involved-277, Number of village's covered-346, Number of field activities conducted 302, Number of messages/Advisory send-454, Number of Farmers benefitted -1524.

Total 13 ICAR institutes and DU namely ICAR-IISR Lucknow, CISH Lucknow, C.S.S.R. Lucknow, SHUATS Allahabad, B.H.U. Varanasi, PDDSR Mau, I.I.P.R. Kanpur, CAFRI Jhansi, I.G.F.R.I. Jhansi, BPKS Almora, IISWCRT Agra, CARI Bareilly, IVRI Bareilly and NBAIM Maunath Bhanjan are working on MGMG project.

### 11.1.5 NASF-ICT (ICT based extension strategies for nutrition sensitive agriculture)

This project is working on three objectives – (i) To understand the relevance and efficacy of the existing agricultural extension approaches and practices. (ii) To develop and validate ICT mediated agriculture extension model in and disadvantaged areas (iii) To create a comprehensive framework for ICT driven Extension Advisory services in disadvantaged areas.

**Technical achievements:** Actual data collection has been started for the districts namely Chandauli, Gonda, Chitrakoot and Jalaun. So for 1600 farmers have been surveyed from these four districts. The extension personnel (100) have been also interviewed for data collection from them.

Total 5 KVKs namely Chandauli, Gonda-I, Jalaun, Chitrakoot and Auraiya are working on this project. Working Period for this project is 2018-21.

### 11.1.6 NEMA (New Extension Methodologies and Approaches)

This project is working on three objectives such as (i) To study the existing extension methodologies and develop new extension methodologies. (ii) To develop technology map for different agro-ecosystem (iii) To study the extent and determinants of adoption of selected improved NARS technologies.

NEMA project was started by ICAR with the collaboration of 19 Institutes in all over India. ICAR-ATARI, Kanpur is working in collaboration with IARI, New Delhi.

**Technical Achievements:** With the aim of Socio-economic Impact Evaluation of Pusa Basmati 1121 and HD 2967, 108 villages were selected from 54 blocks (15 distt.). 3240 Household were selected to study the spread of technology. KVKs data collection work of 10 KVKs has been completed and rest KVKs data collection work is in progress. Data entry work on excel sheet are also ongoing.

Total 15 KVKs of Uttar Pradesh namely Saharanpur, Bijnor, Amroha, Badaun, Farrukhabad, Mathura, Ghaziabad, Muzaffarnagar, Mirzapur, Kasganj, Auraiya, Chandauli, Etah, Mainpuri, Aligarh were selected for data collection in the Uttar Pradesh with the help of interview schedule developed by IARI, New Delhi. Working period for this project is 2018-21.

## 11.2 Government of India Funded Projects

### 11.2.1 TSP/KSHAMTA (Tribal Sub Plan/Knowledge system & Home based Agricultural Management in Tribal Areas)

This scheme is being run for tribal upliftment in Tribal dominated districts. In order to create awareness among farmers, various programme like FLD, OFT, trainings, seed production, planting material production, capacity building and extension activities are being organised by KVKs. Major goal of this programme is to improve the livelihood of tribal farmers.

**Technical achievements:** (i) Technologies assessed and refined : 3; (ii) On Farm Trials Conducted: 2; (iii) Frontline Demonstrations Conducted: 3062; (iv) No. of Farmers and farm women Trained: 2826; (v) No. of Extension Personnel Trained: 1482; (vi) Production of Seeds: 473.20 quintal; (vii) Production of Planting materials: 0.96 lakh; (viii) Production of livestock strains and fingerlings: 0.6106 lakh; (ix) Soil and water samples tested: 236; (x) No. of Soil health card issued by using Mini Soil Testing Kit and using traditional Laboratory: 246; (xi) Nos. of Farmers provided mobile agro-advisory: 25.27 lakh; (xii) No. of Farmers and other stakeholder Benefitted/Awareness created through various Extension Activities: 0.54 lakh.

**Table 10.4: Achievements of TSP/KSHAMTA**

S.No.	Activities	Number	
1	Farmers Training	No. of Trainings/Demons	48
		No. of Farmers	1436
2	Women Farmer Training	No. of Trainings/Demons	23
		No. of women farmers	556
3	Rural Youths	No. of Trainings/Demons	8
		No. of youths	156
4	Extension Personnel	No. of Trainings/Demons	15
		No. of Extension Persons	271
5	Farmers involved in	On- farm trials	22
		Frontline demonstrations	2102
		Mobile agro- advisories	631
6	Participants in extension activities (No.)	2524	
7	Production of seed (q)	228	
8	Production of Planting material (Number in lakh)	0.96	
9	Production of Livestock strains (Number in lakh)	0.0012	
10	Production of fingerlings (Number in lakh)	0.44	
11	Testing of Soil, water, plant, manures samples (Number)	223	
<b>Achievements under KSHAMTA</b>			
1	No. of Villages Adopted	22	
2	No. of Demonstrations conducted	557	
3	No. of farmers benefitted under FLD	2360	
4	No. of Trainings programmes conducted	52	
5	No. of farmers benefitted under training programmes	1795	

Total 8 KVKs namely Chitrakoot, Lakhimpur Kheri, Sonbhadra, Balrampur, Bahraich, Jhansi, Mahoba, Lalitpur are selected for this project.

### 11.2.2 CRM (Crop Residue Management)

Aim of this scheme, is to protect the environment from pollution, microbial flora and fauna of the soil and carbon deterioration by burning paddy, straw and husk especially in paddy and wheat growing areas, the residues are suppressed with the help of high-tech agricultural equipments such as happy seeder, paddy straw chopper/shredder/mulcher, reversible M B plough, zero till drill and rotavator and mixed in the field so that productivity of farm land may be improved and environment may be protected from the pollution.

**Technical Achievements:** (i) Total 425 awareness camps conducted and 47494 farmers are benefitted (ii) Total 92 training programmes organised and 4459 farmers were benefitted (iii) Total 3291 demonstrations conducted covering an area of 2915.00 ha by benefitting 3764 farmers (iv) Total 28 schools & colleges mobilized through essay completion, painting, debate etc and 49 activities conducted by participating 2371 students. (v) Total 6 Kisan Meals organised and 3895 farmers are benefitted. (vi) Total 127

Column/Articles published in newspaper and magazines (vii) 13258 wall writings, 453 Hording fixed at mandi/road side/market/schools/petrol pump/panchayat etc, 33838 Poster/Banner placed at different location/buses etc. (viii) Total 131775 publicity material such as leaflets/pamphlets etc. distributed (ix) Total 137 made awareness through TV & Radio (x) Total 31 TV programmes/panel discussions Doordarshan/ DD-Kisan and other private channels were taken place. (xi) 54 exposure visit conducted by benefitting 1844 farmers (xii) total 7 field days organised by participating 428 farmers (xiii) Total 25 harvest day organised by participating 512 farmers (xiv) Total 341 advertisement published in Print media. (xv) Total 105 award given for village/ Gram Panchayat for achieving zero stubble burning.

In this project, total 28 KVKs of Uttar Pradesh namely Agra, Aligarh, Azamgarh, Bagpat, Bareilly, Bijnor, Budaun, Bulandshahar, Etah, Firozabad, G.B. Nagar, Ghaziabad, Hathras, Jaunpur, Mathura, Meerut, Moradabad, Muzaffarnagar, Pilibhit, Rampur, Saharanpur, Shahjahanpur, Varanasi are involved.

### 11.2.3 ASCI Programme (Agriculture Skill Council of India)

Agriculture Skill Council of India (ASCI) working under the aegis of Ministry of Skill Development & Entrepreneurship (MSDE). ASCI works towards capacity building by bridging gaps and upgrading skills of farmers, wage workers, self-employed & extension workers engaged in organized/unorganized segments of Agriculture & Allied Sectors. Under this program, skill based training is being provided to farmers by registered trainers of KVKs. So that they can establish and set up their own business.

**Technical Achievements:** Under ASCI programme total 38 KVKs organised 30 training programmes benefitting 600 participants on Vermicompost, Dairy farming, Mushroom farming, Beekeeping, Poultry, mechanization, Forest nursery, Quality seed production etc.

Under this programme total 36 KVKs namely Bahraich, Basti, Varanasi, Siddharthnagar, Sonbhadra, Balrampur, Chandoli, Jaunpur, Fatehpur, Kanpur Dehat, Jhansi, Mahoba, Hamirpur, Jalaun, Lalitpur, Banda, Mathura, Bijnour, Saharanpur, Meerut, Muzaffarnagar, GB Nagar, Sultanpur, Mirzapur, Gonda, Chitrakoot, Allahabad, Pratapgarh, Unnao, Lucknow, Ghazipur, Sitapur-I, Kaushambi, Auraiya, Sitapur-II, Gorakhpur-II, and 6 ICAR institutes namely IIPR, Kanpur, IISS, Mau, IGFRI, Jhansi, NBAIM, Mau, NBFGR, Lucknow, IVRI, Barily are involved.

**Table 10.5: CRM Machinery procured by KVKs**

S.No.	Name of the Machine/ Equipment	No. of machines procured
1	Happy Seeder	1
3	Paddy Straw Chopper/ Shradder / Mulcher	6
4	Zero Till Drill	6
5	Rotavator	1
6	Tractor	12
<b>Total</b>		<b>26</b>

**Table 10.6: IEC activities organized under CRM Project by KVKs**

S. No.	Name of IEC activity	No. of activities	No. of Participants
1	Kisan Melas organized	6	3895
2	Awareness programmes conducted at Village Panchayat/ Block/ District Level	425	47494
3	Mobilization of schools and colleges through essay completion, painting, debate etc.	28	2371
4	Demonstration conducted (ha)	3291	2915
5	Training Programmes conducted	92	4459
6	Exposure visits organized	54	1844
7	Field /harvest days organized	7	428
<b>Total</b>		<b>3903</b>	<b>63406</b>
8	Advertisement in Print media	341	Mass
9	Column / Articles in newspaper and magazines etc.	127	
10	Hoarding fixed (at Mandi/ Road side/Market/ Schools/ Petrol pump/ Panchayat etc.)	453	
11	Poster/Banner placed	33838	
12	Publicity material - leaflets/ pamphlets etc. distributed	131775	
13	TV programmes/ panel discussions Doordarshan/ DD-Kisan and other private channels	31	
14	Wall writing	13258	
<b>Total</b>		<b>179823</b>	
<b>G.Total</b>		<b>183726</b>	<b>63406</b>



### 11.2.4 DAMU Project (District Agricultural Meteorological Unit)

This project is being implemented by setting up of weather stations in 17 KVKs, a scientist will be separately appointed for running this station. Farmers of the district will get appropriate information, so that they will take care about their crops accordingly.

#### Technical Achievements

Total 17 KVKs namely Bhadoi, Kushinagar, Sonbhadra, Gorakhpur, Jaunpur, Azamgarh, Sidharthnagar, Balrampur, Chandauli, Kannauj, Fatehpur, Mainpuri, Bulandshahr, Shahjahanpur, Baghpat, Chitrakoot, Ghazipur are working under this project.

### 11.2.5 CFLD (Cluster Frontline Demonstrations on Oilseeds & Pulses)

All Head/Scientist of the KVKs are conducting the demonstrations in packages of practices mode with latest technologies. First of all availability of the seed was ensured from the NSC/SAUs/ICAR institutes and other organizations. Cluster Frontline Demonstration programme is approved by National Food Security Mission (NFSM), Department of Agriculture Cooperation and Farmers Welfare, Ministry of Agriculture and Farmers Welfare, Government of India, New Delhi

**Technical Achievements:** Technology demonstrations on oilseed were organized on an area of 1345 ha. Involving 3427 farmers. Percentage increase in demo yield in case of mustard (20.59%), linseed (23.03%) sesamum (7.60%), toria (25.19%), groundnut (13.54%). Additional Cluster Frontline Demonstrations on Oilseeds for Promotion of Sustainable Agriculture Practices (SAP) during 2020 by KVKs. Mustard

Table 10.: CFLD on Pulses & Oilseed

Name of crop	No. of Farmers	Area (ha)	Demo Yield (q/ha)	Check yield (q/ha)	% increase in yield	Economics of demonstration (Rs/ha)			
						Gross cost	Gross Return	Net return	BCR
<b>Pulses</b>									
Pigeonpea	974	320.60	11.09	7.80	42.08	20347	57160	36813	2.81
Blackgram	604	235.00	10.82	8.47	27.72	20352	55890	35537	2.75
Greengram	874	326.18	8.46	5.97	41.69	19639	53266	33626	2.71
Chickpea	952	310.01	13.55	11.05	22.63	18677	61686	43009	3.30
Fieldpea	879	181.22	13.65	10.66	28.08	21602	67189	45586	3.11
Lentil	1042	342.55	10.64	8.17	30.27	20586	51226	30640	2.49
Cowpea	20	2.00	13.30	11.25	18.22	22150	59850	37700	2.70
<b>G.Total</b>	<b>5345</b>	<b>1717.56</b>	-	-	-	-	-	-	-
<b>Oilseeds</b>									
Sesame	621	279.00	5.38	3.91	37.65	12423	34224	21800	2.75
Groundnut	123	60.00	26.55	20.30	30.77	37693	103066	65372	2.73
Mustard	4051	1653.30	12.60	9.20	36.94	21974	73828	51853	3.36
Linseed	50	20.00	11.33	9.24	22.69	29834	88447	58613	2.96
Toria	181	50.00	9.04	6.61	36.83	25904	81137	55233	3.13
<b>G.Total</b>	<b>5026</b>	<b>2062.30</b>	-	-	-	-	-	-	-

corp area 1974 ha. Involving 4975 farmers. Percentage increase in demo yield in case of Mustard (19.62%).

Technology demonstrations on pulses were organized on an area of 1717.56 ha involving 5345 farmers and on pulses Percentage increase in demo yield in case of pigeonpea (42.08%), blackgram (27.72%), greengram (41.69%), chickpea (22.63%), fieldpea (28.08%), lentil (30.27%) & Cowpea (18.22%).

### 11.3 International Funded Projects

#### 11.3.1 CSISA (Cereal System Initiative for South Asia)

The Cereal Systems Initiative for South Asia (CSISA) was established in 2009 with a goal of benefiting more 8 crore farmers by the end of 2020. This project is being operated by International Corn and Wheat Improvement Centre and joint efforts of International Food Policy and International Rice Research Institute (IFPRI), Kushinagar.

**Technical Achievement:** The OFT on paddy were conducted by the KVKs of Deoria and Kushinagar. Other selected KVKs were involved in practice survey and diagnostic using ODK.

Total 8 KVKs namely Kushinagar, Ghazipur, Gorakhpur, Deoria, Ballia, Maharajganj, Mau, Siddharthnagar are working under this project.

Table 10.: Achievements of CSISA project

S.No.	Name of Programme	Number
1	Survey for paddy programme	18 districts
2	Farmers interview	3780 farmers
3	Trials on paddy & wheat	2 KVKs (Deoria & Kushinagar)

## 11.5 Achievements of Special Programmes

ICAR-ATARI, Kanpur involved to run total 9 different kinds of Special Programmes as per ICAR guidelines such as–

- (i) PKVY (Paramparagat Krishi Vikas Yojna Scheme)
- (ii) Seed Hub Programme
- (iii) CRM (Crop Residue Management)
- (iv) Aspirational Districts Scheme
- (v) NARI (Nutrition- sensitive Agricultural Resources and Innovation)/VATICA (Value Addition and Technology Incubation Center in Agriculture)
- (vi) ASCI (Agriculture Skill Council of India 37 KVK)
- (vii) SBA (Swachchh Bharat Abhiyaan) and
- (viii) SCSP (Schedule Caste Sub Plan).

Achievements of said different special programmes in brief are given below:-

### 11.5.1. PKVY (Paramparagat Krishi Vikas Yojna Scheme)

The purpose of this Development Manual for Paramparagat Krishi Vikas Yojana (PKVY) is to create an enabling mechanism for improved implementation of the Scheme at the cutting edge, leading to enhanced outcomes in nature and extent. Accordingly, it is a guide for implementation by the District Collector and key District-level functionaries, and enables quick learning, implementation modalities, roles and responsibilities of the various functionaries as well as stakeholders etc. Under this scheme each KVK has to perform demonstrations on 20 ha area under their respective clusters.

**KVKs involved:** 10 (Basti, Ballia, Kanpur Dehat, Mahoba, Hamirpur, Shahjahanpur, Gonda, Pratapgarh, Lucknow, Sitapur-II)

### 11.5.2 Seed Hub Programme

For the purpose of maintaining self-sufficiency in seeds,

ICAR has initiated for preparation of seed hubs of pulses and oilseeds, so that seed of novel varieties may be produced at agricultural farm and farmers field and processed under the supervision of scientists and will be made available at the appropriate cost. This scheme is very much beneficial in providing prices to the farmers more than market price or MSP along with bonus on the purchase of their seeds and making it available after processing. Each KVK has been provided with revolving fund of Rs. One crore and funds for establishing seed processing plant by the Central Government. Under this scheme, KVKs of Deoria, Banaras, Jalaun, Chitrakoot, Lalitpur, Mahoba, Fatehpur and Mirzapur districts have been selected. During 2020 total 2385.08 quintal pulse seeds are produced by 8 seed hubs.

**KVKs involved:** 8 (Deoria, Varanasi, Jalaun, Chitrakoot, Lalitpur, Mahoba, Fatehpur and Mirzapur)

### 11.5.3 CRM (Crop Residue Management)

Under this scheme, to protect the environment from pollution, microbial flora and fauna of the soil and carbon deterioration by burning paddy, straw and husk especially in paddy and wheat growing areas, the residues are suppressed with the help of high-tech agricultural equipments and mixed in the field. So that productivity of farm land may be improved and environment may be protected from the pollution.

**Programme and Number:** CRM Machinery procured (26), Demonstration (3291), Training (92), KisanMela (6), Farmer Scientist Interaction (54), Awareness programmes (425), Mobilization of schools and colleges (28), exposure visits (54), field days (6), Adversement in print media (341), News paper coverage (127), Hoarding fixed (453), Poster/Banner placed (33838), Publicity material distributed (131775), TV Programmes (31), Wall writing (13258), Adopted village (27)

**KVKs involved:** 23 (Agra, Aligarh, Azamgarh, Baghpat, Bareilly, Bijnor, Budaun, Bulandshahar, Etah, Firozabad, G.B. Nagar, Ghaziyabad, Hathras, Jaunpur, Mathura, Meerut, Moradabad, Muzaffarnagar, Pilibhit, Rampur, Saharanpur, Shahjahanpur, Varanasi)

**Table 10: Achievements of Pulses Seed Hubs**

S.No.	Name of Crop	Name of Variety	Production of seed in quintal
1	Blackgram	IPU-2-43, Pratap Urd-1	15.6
2	Greengram	IPM-2-3, Shikha and PDM-139	17.2
3	Pigeonpea	IPA-203	158.1
4	Chickpea	JG-12, RVG-202, RVG-203, KGD-1168, P-542, P-547, P-1103 and JG-14	747.75
5	Fieldpea	IPFD-12-2, IPFD-4-9, IPFD-6-3, Aman and KPMR-400	1016.01
6	Lentil	IPL-316, KLB-303 and DPL-62	430.42
		<b>Total</b>	<b>2385.08</b>

### 11.5.4 Aspirational Districts Scheme

Above eight districts have been selected to promote organic farming by vermi and NADEP units on large scale. Sufficient budget has been allotted to KVKs for providing trainings, seeds and plants of vegetables and fruits to enhance their income. Under this programme different kinds of activities taken place such as (i) Training: Session (32), Number of Farmers (707), Officers/Staff (67) (11) Seed and Plant Distribution program:., Seed Distribution (1025 q), Planting material distributed (5054), Farmers benefitted (374), Officer /Staff involved (27) (iii) Animal husbandry & fish distribution programme\_ medicine for control of parasite (114), Distribution of Mineral mixture (20), Farmers benefitted (55), Officers/Employees involved (2).

**KVKs involved:** 8 (Sonbhadra, Fatehpur, Chitrakoot, Siddharthnagar, Balrampur, Chandauli, Bahraich and Shrivasti).

**Table 10: Achievements of Aspirational District Scheme**

S.No.	Activities	Name of programme	Number/quantity
1	Training	Session No.	32
		No. of farmers	707
		Officers/staff involved	67
2	Seed & Plant Distribution	Programme number	10.65
		Seed distribution in q	1025
		No. of plant distributed	5054
		No. of programme organised	7
		No. of farmers	374
		Officers/staff involved	27
3	Animal husbandra & fish distribution programme	Medicine for control of parasite	114
		Distribution of mineral mixture	20
		No. of farmers	55
		Officers/staff involved	2

### 11.5.5 NARI (Nutrition-Sensitive Agricultural Resources and Innovation)/VATICA (Value Addition and Technology Incubation Center in Agriculture)

NARI is a flagship programme of AE division of ICAR which was conceptualized to promote nutri gardens, biofortified crops and varieties and Nutri - thali. ICAR is working with the Ministry of women and child development to take the benefit of this project to farm women , farmers and other stakeholders across the country. following activities are being conducted under this programme on priority.

1. Establishment of one nutri - garden in each KVK and its maintenance throughout the year.
2. Conducting training programmes by each KVK involving 100 Aganwadi workers.

3. Preparation of nutrition map of the district in terms of location specific commodities grown and development of different nutri thali recipies in consultation with experts and sharing the map and nutri thali recipes to stakeholders.

ICAR-ATARI has started NARI programme in all KVKs for empowerment of women farmers. During the year under report, four major activities, namely trainings (courses: 213, Participants: 5313), On Farm Trials (Trials: 185, Farmers: 767), Front Line Demonstrations (Number: 740, farmers: 2733), and Extension programmes (Number 247, Participants: 8887) were taken place under NARI programme.

The major objective of VATICA is to provide a sustainable model to promote post-harvest management of farm produce so that farm level losses may be minimized, farmers may be saved from huge economic losses and agriculture may become a profitable venture. Presently the programme is

being implemented by 13 KVKs (Kanpur Dehat Fatehpur, Banda, Mahoba, Hamirpur, Kannauj, Sitapur-II, Unnao, Gonda-II, Meerut, Bijnour, Lucknow, Ghazipur).

### 11.5.6 ASCI (Agriculture Skill Council of India)

Under this program, skill based training such as vermicompost, dairy farming, mushroom farming, beekeeping, poultry, mechanization, forest nursery, quality seed production etc. is being provided to farmers by registered trainers of KVKs so that they can establish and set up their own business. This is an ambitious plan, is being run by ICAR-ATARI Zone-III to prevent the migration from the villages to the cities and to provide employment opportunities.

During the period under report, total 30 courses were organised by participating 600 rural youths under ASCI programme.

**Table 10: Achievements of NARI programme**

S.No.	Activities	Number of activity	No. of farmers/beneficiaries
1	OFTs – Nutritional Garden (activity in no. of Unit)	127	224
2	OFTs – Bio-fortified Crops (activity in no. of Unit)	11	83
3	OFTs – Value addition (activity in no. of Unit/Enterprise)	18	109
4	OFTs – Other Enterprises (activity in no. of Unit/Enterprise) (activity in no. of Unit/Enterprise)	29	351
5	FLDs – Nutritional Garden (activity in no. of Unit)	682	1690
6	FLDs – Bio-fortified Crops (activity in no. of Unit)	17	197
7	FLDs – Value addition (activity in no. of Unit/Enterprise)	22	320
8	FLD – Other Enterprises (activity in no. of Unit/Enterprise) (activity in no. of Unit/Enterprise)	19	526
9	Trainings	213	5313
10	Extension Activities	247	8887
	<b>Total</b>	<b>1385</b>	<b>17700</b>

**KVKs/Institute involved :** 42 KVKs and 6 ICAR Institutes (Bahraich, Basti, Varanasi, Siddharthnagar, Sonbhadra, Balrampur, Chandoli, Jaunpur, Fatehpur, Kanpur Dehat, Jhansi, Mahoba, Hamirpur, Jalaun, Lalitpur, Banda, Mathura, Bijour, Saharanpur, Meerut, Muzaffarnagar, GB Nagar, Sultanpur, Mirzapur, Gonda, Chitrakoot, Allahabad, Pratapgarh, Unnao, Lucknow, Ghazipur, Sitapur-I, Kaushambi, Auraiya, Sitapur-II, Gorakhpur-II, IIPR, Kanpur, IISS, Mau, IGFR, Jhansi, NBAIM, Mau, NBFGR, Lucknow, IVRI, Barielly).

### 11.5.7 SBA (Swachchh Bharat Abhiyaan)

Swachh Bharat Abhiyan is being organised every Saturday in all KVKs and ICAR-ATARI, Kanpur under which awareness regarding cleanliness is being created among common public so that they can understand their responsibility towards cleanliness. Under this programme all 86 KVKs worked on total 130 adopted villages including their office campus. Work includes –

- Cleaning of village, Drainage, Road

**Table 10: Achievements of ASCI programme**

S.No.	Name of QP/ Job role	Duration (hrs)	No. of Courses Organised	No. of Participants						
				SCs/STs		Others		Total		Total
				Male	Female	Male	Female	Male	Female	
1	Agriculture Extension Service Provider	200	3	7	11	16	26	23	37	60
2	Agriculture Machinery Operator	200	1	2	0	18	0	0	0	20
3	Animal Health Worker	300	4	24	2	51	3	75	5	80
4	Assistant Gardener	200	1	8	2	10	0	18	2	20
5	Beekeeper	200	1	5	0	15	0	20	0	20
6	Dairy Farmer - Entrepreneur	200	2	14	2	24	0	38	2	40
7	Freshwater Aquaculture Farmer	200	1	2	0	18	0	20	0	20
8	Group Farming Practitioner	200	1	5	9	2	4	7	13	20
9	Mushroom Grower	200	4	15	1	61	3	76	4	80
10	Nursery Worker	200	3	12	0	47	1	59	1	60
11	Quality Seed Grower	200	2	10	2	24	4	34	6	40
12	Small poultry farmer	240	1	7	0	12	1	19	1	20
13	Soil & Water Testing Lab Assistant	200	1	5	0	15	0	20	0	20
14	Vermicompost Producer	200	5	23	0	71	6	54	6	100
	<b>TOTAL</b>		<b>30</b>	<b>139</b>	<b>29</b>	<b>384</b>	<b>48</b>	<b>463</b>	<b>77</b>	<b>600</b>



- Campaign for swachhta action plan in village
- Nukar natak for swachhta
- In rural areas nearby KVK campus the training has been given to the farmers about cleaning and their importance for healthy environment
- Awareness campaign on cleanliness, Awareness campaign on water management, Awareness campaign on Waste management
- To create awareness camp in school & village
- Create awareness about Vermi compost and NADEP
- Awareness programme on Cleanliness
- Training on Crop residue management and animal Waste management
- Training Kitchen waste management
- Introduce waste decomposer techniques in adopted village
- To Aware the farming community regarding swachhta Abhiyan
- To aware the school children regarding the use of safe water for drinking
- To aware the cleaning of houses and surrounding.
- Training Kitchen waste management
- Awareness programme conducted at village level for cleaning around house of farm families
- Management of decomposable waste by converting it in compost
- Awareness programme for school students

#### 10.5.8 SCSP (Schedule Caste Sub Plan)

The main objective of the scheme is to give a thrust to family oriented schemes of economic development of SCs below the poverty line, by providing resources for filling the critical gaps. Following activities have been conducted under SCSP programme –

Farmers, farm women trained by KVKs (5931), Extension personnel trained by KVKs (538), On-farm trials conducted by KVKs (20), Frontline demonstrations conducted by KVKs (437), Quantity of seeds produced 112.32 q, Planting materials Produced (0.79 lakh), Soil & water samples tested (637)

**KVKs involved:** 10 (Faizabad, Sonbhadra, Chandauli, Raebareili, Hardoi, Mirzapur, Unnao, Lucknow, Sitapur (I & II), Kaushambi)

**Table 10: Achievements of SCSP programme**

S.No.	Activities	Number
1	<b>Farmers Training</b>	
	No. of Trainings/Demons	432
	No. of Farmers	5931
2	<b>Women Farmer Training</b>	
	No. of Trainings/Demons	351
	No. of women farmers	1278
3	<b>Rural Youths</b>	
	No. of Trainings/Demons	63
	No. of youths	1026
4	<b>Extension Personnel</b>	
	No. of Trainings/Demons	72
	No. of Extension Persons	538
5	<b>Number of farmers involved</b>	
	On- farm trials	20
	Frontline demos	437
	Mobile agro- advisory to farmers	11582
6	<b>Participants in extension activities (No.)</b>	26251
7	<b>Production of seed (q)</b>	312.32
8	<b>Production of Planting material (Number in lakh)</b>	0.79
11	<b>Testing of Soil, water, plant, manures samples (Number)</b>	637

## STATUS OF INFRASTRUCTURE, STAFF & BUDGET

### 12.1 Infrastructure Facilities at KVK

Most of KVKs are having their own infrastructure facilities, in Uttar Pradesh availability of infrastructure are Administrative Building (67), Farmers Hostel (59), Staff Quarters (59), Soil Testing Labs (44), Soil Testing Kits (104), IFS (26), Demo Units funded by ICAR (211), Demo Units funded by others (56), e-connectivity (26), Technology Information Unit (23) and Four wheeler (68), Two wheeler (59), Tractor (66). Physical status of infrastructure facilities at a glance are shown in following Table 12.1.

### 12.2 Status of Staff Position

#### 12.2.1 Staff position of ICAR-ATARI, Kanpur

ICAR-ATARI, Kanpur have filled up 12 staff personnel out of total 20 vacancies. Out of 6 sanctioned positions in scientific cadre, 4 positions (1 PS, 3 Sr. Scientist) are filled up and 2 Jr. Scientist positions are lying vacant. Out of 9 positions in administrative cadre, 5 were filled up and 4 positions (Jr. Account Officer, AF & AO, Assistant & LDC) are lying vacant. Position wise details are given in following Table 10.2.

**Table 12.1: Physical status of infrastructure at a glance**

S. No.	Name of Infrastructure	Host Institutions								Total KVKs (87)
		SAUs					ICAR KVKs	Edn KVKs	NGO KVKs	
		NDUAT, Ayodhya	BUAT, Banda	CSAUAT, Kanpur	DUVASU, Mathura	SVPUAT, Meerut				
		(24)	(7)	(13)	(01)	(20)	(7)	(1)	(14)	
1.	Administrative Building	16	6	12	1	12	5	1	14	67
2.	Farmers Hostel	15	3	10	1	13	4	1	12	59
3.	Staff Quarters	16	5	10	1	13	3	1	10	59
4.	Threshing Floor	15	2	5	1	13	0	1	5	42
5.	Tubewell	17	6	12	1	13	5	1	12	67
6.	Drip Irrigation	6	0	1	0	0	5	0	3	15
7.	Soil & Water Testing Lab	14	2	5	1	10	2	1	9	44
8.	Soil Testing Kits	6	12	25	1	23	4	3	30	104
9.	Fencing	13	2	9	1	13	3	1	8	50
10.	Rain Water Harvesting Structure	6	12	25	1	23	4	3	30	104
11.	Demo Unit funded by ICAR	54	9	26	4	37	19	1	61	211
12.	Demo Units funded by others	19	6	11	1	10	0	2	7	56
13.	Integrated Farming System (IFS)	1	6	0	1	6	4	0	8	26
14.	Minimal Processing Facility	0	0	0	0	0	0	0	1	1
15.	e-Connectivity	0	6	0	1	7	3	1	8	26
16.	Carp Hatchery	0	0	0	0	0	0	0	3	3
17.	Solar Panel	3	2	4	0	0	1	0	1	11
18.	Technology Information Unit	0	4	0	1	10	2	0	6	23
19.	Mini Seed Processing Facility	0	0	0	0	0	0	1	3	4
20.	Four wheeler	22	6	11	1	11	5	1	11	68
21.	Two wheeler	16	4	11	1	13	2	1	11	59
22.	Tractor	17	4	12	1	13	5	0	14	66
23.	Genset	0	1	0	0	2	2	0	2	7

**Table 12.2.1: Status of staff position in ICAR-ATARI, Kanpur**

Sr.No.	Positions	Filled	Vacant
1	RMP	0	1
2	Principal Scientist	1	0
3	Sr. Scientist	3	0
4	Scientist	0	2
5	Technical	2	0
6	Administrative	5	4
7	Supporting	1	1
	<b>Total</b>	<b>12</b>	<b>8</b>

**Table 12.2.2: Details of ICAR-ATARI, Kanpur staff**

Category	Name of employee with designation
Scientific Staff	1. Dr. Atar Singh, Director (Acting) 2. Dr. Shantanu Kumar Dubey, Principal Scientist (AgrilExtn.) 3. Dr. Sadhna Pandey, Principal Scientist (H.Sci.) 4. Dr. Raghendra Singh, Principal Scientist (Hort.)
Technical Staff	1. Mr. Yemul Sanjeev N., Chief Technical Officer (Computer) 2. Mr. Pramod Kumar Rai, Sr. Technical Asstt. (Driver)
Administrative Staff	1. Mr. Ram Bodh Verma, Asstt. Administrative Officer 2. Mr. S.N. Singh, Personal Assistant 3. Mr. Raman Tripathi, Assistant. 4. Mr. Sunil Kumar Singh, U.D.C. 5. Mr. Shravan Kumar Yadav, L.D.C.
Supporting Staff	1. Mr. Bal Kishun, Skill Supporting Staff

### 12.2.2 Staff Position in KVKs of Uttar Pradesh

Out of total sanctioned post (1392), KVKs have filled 904 posts including Head (68), Scientist (328), Programme Asstt. (160), Administrative (122), Auxiliary (123), Supporting (114). Filled positions are 65.73 % and vacant post lying as 34.27%. Category wise staff positions are given in Table 12.3.

### 12.3 Status of Budget

During the financial year 2019-20, an amount of Rs. 10882.52 lakh was utilized/released against the allotted budget of Rs. 11592.19 lakh.

**Table 12.3: KVK staff Position at a glance**

Category	Sanctioned	Filled	Vacant
Head	87	68	19
Scientist	522	328	194
Programme Asstt	261	160	101
Administrative	174	122	52
Auxiliary	174	123	51
Supporting	174	114	60
<b>Total</b>	<b>1392</b>	<b>915</b>	<b>477</b>
	Total % filled	<b>65.73 %</b>	<b>34.27 %</b>

Table 12.3.1: Head wise allocation funds for ICAR-ATARI, Kanpur and KVKs of U.P. for 2019-20

(Rs in lakh)

S.No.	Heads	ATARI	KVK	DE	Total
<b>A</b>	<b>Revenue</b>				
i)	Pay & Allowances	166.97	9531.00	0.00	9697.97
ii)	Pension	2.12	0.00	0.00	2.12
iii)	T.A.	8.00	87.60	3.60	99.20
iv)	H.R.D.	5.00	23.50	4.30	32.80
v)	Contingency	88.00	490.50	19.50	598.00
	<b>Total (A)</b>	<b>270.09</b>	<b>10132.60</b>	<b>27.40</b>	<b>10430.09</b>
<b>B</b>	<b>Capital</b>				
i)	Furniture/Equipment	6.00	16.90	0.00	22.90
ii)	Works	0.00	455.10	0.00	455.10
iii)	Library	0.00	0.00	0.00	0.00
iv)	Vehicle	0.00	16.00	0.00	16.00
	<b>Total (B)</b>	<b>6.00</b>	<b>488.00</b>	<b>0.00</b>	<b>494.00</b>
<b>C</b>	<b>Revolving Fund</b>	0.00	3.00	0.00	3.00
<b>D</b>	<b>TSP – Capital</b>	0.00	162.10	0.00	162.10
	<b>TSP – General</b>	0.00	128.00	0.00	128.00
<b>E</b>	<b>SCSP – Capital</b>	0.00	240.00	0.00	240.00
	<b>SCSP – General</b>	0.00	135.00	0.00	135.00
	<b>Total (A+B+C+D)</b>	<b>276.09</b>	<b>11288.70</b>	<b>27.40</b>	<b>11592.19</b>

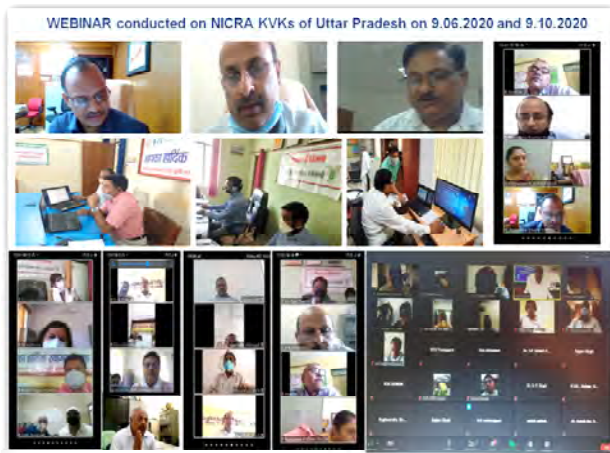
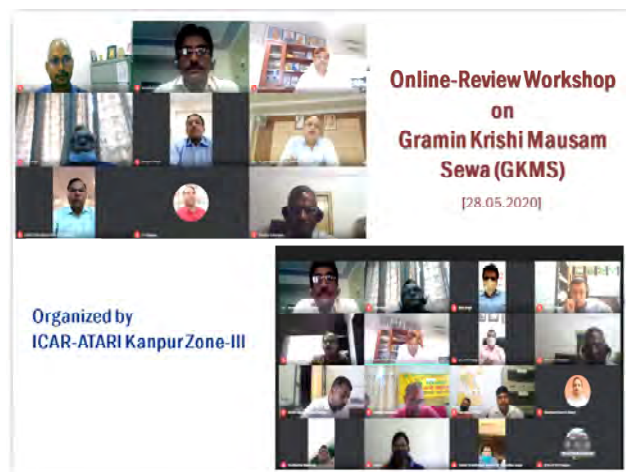
Table 12.3.2: Actual Expenditure/Release for 2019-20

(Rs in lakh)

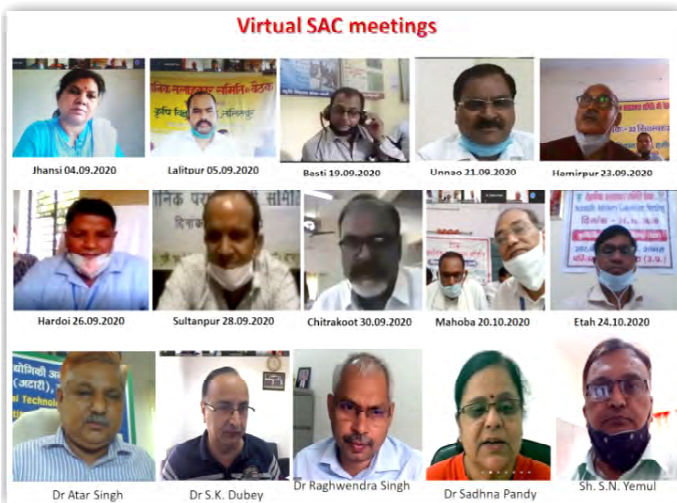
S.No.	Heads	ATARI	KVK	DE	Total
<b>A</b>	<b>Revenue</b>				
i)	Pay & Allowances	165.78	9097.82	0.00	9263.60
ii)	Pension	2.00	0.00	0.00	2.00
iii)	T.A.	7.28	87.60	3.60	98.48
iv)	H.R.D.	3.57	23.60	4.30	31.47
v)	Contingency	84.12	337.92	13.50	435.54
	<b>Total (A)</b>	<b>262.75</b>	<b>9546.94</b>	<b>21.40</b>	<b>9831.09</b>
<b>B</b>	<b>Capital</b>				
i)	Furniture/Equipment	1.44	0.00	0.00	1.44
ii)	Works	0.00	388.17	0.00	388.17
iii)	Library	0.00	0.00	0.00	0.00
iv)	Vehicle	0.00	16.00	0.00	16.00
	<b>Total (B)</b>	<b>1.44</b>	<b>404.17</b>	<b>0.00</b>	<b>405.61</b>
<b>C</b>	<b>Revolving Fund</b>	0.00	3.00	0.00	3.00
<b>D</b>	<b>TSP – Capital</b>	0.00	155.10	0.00	155.10
	<b>TSP – General</b>	0.00	123.00	0.00	123.00
<b>E</b>	<b>SCSP – Capital</b>	0.00	229.72	0.00	229.72
	<b>SCSP – General</b>	0.00	135.00	0.00	135.00
	<b>Total (A+B+C+D)</b>	<b>264.19</b>	<b>10596.93</b>	<b>21.40</b>	<b>10882.52</b>



## VIRTUAL EVENTS OF ATARI







One day virtual meeting of all ICAR-ATARIs of the country organised with Shri Kailash Choudhary Hon'ble Minister of Agriculture and Farmers Welfare, GoI held on 9th September, 2020.

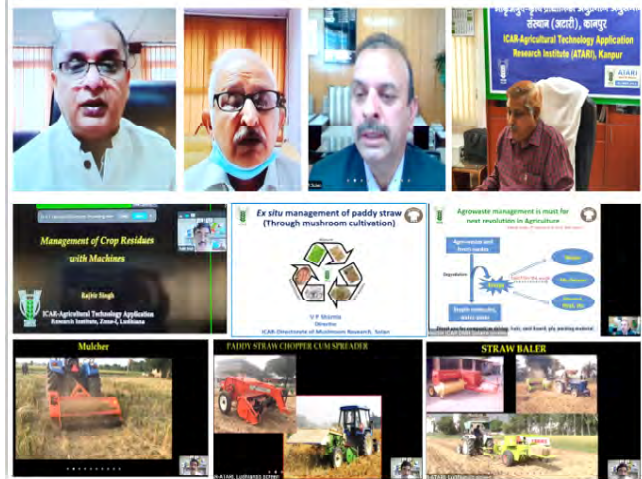


**हिन्दी पखवाड़ा** (14-29 सितंबर, 2020)



**Webinar on Paddy Residue Management**

28 October, 2020



**Virtual RAC Meeting**

6-7 November, 2020



**Celebrated Swachhata Pakhwada**  
By  
ICAR-ATARI,  
Kanpur

16-31 Dec., 2020



**Swachh Bharat Mission**  
(स्वच्छ भारत अभियान)



**Swachh Bharat Mission**  
(स्वच्छ भारत अभियान)





### Swachh Bharat Mission

#### Theme of organised programme

- ❖ Taking Swachhhta pledge, stock taking & briefing of activities of swachhhta pakhwada.
- ❖ Stock taking on digitization of office record/e-office implementation.
- ❖ Cleaning and sanitation drive in the village adopted under KVK programme.
- ❖ Sanitation and SWM, Cleaning and sanitation drive within campus and surround colonies.
- ❖ Stock taking of waste management and other activities.
- ❖ Campaign on cleaning of sewage and waterlines.
- ❖ Technology demonstration on agricultural technologies for conservation of waste to wealth.
- ❖ Celebration of Kisan ulwas (Farmer's day)
- ❖ Swachhhta awareness at local level
- ❖ PM kisan Samman nidh and cleaning of public places.
- ❖ Organising competition and rewarding best officers and residential area.
- ❖ Awareness on waste management
- ❖ Campaign on water harvesting for agriculture/ horticulture.
- ❖ Visits of communities waste disposal sites
- ❖ Involvement of print and electronic media.
- ❖ Organisation of press conference for highlighting the activities.



### Webinar on Fishery

22.12.2020



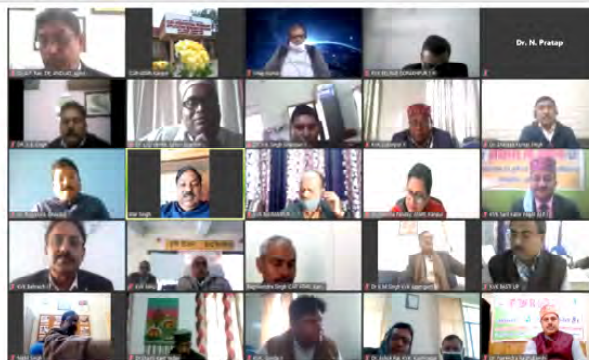
### प्रधानमंत्री किसान सम्मान निधि

29.12.2020



### Virtual Mid Term Review Workshop

ANDUAT, Ayodhya  
29-30 Dec., 2020





## TRAINING PROGRAMMES

### (1) On Campus Training Programmes for Farmers & Farm Women

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>I Crop Production</b>										
Weed Management	76	1186	105	1291	328	75	403	1514	180	1694
Resource Conservation Technologies	36	575	51	626	199	38	237	774	89	863
Cropping Systems	41	614	33	647	199	43	242	813	76	889
Crop Diversification	24	431	39	470	109	19	128	540	58	598
Integrated Farming	20	314	21	335	117	17	134	431	38	469
Micro Irrigation/irrigation	15	222	15	237	66	16	82	288	31	319
Seed production	56	800	131	931	230	50	280	1030	181	1211
Nursery management	18	282	28	310	83	17	100	365	45	410
Integrated Crop Management	89	1298	130	1428	465	83	548	1763	213	1976
Soil & water conservatioin	12	196	9	205	70	11	81	266	20	286
Integrated nutrient management	50	697	67	764	247	33	280	944	100	1044
Production of organic inputs	27	410	86	496	115	58	173	525	144	669
Others	28	411	34	445	124	21	145	535	55	590
<b>Total</b>	<b>492</b>	<b>7436</b>	<b>749</b>	<b>8185</b>	<b>2352</b>	<b>481</b>	<b>2833</b>	<b>9788</b>	<b>1230</b>	<b>11018</b>
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
Production of low value and high valume crops	59	993	55	1048	213	51	264	1206	106	1312
Off-season vegetables	33	493	51	544	190	45	235	683	96	779
Nursery raising	44	593	156	749	196	70	266	789	226	1015
Exotic vegetables	6	85	10	95	15	10	25	100	20	120
Export potential vegetables	4	56	22	78	11	8	19	67	30	97
Grading and standardization	5	77	19	96	27	8	35	104	27	131
Protective cultivation	30	525	190	715	157	62	219	682	252	934
Others	13	200	27	227	23	20	43	223	47	270
<b>Total (a)</b>	<b>194</b>	<b>3022</b>	<b>530</b>	<b>3552</b>	<b>832</b>	<b>274</b>	<b>1106</b>	<b>3854</b>	<b>804</b>	<b>4658</b>
<b>b) Fruits</b>										
Training and Pruning	24	383	29	412	112	17	129	495	46	541
Layout and Management of Orchards	14	198	13	211	71	10	81	269	23	292
Cultivation of Fruit	14	181	50	231	54	27	81	235	77	312
Management of young plants/orchards	15	285	13	298	83	15	98	368	28	396
Rejuvenation of old orchards	21	285	39	324	110	40	150	395	79	474
Export potential fruits	3	55	0	55	15	0	15	70	0	70
Micro irrigation systems of orchards	8	129	20	149	41	3	44	170	23	193
Plant propagation techniques	12	224	11	235	54	13	67	278	24	302
Others	5	72	3	75	23	5	28	95	8	103
<b>Total (b)</b>	<b>116</b>	<b>1812</b>	<b>178</b>	<b>1990</b>	<b>563</b>	<b>130</b>	<b>693</b>	<b>2375</b>	<b>308</b>	<b>2683</b>
<b>c) Ornamental Plants</b>										
Nursery Management	14	205	18	223	68	25	93	273	43	316
Management of potted plants	1	15	2	17	3	0	3	18	2	20
Export potential of ornamental plants	2	30	2	32	12	1	13	42	3	45
Propagation techniques of Ornamental Plants	2	31	4	35	8	2	10	39	6	45
Others	4	58	4	62	5	1	6	63	5	68
<b>Total (c)</b>	<b>23</b>	<b>339</b>	<b>30</b>	<b>369</b>	<b>96</b>	<b>29</b>	<b>125</b>	<b>435</b>	<b>59</b>	<b>494</b>
<b>d) Plantation crops</b>										
Production and Management technology	10	175	10	185	49	11	60	224	21	245
Processing and value addition	4	97	0	97	10	0	10	107	0	107
<b>Total (d)</b>	<b>14</b>	<b>272</b>	<b>10</b>	<b>282</b>	<b>59</b>	<b>11</b>	<b>70</b>	<b>331</b>	<b>21</b>	<b>352</b>

<b>e) Tuber crops</b>										
Production and Management technology	18	317	26	343	85	36	121	402	62	464
Processing and value addition	1	20	0	20	5	0	5	25	0	25
Others	1	14	0	14	0	0	0	14	0	14
<b>Total (e)</b>	<b>20</b>	<b>351</b>	<b>26</b>	<b>377</b>	<b>90</b>	<b>36</b>	<b>126</b>	<b>441</b>	<b>62</b>	<b>503</b>
<b>f) Spices</b>										
Production and Management technology	13	157	18	175	64	27	91	221	45	266
Processing and value addition	5	58	26	84	18	7	25	76	33	109
Others	1	17	0	17	3	0	3	20	0	20
<b>Total (f)</b>	<b>19</b>	<b>232</b>	<b>44</b>	<b>276</b>	<b>85</b>	<b>34</b>	<b>119</b>	<b>317</b>	<b>78</b>	<b>395</b>
<b>g) Medicinal and Aromatic Plants</b>										
Nursery management	2	25	2	27	7	1	8	32	3	35
Production and management technology	8	132	18	150	31	16	47	163	34	197
Post harvest technology and value addition	2	15	10	25	10	0	10	25	10	35
<b>Total (g)</b>	<b>12</b>	<b>172</b>	<b>30</b>	<b>202</b>	<b>48</b>	<b>17</b>	<b>65</b>	<b>220</b>	<b>47</b>	<b>267</b>
<b>GT (a-g)</b>	<b>398</b>	<b>6200</b>	<b>848</b>	<b>7048</b>	<b>1773</b>	<b>531</b>	<b>2304</b>	<b>7973</b>	<b>1379</b>	<b>9352</b>
<b>III Soil Health and Fertility Mangmt.</b>										
Soil fertility management	52	898	69	967	224	26	250	1122	95	1217
Integrated water management	10	161	16	177	38	13	51	199	29	228
Integrated Nutrient Management	31	572	25	597	121	24	145	693	49	742
Production and use of organic inputs	20	217	65	282	95	79	174	312	144	456
Management of Problematic soils	6	85	3	88	13	2	15	98	5	103
Micro nutrient deficiency in crops	16	224	21	245	88	9	97	312	30	342
Nutrient Use Efficiency	5	79	10	89	23	10	33	102	20	122
Balance use of fertilizers	16	212	44	256	65	24	89	277	68	345
Soil and Water Testing	17	214	33	247	66	45	111	280	78	358
Others	6	51	2	53	7	1	8	58	3	61
<b>Total</b>	<b>179</b>	<b>2713</b>	<b>288</b>	<b>3001</b>	<b>740</b>	<b>233</b>	<b>973</b>	<b>3453</b>	<b>521</b>	<b>3974</b>
<b>IV Livestock Production and Mangmt.</b>										
Dairy Management	62	913	75	988	329	72	401	1242	147	1389
Poultry Management	29	340	55	395	137	34	171	477	89	566
Piggery Management	3	45	0	45	11	2	13	56	2	58
Rabbit Management	1	9	0	9	6	0	6	15	0	15
Animal Nutrition Management	42	650	64	714	210	57	267	860	121	981
Disease Management	59	946	95	1041	228	40	268	1174	135	1309
Feed & fodder technology	58	895	86	981	239	48	287	1134	134	1268
Production of quality animal products	7	110	14	124	48	9	57	158	23	181
Others	13	249	8	257	37	12	49	286	20	306
<b>Total</b>	<b>274</b>	<b>4157</b>	<b>397</b>	<b>4554</b>	<b>1245</b>	<b>274</b>	<b>1519</b>	<b>5402</b>	<b>671</b>	<b>6073</b>
<b>V Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening	38	76	640	716	36	248	284	112	888	1000
Design and development of low/minimum cost diet	15	23	219	242	12	79	91	35	298	333
Designing and development for high nutrient efficiency diet	15	63	274	337	18	92	110	81	366	447
Minimization of nutrient loss in processing	12	46	133	179	18	73	91	64	206	270
Processing and cooking	12	4	214	218	0	42	42	4	256	260
Gender mainstreaming through SHGs	5	4	42	46	0	47	47	4	89	93
Storage loss minimization techniques	13	41	150	191	20	62	82	61	212	273
Value addition	42	8	632	640	5	213	218	13	845	858
Women empowerment	18	0	253	253	0	87	87	0	340	340
Location specific drudgery reduction technologies	12	14	178	192	2	78	80	16	256	272
Rural Crafts	7	0	98	98	0	73	73	0	171	171

Women and child care	22	30	321	351	13	119	132	43	440	483
Others	8	0	143	143	0	29	29	0	172	172
<b>Total</b>	<b>219</b>	<b>309</b>	<b>3297</b>	<b>3606</b>	<b>124</b>	<b>1242</b>	<b>1366</b>	<b>433</b>	<b>4539</b>	<b>4972</b>
<b>VI Agril. Engineering</b>										
Farm Machinery and its maintenance	19	307	100	407	81	34	115	388	134	522
Installation and maintenance of micro irrigation systems	7	104	2	106	40	0	40	144	2	146
Use of Plastics in farming practices	5	54	6	60	38	5	43	92	11	103
Production of small tools and implements	2	24	9	33	13	4	17	37	13	50
Repair and maintenance of farm machinery and implements	25	377	20	397	98	9	107	475	29	504
Small scale processing and value addition	4	30	27	57	17	5	22	47	32	79
Post Harvest Technology	8	102	49	151	38	33	71	140	82	222
Others	9	126	16	142	14	22	36	140	38	178
<b>Total</b>	<b>79</b>	<b>1124</b>	<b>229</b>	<b>1353</b>	<b>339</b>	<b>112</b>	<b>451</b>	<b>1463</b>	<b>341</b>	<b>1804</b>
<b>VII Plant Protection</b>										
Integrated Pest Management	110	1230	90	1320	455	107	562	1685	197	1882
Integrated Disease Management	55	838	87	925	317	67	384	1155	154	1309
Bio-control of pests and diseases	27	384	39	423	171	47	218	555	86	641
Production of bio control agents and bio pesticides	20	301	36	337	95	32	127	396	68	464
Others	5	74	14	88	18	4	22	92	18	110
<b>Total</b>	<b>217</b>	<b>2827</b>	<b>266</b>	<b>3093</b>	<b>1056</b>	<b>257</b>	<b>1313</b>	<b>3883</b>	<b>523</b>	<b>4406</b>
<b>VIII Fisheries</b>										
Integrated fish farming	4	55	7	62	49	3	52	104	10	114
Carp breeding & hatchery management	1	7	3	10	10	5	15	17	8	25
Carp fry and fingerling rearing	6	73	1	74	36	2	38	109	3	112
Composite fish culture	4	48	2	50	20	1	21	68	3	71
Pen culture of fish and prawn	1	15	0	15	5	0	5	20	0	20
<b>Total</b>	<b>12</b>	<b>198</b>	<b>13</b>	<b>211</b>	<b>120</b>	<b>11</b>	<b>131</b>	<b>318</b>	<b>24</b>	<b>342</b>
<b>IX Production of Inputs at site</b>										
Seed Production	25	478	23	501	108	22	130	586	45	631
Planting material production	4	61	3	64	9	6	15	70	9	79
Bio-agents production	4	54	16	70	22	18	40	76	34	110
Bio-pesticides production	2	32	3	35	4	6	10	36	9	45
Bio-fertilizer production	5	63	8	71	30	9	39	93	17	110
Vermi-compost production	17	250	14	264	86	79	165	336	93	429
Organic manures production	14	194	52	246	63	33	96	257	85	342
Production of Bee-colonies and wax sheets	1	20	0	20	5	0	5	25	0	25
Small tools and implements	2	31	5	36	24	2	26	55	7	62
Production of livestock feed and fodder	2	31	2	33	12	5	17	43	7	50
Mushroom Production	5	66	31	97	12	8	20	78	39	117
Others	4	67	0	67	13	0	13	80	0	80
<b>Total</b>	<b>85</b>	<b>1347</b>	<b>157</b>	<b>1504</b>	<b>388</b>	<b>188</b>	<b>576</b>	<b>1735</b>	<b>345</b>	<b>2080</b>
<b>X Capacity Building and Group Dynamics</b>										
Leadership development	15	212	22	234	64	18	82	276	40	316
Group dynamics	15	226	38	264	46	25	71	272	63	335
Formation and Management of SHGs	21	237	51	288	85	55	140	322	106	428
Mobilization of social capital	10	153	15	168	43	6	49	196	21	217
Entrepreneurial development of farmers/youths	21	363	99	462	97	58	155	460	157	617
WTO and IPR issues	3	61	0	61	8	0	8	69	0	69
Others	19	228	22	250	127	57	184	355	79	434
<b>Total</b>	<b>104</b>	<b>1480</b>	<b>247</b>	<b>1727</b>	<b>470</b>	<b>219</b>	<b>689</b>	<b>1950</b>	<b>466</b>	<b>2416</b>
<b>XI Agro-forestry</b>										
Production technologies	4	58	6	64	13	3	16	71	9	80
Nursery management	6	103	9	112	21	6	27	124	15	139
Integrated Farming Systems	6	58	24	82	19	27	46	77	51	128
<b>Total</b>	<b>16</b>	<b>219</b>	<b>39</b>	<b>258</b>	<b>53</b>	<b>36</b>	<b>89</b>	<b>272</b>	<b>75</b>	<b>347</b>
<b>GRAND TOTAL</b>	<b>2075</b>	<b>28010</b>	<b>6530</b>	<b>34540</b>	<b>8660</b>	<b>3584</b>	<b>12244</b>	<b>36670</b>	<b>10114</b>	<b>46784</b>

## (2) Off Campus Training Programmes for Farmers and Farm Women

Thematic area	No. of courses	OFF CAMPUS								
		Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>I Crop Production</b>										
Weed Management	129	1532	236	1768	467	121	588	1999	357	2356
Resource Conservation Technologies	57	943	72	1015	272	25	297	1215	97	1312
Cropping Systems	69	813	76	889	180	51	231	993	127	1120
Crop Diversification	26	414	44	458	96	25	121	510	69	579
Integrated Farming	57	897	68	965	456	42	498	1353	110	1463
Micro Irrigation/irrigation	19	287	9	296	109	6	115	396	15	411
Seed production	114	1340	169	1509	331	76	407	1671	245	1916
Nursery management	30	444	65	509	187	40	227	631	105	736
Integrated Crop Management	128	1899	154	2053	363	80	443	2262	234	2496
Soil & water conservatioin	19	289	27	316	80	4	84	369	31	400
Integrated nutrient management	83	974	113	1087	247	47	294	1221	160	1381
Production of organic inputs	27	422	71	493	143	37	180	565	108	673
Others	47	727	70	797	260	169	429	987	239	1226
<b>Total</b>	<b>805</b>	<b>10981</b>	<b>1174</b>	<b>12155</b>	<b>3191</b>	<b>723</b>	<b>3914</b>	<b>14172</b>	<b>1897</b>	<b>16069</b>
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
Production of low value and high volume crops	73	1242	111	1353	352	96	448	1594	207	1801
Off-season vegetables	27	436	38	474	127	44	171	563	82	645
Nursery raising	59	902	126	1028	226	80	306	1128	206	1334
Exotic vegetables	6	106	3	109	7	7	14	113	10	123
Export potential vegetables	19	122	20	142	270	14	284	392	34	426
Grading and standardization	12	161	30	191	58	19	77	219	49	268
Protective cultivation	28	435	53	488	156	40	196	591	93	684
Others	25	394	52	446	110	41	151	504	93	597
<b>Total (a)</b>	<b>249</b>	<b>3798</b>	<b>433</b>	<b>4231</b>	<b>1306</b>	<b>341</b>	<b>1647</b>	<b>5104</b>	<b>774</b>	<b>5878</b>
<b>b) Fruits</b>										
Training and Pruning	20	310	57	367	103	12	115	413	69	482
Layout and Management of Orchards	44	693	70	763	163	27	190	856	97	953
Cultivation of Fruit	25	391	26	417	136	23	159	527	49	576
Management of young plants/orchards	9	130	16	146	45	10	55	175	26	201
Rejuvenation of old orchards	20	272	34	306	105	21	126	377	55	432
Export potential fruits	1	12	4	16	3	0	3	15	4	19
Micro irrigation systems of orchards	14	309	10	319	56	9	65	365	19	384
Plant propagation techniques	11	145	23	168	54	15	69	199	38	237
Others	4	54	4	58	29	1	30	83	5	88
<b>Total (b)</b>	<b>148</b>	<b>2316</b>	<b>244</b>	<b>2560</b>	<b>694</b>	<b>118</b>	<b>812</b>	<b>3010</b>	<b>362</b>	<b>3372</b>
<b>c) Ornamental Plants</b>										
Nursery Management	11	203	20	223	28	21	49	231	41	272
Management of potted plants	2	26	5	31	5	0	5	31	5	36
Export potential of ornamental plants	1	17	3	20	3	1	4	20	4	24
Propagation techniques of Ornamental Plants	3	37	9	46	20	5	25	57	14	71
Others	5	86	6	92	8	5	13	94	11	105
<b>Total (c)</b>	<b>22</b>	<b>369</b>	<b>43</b>	<b>412</b>	<b>64</b>	<b>32</b>	<b>96</b>	<b>433</b>	<b>75</b>	<b>508</b>



<b>d) Plantation crops</b>										
Production and Management technology	7	99	3	102	43	1	44	142	4	146
Processing and value addition	1	12	2	14	8	6	14	20	8	28
Others	2	85	0	85	20	4	24	105	4	109
<b>Total (d)</b>	<b>10</b>	<b>196</b>	<b>5</b>	<b>201</b>	<b>71</b>	<b>11</b>	<b>82</b>	<b>267</b>	<b>16</b>	<b>283</b>
<b>e) Tuber crops</b>										
Production and Management technology	24	354	41	395	76	25	101	430	66	496
Processing and value addition	1	14	1	15	1	4	5	15	5	20
<b>Total (e)</b>	<b>25</b>	<b>368</b>	<b>42</b>	<b>410</b>	<b>77</b>	<b>29</b>	<b>106</b>	<b>445</b>	<b>71</b>	<b>516</b>
<b>f) Spices</b>										
Production and Management technology	19	286	44	330	60	20	80	346	64	410
Processing and value addition	1	15	0	15	0	0	0	15	0	15
Others	2	36	0	36	4	0	4	40	0	40
<b>Total (f)</b>	<b>22</b>	<b>337</b>	<b>44</b>	<b>381</b>	<b>64</b>	<b>20</b>	<b>84</b>	<b>401</b>	<b>64</b>	<b>465</b>
<b>g) Medicinal and Aromatic Plants</b>										
Nursery management	3	45	4	49	11	2	13	56	6	62
Production and management technology	10	117	36	153	47	19	66	164	55	219
Post harvest technology and value addition	3	57	15	72	5	0	5	62	15	77
Others	1	20	5	25	5	0	5	25	5	30
<b>Total (g)</b>	<b>17</b>	<b>239</b>	<b>60</b>	<b>299</b>	<b>68</b>	<b>21</b>	<b>89</b>	<b>307</b>	<b>81</b>	<b>388</b>
<b>GT (a-g)</b>	<b>493</b>	<b>7623</b>	<b>871</b>	<b>8494</b>	<b>2344</b>	<b>572</b>	<b>2916</b>	<b>9967</b>	<b>1443</b>	<b>11410</b>
<b>III Soil Health and Fertility Mangmt.</b>										
Soil fertility management	78	819	109	928	204	61	265	1023	170	1193
Integrated water management	17	281	42	323	53	18	71	334	60	394
Integrated Nutrient Management	57	1011	66	1077	251	74	325	1262	140	1402
Production and use of organic inputs	36	518	71	589	111	28	139	629	99	728
Management of Problematic soils	11	205	14	219	57	39	96	262	53	315
Micro nutrient deficiency in crops	20	335	13	348	105	3	108	440	16	456
Nutrient Use Efficiency	17	208	17	225	125	22	147	333	39	372
Balance use of fertilizers	22	364	31	395	100	39	139	464	70	534
Soil and Water Testing	82	554	104	658	164	71	235	718	175	893
Others	13	175	1	176	40	20	60	215	21	236
<b>Total</b>	<b>353</b>	<b>4470</b>	<b>468</b>	<b>4938</b>	<b>1210</b>	<b>375</b>	<b>1585</b>	<b>5680</b>	<b>843</b>	<b>6523</b>
<b>IV Livestock Production and Mangmt.</b>										
Dairy Management	97	1408	260	1668	361	126	487	1769	386	2155
Poultry Management	31	398	52	450	193	174	367	591	226	817
Piggery Management	4	23	0	23	60	10	70	83	10	93
Rabbit Management	3	17	23	40	14	13	27	31	36	67
Animal Nutrition Management	43	630	132	762	280	66	346	910	198	1108
Disease Management	96	1397	155	1552	453	114	567	1850	269	2119
Feed & fodder technology	52	726	105	831	295	44	339	1021	149	1170
Production of quality animal products	14	203	18	221	91	38	129	294	56	350
Others	13	225	2	227	54	3	57	279	5	284
<b>Total</b>	<b>353</b>	<b>5027</b>	<b>747</b>	<b>5774</b>	<b>1801</b>	<b>588</b>	<b>2389</b>	<b>6828</b>	<b>1335</b>	<b>8163</b>

<b>V Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening	80	195	1072	1267	71	476	547	266	1548	1814
Design and development of low/minimum cost diet	22	2	321	323	11	165	176	13	486	499
Designing and development for high nutrient efficiency diet	29	21	425	446	10	154	164	31	579	610
Minimization of nutrient loss in processing	21	12	319	331	10	121	131	22	440	462
Processing and cooking	19	10	276	286	17	159	176	27	435	462
Gender mainstreaming through SHGs	9	4	124	128	3	33	36	7	157	164
Storage loss minimization techniques	21	0	367	367	5	87	92	5	454	459
Value addition	45	0	661	661	22	279	301	22	940	962
Women empowerment	18	3	346	349	0	123	123	3	469	472
Location specific drudgery reduction technologies	30	31	459	490	2	117	119	33	576	609
Rural Crafts	10	0	189	189	0	53	53	0	242	242
Women and child care	42	3	603	606	0	281	281	3	884	887
Others	14	24	227	251	51	52	103	75	279	354
<b>Total</b>	<b>360</b>	<b>305</b>	<b>5389</b>	<b>5694</b>	<b>202</b>	<b>2100</b>	<b>2302</b>	<b>507</b>	<b>7489</b>	<b>7996</b>
<b>VI Agril. Engineering</b>										
Farm Machinery and its maintenance	30	422	77	499	127	45	172	549	122	671
Installation and maintenance of micro irrigation systems	32	203	31	234	65	20	85	268	51	319
Use of Plastics in farming practices	8	112	20	132	44	13	57	156	33	189
Repair and maintenance of farm machinery and implements	78	1055	61	1116	182	29	211	1237	90	1327
Small scale processing and value addition	8	84	45	129	34	24	58	118	69	187
Post Harvest Technology	10	141	26	167	32	8	40	173	34	207
Others	3	35	0	35	18	0	18	53	0	53
<b>Total</b>	<b>169</b>	<b>2052</b>	<b>260</b>	<b>2312</b>	<b>502</b>	<b>139</b>	<b>641</b>	<b>2554</b>	<b>399</b>	<b>2953</b>
<b>VII Plant Protection</b>										
Integrated Pest Management	126	2075	138	2213	508	127	635	2583	265	2848
Integrated Disease Management	100	1605	102	1707	416	129	545	2021	231	2252
Bio-control of pests and diseases	44	715	75	790	149	51	200	864	126	990
Production of bio control agents and bio pesticides	19	296	50	346	89	35	124	385	85	470
Others	8	123	4	127	42	3	45	165	7	172
<b>Total</b>	<b>297</b>	<b>4814</b>	<b>369</b>	<b>5183</b>	<b>1204</b>	<b>345</b>	<b>1549</b>	<b>6018</b>	<b>714</b>	<b>6732</b>
<b>VIII Fisheries</b>										
Integrated fish farming	34	167	33	200	24	22	46	191	55	246
Composite fish culture	26	68	24	92	43	15	58	111	39	150
Portable plastic carp hatchery	1	14	0	14	4	2	6	18	2	20
<b>Total</b>	<b>61</b>	<b>249</b>	<b>57</b>	<b>306</b>	<b>71</b>	<b>39</b>	<b>110</b>	<b>320</b>	<b>96</b>	<b>416</b>
<b>IX Production of Inputs at site</b>										
Seed Production	21	346	18	364	81	20	101	427	38	465
Planting material production	4	61	7	68	30	13	43	91	20	111
Bio-agents production	2	25	12	37	15	17	32	40	29	69
Bio-pesticides production	3	45	8	53	18	7	25	63	15	78
Bio-fertilizer production	1	7	3	10	10	5	15	17	8	25

Vermi-compost production	14	221	35	256	100	17	117	321	52	373
Organic manures production	5	66	10	76	32	7	39	98	17	115
Production of Bee-colonies and wax sheets	2	32	3	35	16	2	18	48	5	53
Production of livestock feed and fodder	5	55	10	65	31	9	40	86	19	105
Mushroom Production	2	31	2	33	22	2	24	53	4	57
Apiculture	4	49	3	52	35	3	38	84	6	90
Others	7	118	0	118	22	0	22	140	0	140
<b>Total</b>	<b>70</b>	<b>1056</b>	<b>111</b>	<b>1167</b>	<b>412</b>	<b>102</b>	<b>514</b>	<b>1468</b>	<b>213</b>	<b>1681</b>
<b>X Capacity Building and Group Dynamics</b>										
Leadership development	32	596	57	653	108	41	149	704	98	802
Group dynamics	17	270	61	331	82	31	113	352	92	444
Formation and Management of SHGs	40	769	116	885	112	115	227	881	231	1112
Mobilization of social capital	14	150	63	213	58	33	91	208	96	304
Entrepreneurial development of farmers/youths	42	698	41	739	149	60	209	847	101	948
WTO and IPR issues	4	53	20	73	26	20	46	79	40	119
Others	21	298	49	347	94	42	136	392	91	483
<b>Total</b>	<b>170</b>	<b>2834</b>	<b>407</b>	<b>3241</b>	<b>629</b>	<b>342</b>	<b>971</b>	<b>3463</b>	<b>749</b>	<b>4212</b>
<b>XI Agro-forestry</b>										
Production technologies	11	168	10	178	21	27	48	189	37	226
Nursery management	10	140	16	156	17	26	43	157	42	199
Integrated Farming Systems	10	158	17	175	37	19	56	195	36	231
Others	2	34	1	35	3	2	5	37	3	40
<b>Total</b>	<b>33</b>	<b>500</b>	<b>44</b>	<b>544</b>	<b>78</b>	<b>74</b>	<b>152</b>	<b>578</b>	<b>118</b>	<b>696</b>
<b>Grand Total</b>	<b>3164</b>	<b>39911</b>	<b>9897</b>	<b>49808</b>	<b>11644</b>	<b>5399</b>	<b>17043</b>	<b>51555</b>	<b>15296</b>	<b>66851</b>

### (3) Pooled (On + Off Campus) Training Programmes Farmers & Farm Women

Thematic area	No. of courses	ON+OFF CAMPUS								
		Participants								
		Others			SC/ST			Grand Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
I Crop Production										
Weed Management	205	2718	341	3059	795	196	991	3513	537	4050
Resource Conservation Technologies	93	1518	123	1641	471	63	534	1989	186	2175
Cropping Systems	110	1427	109	1536	379	94	473	1806	203	2009
Crop Diversification	50	845	83	928	205	44	249	1050	127	1177
Integrated Farming	77	1211	89	1300	573	59	632	1784	148	1932
Micro Irrigation/irrigation	34	509	24	533	175	22	197	684	46	730
Seed production	170	2140	300	2440	561	126	687	2701	426	3127
Nursery management	48	726	93	819	270	57	327	996	150	1146
Integrated Crop Management	217	3197	284	3481	828	163	991	4025	447	4472
Soil & water conservatiion	31	485	36	521	150	15	165	635	51	686
Integrated nutrient management	133	1671	180	1851	494	80	574	2165	260	2425
Production of organic inputs	54	832	157	989	258	95	353	1090	252	1342
Others	75	1138	104	1242	384	190	574	1522	294	1816
Total	1297	18417	1923	20340	5543	1204	6747	23960	3127	27087
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops	132	2235	166	2401	565	147	712	2800	313	3113
Off-season vegetables	60	929	89	1018	317	89	406	1246	178	1424
Nursery raising	103	1495	282	1777	422	150	572	1917	432	2349
Exotic vegetables	12	191	13	204	22	17	39	213	30	243
Export potential vegetables	23	178	42	220	281	22	303	459	64	523
Grading and standardization	17	238	49	287	85	27	112	323	76	399
Protective cultivation	58	960	243	1203	313	102	415	1273	345	1618
Others	38	594	79	673	133	61	194	727	140	867
Total (a)	443	6820	963	7783	2138	615	2753	8958	1578	10536
b) Fruits										
Training and Pruning	44	693	86	779	215	29	244	908	115	1023
Layout and Management of Orchards	58	891	83	974	234	37	271	1125	120	1245
Cultivation of Fruit	39	572	76	648	190	50	240	762	126	888
Management of young plants/orchards	24	415	29	444	128	25	153	543	54	597
Rejuvenation of old orchards	41	557	73	630	215	61	276	772	134	906
Export potential fruits	4	67	4	71	18	0	18	85	4	89
Micro irrigation systems of orchards	22	438	30	468	97	12	109	535	42	577
Plant propagation techniques	23	369	34	403	108	28	136	477	62	539
Others	9	126	7	133	52	6	58	178	13	191
Total (b)	264	4128	422	4550	1257	248	1505	5385	670	6055
c) Ornamental Plants										
Nursery Management	25	408	38	446	96	46	142	504	84	588
Management of potted plants	3	41	7	48	8	0	8	49	7	56
Export potential of ornamental plants	3	47	5	52	15	2	17	62	7	69
Propagation techniques of Ornamental Plants	5	68	13	81	28	7	35	96	20	116
Others	9	144	10	154	13	6	19	157	16	173
Total (c)	45	708	73	781	160	61	221	868	134	1002



<b>d) Plantation crops</b>										
Production and Management technology	17	274	13	287	92	12	104	366	25	391
Processing and value addition	5	109	2	111	18	6	24	127	8	135
Others	2	85	0	85	20	4	24	105	4	109
<b>Total (d)</b>	<b>24</b>	<b>468</b>	<b>15</b>	<b>483</b>	<b>130</b>	<b>22</b>	<b>152</b>	<b>598</b>	<b>37</b>	<b>635</b>
<b>e) Tuber crops</b>										
Production and Management technology	42	671	67	738	161	61	222	832	128	960
Processing and value addition	2	34	1	35	6	4	10	40	5	45
Others	1	14	0	14	0	0	0	14	0	14
<b>Total (e)</b>	<b>45</b>	<b>719</b>	<b>68</b>	<b>787</b>	<b>167</b>	<b>65</b>	<b>232</b>	<b>886</b>	<b>133</b>	<b>1019</b>
<b>f) Spices</b>										
Production and Management technology	32	443	62	505	124	47	171	567	109	676
Processing and value addition	6	73	26	99	18	7	25	91	33	124
Others	3	53	0	53	7	0	7	60	0	60
<b>Total (f)</b>	<b>41</b>	<b>569</b>	<b>88</b>	<b>657</b>	<b>149</b>	<b>54</b>	<b>203</b>	<b>718</b>	<b>142</b>	<b>860</b>
<b>g) Medicinal and Aromatic Plants</b>										
Nursery management	5	70	6	76	18	3	21	88	9	97
Production and management technology	18	249	54	303	78	35	113	327	89	416
Post harvest technology and value addition	5	72	25	97	15	0	15	87	25	112
Others	1	20	5	25	5	0	5	25	5	30
<b>Total (g)</b>	<b>29</b>	<b>411</b>	<b>90</b>	<b>501</b>	<b>116</b>	<b>38</b>	<b>154</b>	<b>527</b>	<b>128</b>	<b>655</b>
<b>GT (a-g)</b>	<b>891</b>	<b>13823</b>	<b>1719</b>	<b>15542</b>	<b>4117</b>	<b>1103</b>	<b>5220</b>	<b>17940</b>	<b>2822</b>	<b>20762</b>
<b>III Soil Health and Fertility Mangmt.</b>										
Soil fertility management	130	1717	178	1895	428	87	515	2145	265	2410
Integrated water management	27	442	58	500	91	31	122	533	89	622
Integrated Nutrient Management	88	1583	91	1674	372	98	470	1955	189	2144
Production and use of organic inputs	56	735	136	871	206	107	313	941	243	1184
Management of Problematic soils	17	290	17	307	70	41	111	360	58	418
Micro nutrient deficiency in crops	36	559	34	593	193	12	205	752	46	798
Nutrient Use Efficiency	22	287	27	314	148	32	180	435	59	494
Balance use of fertilizers	38	576	75	651	165	63	228	741	138	879
Soil and Water Testing	99	768	137	905	230	116	346	998	253	1251
Others	19	226	3	229	47	21	68	273	24	297
<b>Total</b>	<b>532</b>	<b>7183</b>	<b>756</b>	<b>7939</b>	<b>1950</b>	<b>608</b>	<b>2558</b>	<b>9133</b>	<b>1364</b>	<b>10497</b>
<b>IV Livestock Production and Mangmt.</b>										
Dairy Management	159	2321	335	2656	690	198	888	3011	533	3544
Poultry Management	60	738	107	845	330	208	538	1068	315	1383
Piggery Management	7	68	0	68	71	12	83	139	12	151
Rabbit Management	4	26	23	49	20	13	33	46	36	82
Animal Nutrition Management	85	1280	196	1476	490	123	613	1770	319	2089
Disease Management	155	2343	250	2593	681	154	835	3024	404	3428
Feed & fodder technology	110	1621	191	1812	534	92	626	2155	283	2438
Production of quality animal products	21	313	32	345	139	47	186	452	79	531
Others	26	474	10	484	91	15	106	565	25	590
<b>Total</b>	<b>627</b>	<b>9184</b>	<b>1144</b>	<b>10328</b>	<b>3046</b>	<b>862</b>	<b>3908</b>	<b>12230</b>	<b>2006</b>	<b>14236</b>
<b>V Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening	118	271	1712	1983	107	724	831	378	2436	2814
Design and development of low/minimum cost diet	37	25	540	565	23	244	267	48	784	832

Designing and development for high nutrient efficiency diet	44	84	699	783	28	246	274	112	945	1057
Minimization of nutrient loss in processing	33	58	452	510	28	194	222	86	646	732
Processing and cooking	31	14	490	504	17	201	218	31	691	722
Gender mainstreaming through SHGs	14	8	166	174	3	80	83	11	246	257
Storage loss minimization techniques	34	41	517	558	25	149	174	66	666	732
Value addition	87	8	1293	1301	27	492	519	35	1785	1820
Women empowerment	36	3	599	602	0	210	210	3	809	812
Location specific drudgery reduction technologies	42	45	637	682	4	195	199	49	832	881
Rural Crafts	17	0	287	287	0	126	126	0	413	413
Women and child care	64	33	924	957	13	400	413	46	1324	1370
Others	22	24	370	394	51	81	132	75	451	526
<b>Total</b>	<b>579</b>	<b>614</b>	<b>8686</b>	<b>9300</b>	<b>326</b>	<b>3342</b>	<b>3668</b>	<b>940</b>	<b>12028</b>	<b>12968</b>
<b>VI Agril. Engineering</b>										
Farm Machinery and its maintenance	49	729	177	906	208	79	287	937	256	1193
Installation and maintenance of micro irrigation systems	39	307	33	340	105	20	125	412	53	465
Use of Plastics in farming practices	13	166	26	192	82	18	100	248	44	292
Production of small tools and implements	2	24	9	33	13	4	17	37	13	50
Repair and maintenance of farm machinery and implements	103	1432	81	1513	280	38	318	1712	119	1831
Small scale processing and value addition	12	114	72	186	51	29	80	165	101	266
Post Harvest Technology	18	243	75	318	70	41	111	313	116	429
Others	12	161	16	177	32	22	54	193	38	231
<b>Total</b>	<b>248</b>	<b>3176</b>	<b>489</b>	<b>3665</b>	<b>841</b>	<b>251</b>	<b>1092</b>	<b>4017</b>	<b>740</b>	<b>4757</b>
<b>VII Plant Protection</b>										
Integrated Pest Management	236	3305	228	3533	963	234	1197	4268	462	4730
Integrated Disease Management	155	2443	189	2632	733	196	929	3176	385	3561
Bio-control of pests and diseases	71	1099	114	1213	320	98	418	1419	212	1631
Production of bio control agents and bio pesticides	39	597	86	683	184	67	251	781	153	934
Others	13	197	18	215	60	7	67	257	25	282
<b>Total</b>	<b>514</b>	<b>7641</b>	<b>635</b>	<b>8276</b>	<b>2260</b>	<b>602</b>	<b>2862</b>	<b>9901</b>	<b>1237</b>	<b>11138</b>
<b>VIII Fisheries</b>										
Integrated fish farming	38	222	40	262	73	25	98	295	65	360
Carp breeding and hatchery management	1	7	3	10	10	5	15	17	8	25
Carp fry and fingerling rearing	6	73	1	74	36	2	38	109	3	112
Composite fish culture	30	116	26	142	63	16	79	179	42	221
Portable plastic carp hatchery	1	14	0	14	4	2	6	18	2	20
Pen culture of fish and prawn	1	15	0	15	5	0	5	20	0	20
<b>Total</b>	<b>77</b>	<b>447</b>	<b>70</b>	<b>517</b>	<b>191</b>	<b>50</b>	<b>241</b>	<b>638</b>	<b>120</b>	<b>758</b>
<b>IX Production of Inputs at site</b>										
Seed Production	46	824	41	865	189	42	231	1013	83	1096
Planting material production	8	122	10	132	39	19	58	161	29	190
Bio-agents production	6	79	28	107	37	35	72	116	63	179
Bio-pesticides production	5	77	11	88	22	13	35	99	24	123
Bio-fertilizer production	6	70	11	81	40	14	54	110	25	135
Vermi-compost production	31	471	49	520	186	96	282	657	145	802
Organic manures production	19	260	62	322	95	40	135	355	102	457
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0

Production of Bee-colonies and wax sheets	3	52	3	55	21	2	23	73	5	78
Small tools and implements	2	31	5	36	24	2	26	55	7	62
Production of livestock feed and fodder	7	86	12	98	43	14	57	129	26	155
Mushroom Production	7	97	33	130	34	10	44	131	43	174
Apiculture	4	49	3	52	35	3	38	84	6	90
Others	11	185	0	185	35	0	35	220	0	220
<b>Total</b>	<b>155</b>	<b>2403</b>	<b>268</b>	<b>2671</b>	<b>800</b>	<b>290</b>	<b>1090</b>	<b>3203</b>	<b>558</b>	<b>3761</b>
<b>X Capacity Building and Group Dynamics</b>										
Leadership development	47	808	79	887	172	59	231	980	138	1118
Group dynamics	32	496	99	595	128	56	184	624	155	779
Formation and Management of SHGs	61	1006	167	1173	197	170	367	1203	337	1540
Mobilization of social capital	24	303	78	381	101	39	140	404	117	521
Entrepreneurial development of farmers/youths	63	1061	140	1201	246	118	364	1307	258	1565
WTO and IPR issues	7	114	20	134	34	20	54	148	40	188
Others	40	526	71	597	221	99	320	747	170	917
<b>Total</b>	<b>274</b>	<b>4314</b>	<b>654</b>	<b>4968</b>	<b>1099</b>	<b>561</b>	<b>1660</b>	<b>5413</b>	<b>1215</b>	<b>6628</b>
<b>XI Agro-forestry</b>										
Production technologies	15	226	16	242	34	30	64	260	46	306
Nursery management	16	243	25	268	38	32	70	281	57	338
Integrated Farming Systems	16	216	41	257	56	46	102	272	87	359
Others	2	34	1	35	3	2	5	37	3	40
<b>Total</b>	<b>49</b>	<b>719</b>	<b>83</b>	<b>802</b>	<b>131</b>	<b>110</b>	<b>241</b>	<b>850</b>	<b>193</b>	<b>1043</b>
<b>GRAND TOTAL</b>	<b>5243</b>	<b>67921</b>	<b>16427</b>	<b>84348</b>	<b>20304</b>	<b>8983</b>	<b>29287</b>	<b>88225</b>	<b>25410</b>	<b>113635</b>

**(4) On Campus Training Programmes for Rural Youths**

Area of Training	No. of courses	ON CAMPUS								
		Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	31	407	43	450	115	24	139	522	67	589
Training and pruning of orchards	3	45	0	45	6	2	8	51	2	53
Protected cultivation of vegetable crops	21	314	9	323	114	23	137	428	32	460
Commercial fruit production	9	99	2	101	45	6	51	144	8	152
Integrated farming	13	196	5	201	63	12	75	259	17	276
Seed production	72	1057	15	1072	291	55	346	1348	70	1418
Production of organic inputs	24	343	111	454	97	26	123	440	137	577
Planting material production	4	60	5	65	27	2	29	87	7	94
Vermi-culture	28	394	5	399	145	20	165	539	25	564
Mushroom Production	54	768	37	805	234	87	321	1002	124	1126
Bee-keeping	36	563	8	571	194	59	253	757	67	824
Sericulture	1	17	0	17	8	0	8	25	0	25
Repair and maintenance of farm machinery and implements	21	298	1	299	86	3	89	384	4	388
Value addition	39	54	230	284	37	195	232	91	425	516
Small scale processing	9	19	48	67	7	33	40	26	81	107
Post Harvest Technology	6	34	34	68	9	15	24	43	49	92
Tailoring and Stitching	10	14	136	150	0	59	59	14	195	209
Rural Crafts	6	3	37	40	4	21	25	7	58	65
Production of quality animal products	4	51	8	59	0	13	13	51	21	72
Dairying	28	392	39	431	90	30	120	482	69	551
Sheep and goat rearing	26	366	39	405	105	37	142	471	76	547
Piggery	9	119	1	120	20	0	20	139	1	140
Poultry production	23	315	10	325	136	20	156	451	30	481
Ornamental fisheries	1	0	10	10	0	5	5	0	15	15
Composite fish culture	7	203	7	210	33	4	37	236	11	247
Pearl culture	1	9	0	9	0	0	0	9	0	9
Fish harvest and processing technology	1	12	0	12	8	0	8	20	0	20
Other	22	291	38	329	57	1	58	348	39	387
<b>TOTAL</b>	<b>509</b>	<b>6443</b>	<b>878</b>	<b>7321</b>	<b>1931</b>	<b>752</b>	<b>2683</b>	<b>8374</b>	<b>1630</b>	<b>10004</b>



**(5) Off Campus Training Programmes for Rural Youths**

Area of Training	No. of courses	OFF CAMPUS								
		Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	11	320	45	365	76	16	92	396	61	457
Training and pruning of orchards	8	125	16	141	40	12	52	165	28	193
Protected cultivation of vegetable crops	13	218	29	247	61	18	79	279	47	326
Commercial fruit production	11	232	76	308	102	45	147	334	121	455
Integrated farming	21	461	61	522	165	34	199	626	95	721
Seed production	34	524	43	567	140	35	175	664	78	742
Production of organic inputs	10	165	12	177	25	13	38	190	25	215
Planting material production	5	70	12	82	31	13	44	101	25	126
Vermi-culture	36	191	49	240	62	31	93	253	80	333
Mushroom Production	21	340	93	433	129	69	198	469	162	631
Bee-keeping	18	298	9	307	69	12	81	367	21	388
Repair and maintenance of farm machinery and implements	7	158	37	195	67	23	90	225	60	285
Value addition	8	16	130	146	7	31	38	23	161	184
Small scale processing	1	1	6	7	4	14	18	5	20	25
Post Harvest Technology	5	30	46	76	13	15	28	43	61	104
Tailoring and Stitching	6	12	72	84	3	18	21	15	90	105
Rural Crafts	7	20	57	77	8	62	70	28	119	147
Dairying	7	108	12	120	27	9	36	135	21	156
Sheep and goat rearing	15	236	23	259	74	27	101	310	50	360
Poultry production	6	178	32	210	64	37	101	242	69	311
Composite fish culture	0	31	23	54	17	12	29	48	35	83
Other	7	1019	308	1327	411	137	548	1430	445	1875
<b>TOTAL</b>	<b>257</b>	<b>4753</b>	<b>1191</b>	<b>5944</b>	<b>1595</b>	<b>683</b>	<b>2278</b>	<b>6348</b>	<b>1874</b>	<b>8222</b>

**(6) Pooled (On + Off Campus) Training Programmes for Rural Youths**

Area of Training	No. of courses	Participants								
		Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	42	727	88	815	191	40	231	918	128	1046
Training and pruning of orchards	11	170	16	186	46	14	60	216	30	246
Protected cultivation of vegetable crops	34	532	38	570	175	41	216	707	79	786
Commercial fruit production	20	331	78	409	147	51	198	478	129	607
Integrated farming	34	657	66	723	228	46	274	885	112	997
Seed production	106	1581	58	1639	431	90	521	2012	148	2160
Production of organic inputs	34	508	123	631	122	39	161	630	162	792
Planting material production	9	130	17	147	58	15	73	188	32	220
Vermi-culture	64	585	54	639	207	51	258	792	105	897
Mushroom Production	75	1108	130	1238	363	156	519	1471	286	1757
Bee-keeping	54	861	17	878	263	71	334	1124	88	1212
Sericulture	1	17	0	17	8	0	8	25	0	25
Repair and maintenance of farm machinery and implements	28	456	38	494	153	26	179	609	64	673
Value addition	47	70	360	430	44	226	270	114	586	700
Small scale processing	10	20	54	74	11	47	58	31	101	132
Post Harvest Technology	11	64	80	144	22	30	52	86	110	196
Tailoring and Stitching	16	26	208	234	3	77	80	29	285	314
Rural Crafts	13	23	94	117	12	83	95	35	177	212
Production of quality animal products	4	51	8	59	0	13	13	51	21	72
Dairying	35	500	51	551	117	39	156	617	90	707
Sheep and goat rearing	41	602	62	664	179	64	243	781	126	907
Piggery	9	119	1	120	20	0	20	139	1	140
Poultry production	29	493	42	535	200	57	257	693	99	792
Ornamental fisheries	1	0	10	10	0	5	5	0	15	15
Composite fish culture	7	234	30	264	50	16	66	284	46	330
Pearl culture	1	9	0	9	0	0	0	9	0	9
Fish harvest and processing technology	1	12	0	12	8	0	8	20	0	20
Other	29	1310	346	1656	468	138	606	1778	484	2262
<b>TOTAL</b>	<b>766</b>	<b>11196</b>	<b>2069</b>	<b>13265</b>	<b>3526</b>	<b>1435</b>	<b>4961</b>	<b>14722</b>	<b>3504</b>	<b>18226</b>

**(7) On Campus Training Programmes for Extension Functionaries**

Area of Training	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	62	976	45	1021	245	7	252	1221	52	1273
Integrated Pest Management	54	825	16	841	174	0	174	999	16	1015
Integrated Nutrient management	35	618	9	627	166	12	178	784	21	805
Rejuvenation of old orchards	19	316	2	318	70	0	70	386	2	388
Protected cultivation technology	26	409	0	409	94	8	102	503	8	511
Production and use of organic inputs	26	526	4	530	130	3	133	656	7	663
Care & maintenance of farm machinery & implements	14	213	0	213	62	0	62	275	0	275
Gender mainstreaming through SHGs	4	33	12	45	7	8	15	40	20	60
Formation and Management of SHGs	6	40	80	120	8	17	25	48	97	145
Women and Child care	27	148	294	442	19	99	118	167	393	560
Low cost and nutrient efficient diet designing	12	38	161	199	20	52	72	58	213	271
Group Dynamics and farmers organization	10	127	36	163	37	6	43	164	42	206
Information networking among farmers	8	118	48	166	15	8	23	133	56	189
Capacity building for ICT application	7	151	3	154	27	4	31	178	7	185
Management in farm animals	25	437	15	452	103	2	105	540	17	557
Livestock feed and fodder production	35	542	88	630	153	37	190	695	125	820
Household food security	22	34	233	267	18	94	112	52	327	379
Other	55	826	90	916	185	36	221	1011	126	1137
<b>TOTAL</b>	<b>447</b>	<b>6377</b>	<b>1136</b>	<b>7513</b>	<b>1533</b>	<b>393</b>	<b>1926</b>	<b>7910</b>	<b>1529</b>	<b>9439</b>

**(8) Off Campus Training Programmes for Extension Functionaries**

Area of Training	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	39	571	6	577	150	2	152	721	8	729
Integrated Pest Management	24	330	16	346	124	9	133	454	25	479
Integrated Nutrient management	31	522	42	564	101	19	120	623	61	684
Rejuvenation of old orchards	11	138	3	141	46	6	52	184	9	193
Protected cultivation technology	11	217	43	260	76	25	101	293	68	361
Production and use of organic inputs	15	278	5	283	92	12	104	370	17	387
Care & maintenance of farm machinery & implements	4	47	0	47	30	5	35	77	5	82
Gender mainstreaming through SHGs	2	75	0	75	15	5	20	90	5	95
Formation and Management of SHGs	1	0	15	15	0	10	10	0	25	25
Women and Child care	8	1	164	165	0	68	68	1	232	233
Low cost and nutrient efficient diet designing	5	0	97	97	0	27	27	0	124	124
Information networking among farmers	2	20	0	20	0	0	0	20	0	20
Management in farm animals	11	170	5	175	29	4	33	199	9	208
Livestock feed and fodder production	16	267	1	268	85	0	85	352	1	353
Household food security	3	5	31	36	2	6	8	7	37	44
Other	27	444	123	567	131	37	168	575	160	735
<b>TOTAL</b>	<b>210</b>	<b>3085</b>	<b>551</b>	<b>3636</b>	<b>881</b>	<b>235</b>	<b>1116</b>	<b>3966</b>	<b>786</b>	<b>4752</b>

**(9) Pooled (On + Off Campus) Training Programmes for Extension Functionaries**

Area of Training	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	101	1547	51	1598	395	9	404	1942	60	2002
Integrated Pest Management	78	1155	32	1187	298	9	307	1453	41	1494
Integrated Nutrient management	66	1140	51	1191	267	31	298	1407	82	1489
Rejuvenation of old orchards	30	454	5	459	116	6	122	570	11	581
Protected cultivation technology	37	626	43	669	170	33	203	796	76	872
Production and use of organic inputs	41	804	9	813	222	15	237	1026	24	1050
Care & maintenance of farm machinery & implements	18	260	0	260	92	5	97	352	5	357
Gender mainstreaming through SHGs	6	108	12	120	22	13	35	130	25	155
Formation and Management of SHGs	7	40	95	135	8	27	35	48	122	170
Women and Child care	35	149	458	607	19	167	186	168	625	793
Low cost and nutrient efficient diet designing	17	38	258	296	20	79	99	58	337	395
Group Dynamics and farmers organization	10	127	36	163	37	6	43	164	42	206
Information networking among farmers	10	138	48	186	15	8	23	153	56	209
Capacity building for ICT application	7	151	3	154	27	4	31	178	7	185
Management in farm animals	36	607	20	627	132	6	138	739	26	765
Livestock feed and fodder production	51	809	89	898	238	37	275	1047	126	1173
Household food security	25	39	264	303	20	100	120	59	364	423
Other	82	1270	213	1483	316	73	389	1586	286	1872
<b>TOTAL</b>	<b>657</b>	<b>9462</b>	<b>1687</b>	<b>11149</b>	<b>2414</b>	<b>628</b>	<b>3042</b>	<b>11876</b>	<b>2315</b>	<b>14191</b>

**(10) Sponsored Training Programmes**

Area of Training	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Crop production and management</b>										
Increasing production and productivity of crops	115	4956	503	5459	1385	264	1649	6341	767	7108
Commercial production of vegetables	48	1749	210	1959	563	165	728	2312	375	2687
<b>Production and value addition</b>										
Fruit Plants	44	1249	238	1487	389	145	534	1638	383	2021
Ornamental plants	8	258	36	294	44	9	53	302	45	347
Spices crops	4	86	12	98	21	3	24	107	15	2368
Soil health and fertility management	52	1771	166	1937	338	96	434	2109	262	2371
Production of Inputs at site	16	414	93	507	150	29	179	564	122	686
Methods of protective cultivation	17	528	41	569	163	56	219	691	97	3057
Others	81	2332	286	2618	945	154	1099	3277	440	3717
<b>Total</b>	<b>385</b>	<b>13343</b>	<b>1585</b>	<b>14928</b>	<b>3998</b>	<b>921</b>	<b>4919</b>	<b>17341</b>	<b>2506</b>	<b>19847</b>
<b>Post harvest technology and value addition</b>										
Processing and value addition	30	877	299	1176	317	179	496	1194	478	1672
Others	15	448	80	528	193	77	270	641	157	798
<b>Total</b>	<b>45</b>	<b>1325</b>	<b>379</b>	<b>1704</b>	<b>510</b>	<b>256</b>	<b>766</b>	<b>1835</b>	<b>635</b>	<b>2470</b>
<b>Farm machinery</b>										
Farm machinery, tools and implements	10	266	27	293	61	7	68	327	34	361
Others	12	545	0	545	0	0	0	545	0	545
<b>Total</b>	<b>22</b>	<b>811</b>	<b>27</b>	<b>838</b>	<b>61</b>	<b>7</b>	<b>68</b>	<b>872</b>	<b>34</b>	<b>906</b>
<b>Livestock and fisheries</b>										
Livestock production and management	45	592	109	701	315	98	413	907	207	1114
Animal Nutrition Management	5	49	20	69	21	18	39	70	38	108
Animal Disease Management	4	72	13	85	28	27	55	100	40	1222
Fisheries Nutrition	5	72	21	93	0	0	0	72	21	93
Others	6	88	2	90	83	2	85	171	4	93
<b>Total</b>	<b>65</b>	<b>873</b>	<b>165</b>	<b>1038</b>	<b>447</b>	<b>145</b>	<b>592</b>	<b>1320</b>	<b>310</b>	<b>1630</b>
<b>Home Science</b>										
Household nutritional security	21	574	274	848	160	136	296	734	410	1144
Economic empowerment of women	18	578	248	826	153	121	274	731	369	1100
Drudgery reduction of women	7	185	65	250	37	15	52	222	80	2244
Others	1	31	0	31	4	0	4	35	0	35
<b>Total</b>	<b>47</b>	<b>1368</b>	<b>587</b>	<b>1955</b>	<b>354</b>	<b>272</b>	<b>626</b>	<b>1722</b>	<b>859</b>	<b>2581</b>
<b>Agricultural Extension</b>										
Capacity Building and Group Dynamics	29	566	81	647	179	87	266	745	168	913
Others	16	467	5	472	115	36	151	582	41	623
<b>Total</b>	<b>45</b>	<b>1033</b>	<b>86</b>	<b>1119</b>	<b>294</b>	<b>123</b>	<b>417</b>	<b>1327</b>	<b>209</b>	<b>1536</b>
<b>GRAND TOTAL</b>	<b>609</b>	<b>18753</b>	<b>2829</b>	<b>21582</b>	<b>5664</b>	<b>1724</b>	<b>7388</b>	<b>24417</b>	<b>4553</b>	<b>28970</b>



**(11) Vocational Training Programmes**

Area of Training	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Crop production and management</b>										
Commercial floriculture	7	108	10	118	25	20	45	133	30	163
Commercial fruit production	12	173	28	201	56	26	82	229	54	283
Commercial vegetable production	12	171	18	189	74	7	81	245	25	270
Integrated crop management	14	136	24	160	82	30	112	218	54	272
Organic farming	12	191	10	201	59	34	93	250	44	294
Others	5	64	12	76	33	8	41	97	20	117
<b>Total</b>	<b>62</b>	<b>843</b>	<b>102</b>	<b>945</b>	<b>329</b>	<b>125</b>	<b>454</b>	<b>1172</b>	<b>227</b>	<b>1399</b>
<b>Post harvest technology and value addition</b>										
Value addition	13	77	85	162	25	54	79	102	139	241
Others	11	9	68	77	4	52	56	13	120	133
<b>Total</b>	<b>24</b>	<b>86</b>	<b>153</b>	<b>239</b>	<b>29</b>	<b>106</b>	<b>135</b>	<b>115</b>	<b>259</b>	<b>374</b>
<b>Livestock and fisheries</b>										
Dairy farming	20	386	47	433	85	22	107	471	69	540
Composite fish culture	9	237	8	245	45	3	48	282	11	293
Sheep and goat rearing	14	241	25	266	70	62	132	311	87	398
Piggery	6	128	1	129	23	1	24	151	2	153
Poultry farming	13	189	27	216	72	40	112	261	67	328
Others	2	44	1	45	5	0	5	49	1	50
<b>Total</b>	<b>64</b>	<b>1225</b>	<b>109</b>	<b>1334</b>	<b>300</b>	<b>128</b>	<b>428</b>	<b>1525</b>	<b>237</b>	<b>1762</b>
<b>Income generation activities</b>										
Vermicomposting	18	265	17	282	76	11	87	341	28	369
Production of bio-agents, bio-pesticides, bio-fertilizers etc.	7	92	14	106	35	7	42	127	21	148
Repair and maintenance of farm machinery	11	157	1	158	44	0	44	201	1	202
Rural Crafts	2	0	37	37	0	10	10	0	47	47
Seed production	26	377	44	421	90	24	114	467	68	535
Sericulture	1	25	0	25	12	0	12	37	0	37
Mushroom cultivation	46	656	145	801	236	117	353	892	262	1154
Nursery, grafting etc.	16	139	107	246	99	87	186	238	194	432
Tailoring, stitching, embroidery, dyeing etc.	3	0	34	34	0	36	36	0	70	70
Agril. para-workers, para-vet training	0	0	0	0	0	0	0	0	0	0
Others	16	204	38	242	93	77	170	297	115	412
<b>Total</b>	<b>150</b>	<b>1961</b>	<b>448</b>	<b>2409</b>	<b>706</b>	<b>372</b>	<b>1078</b>	<b>2667</b>	<b>820</b>	<b>3487</b>
<b>Agricultural Extension</b>										
Capacity building and group dynamics	5	94	10	104	29	5	34	123	15	138
Others	7	110	41	151	17	5	22	127	46	173
<b>Total</b>	<b>12</b>	<b>204</b>	<b>51</b>	<b>255</b>	<b>46</b>	<b>10</b>	<b>56</b>	<b>250</b>	<b>61</b>	<b>311</b>
<b>Grand Total</b>	<b>312</b>	<b>4319</b>	<b>863</b>	<b>5182</b>	<b>1410</b>	<b>741</b>	<b>2151</b>	<b>5729</b>	<b>1604</b>	<b>7333</b>

## INFRASTRUCTURE FACILITIES AT KVKS

S. No.	KVK District	SAU/ICAR/ Edn/ NGO	Year of est.	Farm (in ha)	Admin Bldg	Staff Quarter	Farmers Hostel	Threshing Floor	Tube well	Drtp Irrtg.	S&W Test. Lab	Fencing	Soil Testing Kit (Proc.)	Rain Water Harv. Stru.	Demo Units (ICAR)	Demo Units (Others)	IFS	Minimal Proc fac.	e-Conn. (ERNET)	Carp Hatch.	Solar Panel	Tech. Inf. Unit	Micro Nut.	Mini Seed Proc. Fac.	Four Wh	Two Wh.	Tractor	Gen set
1	Bahraich-I	SAU	1983	13.600	Y	Y	Y	Y	Y	Y	Y	Y	1	N	3	5	N	N	N	N	N	N	N	N	Y	1	Y	N
2	Basti	SAU	1989	20.000	Y	Y	Y	Y	Y	Y	Y	Y	1	N	2	1	N	N	N	N	N	N	N	N	Y	1	Y	N
3	Ballia	SAU	1984	9.600	Y	Y	Y	Y	Y	N	Y	Y	-	N	2		N	N	N	N	N	N	N	Y	2	Y	N	
4	Mau	SAU	1989	21.000	Y	Y	Y	Y	Y	N	Y	N	-	N	2		N	N	N	N	N	N	N	Y	1	Y	N	
5	Varanasi	SAU	1989	12.350	Y	Y	Y	Y	Y	N	Y	Y	-	N	5		N	N	N	N	N	N	N	Y	1	Y	N	
6	Siddharthnagar	SAU	1992	16.400	Y	Y	Y	Y	Y	Y	Y	Y	1	N	4		N	N	N	N	N	N	N	Y	1	Y	N	
7	Faizabad	SAU	2004	20.000	Y	Y	Y	Y	Y	Y	Y	Y	1	N	2	1	N	N	N	N	N	N	N	Y	1	Y	N	
8	Gorakhpur-I	SAU	2004	13.110	Y	Y	Y	Y	Y	Y	Y	Y	1	N	1		N	N	N	N	N	N	N	Y	2	Y	N	
9	Mahrajganj	SAU	2004	4.000	Y	Y	Y	Y	Y	Y	Y	Y	-	N	2	1	N	N	N	N	N	N	N	Y	1	Y	N	
10	Sombhadra	SAU	2004	4.800	N	N	N	Y	Y	Y	Y	N	1	N	3	1	N	N	N	N	N	N	N	Y	2	Y	N	
11	Azangarh	SAU	2004	17.000	Y	Y	Y	Y	Y	Y	Y	Y	-	N	3	1	N	N	N	N	N	N	N	Y	2	Y	N	
12	Barabanki	SAU	2004	12.500	Y	Y	Y	Y	Y	Y	Y	Y	-	N	2		N	N	N	N	N	N	N	Y	2	Y	N	
13	Balrampur	SAU	2005	16.320	Y	Y	Y	Y	Y	Y	Y	Y	-	N	2		N	N	N	N	N	N	N	Y	1	Y	N	
14	Chandoli	SAU	2005	8.000	Y	Y	Y	Y	Y	Y	Y	Y	-	N	3		N	N	N	N	N	N	N	Y	1	Y	N	
15	Jaunpur-I	SAU	2005	7.200	Y	Y	Y	Y	Y	Y	Y	Y	-	N	6		N	N	N	N	N	N	N	Y	1	Y	N	
16	Sant Kabir Nagar	SAU	2009	24.000	Y	Y	Y	Y	Y	N	N	N	-	N	0		N	N	N	N	N	N	N	Y	1	Y	N	
17	Ambedkar Nagar	SAU	2010	9.735	Y	Y	Y	Y	Y	N	N	N	-	N	0	4	N	N	N	N	N	N	N	Y	0	Y	N	
18	Ameethi	SAU	2018	13.000	N	N	N	N	N	N	N	N	-	N			N	N	N	N	N	N	N	Y	0	Y	N	
19	Bahraich-II	SAU	2018	12.000	N	N	N	N	N	Y	N	N	-	N			N	N	N	N	N	N	N	Y	0	Y	N	
20	Jaunpur-II	SAU	2018	9.20	N	N	N	N	N	N	N	N	-	N			N	N	N	N	N	N	N	Y	0	Y	N	
21	Sultanpur-II	SAU	2018	14.707	N	N	N	N	N	N	N	N	-	N	8	3	N	N	N	N	N	N	N	Y	0	Y	N	
22	Gonda-II	SAU	2018	12.332	N	N	N	N	N	N	N	N	-	N	4		N	N	N	N	N	N	N	Y	0	Y	N	
23	Ghazipur-II	SAU	2018	13.60	N	N	N	N	N	N	N	N	-	N			N	N	N	N	N	N	N	Y	0	Y	N	
24	Shravasti	SAU	2020	21.227	N	N	N	N	N	N	N	N	-	N			N	N	N	N	N	N	N	Y	0	Y	N	
25	Jhansi	SAU	1984	22.500	Y	Y	Y	Y	Y	Y	Y	Y	2	N	1	3	Y	N	Y	Y	Y	Y	Y	N	1	Y	N	
26	Mahoba	SAU	2004	8.000	Y	Y	Y	Y	Y	Y	Y	Y	2	N	2		Y	N	Y	Y	Y	Y	Y	N	1	Y	N	
27	Hamirpur	SAU	2005	12.700	Y	Y	Y	Y	Y	Y	Y	Y	2	N	2	1	Y	N	Y	Y	Y	Y	Y	N	0	Y	N	
28	Jalaun	SAU	2005	23.300	Y	Y	Y	Y	Y	Y	Y	Y	2	N	1		Y	N	Y	Y	Y	Y	Y	N	1	Y	N	
29	Lalitpur	SAU	2005	20.350	Y	Y	Y	Y	Y	Y	Y	Y	2	N	3	2	Y	N	Y	Y	Y	Y	Y	N	1	Y	Y	
30	Banda	SAU	2007	8.890	Y	Y	Y	Y	Y	Y	Y	Y	2	N	0		Y	N	Y	Y	Y	Y	Y	N	0	Y	N	
31	Prayagraj-II	SAU	2020	9.647	N	N	N	N	N	N	N	N	-	N			N	N	N	N	N	N	N	Y	0	Y	N	
32	Raebareli	SAU	1984	9.800	Y	Y	Y	Y	Y	Y	Y	Y	2	N	3	2	N	N	N	N	N	N	N	N	Y	1	Y	N
33	Fatehpur	SAU	1989	10.200	Y	Y	Y	Y	Y	Y	Y	Y	2	N	3	2	N	N	N	N	N	N	N	N	Y	1	Y	N
34	Aligarh	SAU	1992	20.000	Y	Y	Y	Y	Y	Y	Y	Y	2	N	2	2	N	N	N	N	N	N	N	Y	2	Y	N	
35	Kannauj	SAU	2004	10.000	Y	Y	Y	Y	Y	Y	Y	Y	2	N	3		N	N	N	N	N	N	N	Y	1	Y	N	
36	Etawah	SAU	2004	6.500	Y	Y	Y	Y	Y	Y	Y	Y	2	N	2		N	N	N	N	N	N	N	Y	1	Y	N	
37	Mainpuri	SAU	2004	10.000	Y	Y	Y	Y	Y	Y	Y	Y	2	N	3		N	N	N	N	N	N	N	Y	2	Y	N	
38	Kanpur Dehat	SAU	2004	20.000	Y	Y	Y	Y	Y	Y	Y	Y	3	N	3	2	N	N	N	N	N	N	N	Y	1	Y	N	
39	Firozabad	SAU	2004	20.000	Y	Y	Y	Y	Y	Y	Y	Y	2	N	2	2	N	N	N	N	N	N	N	Y	1	Y	N	
40	Lakhimpur Kheri	SAU	2005	20.000	Y	Y	Y	Y	Y	Y	Y	Y	2	N	1		N	N	N	N	N	N	N	Y	1	Y	N	
41	Farrukhabad	SAU	2005	20.000	Y	Y	Y	Y	Y	Y	Y	Y	2	N	0		N	N	N	N	N	N	N	Y	1	Y	N	



## KVK WISE STAFF POSITION

S. No.	Name of KVK	Name of the host Organization	PC		SMS		Farm Manager (Computer)		PA (Lab Assistant Tech.)		Steno		Driver		SSS		TOTAL									
			S	F	V	S	F	V	S	F	V	S	F	V	S	F	V	S	F	V						
1.	Bahraich-I	ANDUAT, Ayodhya	1	1	0	6	5	1	1	0	1	1	0	1	1	0	2	2	0	2	1	1	16	12	4	
2.	Basti	ANDUAT, Ayodhya	1	1	0	6	4	2	1	1	0	1	1	0	1	1	0	2	2	0	2	2	0	16	14	2
3.	Ballia	ANDUAT, Ayodhya	1	1	0	6	3	3	1	0	1	1	0	1	1	0	2	2	0	2	0	2	16	10	6	
4.	Mau	ANDUAT, Ayodhya	1	0	1	6	4	2	1	1	0	1	1	0	1	1	0	2	2	0	2	1	1	16	11	5
5.	Varanasi	ANDUAT, Ayodhya	1	1	0	6	4	2	1	1	0	1	1	0	1	1	0	2	2	0	2	2	0	16	13	3
6.	Siddharthnagar	ANDUAT, Ayodhya	1	1	0	6	3	3	1	1	0	1	1	0	1	1	0	2	1	1	2	2	0	16	12	4
7.	Ayodhya	ANDUAT, Ayodhya	1	1	0	6	3	3	1	0	1	1	0	1	1	0	2	2	0	2	1	1	16	10	6	
8.	Gorakhpur-I	ANDUAT, Ayodhya	1	1	0	6	5	1	1	1	0	1	1	0	1	1	0	2	1	1	2	2	0	16	14	2
9.	Mahrajani	ANDUAT, Ayodhya	1	1	0	6	1	5	1	1	0	1	1	0	1	1	0	2	1	1	2	1	1	16	9	7
10.	Sonhadra	ANDUAT, Ayodhya	1	1	0	6	5	1	1	1	0	1	1	0	1	1	0	2	2	0	2	1	1	16	13	3
11.	Azamgarh	ANDUAT, Ayodhya	1	1	0	6	4	2	1	0	1	1	0	1	1	0	2	2	0	2	1	1	16	11	5	
12.	Barabanki	ANDUAT, Ayodhya	1	1	0	6	2	4	1	1	0	1	1	0	1	1	0	2	2	0	2	1	1	16	10	6
13.	Balrampur	ANDUAT, Ayodhya	1	1	0	6	4	2	1	0	1	1	0	1	1	0	2	2	0	2	2	0	16	13	3	
14.	Chandoli	ANDUAT, Ayodhya	1	1	0	6	4	2	1	1	0	1	1	0	1	1	0	2	2	0	2	1	1	16	13	3
15.	Jaunpur-I	ANDUAT, Ayodhya	1	1	0	6	3	3	1	1	0	1	1	0	1	1	0	2	2	0	2	1	1	16	12	4
16.	Sant Kabir Nagar	ANDUAT, Ayodhya	1	1	0	6	3	3	1	0	1	1	0	1	1	0	2	2	0	2	2	0	16	11	5	
17.	Ambedkar Nagar	ANDUAT, Ayodhya	1	1	0	6	2	4	1	1	0	1	1	0	1	1	0	2	2	0	2	0	2	16	9	7
18.	Amethi	ANDUAT, Ayodhya	1	1	0	6	3	3	1	1	0	1	1	0	1	1	0	2	2	0	2	0	2	16	10	6
19.	Bahraich-II	ANDUAT, Ayodhya	1	1	0	6	0	6	1	1	0	1	1	0	1	1	0	2	2	0	2	1	1	16	8	8
20.	Jaunpur-II	ANDUAT, Ayodhya	1	1	0	6	2	4	1	0	1	1	0	1	1	0	2	2	0	2	0	2	16	9	7	
21.	Sultanpur-II	ANDUAT, Ayodhya	1	1	0	6	4	2	1	0	1	1	0	1	1	0	2	2	0	2	0	2	16	10	6	
22.	Gonda-II	ANDUAT, Ayodhya	1	1	0	6	4	2	1	0	1	1	0	1	1	0	2	2	0	2	0	2	16	10	6	
23.	Ghazipur-II	ANDUAT, Ayodhya	1	1	0	6	0	6	1	0	1	1	0	1	1	0	2	1	1	2	0	2	16	4	12	
24.	Shravasti	ANDUAT, Ayodhya	1	1	0	6	2	4	1	1	0	1	1	0	1	1	0	2	2	0	2	0	16	5	11	
25.	Jhansi	BUAT, Banda	1	1	0	6	6	0	1	1	0	1	1	0	1	1	0	2	2	0	2	2	0	16	15	1
26.	Mahoba	BUAT, Banda	1	1	0	6	5	1	1	1	0	1	1	0	1	1	0	2	2	0	2	0	2	16	13	3
27.	Hamirpur	BUAT, Banda	1	1	0	6	6	0	1	1	0	1	1	0	1	1	0	2	2	0	2	2	0	16	16	0
28.	Jalaun	BUAT, Banda	1	1	0	6	5	1	1	1	0	1	1	0	1	1	0	2	2	0	2	2	0	16	15	1
29.	Lalitpur	BUAT, Banda	1	0	1	6	6	0	1	1	0	1	1	0	1	1	0	2	2	0	2	2	0	16	15	1
30.	Banda	BUAT, Banda	1	1	0	6	5	1	1	1	0	1	1	0	1	1	0	2	2	0	2	2	0	16	15	1





67. Lucknow	ICAR-IISR, Lucknow	1	1	0	6	4	2	1	1	0	1	1	0	1	1	0	1	1	0	2	0	2	1	1	6	11	5					
68. Lakhimpur Kheri-II	ICAR-IISR, Lucknow	1	1	0	6	3	3	1	1	0	1	1	0	1	1	0	1	1	0	2	0	2	0	2	16	5	11					
69. Kushinagar	ICAR-IIVR, Varanasi	1	0	1	6	6	0	1	1	0	1	1	0	1	1	0	1	0	1	2	0	2	0	2	16	11	5					
70. Sant Ravidas Nagar	ICAR-IIVR, Varanasi	1	1	0	6	5	1	1	1	0	1	1	0	1	1	0	1	1	0	2	0	2	0	2	16	10	6					
71. Deoria	ICAR-IIVR, Varanasi	1	0	1	6	3	3	1	1	0	1	1	0	1	1	0	1	1	0	2	0	2	0	2	16	6	10					
72. Hardoi-II	ICAR-CSSRI, Karnal	1	0	1	6	0	6	1	0	1	1	0	1	1	0	1	1	0	1	2	0	2	0	2	16	0	16					
73. Mirzapur	BHU, Varanasi	1	1	0	6	4	2	1	0	1	1	1	0	1	1	1	0	2	1	1	2	1	1	16	10	6						
74. Sultanpur-I	KNMT, Sultanpur	1	1	0	6	4	2	1	1	0	1	1	0	1	2	-1	1	1	0	2	0	2	2	0	16	14	2					
75. Etah	R.B.S.College, Agra	1	1	0	6	4	2	1	1	0	1	1	1	0	1	1	1	0	2	0	2	2	0	2	16	12	4					
76. Gonda-I	DRI, Gonda	1	1	0	6	4	2	1	0	1	1	0	1	1	4	-3	1	1	0	2	1	1	2	3	-1	16	14	2				
77. Chitrakoot	DRI, Chitrakoot	1	1	0	6	4	2	1	1	0	1	1	0	1	1	0	1	1	0	2	2	0	2	5	-3	16	15	1				
78. Prayagraj-I	SHUATS, Prayagraj	1	1	0	6	6	0	1	1	0	1	1	0	1	1	0	1	1	0	2	1	1	2	3	-1	16	16	0				
79. Pratapgarh	RASMES, Pratapgarh	1	1	0	6	6	0	1	1	0	1	1	0	1	1	0	1	1	0	2	2	0	2	0	16	16	0					
80. Unmao	KRBSES, Unmao	1	1	0	6	6	0	1	0	1	1	1	0	1	1	0	1	1	0	2	2	0	2	0	16	15	1					
81. Ghazipur-I	PG College Ghazipur	1	0	1	6	6	0	1	1	0	1	1	0	1	1	0	1	1	0	2	2	0	2	0	16	15	1					
82. Agra	RBS College, Agra	1	1	0	6	3	3	1	1	0	1	1	0	1	1	0	1	1	0	2	2	0	2	0	16	12	4					
83. Sitapur-I	MVESH, Lucknow	1	1	0	6	3	3	1	1	0	1	1	0	1	1	0	1	1	0	2	2	0	2	0	16	13	3					
84. Kaushambi	DBRAWS, Prayagraj	1	1	0	6	6	0	1	1	0	1	1	0	1	1	0	1	1	0	2	2	0	2	0	16	16	0					
85. Auraiya	Sarpanch Samaj, Firozpur	1	1	0	6	4	2	1	1	0	1	1	0	1	1	0	1	1	0	2	2	0	2	1	16	13	3					
86. Sitapur-II	RRDCA, Amethi	1	1	0	6	6	0	1	1	0	1	1	0	1	1	0	1	1	0	2	2	0	2	0	16	15	1					
87. Gorakhpur-II	GGSS, Gorakhpur	1	1	0	6	6	0	1	1	0	1	1	0	1	1	0	1	0	1	2	2	0	2	0	16	15	1					
		87	68	19	522	328	194	87	87	56	31	87	61	26	87	43	44	87	58	29	87	64	23	174	123	51	174	114	60	1392	915	477

## SCIENTIFIC ADVISORY COMMITTEE

S.No.	Name of KVK	Category	No. of SAC conducted	Date of SAC conducted
1	Lalitpur	CSAUAT, Kanpur	1	05.09.2020
2	Aligarh	CSAUAT, Kanpur	2	14.01.2020 & 11.09.2020
3	Hardoi	CSAUAT, Kanpur	1	26.09.2020
4	Hathras	CSAUAT, Kanpur	1	16.10.2020
5	Kannuj	CSAUAT, Kanpur	1	17.09.2020
6	Kanpur Dehat	CSAUAT, Kanpur	1	09.09.2020
7	Kasganj	CSAUAT, Kanpur	1	22.09.2020
8	Lakhimpur-khiri-I	CSAUAT, Kanpur	1	29.12.2020
9	Raebareli	CSAUAT, Kanpur	1	31.12.2020
10	KVK, Banda	BUAT, Banda	1	16.12.2020
11	Hamirpur	BUAT, Banda	1	23.09.2020
12	Jhansi	BUAT, Banda	1	09-04-2020
13	Mahoba	BUAT, Banda	1	20.10.2020
14	Baharaich-I	NDUAT, Ayodhya	1	25.01.2020
15	Basti	NDUAT, Ayodhya	1	19.09.2020
16	Chandauli	NDUAT, Ayodhya	1	12.02.2020
17	Ghazipur-II	NDUAT, Ayodhya	1	01.02.2020
18	Gonda II	NDUAT, Ayodhya	1	31.01.2020
19	Sant Kabir Nagar	NDUAT, Ayodhya	1	19.03.2020
20	Siddharthnagar	NDUAT, Ayodhya	1	16.03.2020
21	Sonbhadra	NDUAT, Ayodhya	1	03.02.2020
22	Sultanpur II	NDUAT, Ayodhya	1	30.01.2020
23	Badaun-I	SVPUAT, Meerut	1	09.11.2020
24	Badaun-II	SVPUAT, Meerut	1	11.09.2020
25	Baghpat	SVPUAT, Meerut	1	31.01.2020
26	Bijnor	SVPUAT, Meerut	1	17.12.2020
27	Bulandshahr	SVPUAT, Meerut	1	06.03.2020
28	Gautam Budh Nagar	SVPUAT, Meerut	1	04.11.2020
29	Ghaziabad	SVPUAT, Meerut	1	06.11.2020
30	Hapur	SVPUAT, Meerut	1	17.01.2020
31	Meerut	SVPUAT, Meerut	1	22.12.2020
32	KVK Moradabad -I	SVPUAT, Meerut	1	22.01.2020
33	Moradabad-II	SVPUAT, Meerut	1	04.12.2020
34	KVK Muzaffarnagar-I	SVPUAT, Meerut	1	14.12.2020
35	KVK Muzaffarnagar-II	SVPUAT, Meerut	1	14.12.2020
36	Pilibhit	SVPUAT, Meerut	1	27.10.2020
37	Rampur	SVPUAT, Meerut	1	02.11.2020
38	Saharanpur	SVPUAT, Meerut	2	20.12.2019 & 12.16.2020
39	Sambhal	SVPUAT, Meerut	1	23.01.2020
40	KVK-Shahjahanpur	SVPUAT, Meerut	2	10.02.2020 & 08.12.2020
41	KVK, Shamli	SVPUAT, Meerut	1	21.12.2020
42	Bareilly	ICAR	1	17.11.2020
43	Deoria	ICAR	1	02.06.2020
44	KVK, Hardoi-II	ICAR	1	25.09.2020
45	Lucknow	ICAR	1	17.12.2020
46	Agra	NGO	1	19.12.2020
47	Auraiya	NGO	1	18.09.2020
48	Chitrakoot	NGO	1	30.09.2020
49	Etah	NGO	1	24.10.2020
50	Ghazipur-II	NGO	1	25.02.2020
51	LBS KVK Gonda	NGO	1	30.12.2020
52	KVK Kaushambi	NGO	1	11.11.2020
53	Pratapgarh	NGO	1	15-09-2020
54	Sitapur -I	NGO	1	29.09.2020
55	Sultanpur-I	NGO	1	25.09.2020
56	KVK, Unnao	NGO	1	21.09.2020
	<b>Total</b>		<b>69</b>	





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