



# वार्षिक प्रतिवेदन

## ANNUAL REPORT

2020-21

Sardar Vallabhbhai Patel University of  
Agriculture & Technology, Meerut - 250110 (U.P.)

सरदार वल्लभभाई पटेल कृषि एवं प्रौद्योगिक  
विश्वविद्यालय मेरठ - 250110, उत्तर प्रदेश

### **Annual Report 2020-21**

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Annual Report 2020-21

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## Preface

The present annual report for the year contains the salient achievements and activities carried out by the Sardar Vallabhbhai Patel University of Agriculture & Technology (SVPUAT). Agriculture is the primary source of livelihood for about 58% of India's population and contributes about 17% to Gross Value Added (GVA). The Indian food industry is poised for huge growth, increasing its contribution to the world food trade every year owing to its immense potential for value addition, particularly within the food processing sector. Agricultural research and development are fundamental for planned growth and sustainable development of agriculture in the country. The university is an apex organization in the field of agricultural research at the national level and plays a crucial role in promoting and accelerating agricultural research, education, extension and support in demonstrating the use of new technologies in agriculture at field level. The year 2020 saw one of the most threatening catastrophies ever witnessed by humanity: the COVID-19 pandemic tested our capabilities almost in all fields and the agricultural sector is one of them. Despite these difficulties, we have the responsibility to feed above 1.3 billion people of the country, and I am satisfied that our farmers and scientists worked hard during this difficult period and achieved about 3.4% growth of this sector. Livestock and fishery sectors have immense importance for Indian agriculture and to ensure good health of cattle and fishes is continuing working to develop test and diagnostics. SVPUAT is not only focusing on developing technologies to increase production of various agri-commodities but also working intensely with the farming community. Agricultural education is vital to develop trained and skilled human resources to take up present and future challenges confronted by Indian agriculture due to climate change and constraints to natural resources and the university is fully committed for this. During this period university issued advisories to the colleges to take necessary steps to connect with each student through online tools and guidelines were prepared for e-learning, implementation of student READY programme, conducting examinations etc. University is continued efforts in development of innovative technologies for the benefit of Indian farmers is praiseworthy. Traditionally, the farming systems were sustainable; however, those farming systems have changed rapidly from one of mixed crops and livestock to intensive integrated irrigated cropping. The diverse challenges and constraints demand a paradigm shift in formulating and implementing the agricultural research programmes to arrest slow growth in farm income vis-à-vis new global trade regulations. Optimization of various agricultural components and their integration for multi-enterprise farming systems, development of sustainable farm practices for enhanced soil health, and resource use efficiencies under diverse farming situations and farm categories will be of paramount importance for sustainable agriculture. Simultaneously, integrated approaches towards site-specific balanced nutrition, pests, weeds and crop management, precision agriculture and conservation agriculture-based management practices are the areas of research that need to be addressed through conventional and modern biotechnological tools.

I hope that university Annual Report 2020–21 will be useful to different stakeholders and boost the research and development in agriculture. I congratulate all team members who have put in a lot of efforts in collecting and editing the information and getting the report printed.



  
**R.K. Mittal**  
Vice Chancellor

## ACKNOWLEDGEMENT

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The present Annual Report for the year 2020-21 contains the salient achievements/ activities carried out by the University in the fullment of its aims and objectives concerning teaching, research and extension education in agriculture and other allied branches.

The compilation and publication of Annual Report is a collective effort of all the constituent units of the University. It was not possible for me to compile and present this report without the active cooperation of all Statutory Officers, Heads of Departments, Scientists, Teachers/Officers/Employees of the University for which I am highly grateful.

I express my deep sense of gratitude to the Hon`ble Vice-Chancellor, Prof. R. K. Mittal for his valuable suggestions and guidance in bringing out the Report.

The efforts put in by the members of Annual Report Committee comprising Dr. Harshit Verma, Assistant Professor (Sr. Sc.), Department of Veterinary Microbiology, Dr. Shriya Rawat, Assistant Professor (Sr. Sc.), Department of Veterinary Public Health & Epidemiology and Dr Prabhakar Kumar, Associate Professor & OIC, Department of Veterinary Anatomy in compiling and editing of the Report in the present shape, are highly commendable. I place on record my appreciation to all of them.

**R.S. Sengar**  
Chief Editor



विश्वविद्यालय का मुख्य उद्देश्य मानव संसाधन विकास, तकनीकी विकास एवं तकनीकियों को जन जन तक पहुँचाना है। इस उद्देश्य को लेकर विश्वविद्यालय उत्तर भारत में विशेष रूप से उत्तर प्रदेश के पश्चिमी जिलों एवं उत्तराखंड में संपूर्ण रूप से मानव संसाधन विकास, प्रौद्योगिकी निर्माण और प्रौद्योगिकी प्रसार की आवश्यकता को पूरा कर रहा है। इस विश्वविद्यालय का शिलान्यास वर्ष 2000 में उत्तर प्रदेश के विभाजन एवं गोविंद वल्लभ पंत कृषि और प्रौद्योगिकी विश्वविद्यालय, पंतनगर के उत्तराखंड राज्य का हिस्सा बन जाने के फलस्वरूप हुआ। उत्तर प्रदेश के पश्चिमी भाग के लिए कृषि और ग्रामीण विकास के क्षेत्र में गुणवत्तापूर्ण शिक्षा, अनुसंधान और विस्तार के लिए आसपास कोई कृषि विश्वविद्यालय नहीं था अतः पश्चिमी उत्तर प्रदेश की आवश्यकता को पूरा करने के लिए “सरदार वल्लभभाई पटेल कृषि एवं प्रौद्योगिकी विश्वविद्यालय” की स्थापना दिनांक 27 सितंबर, 2000 को उत्तर प्रदेश सरकार द्वारा की गई थी फलस्वरूप विश्वविद्यालय 02 अक्टूबर, 2000 को प्रभाव में आया। विश्वविद्यालय तब से ही कृषि, पशुचिकित्सा विज्ञान, जैव प्रौद्योगिकी और संबद्ध विज्ञान के क्षेत्र में शिक्षा, अनुसंधान और अन्य गतिविधियों के माध्यम से उत्तर प्रदेश में ग्रामीण लोगों के समग्र विकास के लिए तत्पर है। विश्वविद्यालय के छः घटक कॉलेज जैसे कॉलेज ऑफ एग्रीकल्चर, बायोटेक्नोलॉजी, वेटेनरी एंड एनिमल साइंस, पोस्ट हार्वेस्ट एवं खाद्य प्रौद्योगिकी, प्रौद्योगिकी एवं बागवानी और पोस्ट ग्रेजुएट की पढ़ाई चल रही है। विश्वविद्यालय कृषि में अंडरग्रेजुएट, पोस्टग्रेजुएट और डॉक्टरेट तथा जैव प्रौद्योगिकी, पशुचिकित्सा और पशुविज्ञान के क्षेत्र में अंडरग्रेजुएट और पोस्टग्रेजुएट की डिग्री कार्यक्रम चला रहा है। इन कार्यक्रमों में प्रवेश राज्य स्तर की संयुक्त कृषि और प्रौद्योगिकी प्रवेश परीक्षा और भारतीय कृषि अनुसंधान परिषद द्वारा आयोजित अखिल भारतीय परीक्षा से दिया गया है। विदेशी जैसे अफगानिस्तान तथा बोत्सवाना के छात्रों को भी विभिन्न स्नातकोत्तर कार्यक्रमों में प्रवेश दिया गया। वर्ष 2020-21 में, यूजी स्तर पर 401 छात्र, पीजी स्तर पर 98 और पीएचडी स्तर पर 66 छात्रों को विभिन्न कॉलेजों में प्रवेश दिया गया। विश्वविद्यालय का तेहरवां वार्षिक दीक्षांत समारोह 9 मार्च 2021 को श्रीमती आनंदीबेन पटेल महामहिम राज्यपाल उत्तर प्रदेश और इस विश्वविद्यालय की कुलाधिपति ने समारोह की अध्यक्षता की। कुल 295 छात्रों को विभिन्न डिग्रियाँ प्रदान की गईं, जिसमें पुरुष और महिला छात्रों का अनुपात 87.4:12.6 था। डॉ. त्रिलोचन महापात्र, राष्ट्रीय कृषि विज्ञान अकादमी, नई दिल्ली समारोह के मुख्य अतिथि थे। विश्वविद्यालय ने इस अवधि में राष्ट्रीय युवा दिवस, रविदास जयंती, गणतंत्र दिवस, अंतरराष्ट्रीय महिला दिवस, डॉ० बाबा साहेब अंबेडकर की जयंती, पृथ्वी दिवस, विश्व पशु चिकित्सा दिवस जैसे विभिन्न समारोहों को आयोजित किया। इसके अतिरिक्त आतंकरोधी दिवस, विश्व पर्यावरण दिवस, अंतरराष्ट्रीय योग दिवस, स्वतंत्रता दिवस, सर्जिकल स्ट्राइक दिवस, स्वच्छ भारत अभियान, स्वच्छता पखवारा, एकता दौड़, कौमी एकता दिवस, कृषि शिक्षा दिवस, विश्व मृदा दिवस, विश्व मानवाधिकार दिवस आदि का भी आयोजन किया गया। विश्वविद्यालय के क्रिया-कलापों को गति देने के लिए विद्वत परिषद और प्रबंध परिषद की बैठकों का आयोजन किया गया। इसके अतिरिक्त विश्वविद्यालय स्तर पर किसान मेला, रक्तदान शिविर, मतदान जागरूकता एवं राष्ट्रीय सेवा योजना द्वारा विभिन्न कार्यों को पूर्ण किया गया। विश्वविद्यालय और अनुसंधान केंद्रों पर विभिन्न अनुसंधान गतिविधियों का आयोजन किया गया। जिसमें गेहूँ,

जौ, जई, बरसीम, लोबिया, चावल, मटर, उड़द, मूंग, बीन आदि विभिन्न फसलों पर कुल 59 प्रयोग किए गये। वल्लभ बासमती-21, वल्लभ बासमती-22, वल्लभ बासमती-23, वल्लभ बासमती-24, चना (सौभाग्य, सूर्य, वल्लभ कलार चना-1, वल्लभ कबाली चना-1 और डब्ल्यूसीजी-10), वल्लभ उड़द न्यूक्लियस बीज तैयार किया गया। विभिन्न सब्जियों, केला और पपीते की फसल में विभिन्न सुधार एच०आर०सी० में किए गये। औषधिय और सुगंधित पौधे के उत्पादन के लिए मॉडल नर्सरी की स्थापना यूपी के पश्चिमी मैदानी क्षेत्रों के तहत की गई। पशुधन अनुसंधान केंद्र पर साहीवाल गायों और मुराह भैंसों का संरक्षण किया गया, जिनका उपयोग दूध उत्पादन और प्रायोगिक उद्देश्यों के लिए किया गया। इस अवधि के दौरान बीज प्रसंस्करण संयंत्र कार्यात्मक था और अरहर, धान, सरसों, मसूर, गेहूँ आदि के बीज को संशोधित किया गया। मछली, मशरूम, बायो-एजेंट, मुर्गी, बकरी, भेड़, सूअर पर छात्रों के लिए प्रायोगिक कार्यक्रम भी आयोजित किए गये। जोनल रिसर्च स्टेशन नगीना ने नगीना वल्लभ बासमती-2, नगीना वल्लभ बासमती चावल-6 को सफलतापूर्वक विकसित किया और 681 चावल जर्मप्लाज्म बनाये। जोनल रिसर्च स्टेशन बुलंदशहर ने देसी, अमेरिकी कपास जर्मप्लाज्म और एस.आर.आई विधि द्वारा धान रोपाई पर प्रयोग किए। आंचलिक अनुसंधान केंद्र, उझानी ने बोरिक, जस्ता, मोलिब्डेनम का विशिष्ट प्रकार की मिट्टी में मसूर पर प्रभाव तथा सल्फर, बोरान का लोबिया पर प्रभाव के प्रयोग किये। विश्वविद्यालय में 04 आर०के०वी०वाई० परियोजनाएं, 07 आई०सी०ए०आर० परियोजनाएं, 06 सी०एस०टी०/ डी०बी०टी० परियोजनाएं, 02 एन०एच०बी०/ एन०आई०ए०एम० परियोजनाएं, 04 स्पाइस बोर्ड, सी०एस०आई०आर०, पृथ्वी विज्ञान मंत्रालय, एन०ओ०वी०ओ०डी० एवं निजी कंपनी द्वारा प्रायोजित 05 परियोजनाओं को चलाया गया। कुल 204 शोध पत्र, 25 पुस्तकें/ पुस्तक अध्याय, 30 लोकप्रिय लेखों का प्रकाशन किया गया तथा 36 पत्रों को विभिन्न संगोष्ठियों/ सम्मेलनों में प्रस्तुत किया गया।

विश्वविद्यालय के कार्यों को किसानों तक पहुँचाने का दायित्व विश्वविद्यालय प्रसार निदेशालय एवं कृषि विज्ञान केन्द्रों के माध्यम से बखूबी किया गया। प्रसार निदेशालय एवं कृषि विज्ञान केन्द्रों द्वारा कुल 1501 विभिन्न प्रकार के प्रशिक्षण कार्यक्रम एवं 2288 क्षेत्र प्रदर्शनों को आयोजित किया गया। कृषि विज्ञान केन्द्रों के माध्यम से प्रसार निदेशालय द्वारा विभिन्न जिलों में लगभग 212 प्रक्षेत्र प्रशिक्षण भी कराये गये। विश्वविद्यालय मुख्यालय पर अखिल भारतीय किसान मेला आयोजित किया गया एवम् विश्वविद्यालय स्तर पर कृषि विज्ञान केन्द्र की दो दिवसीय आंचलिक कार्यशाला भी आयोजित की गई। विश्वविद्यालय ने मानव संसाधनों का निरंतर उन्नयन और भर्ती की है। वार्षिक वर्ष के दौरान पशुचिकित्सा और पशुविज्ञान महाविद्यालय में 30 संकाय सदस्य, जैव प्रौद्योगिकी में 05 और कृषि महाविद्यालय में 12 किये गये। नियमित आधार पर संकाय सदस्यों में कौशल विकास और ज्ञान के उन्नयन के लिए राष्ट्रीय संस्थानों और राज्य कृषि विश्वविद्यालयों में प्रशिक्षण पाठ्यक्रमों में उन्हें भेजा गया।

विश्वविद्यालय को 2020-21 में सभी स्रोतों से 26663.63 लाख की धनराशि प्राप्त हुई। जिसमें उत्तर प्रदेश राज्य सरकार ने 1945.49 लाख और भारतीय कृषि अनुसंधान परिषद ने रु 3314.00 लाख का योगदान दिया जिसमें डी०एस०टी०, डी०बी०टी०, आई०सी०ए०एम०आर०, आर०के०वी०वाई० परियोजना राशि सम्मिलित थीं।

This University virtually catered the need for Human Resource Development, Technology generation and Technology dissemination for whole of the North India in general and hill districts and western districts of Uttar Pradesh in particular, since inception. With bifurcation of U.P. in the year 2000, G.B. Pant University, Pantnagar became a part of Uttarakhand state. This created a vacuum for centre of quality education, research and extension in the field of Agriculture and rural development for western part of Uttar Pradesh. To cater the need of western UP “The Sardar Vallabhbhai Patel University of Agriculture and Technology” was established vide notification no. 3204-A/12-8-2000-400{96}99, Lucknow: Dated 27 September, 2000 by the Government of Uttar Pradesh under The UTTAR PRADESH (KRISHI EVAM PRODYOGIK VISHWAVIDYALAYA ADHINIYAM) 1958{U. P. Act XLV of 1958} to come in existence on October 02, 2000 for augmenting the opportunities for education, research and outreach activities in the field of Agriculture, Veterinary Sciences, Biotechnology and allied sciences and overall development of the rural people of Uttar Pradesh. The university is located at Modipuram on Delhi- Dehradun highway, around 12 KM from Meerut city in the north. Initially twelve constituent colleges have been proposed in the University master plan. However, only seven constituent colleges i.e College of Agriculture, Biotechnology, Veterinary and Animal Science, Technology, Post Harvest Technology, Horticulture and Post Graduate studies are operational till date and others are expected to be functional in future.

University is running the Under Graduate, Post Graduate and Doctorate degree programmes in the field of Agriculture, Biotechnology, Veterinary & Animal Sciences. The admission in these programmes is through state level Combined Agriculture and Technology Entrance Test (CATET) and All India Examination (AIRRA-UG&PG) conducted by Indian Council of Agricultural

Research (ICAR) for admission to SAU's of the country. Students from foreign countries like Afganistan, Botswana were also admitted in different post graduate programmes. During the year 2020-21, 401 students at UG level, 97 at PG level and 66 students at Ph.D level were admitted in various colleges. The thirteenth annual convocation of the university was held on 09.03.2021 in the gracious presence of Hon'ble Governor of Uttar Pradesh and Chancellor of the University Smt. Anandiben Patelji. A total 295 students were awarded UG, PG and Ph.D degrees in which male and female students' ratio was 87.4:12.6. Dr Trilochan Mohapatra, Director General, Indian Council of Agriculture Research, New Delhi was the Chief Guest of the function.

The university celebrated various functions like National Youth day on 15<sup>th</sup> January, Ravi Das Jayanti on 31<sup>st</sup> January, Republic day on 26<sup>th</sup> January, International Women day on 8<sup>th</sup> March, Dr Babasaheb Ambedkar birth anniversary on 14<sup>th</sup> April, Earth day on 22<sup>nd</sup> April, World Veterinary day on 27<sup>th</sup> April, Antiterrorism day on 21<sup>st</sup> May, World Environment day on 5<sup>th</sup> June, International Yoga day on 21<sup>st</sup> June, Independence day on 15<sup>th</sup> August, Surgical strike day on 29<sup>th</sup> September, Swachhta Abhiyan on 2<sup>nd</sup> October, Swachhta Pakhwara from 16-31 October, Run for unity on 31<sup>st</sup> October, Kaumi Ekta Diwas on 25<sup>th</sup> November, Agriculture Education day on 3<sup>rd</sup> December, World Soil day on 5<sup>th</sup> December, World Human Rights day on 10<sup>th</sup> December etc. University also organized various extra curriculum activities i.e. National Service Scheme (NSS), Kisan mela, Blood donation camp, winter help programmes, Voting awareness, Academic Council Meetings and Board of Management Meetings and faculty superannuation programme.

The university organized various research activities at university head quarter and on various research centres. Total 36 experiments were planted on various crops i.e wheat, barley, chickpea, oat, barseem, cowpea, rice, pigeon

pea, urd, moong, bean, sorghum. Nucleous seed of rice (Vallabh Basmati 21, Vallabh Basmati 22, Vallabh Basmati 23, Vallabh Basmati 24), Chickpea (Sadbhavna, Surya, Vallabh Kallar Chana-1, Vallabh Kabuli Chana-1 and WCG-10), Vallabh Urd-1 was maintained. Varietal improvement of different vegetable, banana and papaya crop was successfully conducted at HRC. Model nursery for production of medicinal and aromatic plant was established under western plain zones of UP. Livestock research center is successfully maintained Sahiwal cows and Murrah Buffaloes which were used for milk production and experimental purposes. Seed processing plant was functional during this period and processed as well as treated the seed of Arhar, Paddy, Mustard, Lentil, Wheat etc. Experimental programmes were also conducted for students on fisheries, mushroom, bioagents, poultry, goat, sheep, pigs. Zonal Research Station Nagina successfully developed Nagina Vallabh Basmati-2, Nagina Vallabh Basmati Rice-6 and maintained 681 rice germplasms. Zonal Research Station Bulandshar conducted experiments on Desi, American cotton germplasm and SRI method of paddy transplanting. Zonal Research Station, Ujhani conducted experiments on effect of boron, zinc, molybdenum on lentil in Typic Ustipsamments soil and sulphur, boron on chickpea in coarse textured soils. University is also running 06 RKVY projects, 09 ICAR projects,

06 CST/DBT projects, 01 NHB/NIAM projects, 02 Spice board, CSIR, Ministry of Earth Science, IFFCO, 01 and 03 projects sponsored by private company. In the present year total 22 fresh research proposals were submitted to RKVY, 02 DBT and 01 UPCAR. In total 204 research papers, 25 books/book chapters, 30 popular articles, 36 papers presented in the various seminars / conferences / symposiums.

The extension activities like transfer of technologies and farmers training is a mandate of university. So, Directorate of Extension and KVKs conducted variety of training programmes in total of 1501, 2288 of field demonstrations. Directorate of Extension through KVKs laid out nearly 212 on-farm trials in different districts.

The university has continuously upgrading and recruiting the human resources. During the annual year 30 faculty members in College of Veterinary and Animal Sciences, 05 in College of Biotechnology and 12 in College of Agriculture were participated for refresher and training courses in National Institutes and State Agriculture Universities for skill development and upgradation of knowledge.

The budgetary support to the university during this annual year was 26663.63 lakhs from all sources. Uttar Pradesh State Government shared 1945.49 lakhs and Indian Council of Agricultural Research contributed sum of Rs 3314.00 lakhs including DST, DBT, ICMR, RKVY project amount.



## INTRODUCTION

### About The University



The “Sardar Vallabhbhai Patel University of Agriculture and Technology” was established vide notification no. 3204-A/12-8-2000-400{96}99, Lucknow: Dated 27 September, 2000 by the Government of Uttar Pradesh under The UTTAR PRADESH (KRISHI EVAM PRODYOGIK VISHWAVIDYALAYA ADHINIYAM) 1958{U. P. Act XLV of 1958} to come in existence on October 02, 2000 for augmenting the opportunities for education, research and outreach activities in the field of Agriculture, Veterinary Sciences, Biotechnology and allied sciences and overall development of the rural people of Uttar Pradesh. The university is located at Modipuram on Delhi- Dehradun highway, around 12 KM from Meerut city in the north. Initially twelve constituent colleges have been proposed in the University master plan. During the period of report, the university has three constituent colleges, College of Agriculture, Biotechnology, Veterinary and Animal Sciences, off campus research stations and 20 KVKs spread over 18 districts viz., Badaun, Rampur, Bijnor, Muzaffarnagar, Meerut, Saharanpur, Ghaziabad, Shahjahnpur, Pilibhit, Baghpat, G.B. Nagar, Moradabad, Bulandshahr, Hapur, Shamli, Sambhal, Amroha, and Bareilly.

The main campus of University is spread over an area of 262 hectares and has different regional stations, research substations and KVKs located under different agro-climatic zones viz. Bhabhar, Tarai, Western plain and Mid-western plain zones of the State.

Sardar Vallabh Bhai Patel University of Agriculture and

Technology established as a full-fledged University has unique honor of being called “First Agriculture University of the third millennium and the 21<sup>st</sup> century”. It is committed to a unique mandate of integrating education research and extension so as to serve the rural people with following vision and mission.

#### Vision

A sound, viable, vibrant and sustainable rural development.

#### Mission

Enhancement of rural income, living and employment through excellence in education, research and extension activities in agricultural and allied sciences

#### Mandate

- Making provision for the education of the rural people of Uttar Pradesh in different branches in study, particularly agriculture, rural industry and business, and other allied subjects.
- Furthering the prosecution of research, particularly in agriculture and other allied sciences and undertaking field and extension programmes.

#### Teaching

- To create human resource, trained in agricultural and allied sciences who may cater the need of 21<sup>st</sup> century.
- To generate technically sound man power who can apply their acquired knowledge and skills to diversify and industrialize agriculture for socioeconomic transformation of the rural society.





## Research

- To generate innovative agriculture technology to make Indian agriculture globally competitive.
- To apply all possible sources of scientific interventions to the solution of the technical and practical problems of agriculture.
- To boost up basic research to accelerate the progress of agriculture with the input of fundamental knowledge.
- To solve the specific agriculture related problem, being faced by farming community.
- To formulate specific strategies for optimization of farmer's income of different holding sizes viz. large, medium, small and marginal.

## Extension

- To disseminate the innovative agriculture technologies among the farmers.
- To establish partnership with farmers, entrepreneurs and other stakeholders in agriculture for mutual benefit.
- To make the agriculture technology more demand driven.
- To facilitate validation, demonstration and adoption of appropriate Agro-technologies.
- To achieve economic and environmental sustainability through integrated management of productivity, production, marketing and end use of farm produce.
- To establish a linkage between agriculture producer and consumers in an interface mode

## ICAR ranking status of the University

Based on the recommendations of the committee and approval by the competent authority of ICAR, Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut got 35<sup>th</sup> rank for year 2020 among all the Agricultural universities of the country. In the Uttar Pradesh Agriculture universities our university ranked 1<sup>st</sup>.



Hon'ble Vice-Chancellor Chairing the Meeting of Board of Management

## Organizational Setup

Her Excellency Smt Anandiben Patel the Governor of the state of Uttar Pradesh is the Chancellor of the university and by virtue of her office she is head of the university and presides over convocations of the university. The other powers as conferred on her by university act and statutes are also exercised by her as and when required.

## Board of Management

The University has a Board of Management (BOM) as per re-enactment and amendment act 1974. The Board of Management considers and decides matters of general policies relating to the development and upliftment of the University.

The vice-chancellor is its ex-officio chairman. The other ex-officio members are Principal Secretaries of the state government to the Departments of Agriculture, Finance, Higher Education and Director of Agriculture and Animal Husbandry of Uttar Pradesh. There is 01 member representing the legislative assembly and 05 members representing (01 each) agricultural scientists, progressive farmers, live-stock breeders, distinguished industrialists and outstanding women social workers nominated by state government. Besides, 01 nominee of the ICAR and 01 representative of the registered graduate of the university are also included. Following has been the members of the BOM during 2020-21. The list of Hon'ble members of the Board of Management is given in Annexure-I.

Four meetings of Board of Management were held during the period of report. These meetings were held on 12.03.2020, 17.09.2020, 18.01.2021 and 27.02.2021 under the chairmanship of Prof. R. K. Mittal, Hon'ble Vice Chancellor put up different matters before the members to take decisions in the welfare of University and Staff.



Hon'ble Vice-chancellor chairing the Meeting of Academic Council



### Academic Council

University Academic Council is the top most body of the university after Board of management. It comprises all the officers of the university, HOD of all the departments of each of the faculty, two seniors most Associate Professors and one elected faculty secretary from each of the college. Besides making recommendations to the Board of Management, the Academic Council also took various important decisions for the maintenance of high standard of activities related to faculty and students in the university by controlling and regulating the quality of teaching, education and recruitment rules for faculty and staff in the university.

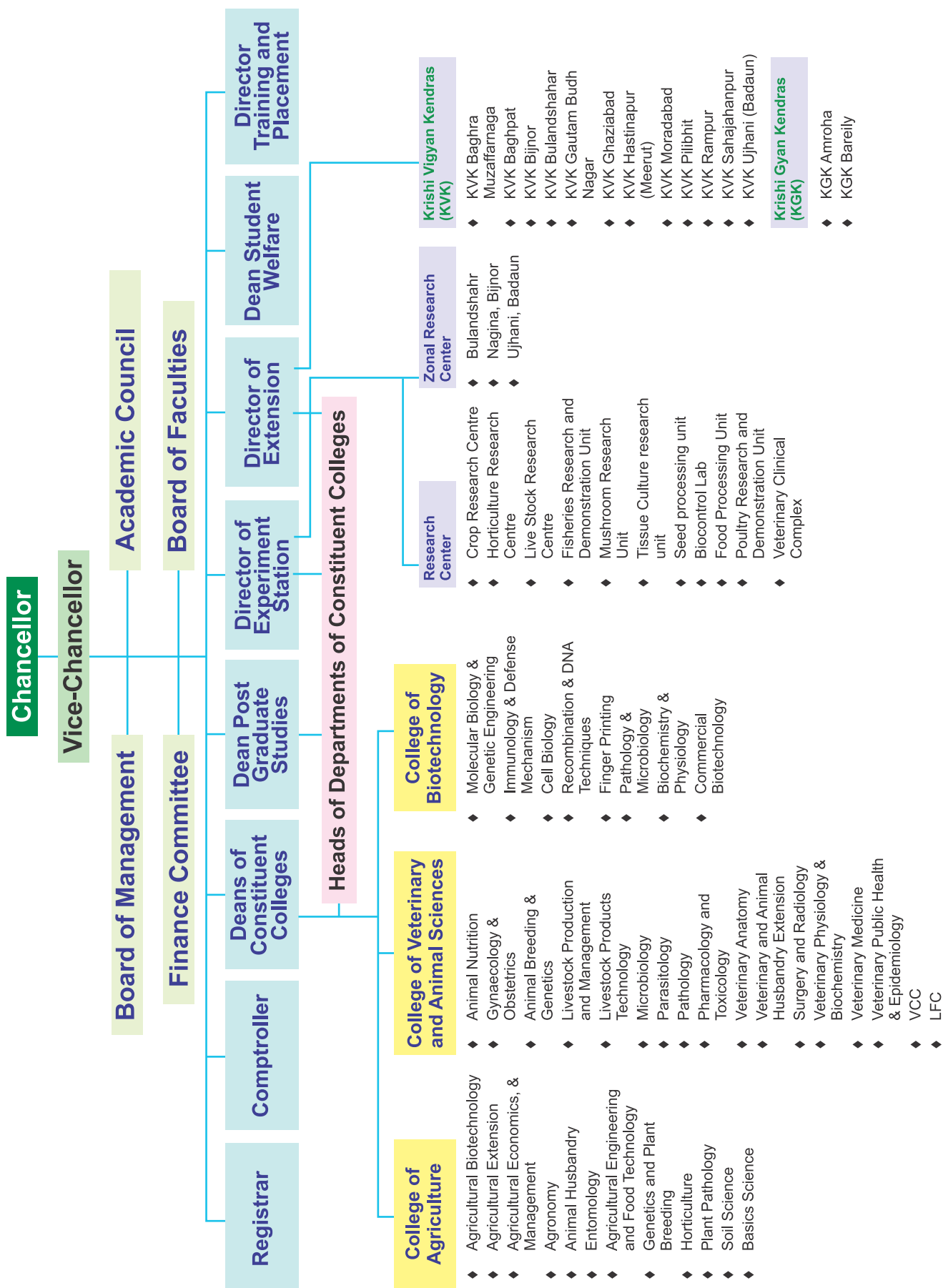
During the period under report, Prof. R.K. Mittal, Vice Chancellor was the Chairman and Dr. B.R. Singh being Registrar of the university was acted as Member Secretary of the Academic Council. The list of members of the Academic Council is given in Annexure-II. During the period of report four meetings

of academic council viz. 30.5.2020, 5.8.2020, 15.01.2021 and 23.02.2021 were held under the chairmanship of Prof. R. K. Mittal, Hon'ble Vice Chancellor of SVPUA&T.

### Officers of the University:

The Chancellor, Vice Chancellor, Director of Research, Dean Post Graduate (PG) Studies, Director of Extension Education, Dean Faculty of Agriculture, Dean Faculty of Biotechnology, Dean Faculty of Veterinary & Animal Sciences, Dean Faculty of Horticulture, Dean Faculty of Post Harvest Technology & Food Processing, Dean Faculty of Technology, Registrar, Comptroller, Dean Students' Welfare, Librarian etc are Officers of the University. List of all the officers of the university is given in Annexure III.

The detailed organizational set-up as well as administrative and functional aspects are given in following chart.





## EDUCATIONAL ACTIVITIES

The educational programme in the “Sardar Vallabhbhai Patel University of Agriculture and Technology” covers higher education in the field of Agriculture, Biotechnology, Veterinary Science & Animal Husbandary, Food Technology, Horticulture and Technology in which Under Graduate (UG), Post Graduate (PG) and Ph.D. programmes are running in different colleges (Table 1).

### Admissions Process

In pursuance of the provisions of clause (3) of Article 384 of the Constitution of India, the Governor is pleased to order the publication of the following English translation of the Uttar Pradesh Krishi Evam Prodyogik Vishwavidyalaya (Dwitiya Sanshodhan) Adhiniyam, 2006 (Uttar Pradesh Adhiniyam Sankhya 16 of 2006) as passed by the Uttar Pradesh Legislature and assented to by the Governor on May 23, 2006. (3-a). According to this provision, the admission in all courses of study of the four State Agricultural Universities of Uttar Pradesh state will be taken by the joint Entrance Examination for admission. This joint examination is called as 'Combined Agriculture and Technology Entrance Test (CATET)' at State level.

The Registrar shall be responsible for organizing, by rotation, joint Entrance Examination for admission in all courses of study of the four State Agricultural Universities.

Applications for the admission to different courses were invited through the advertisement published in leading daily news papers. The applications were processed and entrance tests were conducted through computer OMR system and merit list was prepared. Result was declared on website to call candidates for personal interview/counselling (Table 2).

During the period under report, 401 students at UG level, 97 students at PG level and 66 students at Ph.D. level were admitted in various courses at six constituent colleges of the university viz. College of Agriculture, College of Biotechnology, College of Veterinary Science & Animal Husbandary, College of Horticulture, College of Technology and College of Post Harvest Technology & Food Processing. A total 175 students at UG level, 72 students at PG level and 48 students at Ph.D. level have successfully completed their respective courses during the period under report (Table 3 & 4).



**Table 1. List of Academic Programme**

S.N.	Name of the Constituent College/Faculty	Bachelor's		Master's		Ph.D.	
		Programme	Duration	Programme	Duration	Programme	Duration
1	Agriculture College	B.Sc. (Hons.) Agriculture	4 years	Agril. Biotechnology	2 years	Agril. Biotechnology	Minimum 3 years
				Agril. Economics	2 years	Agril. Economics	Minimum 3 years
				Agril. Extension & Comm.	2 years	Agril. Extension & Comm.	Minimum 3 years
				Agronomy	2 years	Agronomy	Minimum 3 years
				Animal Husbandry	2 years	Animal Husbandry	Minimum 3 years
				Entomology	2 years	Entomology	Minimum 3 years
				Genetics & Plant Breeding	2 years	Genetics & Plant Breeding	Minimum 3 years
				Horticulture	2 years	Horticulture	Minimum 3 years
				Plant Pathology	2 years	Plant Pathology	Minimum 3 years
				Soil Science & Agril. Chem.	2 years	Soil Science & Agril. Chem.	Minimum 3 years
2	College of Biotechnology	B.Tech. (Biotechnology)	4 years	Agril. Engg. (Process and Food Engg.)	2 years	Agril. Engg. (Process and Food Engg.)	Minimum 3 years
				Plant Molecular Biology & Biotechnology	2 years	Plant Molecular Biology & Biotechnology	Minimum 3 years
3	College of Veterinary & Animal Science	B.V.Sc. & A.H.	5 years 6 month	Veterinary Microbiology	2 years	Veterinary and Animal Husbandry Extension Education	Minimum 3 years
				Veterinary Pathology	2 years	Animal Nutrition	Minimum 3 years
				Veterinary Physiology	2 years	Livestock Production and Management	Minimum 3 years



				Animal Genetics & Breeding	2 years	Veterinary Anatomy	Minimum 3 years
				Veterinary Parasitology	2 years	Veterinary Biochemistry	Minimum 3 years
				Livestock Production Management	2 years	Veterinary Medicine	Minimum 3 years
				Livestock Products Technology	2 years	Veterinary Parasitology	Minimum 3 years
				Veterinary Pharmacology & Toxicology	2 years	Veterinary Pathology	Minimum 3 years
				Veterinary Anatomy	2 years	Veterinary Pharmacology and Toxicology	Minimum 3 years
				Animal Nutrition	2 years	Veterinary Physiology	Minimum 3 years
				Veterinary Surgery	2 years		
				Veterinary Medicine	2 years		
				Veterinary Gynaecology	2 years		
4	College of Horticulture	BSc. (Horticulture)	4 years	Veterinary Extension Education	2 years		
				Veterinary Parasitology	2 years		
				Floriculture and Landscaping Architecture	2 years	Floriculture and Landscaping Architecture	Minimum 3 years
				Fruit Science	2 years	Fruit Science	Minimum 3 years
				Vegetable Science	2 years	Vegetable Science	Minimum 3 years
				Agricultural Engineering (Process and Food Engg.)	2 years	Agricultural Engineering (Process and Food Engg.)	Minimum 3 years
				Agricultural Engineering (Farm Machinery and Power Engineering)	2 years	Agricultural Engineering (Farm Machinery and Power Engineering)	Minimum 3 years
				Agricultural Engineering (Soil and Water Cons. Engineering)	2 years	Agricultural Engineering (Soil and Water Cons. Engineering)	Minimum 3 years
				-	-	-	-
				-	-	-	-
5	College of Technology	B.Tech (Ag. Engineering)	4 years				
6	College of PostHarvest & Food Technology	B.Tech(Food Technology)	4 years				
		B.Tech. (Dairy Technology)	4 years				



Table 2. Number of seats in different degree programmes

Under Graduate (UG) Programmes						
S.N.	Programmes	Free	Paid	NRI	ICAR	Total
1	B.Sc. (Hons.) Agriculture	72	30	15	18	135
2	B.Tech. (Biotechnology)	90	30	15	-	135
3	B. V. Sc. & A. H.	48	20	12	-	80
Master's Programmes						
1	Agricultural Biotechnology	05	01	02	02	10
2	Agricultural Economics	02	-	01	01	04
3	Agricultural Extension and Comm.	03	01	02	02	08
4	Agronomy	06	01	02	03	12
5	Animal Husbandry	03	01	02	02	08
6	Entomology	05	01	02	02	10
7	Genetics & Plant Breeding	02	-	01	01	04
8	Horticulture	06	01	02	02	11
9	Plant Pathology	05	01	02	02	10
10	Soil Science & Agril. Chemistry	05	01	02	02	10
11	M.Tech. Agricultural Engineering (Process and Food Engineering)	08	02	02	-	12
12	M.Tech./ M.Sc. Biotechnology	18	04	02	-	24
13	Animal Genetics and Breeding	02	01	-	-	03
14	Veterinary Biochemistry	02	01	-	-	03
15	Veterinary Microbiology	02	01	-	-	03
16	Veterinary Pathology	02	01	-	-	03
17	Veterinary Physiology	02	01	-	-	03
18	Livestock Production and Management	02	01	-	-	03
19	Veterinary Parasitology	02	01	-	-	03



Ph.D. Programmes									
1	Agricultural Biotechnology	05	01	02	02	02	02	10	10
2	Agricultural Extension and Comm.	03	01	02	02	01	01	07	07
3	Agri. Engg. (Process & Food Engg.)	06	02	02	02	-	-	10	10
4	Agronomy	04	01	02	02	02	02	09	09
5	Animal Husbandry	03	01	02	02	01	01	07	07
6	Entomology	04	01	02	02	02	02	09	09
7	Genetics & Plant Breeding	02	-	01	01	01	01	04	04
8	Horticulture	04	01	02	02	02	02	09	09
9	Plant Pathology	04	01	02	02	02	02	09	09
10	Soil Science & Agril. Chemistry	04	01	02	02	02	02	09	09

**Table 3. Student status in university/ Constituent College/ Faculty**

SN	Name of College	Parameters	Numbers					
			Bachelor's	Master's	Ph.D.	Others including Diploma	Total	
1	COA	Intake (F <sup>Y</sup> Yr)	135	65	48	-	248	
		Enrolled (F <sup>Y</sup> Yr)	127	56	39	-	222	
		Passed Out	103	54	48	-	205	
2	COB	Intake (F <sup>Y</sup> Yr)	135	12	08	-	155	
		Enrolled (F <sup>Y</sup> Yr)	89	09	05	-	103	
		Passed Out	58	17	-	-	75	
3	COVAS	Intake (F <sup>Y</sup> Yr)	80	64	17	-	161	
		Enrolled (F <sup>Y</sup> Yr)	74	18	6	-	98	
		Passed Out	14	01	-	-	15	
4	College of Horticulture	Intake (F <sup>Y</sup> Yr)	44	12	12	-	68	
		Enrolled (F <sup>Y</sup> Yr)	41	11	12	-	64	
		Passed Out	-	-	-	-	-	
5	College of Post Harvest Technology & Food Processing	Intake (F <sup>Y</sup> Yr)	44	-	-	-	44	
		Enrolled (F <sup>Y</sup> Yr)	36	-	-	-	36	
		Passed Out	-	-	-	-	-	
6	College of Technology	Intake (1 <sup>st</sup> Yr)	44	04	04	-	52	
		Enrolled (1 <sup>st</sup> Yr)	34	03	04	-	41	
		Passed Out	-	-	-	-	-	



Table 4. Gender pattern amongst students Enrolled in university

SN	Name of College	Parameters	Numbers (including 1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> , 4 <sup>th</sup> , 5 <sup>th</sup> , and 6 <sup>th</sup> year as applicable)			
			Bachelor's	Master's	Ph. D.	Total
1	College of Agriculture	Male	90	39	30	159
		Female	37	17	09	63
		Total	127	56	39	222
2	College of Biotechnology	Male	42	02	04	48
		Female	47	07	01	55
		Total	89	09	05	103
3	College of Veterinary & Animal Sciences	Male	60	17	06	83
		Female	14	01	-	15
		Total	74	18	06	98
4	College of Horticulture	Male	36	09	11	56
		Female	05	02	01	08
		Total	41	11	12	64
5	College of Post Harvest Technology & Food Processing	Male	25	-	-	25
		Female	11	-	-	11
		Total	36	-	-	36
6	College of Technology	Male	31	03	02	36
		Female	03	-	02	05
		Total	34	03	04	41
Grand Total in University (1+2+3+4+5+6)		Male	284	70	53	407
		Female	117	27	13	157
		Total	401	97	66	564



## College of Agriculture



The college of Agriculture was established in 2000 as the first constituent college of Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut within the existing infrastructure and manpower of western campus of Govind Ballabh Pant University of Agriculture and Technology, Pantnagar consequent upon the division of the Uttar Pradesh. Initially, the college was started with admission of 23 students in undergraduate degree programme in the first batch of 2001-02. Since then the college has been progressively gaining new dimensions in all the spheres be it building, faculty, supporting staff, class rooms, laboratories etc. The Post Graduate and Ph.D programmes in different departments of the college were started in 2003-04. The college occupied its new building at the main campus of University in 2004. Presently, college is offering the undergraduate degree of B.Sc. (Ag), Master degree of M.Sc. (Ag)/ M. Tech and Doctoral degree in all the departments of agriculture. The college is having the defined objective of imparting quality education to acquire education and knowledge in the field of agricultural sciences.

The College of agriculture is well established college with 17 well maintained classrooms with white/green Boards and comfortable seating arrangement. The major class rooms are interactive having facilities of Audio-Visual teaching and presentation and DVD'S like LCD projection systems. The each department has separate

class room UG and PG Lab, Conference Room remaining five class rooms are reserve for various demonstration, presentation, seminar and other development activities. Centralized computer lab facility with 30 computers, connected with high speed internet is in the college. Computer lab has been established with collaborative arrangements for free training and award of certificate by IBM. The College of Agriculture has an examination cell with all required facilities for conducting semester final examination of the college.

The Phyto-sanitary certification laboratory, Nematology Laboratory, Soil testing Laboratory, White Grub Laboratory, Sericulture Laboratory, Molecular Biology Laboratory and Food Processing Laboratory etc. are some important laboratories of the college. Organization of education, cultural and literary events is a key activity in education institutions. Looking into the needs, the college of agriculture has a well-equipped mini auditorium with seating capacity of 200 persons. Newer infrastructure developed during the period is Practical Crop Production (PCP), Rural Agriculture Work Experience (RAWE) and Experiential Learning in the undergraduate program in college of agriculture. Board of Faculty of Agriculture (BOFA) is the statutory body to take decision on any academic issue related with college of agriculture, after a thorough discussion among its members



## College of Biotechnology



The College of Biotechnology was started during 2004 and formally inaugurated on April 25, 2005 in the premises of Sardar Vallabhbhai Patel University of Agriculture and Technology with admission of 64 students for undergraduate program in Biotechnology (B. Tech., Biotech). The establishment of College of Biotechnology nearly 13 years ago is first of its kind in the country and reflects a global outlook with the vision to set a revolutionary pace with the advancement of technology in the area of this frontier science of Biotechnology. The basic goal of the collage is to produce highly skilled and qualified Graduates and Postgraduates in the niche area of Biotechnology. Researches on various biotechnological approaches like Recombinant DNA Technology, Cell Biology, Molecular Biology, Biochemistry, Microbiology and Biofertilizer, Tissue culture, Aerobic Rice, Bioinformatics etc. are in process in order to train the students and to help in the outreach of technology to farmers. The undergraduate course curriculum is running as per recommendations of Vth Dean's Committee of Indian Council of Agricultural Research. The college has 17 class rooms with ultra modern

facilities like audio-visual, DVD's like LCD projection system for teaching. All the departments of the college of biotechnology have been made equipped with undergraduate and post graduate laboratories for teaching as well as research. College is also utilizing bioinformatics tools for retrieval of biological information for that a bioinformatic centre is established under DBT scheme. College of Biotechnology has got one centre of excellence in agri-biotechnology with a complete funding from U. P. Council of Science and Technology GOUP. Mandate of this centre is to impart high level training in molecular biology and genetic engineering for combating biotic and abiotic stresses in different crops. Biofertilizer laboratory and Biofertilizer Production Units are also functional in the college. Examination cell of the college is responsible for conducting examinations. College is having Mini Auditorium with seating capacity of 250 persons. Board of Faculty of Biotechnology is a statutory body to take decision on any academic issue related with college of biotechnology, after a thorough discussion among its members.





## College of Veterinary & Animal Sciences



The College of Veterinary and Animal Sciences (COVAS) was established as a constituent unit of the University in 2008, to scale up rural economy by ensuring proper animal health care and management through competent human resource generation. The Veterinary Council of India (VCI) permitted the admission of first batch of B.V.Sc. & A.H. degree programme in academic session 2011. As per VCI-2016 there are 17 constituents' departments viz. Veterinary Anatomy, Veterinary Physiology & Biochemistry, Livestock Production Management, Veterinary Microbiology, Veterinary Pathology, Animal Genetics & Breeding, Animal Nutrition, Veterinary Pharmacology and Toxicology, Veterinary Public Health and Epidemiology, Veterinary Parasitology, Livestock Products Technology, Veterinary and Animal Husbandry Extension Education, Veterinary Surgery and Radiology, Veterinary Medicine, Veterinary Gynaecology & Obstetrics, Veterinary Clinical Complex and Livestock Farm Complex. The Board of Faculty of College of Veterinary & Animal Sciences is a statutory body to take decision on any academic issue related with College of Veterinary & Animal Sciences, after a thorough discussion among its members.

The College of Veterinary & Animal Sciences is having a sound physical infrastructure. The undergraduate teaching is performed in modernized smart class rooms. Besides, each department also has a postgraduate teaching cum seminar hall equipped with board, comfortable seating arrangement and LCD projector system for interactive teaching. The college is having a centralized computer lab with five computers, all

connected with high speed internet. Veterinary Clinical Complex is functional since 2015 and catering the needs of clinical teaching, diagnosis, treatment of animals and veterinary extension through its different units. The building is equipped with latest instruments and technologies. It is a coordinating unit between clinical, para-clinical and supporting departments for teaching, providing material for research, platform for treatment of seriously sick animals and instant diagnostic facilities. The department comprises of various sub units like-Treatment Section, Small Animal Examination Room, Dispensing Section, Computerized Registration Counter, Central Diagnostic Laboratory, Teaching Diagnostic Laboratory, Farmer's Rest Rooms, Indoor Wards, and two additional sections viz., Radiology and gynaecology which provides specialized diagnostic, surgical and obstetrical services for small and large animals. Livestock Farm Complex (LFC), established under the recent guidelines of Veterinary Council of India, has the mandate to train B.V. Sc. & A.H students in the day to day operations of the livestock farm besides closely collaborating with other departments in the teaching of Livestock Production Management, Animal Nutrition, Animal Genetics and Breeding and other animal science courses. The department of Livestock Farm Complex is functional from the year 2011. The Livestock Farm Complex (LFC) is comprises of Cow Unit, Buffalo Unit, Heifer Unit, Poultry Unit, Piggery Unit, Fodder production unit, Feed formulation Unit and Milking Unit. The poultry research and training centre (PRTC) is also functional since 2014.



## COLLEGE OF TECHNOLOGY



The College of Technology, was established during the year 2013-14 and inaugurated by Honorable Dr. A.P.J. Abdul Kalam, the then Hon'ble President of India, on 06.03.2014. The foundation stone of the college was laid down by Dr. P. Das Deputy Director General, I.C.A.R., New Delhi on 26.08.2006. This college is an integral part of Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut, U.P. The College of Technology Building was Constructed by the government order No: 774/67- कृषिअ-06 -500 (14) 03 dated 31-03-2006 and an amount of Rs 1453.32 lacs had been sanction by the U. P. Govt. The Construction of building was Started in may 2006, then after government had revised the total cost building of from Rs 1453.32 lacs to Rs 2197.63 lacs by government order No: 267/67- द'f'kv- 10 -500 (14) 03

Dated 08-11-2010. The College Building is Ground + two story. The building Construction was completed in year 2013 with the total plinth area of 14626.27 sq.m.

The provision of following departments has been made in the college of technology.

1. Agricultural Engineering
2. Soil and water conservation Engg.
3. Irrigation and Drainage Engg.
4. Agricultural Machinery and power Engg.
5. Post harvest Technology
6. Civil Engg.
7. Electrical Engg.
8. Mechanical Engg.
9. Electronics Engg.



## COLLEGE OF POST-HARVEST TECHNOLOGY & FOOD PROCESSING



The College of Post-Harvest Technology and Food Processing has established in 2019. The first batch of B.Tech. (Food Technology) has been started from the Academic Session 2019-2020 with the strength of 44 students. The college has presently 4 UG class rooms and 2 PG class rooms with white/green boards and comfortable seating arrangement. A committee room is interactive having facilities of audio-visual teaching and presentation & DVD'S like LCD projection systems enhance the instructional and teaching capabilities. Many laboratories are equipped with various types of lab equipment's and machineries.

### **Mandate**

- To impart teaching for the development of human resources in the area of food processing and technology
- To undertake basic, applied, strategic and adaptive engineering and technology research in post-production sector of produce of plant origin, livestock and aquaculture produce including agriculture structures and environmental control, quality and food safety.

- To promote professional skills and knowledge through meaningful Hands-on- Training for innovations of new processing technology.
- To expose the students to various aspects of entrepreneurship development programmes with industrial environment so as to understand the scope, functions and job responsibility in food industries.
- To acquaint students with ongoing extension activities and transfer of technology.
- To develop and strengthen linkages with the growers/farmers, private and public sector food processing enterprises in the mandated areas.

### **Infrastructure**

The College Post-Harvest Technology and Food Processing is equipped with 08 lecture theatres furnished with comfortable seating arrangement and quality green boards for instructions. The college has one seminar room equipped with LCD projector where faculty meeting and seminars are being organized.

### **Examination Cell**

The College of Post-Harvest Technology and Food Processing has an examination cell with all required facilities for conducting examination of the college.





## FACULTY OF POST GRADUATE STUDIES



The mission of the Faculty for Postgraduate Studies is to promote excellence amongst postgraduate staff and students through responsive teaching, postgraduate studies, research and supervision, scholarship and instructional pastoral support. The faculty for Postgraduate Studies has the mandate to coordinate the University Postgraduate Programmes in a manner that uniform quality control regulations and procedures are strictly adhered to and high academic standards are maintained. The Centre is mandated to build capacity for the expression of excellence in teaching, student research supervision and innovation amongst postgraduate staff.

The roles and responsibilities of the Faculty for Postgraduate Studies are to:

- Coordinate and monitor the running of University postgraduate programmes; including postgraduate training programmes to ensure quality control and the maintenance of high academic standards.
- Coordinate the consideration and processing of postgraduate student research proposals, theses and dissertations. Review all postgraduate programmes offered.
- Coordinate and administer viva voce examinations.
- Provide academic support services to postgraduate students such as those of study programme information dissemination, supervision, academic Counselling enrolment, registration, examination, compensatory capacity enhancement, postgraduate level ICT empowerment and access to electronic

resources for study purposes, postgraduate study resource mobilisation.

- Provide postgraduate students with opportunities to interact and determine their own welfare through the various scientific bodies.
- Operate administrative and academic structures for applying research ethics in postgraduate training and in the use of animal subjects in research conducted by postgraduate students.
- Empower academic staff, through short courses, workshops and seminars, to teach at the postgraduate level, conduct effective student supervision and lead viable collaborative staff/student research teams.
- Consider and assess the viability, quality and accreditation issues of new postgraduate programmes; Initiate, formulate, interpret, and review postgraduate studies regulations.

Our mission is to produce graduates who will be mentally resourceful, intellectually equipped, entrepreneurially self-dependent, futuristically visionary and responsibility sensitive. The University has a number of linkages with institutions and industry at National level that offer opportunities for internship and exchange to faculty and students. Our faculty and students have continued to win grants and Fellowships, including INSPIRE-DST to carry out postgraduate and postdoctoral research work. Masters and Doctrate thesis for the session 2020-21 is shown in Table 6.

**Table 5. Master's and Doctoral students' thesis**

S. No.	Name of the Student	Id. No.	Thesis Title	Advisor Name
<b>MASTERS DEGREE</b>				
<b>Agricultural Biotechnology</b>				
1.	Mr. Vyankatesh Dhanraj Bagul	4357	Morpho- Physio- Biochemical and molecular characterization of selected potato ( <i>Solanum tubersum</i> L.) varieties under drought stress	Dr. R. S. Sengar
<b>Agricultural Extension</b>				
2.	Ms. Tshoganetso Tsamodimo	4255	A Study on Utilization Pattern of Mass Media Tools by the Postgraduate Students	Dr. Dan Singh
3.	Mr. Ram Babu	4197	A Study on Awareness and Impact of Kisan Credit Card Scheme Among the Farmers of Hapur District	Dr. V. K. Singh
4.	Ms. Mupparapu Deepika	4368	A Study on Entrepreneurial Behaviour of Women through Self Help Groups in Chittoor District of Andhra Pradesh	Dr. R. N. Yadav
5.	Mr. Rohit Chandrakant Walake	4369	A Study on Impact of Swachh Bharat Mission on Rural Community of Uttar Pradesh	Dr. D. K. Singh
<b>Agonomy</b>				
6.	Ms. Swati Singh	4202	Effect of Different Natural Farming Treatments on Growth, Yield and Economics of Black Gram ( <i>Vigna Mungo</i> L.) in Western U.P.	Dr. P. K. Singh
7.	Mr. Virendra Kumar	4201	Effect of Micro-nutrients application over different levels of RDF on performance of Mung Bean ( <i>Vigna radiate</i> L. Wilczek)	Dr. R. B. Yadav
8.	Ms. Preeti Chaudhary	4198	Effect of Weed Management Practices on Weed Dynamics Yield and Monetary Returns of Rice ( <i>Oryza sativa</i> L.)	Dr. Vivek
9.	Mr. G. Naveen Kumar	4365	Effect of Planting Techniques with Organic and in organic nutrient management for improving crop, water, productivity, profitability and soil health in rice ( <i>oryza sativa</i> L.) under rice-wheat cropping system	Dr. P. K. Singh
10.	Ms. Divya Rajput	4200	Effect of micronutrient application on growth, yield and quality of Urdbean ( <i>Vigna mungo</i> L.)	Dr. Mukesh Kumar
11.	Mr. Bal Veer Singh	4199	Effect of Doses and Sources of Nutrients on Growth, Yield and Nutrient Uptake in Timely Sown Wheat ( <i>Triticum aestivum</i> L.)	Dr. N. S. Rana



12.	Mr. Reenu Kumar	2800	Soil Water Dynamics and Crop Productivity of Wheat in Rice-Wheat System under Different Establishment Methods in <i>Typic Ustochrept</i>	Dr. R. K. Naresh
13.	Mr. Ishwar D Ullagaddi	4366	Response of Basmati rice ( <i>Oryza sativa</i> L.) cultivars to different planting geometry in western plain zone of UP	Dr. K. G. Yadav
Entomology				
14.	Ms. Elluru Sireesha	4363	Evaluation of novel insecticides against spotted pod borer <i>Maruca vitrata</i> (Geyer) in greengram	Dr. Gaje Singh
15.	Ms. Nivethitha K.	4364	Studies on the seasonal incidence and management of shoot and fruit borer <i>Leucinodes orbonalis</i> (Guene) on brinjal in Western Plain Zone of U.P.	Dr. Rajendra Singh
16.	Mr. Reetesh Pratap Singh	4209	Studies on development and feeding potential of the green lacewing, <i>Chrysoperia zastrowi</i> (Stephens) on different hosts	Dr. Rajendra Singh
17.	Mr. Pradeep Kumar Verma	4210	Bio-efficacy of newer insecticides against Brown plant hopper, <i>Nilaparvata lugens</i> (Stal.) in Basmati rice	Dr. Hem Singh
18.	Mr. Avinash Kumar S. Verma	4212	Occurrence and insecticidal management of leaf hopper ( <i>Amrasca biguttula biguttula</i> Ishida) and whitefly ( <i>Bemisia tabaci</i> Gennadius) in okra ( <i>Abelmoschus esculentus</i> )	Dr. Hem Singh
19.	Mr. Bhanu Pratap Singh	4211	Studies on insect pest complex and management of stem borer <i>Chilo Partillus</i> (Swinhoe) through Biopesticides and insecticides in maize ( <i>Zea mays</i> L.)	Dr. D. V. Singh
Genetics & Plant Breeding				
20.	Mr. Chiranjeev	4213	Genetic Variability and Stability analysis in Greengram ( <i>Vigna radiata</i> (L.) Wilczek)	Dr. Atar Singh
21.	Mr. Siddamurthy Subbareddy	4360	Genetic Diversity and Association analysis in Rice ( <i>Oryza sativa</i> L.)	Dr. L. K. Gangwar
Horticulture				
22.	Mr. Kefayatullah Wasiq	4220	Effect of different doses of cycocel and maleic hydrazide on growth and flower yield of African marigold ( <i>Tagetes erecta</i> L.) cv. Pusa narangi gainda	Dr. Satya Prakash
23.	Mr. Khursheed Alam	4215	Genetic variability and divergence analysis in okra ( <i>Abelmoschus esculentus</i> (L.) Moench)	Dr. M. K. Singh
24.	Mr. Deep Kumar	4219	Genetic Diversity analysis by using morphological approaches in bottle gourd ( <i>Legenaria siceraria</i> (Molina) Standl.) germplasm in India	Dr. Vipin Kumar
25.	Mr. Vibhu Pandey	4218	Effect of time and intensity of shoot pruning on fruit size, yield and quality of guava ( <i>Psidium guajava</i> L.) under jester U.P. conditions	Dr. Arvind Kumar



26.	Mr. Deepesh Keshari	4214	Studies on genetic divergence and molecular characterization in cucumber ( <i>Cucumis sativus</i> L.)	Dr. Bijendra Singh
27.	Mr. Prabhat Kumar Pandey	4216	Effect of plant growth regulators on micropropagation of mulberry ( <i>Morus Alba</i> L.) through In Vitro culture of shoot tip and nodal explants	Dr. Yogesh Prasad
28.	Ms. Khushboo Sharma	4370	Effect of Integrated nutrients and foliar spray of bio-regulators on growth, yield and quality of okra ( <i>Abelmoschus esculentus</i> (L.) Moench) under western plain zone	Dr. Mukesh Kumar
29.	Mr. Vimal Chandra Garge	4217	Effect of nutrient sources on growth, yield and quality of French marigold ( <i>Tagetes patula</i> L.) in north western plain zone of Uttar Pradesh	Dr. Sunil Malik
Plant Pathology				
30.	Mr. Naimish Kumar	4221	Studies on Effect of different additives on spawn production of lion's mane mushroom ( <i>Herizium species</i> )	Dr. Gopal Singh
31.	Mr. Ravi Kumar	4223	Studies on management of black scurf ( <i>Rhizoctonia tuberosum</i> L.)	Dr. Ramesh Singh
32.	Ms. Anjali Arya	2748	Studies on management of Collar rot of Lentil caused by <i>Sclerotium rotsii</i>	Dr. Prashant Mishra
33.	Mr. Manoj H.K.	4221	Studies on antagonistic potential of native isolates of Trichoderma for the management of rice root knot nematode ( <i>Meloidogyne graminicola</i> )	Dr. Kamal Khilari
34.	Mr. Ankit Kumar Singh	4222	Studies on management of sheath blight in rice using different isolates of <i>Pseudomonas fluorescens</i> and <i>Trichoderma harzianum</i>	Dr. Ramji Singh
Soil Science				
35.	Mr. Maharaj Singh	4227	Effect of Different Moisture Conservation Techniques on Nutrient Availability, Water Use Efficiency and Productivity of Wheat ( <i>Triticum aestivum</i> L.)	Dr. U. P. Shahi
36.	Ms. Yakshi Agarwal	4225	Effect of Micro-nutrients Application on Nutrient Removal and Performance of Urdbean in Sandy Loam Soil	Dr. S. P. Singh
37.	Mr. Nishant Chauhan	4362	Soil Health Assessment of KVK Amroha	Dr. Ashok Kumar
38.	Mr. Ram Pal	2821	Effect of Tillage Practices on rice crop water productivity and soil health	Dr. Yogesh Kumar
39.	Dr. Shubha Tripathi	2807	Effect of Rhizobium Inoculation methods on root nodulation nutrient uptake and productivity of black gram ( <i>Vigna mungo</i> L. Hepper)	Dr. Satendra Kumar



Agricultural Engineering & Food Technology				
40.	Ms. Puja	4228	Development of Value added Product from Carrot and Assessment of their storability	Dr. Suresh Chandra
41.	Ms. Deepali Mudgal	4229	Studies on rying Characteristics of Beetroot ( <i>Beta vulgaris</i> L.) and Development of its Chips with Quality Evaluation	Dr. B. R. Singh
42.	Mr. Pankaj Kumar	4230	Development and Quality Evaluation of Value added Mixed Fruit RT S Beverages	Dr. Vivak Kumar
43.	Mr. Rahul Kumar	3695	Effect of Pre-treatment, Drying method and cooking medium on yield, Quality and Storability of Potato Sticks	Dr. Vivek Kumar
Animal Husbandry				
44.	Mr. Abdul Bashir Azizi	4207	Study of feeding practices of dairy animals in small holder production system in western U.P.	Dr. Nazim Ali
45.	Mr. Rajesh Kumar	4205	Growth performance and immune- biochemical status of growing murreh buffalo heifers supplemented with astaxanthin and copper	Dr. D. S. Sahu
46.	Mr. Sudhir Kumar	4204	Influence of Betaine supplementation on immune biochemical and growth performance of murreh buffalo calves	Dr. S. P. Yadav
COLLEGE OF VETERINARY & ANIMAL SCIENCES				
Veterinary Pathology				
47.	Mr. Sagar Saraswat	4231	Studies on pathology of hoof affections in equines	Dr. Aarti Bhatele
College of Biotechnology				
M. Tech (Biotechnology)				
48.	Ms. Swati	2922	Transcriptomic analysis through <i>Denovo</i> assembly, mapping and annotation for identification of salinity stress tolerant genes in rice ( <i>Oryza sativa</i> )	Dr. Anil Sirohi
49.	Ms. Gargi	2873	Impact of elevated temperature stress on aroma and its gene expression in photosensitive basmati rice	Dr. Ravindra Kumar
50.	Ms. Monika Chaudhary	4239	Impact of elevated temperature stress on aroma and its gene expression in different development stages of photosensitive basmati rice	Dr. Sweta Mishra
51.	Ms. Meenakshi Verma	4241	Evaluation of cytotoxic effects of biocontrol agents using plant assay systems and in-silico analysis in <i>Cicer arietinum</i>	Dr. Shalini Gupta
52.	Ms. Akansha Singh	2874	Assessment of molecular markers to detect the DNA damage caused by <i>Parthenium</i> plant extract	Dr. Shalini Gupta



53.	Mr. Ankit Agarwal	4237	Investigation of Phytochemicals and antimicrobial activity of Tulsi ( <i>Ocinum sanctum</i> L.)	Dr. Pankaj Chauhan
54.	Mr. Abhinay Singh	4240	Identification and in silico analysis of drought resistance gene in rice ( <i>Oryza sativa</i> L.)	Dr. Anil Sirohi
55.	Mr. Varun Saxena	3076	Biochemical analysis of hydroponically grown chickpea ( <i>Cicer arietinum</i> L.) with different levels of zinc	Dr. Pankaj Kumar
56.	Ms. Mansi Tyagi	4236	Studies on characterization of microorganisms for solubilization of Phosphate, Potassium and Zinc	Dr. Akash Tomar
S. No.	Name of the Student	Id. No.	Thesis Title	Advisor Name
DOCTORAL DEGREE				
Agriculture Biotechnology				
1.	Ms. Vishakha Burman	3425	E- screening and expression analysis of curcuminoid biosynthesis gene in turmeric with Phytochemical characterization and their activity analysis	Dr. Vaishali
2.	Ms. Nisha Malik	3704	In-VITRO Propagation, Phytochemical Antioxidant Screening and DNA Fingerprinting of Papaya ( <i>Carica papaya</i> L.)	Dr. R. S. Sengar
3.	Ms. Khyati Lehari	1508	Analysis and characterization of heat stress gene/s in Wheat ( <i>Triticum Aestivum</i> L.) Genotypes	Dr. Mukesh Kumar
4.	Mr. Shende Rajendra Tukaram	3977	In-silico genome wide identification and expression analysis of WRKY gene family members in chickpea ( <i>Cicer arietinum</i> L.) in response to drought stress	Dr. R. S. Sengar
5.	Mr. Arun Kumar	2566	Physio- Biochemical and molecular characterization of selected rice ( <i>Oryza sativa</i> L.) genotypes to drought at flowering stage	Dr. R. S. Sengar
6.	Mrs. Madhuri Gupta	1235	Identification and Expression analysis of genes involved in endodormancy break and sprouting in potato ( <i>Solanum tubersum</i> L.)	Dr. Pushpendra Kumar
7.	Mr. Vivek Rana	2966	Identification and characterization of certain MADS Box / SPL genes and their expression during organogenesis in Petunia ( <i>Petunia axillaris</i> )	Dr. Pushpendra Kumar
Agronomy				
8.	Ms. Lali Jat	3976	Nutrient Management in Wheat for Improving Fertilizer use efficiency, productivity and soil health in Indo - Gangetic Plains of U.P.	Dr. N. S. Rana



9.	Mr. Ajay Yadav	3983	Studies on the effect of different gelling agents for micropropagation of banana ( <i>Musa paradisiacal</i> L.) variety udhayam	Dr. Yogesh Prasad
10.	Mr. Rajendra Kumar	1825	Improving Crop Water Productivity in Wheat under Rice- Wheat Cropping System through Tillage Crop Establishment Methods in Sandy Loam Soil of Western Uttar Pradesh	Dr. R. K. Naresh
Entomology				
11.	Mr. Abhishek Yadav	3982	Screening of genotypes and evaluation of bio-rational and botanical insecticides against major pod borers in black gram	Dr. Gaje Singh
12.	Mohammad Rizwan	3981	Ecological Studies and Integrated Pest Management (IPM) of major insect-pests of basmati rice	Dr. S. K. Sachan
13.	Mr. Daggumati Vamsi Chandrasekhar Reddy	3992	Studies on host plant resistance of maize against spotted stem borer, <i>Chilo partellus</i> (Swinhoe)	Dr. D. V. Singh
14.	Mr. Gajendra Singh	3980	Biology and evaluation of bio- pesticides and novel insecticides against brinjal shoot and fruit borer, <i>Leucinodes orbonalis</i> (GUENEE)	Dr. D. V. Singh
15.	Mr. Ankush Kumar	3434	Isolation and Pathogenicity of nuclear polyhydrosis virus against <i>Helicoverpa Armigera</i> (HUBNER) in Chickpea Crop	Dr. Rajendra Singh
16.	Mr. Mahender Pratap Gautam	3979	Development of IPM module for sustainable management of diamondback moth ( <i>Plutella xylostella</i> L.) and insecticides residues analysis in cabbage ( <i>Brassica oleracea</i> L.)	Dr. Hem Singh
Genetics & Plant Breeding				
17.	Mr. Mayank Chaudhary	3393	Combining ability and heterosis analysis in relation to yield and yield components in forage sorghum ( <i>Sorghum bicolor</i> L. Moench)	Dr. S. K. Singh
18.	Mr. Amit Kumar	3396	Studies on heterosis, genetic analysis and character association in chickpea ( <i>Cicer arietinum</i> L.)	Dr. Mukesh Kumar
19.	Mr. Rohit Kumar	3394	Gene expression of salt tolerance in rice ( <i>Oryza sativa</i> L.) using gene specific markers	Dr. Pooran Chand
Horticulture				
20.	Mr. Ramlakhan Maurya	3714	Effect of Growth Regulators in in-Vitro micropropagation and morpho-molecular characterization in carnation ( <i>Dianthus caryophyllus</i> L.)	Dr. Mukesh Kumar
21.	Ms. Archi Gupta	3400	Study of Heterosis and screening of table pea for powdery mildew resistance using molecular marker	Dr. Bijendra Singh



22.	Mr. Amit Kumar	3984	Effect of different sources of nutrients and mulching on sustainable production of Cauliflower ( <i>Brassica oleracea</i> var. <i>botrytis</i> L.) cv. Pusa Ashwani	Dr. Mukesh Kumar
23.	Mr. Mohit Chaudhary	1565	Effect of organic fertilizers complemented with chemical fertilizers on vegetative, nutritional and productive parameters	Dr. Sumil Malik
Plant Pathology				
24.	Mr. Sandeep Kumar	3715	Studies on effect of different non-chemical additives and botanicals on production of oyster mushroom	Dr. Gopal Singh
25.	Mr. Akash Pandey	3985	Studies on Compatibility of <i>Trichoderma harzianum</i> and <i>Pseudomonas fluorescens</i> in wheat crop under water deficit condition	Dr. Ramji Singh
26.	Mr. Abhishek Kumar	2995	Studies on induced biochemical changes and management of root knot nematode ( <i>Meloidogyne graminicola</i> ) in rice crop	Dr. Kamal Khilari
27.	Mr. Gaurav Kumar Yadav	3986	Development of integrated disease management modules for major fungal disease of basmati rice and fungicide residue analysis	Dr. Ramesh Singh
Soil Science and Agricultural Chemistry				
28.	Mr. Prashant Deo Singh	3989	Assessment of Physico- Chemical properties under Different Levels of Compaction for Soil Health Rating of Different Textured Soil	Dr. Ashok Kumar
29.	Mr. Anand Singh	3988	Effect of New Formulation of Micronutrients on Soil Fertility, Nutrient Grain Density and Yield of Wheat in Sandy Loam Soil of Western Uttar Pradesh	Dr. U. P. Shahi
Agricultural Engineering				
30.	Ms. Vaishali	3991	Standardization of Processing Parameters for Development of Potato Products and Assessment of Quality	Prof. Samsher
31.	Mr. Vipul Chaudhary	3416	Studies on Drying Behaviour of Bael ( <i>Aegle marmelos</i> ) and development of Value Added Products	Dr. Vivak Kumar
32.	Mr. Ankur Mahendra Arya	2075	Assessment of Engineering Properties of Jackfruit Seeds and Functional Properties of its Flour	Dr. B. R. Singh
33.	Mr. Kavindra Singh	1462	Development, Standardization and Preservation of jiggery and its product from sugarcane juice by using herbal clarifying agent	Dr. Suresh Chandra



## DEAN OF STUDENT WELFARE (DSW)

After creation of Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut, the office of Dean, Students' Welfare, Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut, was established. This office is looking after various students' activities/facilities including sports, culture, fellowships, recreation, health *etc.* Moreover, dignitaries of different fields are invited to share their thoughts, experiences and views among staff and students.

### 1. Students Amenities:

#### A. Hostel

Hostel environment plays an important role in the development of personality and character of the students. Good hostel facilities are provided to all the undergraduate and post-graduate students of the University with an attached mess. In some of the hostels, self-managed mess is governed by the students while some are managed by contract system under the supervision of Hostel Warden. Hostel Wardens are appointed in each Hostel for maintenance of student facilities and solving the residential problems of the students.

Separate hostel accommodation for boys and girls are available at the University campus. The girl boarders are housed in Shaheed Bhagat Singh Girls Hostel, Sarojini Bhawan Girls Hostel and New Girls Hostel. Male boarders are housed in ten hostels namely Gandhi Bhawan, Subhash Bhawan, Tagore Bhawan, CV Raman Hostel, Nehru Bhawan, APJ Abdul Kalam Hostel, Khurana Hostel, Type IA Block, Type IB Block, Type IC Block and International Hostel with adequate furniture and fixture facility. Spacious and well-furnished dining hall, common room, lawn, courtyard, CTV with cable/dish connection, water purifier, geyser in washrooms *etc.*, have also been provided in the hostels. International Hostel with single room suites for foreign students with facility of kitchenette and attached rest rooms.

#### Health Facilities

Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut, has developed a University Hospital, for providing better health facility to students and staff. Special facility of Physician for various specialties are made available in campus. University hospital has 24 hours ambulance facility for emergency

### 2. Physical Education Programme:

Physical Education and Sports play vital role for development and maintenance of personality, physical

fitness, health and body build up of the students. Along with the development of academic career of the students, this university also strives hard to take care of physical fitness and personality development of the students by involving them in physical education, sports, cultural, adventurous activities *etc.* at University level under the direct guidance of Dean Students Welfare.

#### (a) Sports Activities: Covid-19

##### Sports Facilities Available in the University:

The stadium, Volleyball court, Basket Ball, Kabbadi, Table Tennis, Kho Kho, Gymnasium, Mini Gymnasium at Girls Hostel, Badminton hall, Indoor games and sports equipments and Efforts are being made to further strengthen and develop sports infrastructure and facilities with modern sports amenities.

Foundation Day : Zoom Meeting

##### Group Insurance Scheme:

Medical Assistance to Students: Health Centre, Health Insurance *etc.*:

- Every year the University avails the medical assistance facility for the students and staff through the University health centre.
- During the year under report University has implemented an "Yuva Raksha" insurance scheme for students. Under this scheme, from each student Rs.355 /- are collected as security insurance and forwarded to Oriental Insurance Corporation of India. As per the agreement between the University and the insurance company, in case of any mishap, accident the claim is made to insurance company through proper channel. The amount of claim is up to Rs.500000/- for death and Rs. 100000/- for parent of the student's death.

##### Scholarships/Fellowships

The University takes all efforts for finding out scholarships, different types of monetary channels so the needy students may not turn away from the main-stream of education. Our efforts are mainly to bring the down-trodden, economically weaker and needy students to come in the flow of education. There are two major types of scholarships: University related and sponsored by Government. The institutional financial aids were available in time for all the students of the faculties. Besides, all the financial aids were disbursed in time during last four years. The details of various scholarships and financial aids are given ahead.



- Award of Ph.D. Scholarship/Fellowship: Rs. 1500 per month
- Scholarship and fees available from Samaj Kalyan, Meerut.
- Scholarship from Mandi Parishad. B.Sc. M.Sc. 3000/- Ph.D 6000/-
- ICAR Junior Research Fellowship
- ICAR Senior Research Fellowship
- UGC M. Tech Fellowship for ST/SC students. Rs. 5000/- 15000 contingency
- U.G.C. Rajiv Gandhi National Fellowship for SC/ST unemployed students.
- Maulana Azad National Fellowship (UGC) 16000/- 18000/-
- Indira Gandhi National Fellowship (Post Graduate Indira Gandhi National Fellowship for single girl child) 2000/ per month

Sl. No.	Name of Scholarship /Fellowship		2020-21	
			No. of Students	Amount
1.	Samaj Kalyan Scholarship Meerut	SC	159/156	85,54,661.00
		ST	6/5	2,37,680
		OBC	445/437	1,80,63,303.00
		GEN	244/241	1,05,18,441.00
		MINORITY	33/32	13,63,320.00
2	Ph.D. Scholarship From University		24	5,67,000.00
3	PDF WM		01	3,72,000.00
4	SRF from ICAR		06	14,62,479.00
5	JRF from ICAR		00	00.00
6	NTS from ICAR-UG		20	7,06,500.00
7	NTS from ICAR-PG		29	12,69,422.00
8	DST-Inspire Fellowship From UGC		06	24,77,734.00
9	Other State Scholarship		01	88,000.00
10	Scholarship Ad to India Afghanistan Batch 2019-20		06	21,40,000.00
11	Ministry of tribal Affairs Scholarship		01	3,66,500.00
12	National Fellowship for OBC		01	3,80,000.00
13	Single Child Fellowship		01	1,20,000.00
14	National Fellowship of Defense		01	36,200.00
Total			959	4,89,03,470.00





## CELEBRATION

### Convocation

Thirteenth convocation of SVPUA&T, Meerut was held on 09.03.2021 at Gandhi Hall to confer the degree for the academic year 2020-2021. Her Excellency the governor of the state of U.P. & the Chancellor of the university Shri Anandi Ben Patelji presided over the thirteenth

convocation of the university. Dr. Triloachan Mohapatra, Director General, ICAR, New Delhi delivered the convocation address as chief guest during the 13<sup>th</sup> convocation of SVPUA&T, Meerut.



Hon'ble Vice-Chancellor has welcomed the Chief Guest & Governor of Uttar Pradesh

## GLIMPSES OF THIRTEENTH CONVOCATION SVPUA&T, MEERUT



Student receiving degree by the Chief Guest Dr. Triloachan Mohapatra & Vice Chancellor, SVPUAT



Student receiving degree by the Chief Guest Dr. Triloachan Mohapatra & Vice Chancellor, SVPUAT



Convocation Team with the Guests & Vice Chancellor, SVPUAT

## DIRECTORATE OF RESEARCH

Uttar Pradesh is one of the most populous and comparatively bigger States of the country. There are 9 agro-climatic zones in this state. Out of 9 agro-climatic zones three, namely – Bhabhar and Tarai, Western Plain and Mid Western Plain Zones falls under the area jurisdiction of Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut. The area consists of

four revenue divisions *i.e.* Meerut, Saharanpur, Moradabad and Barelilly comprising total 18 districts, *namely* – Meerut, Ghaziabad, Baghpat, G.B. Nagar, Bulandshahr, Saharanpur, Muzaffarnagar, Moradabad, Bijnore, Rampur, J.P. Nagar, Barelilly, Badaun, Pilibhit, Shamli, Hapur, Sambhal and Shahjahanpur.

### Area Jurisdiction of SVPuat Meerut



#### Agroclimatic Zone of U.P.

1. Bhabhar and Tarai Zone	5. Central Plain Zone
2. Western Plain Zone	6. Bundelkhand Zone
3. Mid Western Plain Zone	7. North Eastern Plain Zone
4. South Western Plain Zone	8. Eastern Plain Zone
	9. Vidhva Zone

#### University H.Q.

KVKs	13
KGKs	01
Research Centre	03
New Sanctioned KVK	07
Total districts	18

The livelihood of rural people mainly oscillates around crop cultivation and animal husbandry. Research activities in the field of agriculture and allied sector have been constantly contributing towards ensuring livelihood and income security. At the same time certain new challenges like declining water resources, soil health deterioration have become major constraints in achieving sustainable production. Such production limiting factors call for serious research efforts for ensuring food and fodder security in the State. Under such situations our research programmes centered on water saving farming, soil health improving practices, agrobiodiversity, and conservation and integrated farming.

Characteristic features of agroclimatic zones falling under university operational area:

1. Bhabhar and Tarai Zone : Just below the foot hills of Himalayas, a narrow strip of land is known as Bhabhar which covers part of Saharanpur and Bijnore districts of the state. Tarai comprises of the central part of Saharanpur district, northern portion of Bijnore, Moradabad, Rampur, Barelilly, Pilibhit and Shahjahanpur. Temperature vary from 4.3°C to 38.4°C, while, Relative Humidity varies between 39% in the month of May to 81.7% in the month of July. Average rainfall is 1400 mm. Soil is alluvial in nature, low to medium in phosphorus, medium to high in potassium and high in organic matter. The main crops of the area are wheat and rice. Gram and lentil are the major pulses while rapeseed and mustard occupy the principal position as oilseed crops. Potato, tomato, cole crops, vegetable pea and





cucurbits are among the vegetable for the area and mango, guava, litchi, papaya are the major fruits being grown in this zone.

2. **Western Plain Zone :** This zone is highly productive with light loam soil situated between the Ganga and Yamuna rivers and their tributaries. This zone includes districts of Meerut, Baghpat, Muzaffarnagar, Ghaziabad, Gautam Budh Nagar, Bulandshahr and part of Saharanpur. Temperature vary from 1.5°C to 43.2°C, while, Relative Humidity varies between 32% to 85.0%. Average rainfall is 795 mm. Cropping system of the zone oscillate around Sugarcane. Major crops of the zone comprise of sugarcane, wheat, rice, maize, bajara, blackgram, chickpea, groundnut and mustard. Potato, onion, tomato, pea, cole crops, chillies are the major vegetables and mango, litchi, grape, guava and papaya are the major fruit cultivated in the zone. Floriculture is also practiced in this zone.

### 3. Mid Western Plain Zone:

This zone comprised of the districts of Badaun, Shahjahanpur. J.P. Nagar and part of Moradabad, Rampur, Bareilly and Pilibhit. Average annual rainfall is 1032 mm. The temperature ranges from 4.5°C to 45.4°C. The soil of the region is mostly alluvial. Soils are neutral to moderately alkaline having medium organic matter. Wheat, rice, sugarcane, bajra, Sorghum, maize, groundnut, rape-seed and mustard, gram, peas, lentil, urd, pigeon pea are the major field crops. Potato, brinjal, cauliflower are the major vegetable crops. Mentha cultivation is also being practiced in this zone at large scale.

#### Research Mandate

- To generate income and employment in the sector of agriculture and make Indian agriculture globally competitive.
- To achieve economic and environmental

sustainability through integrated management of production, marketing and end-use of farm produce.

- To develop separate research strategies for large, medium, small and marginal farmers.
- Transformation of Agriculture being a production unit towards a business unit of the global market.
- Emphases on natural resources management and bio-agricultural system.
- Increase in production through integrated farming system with minimum cost and eco-friendly technology.
- Use of Biotechnology in different crop management.
- Women empowerment and farmers participatory approaches.

#### Major Thrust Areas

- Developing precision irrigation systems requiring low volume of water.
- Developing technology for sustainable improvement of soil health and fertility with bias on organic components.
- Emphasizing organic farming technology in prevailing crop production systems.
- IPNM and IPM technology of combating soil health and pests' problems.
- Strengthening fruits, vegetables, floricultural, herbal and spices research activities.
- Promoting entrepreneurship vocations trade like poultry, mushroom, sericulture, apiculture, fisheries, piggery, goatary and dairying for diversification-based agriculture.
- Post harvest technology and value addition of the crop produce for export purposes.
- Promoting aromatic and medicinal plants and floriculture for developing entrepreneurship for export.
- Development of programmes for improvement of buffalo, cattle and sheep.

## Research Units Headquarter

1	Crop Research Center	8	Seed Processing Unit
2	Horticulture Research Center	9	Vermi compost Unit
3	Livestock Research Center	10	Technology park
4	Fisheries Research and Demonstration Unit	11	Mushroom Production Center
5	Poultry Research and Demonstration Centre	12	Bio-agents production center
6	Instructional Livestock Farm Complex	13	Golden jubilee Forage Garden
7	Seed Production Center Chirori	14	Organic Research Block

### 1. Crop Research Center:

University has 9.9 ha land at its Crop Research Center

(CRC) located at Chirodi which has been divided into 11 plots. The overall quality of CRC soil appears to be poor

to medium except for certain parameters. Majority of soil samples showed moderately slow to moderate in hydraulic conductivity (0.48- 1.8 and 1.8-6.24 cm/hr) and infiltration rate (0.5-2.0 and 2.0-6.5 cm/hr) which may be attributed due to poor OC, low porosity and high BD. A positive and strongly significant relation was observed between HC, IR with OC and Porosity while negative correlation was found between HC, IR and Bulk density. Soil pH range between 6.7 to 8.6 at surface and all the samplers belongs to neutral to alkaline range. The electrical conductivity of the surface soil ranged from 0.12 to 0.26 dSm<sup>-1</sup>. The percent organic carbon content of surface soil samples was in the range of 0.28-0.98 %. Soils of CRC classified based on pH, EC (1:2 soil: water ratio), OC, HC, IR, BD were neutral to strongly alkaline, majority of soils falls under very low EC (0-0.15 dSm<sup>-1</sup>) and low organic carbon (<0.5%), the available nitrogen of samples was in the range of 153.03 to 386.4 kg/ha and were in low nutrient index range (1.21 NI), the available phosphorus of samples range between 17.92 to 26.88 kg ha<sup>-1</sup> for and falls in medium nutrient index range (2.21 NI) while the available potassium of

samples range between 114.24 to 455.8 kg/ha and falls in high nutrient index range (2.63 NI). As per the nutrient status of the study area and each nutrient index level (i.e., low, medium and high), the soils of CRC were categorized into low-medium-high (L M H) category based on available N, P and K concentrations. Ca/Mg ratio of the study area varied from 1.6-3.06 while Mg/K ratio varied from 2.88 to 16.42. Soil of study area was found in sufficient range for available Cu, Zn, Fe, and Mn. Faculty Members and PG Students of various departments of University conducted their research experiments on field crops at Crop Research Centre.

Total 51 Experiments were planted During 2020-21 on various crops i.e. Wheat, barley, Indian Mustard, Chickpea, Oat, Barseem, Cowpea, Rice, Pigeon pea, Urd, Moong bean, Sorghum etc. by the PG, Ph.D students and faculty members of Soil science, Agronomy, Entomology, Pathology, Genetics and plant breeding Departments of college of Agriculture. Apart from this National Institute of plant genome Research, New Delhi also conduct the field trials on Chickpea, Mustard, Lentil, Foxtail, Rice, Groundnut etc for molecular studies.



View of experiment on Indian Mustard at CRC Chirodi



View of experiment on Wheat at CRC Chirodi

**Maintenance of Nucleus seed:** Nucleus Seed Was maintain of field crops varieties developed by university. The details are given below

**Rice:** Vallabh Basmati 21, Vallabh Basmati 22, Vallabh Basmati 23 and Vallabh Basmati 24.





**Chickpea:** Sadbhavna, Surya, Vallabh Kallar Chana-1, Vallabh Kabuli Chana-1 and WCG-10.

**Urd:** Vallabh Urd-1.

**Breeder seed:** 6.10, 5.61, 1.75 and 10.50 Qt. Breeder seed was produced of Rice variety namely Vallabh Basmati -21, Vallabh Basmati -22 Vallabh Basmati-23 and Vallabh Basmati-24 respectively.



Maintenance of nucleus seed of rice variety  
Vallabh Basmati 22 at CRC Chirodi



View of Nucleus seed production of Vallabh  
Urd-1 variety at CRC Main campus

## 2. Horticulture Research Center

Horticulture Research Center (HRC) of the university divided in to two blocks situated at old building and at main campus (Siwaya block). Both blocks are having the total area of 12.21 Ha. Out of these the total area under Siwaya block is 9.20 ha. Orchard is 5.78 ha. open area is 3.56 ha, area under building/road/irrigation channel is 1.64 ha and green/net house is 0.20 ha.

### Research Mandate

- To develop separate research strategies for large, medium, small and marginal farmers.
- To generate income and employment in the sector of agriculture and make Indian agriculture globally competitive.
- To achieve economic and environmental sustainability through integrated management of production, marketing and end-use of farm produce.
- Transformation of Agriculture being a production unit towards a business unit of the global market.

- Emphases on natural resources management and bio-agricultural system.
- Increase in production through horticultural crops with minimum cost and eco-friendly technology.
- Promoting aromatic and medicinal plants and floriculture for developing entrepreneurship for export.
- Promoting the crop diversification through horticultural crops.

### Major thrust areas

1. Strengthening fruits, vegetables, floricultural, herbal and spices research activities.
2. Developing technology for sustainable improvement of soil health and fertility with bias on organic components.
3. Emphasizing organic farming technology in prevailing crop production systems.
4. Post harvest technology and value addition of the crop produce for export purposes.



5. Crop Improvement

6. Crop Production

### Major crops under experimentation:

**Fruits:** Mango, Guava, Litchi, Bael, Aonla, Jamun, citrus, Papaya, Grapes, Pear, Peach, Custard apple, Loquat, Lemon, Sapota, Kinnow, Pomegranate, Malta, Litchi, Falsa, Ber, Karonda *etc.*

**Vegetables:** Cole crops, Cruciferae crops, Cucurbits, Potato, Onion, Garlic and Spices *etc.*

**Flowers:** Gladiolus, Marigold, Chrysanthemum *etc.*

**Medicinal and Aromatic Plants:** More than 40 types of Aromatic, medicinal, spices and plantation crops

### Experiments conducted at HRC

During the period 36 experiments on different aspects of horticulture have been conducted at HRC. The details given blow :

- 1 Studies on Heterosis, combining ability and molecular screening of bottle gourd for biotic resistance.
- 2 Study of genetic diversity in pumpkin.
- 3 To studies on Heterosis and combining ability for grown yield and quality traits of cucumber.
- 4 Effect of plant growth regulator on flower induction and genetic diversity analysis using molecular marker in Brinjal.
- 5 Effect of Nutrient management of growth and yield of Garlic.
- 6 Impact of GA<sub>3</sub> on growth and flowering parameters of African Marigold var. Pusa narangi in western Plan Zone of U.P.
- 7 D<sub>2</sub> analysis and direct and indirect selection parameter for yield and its component in Gladiolus.
- 8 Effect of pinching and disbudding on growth and yield of chrysanthemum.
- 9 In vitro propagation of pomegranate (*Punica granatum* L.) and their genetic fidelity assessment using morpho-physio-biochemical and molecular tools.
- 10 Assessment of genetic variation in Mango (*Mangifera indica* L.) based on molecular markers.
- 11 Effect of rooting media on germination, shoot and root growth of Acid lime (*Citrus aurantifolia* Swingle).
- 12 Studies on heterosis and charater association analysis in Papaya (*Carica papaya* L.).
- 13 Effect of Plant growth regulators on micro propagation of mulberry (*Morus alba* L.) through in-vitro culture of shoot tip and nodal plants.
- 14 Studies on morphological and bearing behavior of Guava (*Psidium guajava* L.) Cultivars under western Uttar Pradesh."
- 15 Effect of auxin and cytokinin on callus induction, shoot multiplication and root initiation in Dragon fruit (*Hylocereas undatus* (Haworth) Britton & Rose
- 16 Effects of pruning on growth, flowering, fruiting and quality of Guava (*Psidium guajava* L.) varieties Under high density conditions.
- 17 Genetic analysis for yield and its component traits in Bottle gourd.
- 18 Genetic diversity analysis in okra using morphological characters.
- 19 Studies on combining ability and heterosis for yield and it contributes in okra.
- 20 Evaluation of different elite Mango (*Mangifera indica*) varieties for NWPZ of UP
- 21 Evaluation of different elite Guava (*Psidium guajava*) varieties for NWPZ of UP
- 22 Evaluation of different elite Pear (*Pyrus commumis*) varieties for NWPZ of UP
- 23 Effect of integrated use of manure and fertilizer on growth and yield of Potato (*Solanum tuberosum* L.) cv. Kufri mohan.
- 24 Effect of nutrients management practices on growth and yield of coriander (*Coriander sativum* L.) var. Sarvati.
- 25 Effect of nutrients management practices on growth and yield of Garlic (*Allium sativum* L.) var. G-282.
- 26 Effect of Beejamrit and Jeevamrit on growth and yield of Onion (*Allium cepa* L.) cv. NHRDF Red-3.
- 27 Characterization and evaluation of different germplasm of Onion (*Allium cepa* L.) for NWPZ of UP.
- 28 Characterization and evaluation of different germplasm of Garlic (*Allium sativum* L.) for NWPZ of UP
- 29 Characterization and evaluation of different germplasm of vegetable mustard (Saag Sarson) for NWPZ of UP.
- 30 Studies on vegetative growth, flowering and yield of different varieties of Banana.
- 31 Studies on vegetative growth, flowering and yield of different varieties of Grapes.
- 32 Varietal trail of Turmeric
- 33 Germplasm (42) evaluation of turmeric
- 34 Seed production of turmeric
- 35 Crossing programme of papaya
- 36 Established a cafeteria block of improved cultivars of Vegetables crops.



### Seed production

For enhancing the crop diversification and increasing in farmer's income through horticultural crops, HRC is producing and distributing the seed of different vegetable crops and sapling of different fruit and medicinal crops. The major crops under seed production are: Okra, Coriander, Fenugreek, Fennel, Bottle gourd, Sponge gourd, Colocassia, Pea, Beans, Turnip, Radish, carrot, Vegetable mustard, Garlic, Kalonji, tomato, brinjal, turmeric, fennel and Palak etc.

### 3. Livestock Research Center

University has a Livestock Research Center at headquarter where research experiments of post graduate students and faculty members of department of animal science and college of veterinary are being carried out.



Seed production of Garlic var G-282

Apart from this milk produce at Livestock Research Center is being used for university employee. Two breeds of cattle and Buffalo are being maintained at Livestock Research Center namely Sahiwal cow and Murrah Buffalo respectively.

### Milk Production and income generated through milk during year 2020-21

S. No.	Cow milk (kg.)	Income generated (Rs.)	Buffalo milk (Kg.)	Income generated (Rs.)	Total income (Rs.)
1.	21688.00	886753.00	43001.50	2037205.00	2923958.00

**Total income generated** (for the financial year 2020-21) - Rs. **3438858.00** {2923958.00 (income generated through milk sale) + 514900.00 (income generated through animal auction)}.

**Expenditure - 5814428.00** {around Rs. 2934130.00 (labor wages) + 1850000.00 (concentrate feed) + 205615.00 (seed and fertilizer) + 365167.00 (diesel) + 459516.00 (others)}

### Details of animals at Livestock Research Centre

#### Bovines Species maintained at LRC Cattle and Buffaloes

Sahiwal Cattle					
	Total	Adults cows	> 1 year	1 – 3 year	< 3 year
Female stock	44	19	08	16	01
Male stock	32	-	19	10	3
	<b>76</b>	<b>19</b>	<b>13</b>	<b>25</b>	<b>4</b>

Murrah Buffaloes					
	Total	Adults Buffaloes	> 1 year	1 – 3 year	< 3 year
Female stock	68	20	20	18	10
Male stock	22	-	17	02	03
	<b>90</b>	<b>20</b>	<b>37</b>	<b>20</b>	<b>13</b>

### Animal housing facility available at Livestock Research Centre

S. No.	Animal house	No.
1.	Conventional barn	
2.	Semi – intensive housing (low shed structure)	03
3.	Semi – intensive housing (high shed structure)	01
4.	Animal experimental house	01
5.	Feed and forage storage	03
6.	Animal parturition house	01
7.	Animal isolation house	01



**4. Fodder Production at Livestock Research Centre****Rabi Season, 2020-21****a. University Campus**

Name of crops	Average Area	Status
Barseem+ Mustard green fodder	09acre	Fed to livestock
Oat green fodder	10acre	Fed to livestock

**b. Chirodi Farm**

Name of crops	Average Area	Status
Oat green fodder	24.0 acre	Fed to livestock
Barley green fodder	14.0acre	Fed to livestock

**Research work conducted/ongoing at LRC by the various Departments**

S. N.	Name of student	Research topic	Department	College
1	Shambhavi Mishra	Studies on fertility associated factors and MX2 gene expression for early pregnancy diagnosis.	Veterinary Gynaecology	COVAS
2	Aman Srivastav	Studies on expression of CCL8 & CXCL 10 as early pregnancy marker in Buffalo.	Veterinary Gynaecology	COVAS
3	Vaibhav Arya	Formulation of area specific mineral mixture for Meerut district and effect of its supplementation on the performance of buffalo heifers.	Animal Nutrition	COVAS
4	Rajesh Kumar	Effect of dietary betaine supplementation on growth performance, immune and biochemical profile of murrah buffalo calves.	Animal Husbandry	COA
5	Ayush Maurya	Impact of nickel supplementation on growth, antioxidant and immune status of Sahiwal growing heifers.	Animal Husbandry	COA
6	Jai Prakash Prajapati	Influence of vanadium supplementation on growth performance, immune – antioxidant and blood biochemical status of growing Murrah buffalo calves	Animal Husbandry	COA

**Seed production farm, Chirodi**

University has seed production farm with an area of 136.44 ha for the production of breeder foundation/

certified/ TL seed of field crops improved varieties. The details given blow

**Kharif 2020****PADDY**

Variety	Class of Seed	Net Weight	Area (Ha)
PB-1509	F/S	221.69	39.50
PB-1509	C/S	188.58	
PB-1121	F/S	135.47	
PB-1	F/S	46.47	
PB-1728	F/S	26.59	
PB-1718	F/S	141.11	
PS-5	F/S	8.18	
PB 1637	F/S	155.06	
	Commercial/ Mixture	21.45	
	<b>Total</b>	<b>944.60</b>	

## Rabi 2020-21

### WHEAT

Variety	Class of Seed	Net Weight	Area (Ha)
DBW 17	B/S	108.84	61.50
DBW 173	F/S	248.97	
DBW71	F/S	222.25	
DBW 90	B/S	32.46	
DBW 90	C/S	43.56	
DBW 88	B/S	34.95	
WB 02	F/S	48.12	
PBW 226	F/S	448.65	
DBW 187	F/S	394.23	
HD 3226	F/S	208.25	
DBW-222	F/S	303.91	
Mixture		66.15	
	<b>Total</b>	<b>2160.34</b>	

### MUSTARD

<b>PUSA VIJYA / NRCY 50502</b>	<b>Commercial</b>	<b>40.78</b>	<b>6.5</b>
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Monitoring team of AICRP-NSP (Crops) Visit at University seed production farm

### 5. Seed Processing Plant

A fully equipped seed processing plant of 2TPH capacity with pre-cleaner, seed grader, indented cylinder, gravity separator, seed dryer, destoner, seed treater and mistomating auto weighing machine etc., is available at main campus. Seed production program of the University is running under the **Mega Seed Project on “Seed Production in Agricultural Crops”** since 2008. It is financially assisted by ICAR- Indian Institute of Seed Science, Mau. Production of breeder/foundation/certified/registered seed is the major activity supported by technology dissemination programs.

### Kharif 2020: Seed Status

S. No.	Variety	Class of Seed	Intake Qty. (q)	Processed Qty.(q)	Sale Qty. (q)	Rate/q (Rs.)	Amount (Rs.)
<b>Paddy</b>							
1.	PB 1509	F/S	279.96	204.70	199.55	7000	1396850
2.	PB 1121	F/S	130.61	80.60	49.53	7000	346710
3.	PB 1637	F/S	150.99	88.00	22.86	7000	160020
4.	PB 1	F/S	43.72	23.38	21.25	7000	148750
5.	PB 1509	C/S	129.53	84.40	22.88	6500	148720



6.	PB 1718	C/S	121.38	72.70	37.27	6500	242255
7.	PB 1728	C/S	19.39	5.39	4.65	6500	30225
8.	PS 5	C/S	7.70	4.09	4.00	6500	24000
9.	VB-21	B/S	6.10	3.87	-	-	-
	VB-22	B/S	5.61	3.60	2.72	11550	31416
	VB-23	B/S	1.75	0.96	-		-
	VB-24	B/S	10.50	4.10	1.30	11550	15015
TOTAL			907.24	575.79	366.01		2543961

**Rabi 2020-21 Seed Status**

S. No.	Crop	Variety	Class of Seed	Seed Intake (q)	Process Seed (q)	Seed Sale Qty. (q)*	Rate (Rs.)	Amount	Particular
1-	Wheat	DBW 71	FS	222.25	162.80	9.70	4500	493250	Seed sale is in progress
2-		PBW 226	FS	448.65	336.80	162.10	4500	408825	
3-		DBW 187	FS	394.47	287.60	145.78	5000	45450	
4-		HD 3226	FS	208.27	155.20	98.65	5000	8550	
5-		DBW 173	FS	248.95	195.40	90.85	4500	719500	
6-		DBW 90	FS	43.56	29.60	10.10	4500	493250	
7-		WB 02	FS	48.12	33.20	1.90	4500	408825	
8-		DBW 222	FS	303.91	223.60	143.90	5000	45450	
9-		DBW 90	BS	32.46	23.60	1.20	6520	7824	
10-		DBW 17	BS	108.84	78.00	28.80	6520	187776	
11-		DBW 88	BS	34.95	23.20	18.40	6520	119968	
Total				176.25	124.8	48.4		315568	
13-	Mustard	Pusa Vijay	TL	23.82	13.17	13.17	8000	105360	
14-		NRCYS 0502	TL	16.46	12.74	12.74	8500	108290	
Total				40.28	25.91	25.91		213650	
Grand Total				2134.71	1574.91	737.29		3706793	

**\*Seed Sale Upto 30-12-2021**

Seed sale activities at seed processing plant

**6. Fisheries Research and Demonstration Unit**

The Fish Demonstration and Research Unit established at S.V.P University of Agriculture and Technology, Meerut, India is working especially in the Inland

Fisheries Sector, needs of the farmers to train in fish technology, transferring the technologies to fish culturists and entrepreneurs. A large number of modern fish farms have been established by the farmers.

Integrated fish farming has also been taken up. The farm facilities of the unit provide opportunity for conducting fish farming and demonstration of frontline technologies to fish culturists. The Fish Demonstration and Research Unit is now emphasizing on the development and management of fisheries in the freshwater resources. Special emphasis is being put on the transfer of technology for the culture and hatchery seed production of carp fish species. Presently SVPUA&T has implemented the experiential learning program in Fish & Aquaculture. EL provides the students an excellent opportunity to develop analytical and entrepreneurial skills, and knowledge through meaningful hands on experience, confidence in their ability to design and execute project work. The main objectives of EL are:

- To promote professional skills and knowledge through meaningful hands on experience.
- To build confidence and to work in project mode.
- To acquire enterprise management capabilities

#### **Developed Fish Demonstration and Research Unit**

Fish culture and Fish seed production facilities for ELP Students and Farmers. Six species of Carps out of that three Indigenous carps i.e. Rohu, Catla, Nain and three Exotic carps i.e. Grass carp, Silver carp and Common carp. Carp hatchery with breeding tank, hatching tanks and spawn receiving tanks are available.

#### **Significant Achievements**

- Rearing of brooders to develop the brood stock for quality fish seed production.
- The students of RAWA are taught about the fisheries under experiencing learning programme
- The development of facilities for research and training has been done (Aquaculture Lab).
- University is in possession of 4 stocking ponds, 4

seed rearing ponds, one circular carp hatchery and very good fodder field for grass carp feed.

- A part from the above income the Demonstration and training to farmers were provided.
- R.A.W.E students are also attached with this unit for teaching every year.
- The students of B.Sc. Ag. under Experiential Learning Programme Course AEL – 412 is working under learning by doing for different activities like Cleaning of ponds, Liming, Manu ring Fertilization, Water analysis, Netting and Sampling of Fishes etc.
- Developed seed production technology of carps to demonstrate the trainees/Students/Farmers.

#### **7. Mushroom Production Centre**

University established Mushroom production centre at old campus of the university to conduct the research and training for UG and PG student as well as farmers. The research work is carried out on Oyster and milky mushroom at the centre. Trainings were given to the students, farmers, and defiance personals on mushroom production technology. Commercial spawn were sold to the farmers and farmers also purchased the spawn from the centre. The unit has been developed for Experiential learning programme for UG students.

#### **8. Technology Park**

University developed Technology Park to demonstrate the technology to the farmers and visitors. Field demonstrations were organized on newly released varieties *ie.* 08 varieties of lentil, 12 varieties of chickpea 42 varieties of wheat during Rabi 2019-20 crop season and 36 varieties of basmati and fine rice, 10 varieties of Green gram and 09 varieties of Urd were demonstrated in Technology Park during Kharif 2019 crop season.



Farmers visit at Technology park





### 9. Bio-agents Production Centre

Several bio-agents are being produced by the university to facilitate the farming community of this region during 2020-21. The details of the same are given below: -

#### Production and maintain of following Bio agents:

##### i. Parasitoid:

Egg parasitoids, *Trichogramma* spp.

##### ii. Predator:

*Chrysoperla carnea*

##### iii. Pathogens:

*Beauveria bassiana*

*Trichoderma harzianum*

*Metarhizium anisopliae*

HaNPV

Entomopathogenic Nematodes

**Host insect** *Corcyra cephalonica* reared

### 10. Compost Unit

The Vermi compost unit established at S.V.P University of Agriculture and Technology, Meerut, to provide the training for UG and PG student as well as farmers. During experiential and learning Course a team of students of B.Sc. Ag. are attached to the unit to get the knowledge about the production of Vermi Compost so that they may start their own vermin compost units.

### 11. Poultry Research and Training Centre

Poultry Research and Training Centre of the university is consistently serving the farming community of this region by providing technical knowhow on various aspects of poultry production through organization of trainings and demonstrations. Several students-oriented activities including research trials are being executed continuously as a part of course curricula.

### 12. Livestock Farm Complex

Instructional Livestock Farm Complex established at SVPUA&T, Meerut for veterinary students.

#### Major objectives

- To undertake basic, applied and adaptive research in major areas of small ruminants including conservation and maintenance of elite sheep and goat germplasm.
- Impart quality teaching to B.VSc. and AH degree programme students.
- To impart specialized training and post graduate research for students interested in the field of small ruminants.
- To develop and standardize package of practices related to small ruminants and pig feeding, management and health cover.
- Transfer of technology to the sheep, goat and pig farmers.
- To provide referral and consultancy services on various aspects of sheep, goat and pig production

#### Major ongoing and proposed researchable activities

- Conservation of Muzaffarnagri sheep breed.
- Establishment of goat unit for conservation and revitalization of superior germ plasm of Barbari goat.
- Research trail on feeding behavior of sheep and goat.
- Improvement of meat and wool production through various breeding tools
- Development of viable technologies and to promote commercial sheep, goat and pig farming among weaker section of society for self employment.
- Standardization of cost-effective feeding modules for small ruminants and pigs.
- Identification of available feed resources and their effective utilization.

### Infrastructures at ILFC Unit II

SN	Building/ Shed	Capacity
1	Goat and Sheep Shed (Under construction)	100 animals
2	Research sheep and goat shed	24 Animal
3	Horse shed	02 Animal
4	Pig Shed	24 Animals
8	Storage room	03
9	Administrative Block	02 rooms, 01 hall
10	Grazing land	04 Acre

S.N.	Name and Breed of Animals
1.	Goat (Barbari)
2.	Sheep (Muzaffarnagari)
3.	Pig (Middle White Yorkshire)
4.	Horse





### 13. Golden Jubilee Forage Garden

India has more than 536 million livestock population which needs an effective strategy to meet the burgeoning demand for quality feed and fodder. At present, the country is facing a nearly 23 % deficit in the green fodder and 14 % deficit in dry fodder. The ICAR AICRP on Forage Crops & Utilization is playing a very important role in the improvement in forages for its increased production. The project has already released 320 varieties and 300 production technologies of different forage crops for the country. ICAR-AICRP on forage has completed 50 years of its establishment in 2020. On this auspicious occasion Golden Jubilee Forage Garden was established in the university. The basic purpose of this forage garden would be to create awareness among the general masses about the significance of forage crops in Indian agriculture and for increasing the milk production in the country. It will be a scientifically designed garden which will help to sensitize the farmers/ livestock keepers as well as students/ faculty/ visitors about different fodder crops, their feeding value, production level etc. The 45 improved high yielding varieties of both annual (for both *rabi* and *Kharif* season) and perennial species were demonstrated in Golden Jubilee Forage Garden.

### 14. Organic Research Block

Soil is one of the most important resources. Organic farmers aim to maintain the long-term fertility of the soil. Biologically active soil will decompose organic matter faster, so bacteria, fungi and earthworms are encouraged. When soil organisms decompose organic matter, nutrients essential for plant growth are recycled back into the soil to 'feed' the next crop.

Organic food is very fresh when consumed so the quality is high. Reduce the risks of human, animal, and environmental exposure to toxic materials. The Organic Research Block was established in the university to stimulate the research on organic farming. The trials on

wheat and pulse crops were conducted.

### Zonal Research Stations

University has three zonal research stations in its jurisdiction area.

#### 1. Zonal Research Station- Nagina (AREA 17.50 ha)

Research Station Nagina is one of the premier Rice Research Station of the country which was established by British Govt. after intensive survey of undivided India in 1921., situated in foot hills of great Himalaya at an altitude of 29° 28' North, and latitude 78° 32' East at 245 meter above mean sea level. This station has released 24 rice varieties for different eco-systems before green revaluation era and some of them are still under cultivation. An export quality rice variety Type -3, known as Dehraduni Basmati, is the first variety by which the quality rice export was started first time by our country India, was also released by this station. Another rice variety N-22, a drought resistant variety, is still being used as donor parent for drought resistant breeding. ICAR funded AICRP on rice is also running at Nagina. Some of major achievements along with staff position are summarized below

#### Function of Research Station:

- Development of high yielding rice varieties.
- Collection and evaluation of rice germplasm.
- To test and verify the genetic material of crops (Rice and wheat) developed different parts of country through All India Coordinated Research Programmes.
- Quality seed production of rice and wheat.
- Standardization and evaluation of new agro techniques like resource conservation technology for the region.
- Diseases and pest management studies of various crops.

### Trials Conducted : Agronomy

#### Kharif 2020

S.No	Name of trials	Achievements
1.	Nitrogen response trials on selected AVT- 2 MS rice cultures under high and low input management.	<ul style="list-style-type: none"> <li>• Incremental dose of Nitrogen increases the number of panicles and grain yield up to 100% RDF, highest number of panicles 281 and grain yield 4.72 t/ha was recorded with 100%RDF.</li> <li>• Among varieties highest number of panicles was recorded with - IET-27118 (280) which was at par with IET-27438 (265), KRH-4 (272), WGL-14 (266) and was significantly superior over other varieties/ entries.</li> <li>• Highest grain yield was found with Entry IET-27118 (4.84t/ha) which was found significantly superior over other entries and checks under test.</li> </ul>



2	Nitrogen response trials on selected AVT- 2 ASG rice cultures under high and low input management.	<ul style="list-style-type: none"> <li>Incremental dose of Nitrogen increases the number of panicles and grain yield up to 100% RDF, highest number of panicles 249 and grain yield 4.11 t/ha was recorded with 100%RDF.</li> <li>Among varieties highest number of panicles (244) and grain yield (3.78 t/ha) was recorded with IET-25419 as significantly superior over other varieties/ entries.</li> </ul>
3	Nitrogen response trials on selected AVT- 2 IME rice cultures under high and low input management.	<ul style="list-style-type: none"> <li>Among the fertilizer levels highest grain yield (4.88 t/ha) and Number of panicles (313) was recorded with recommended dose of fertilizer.</li> <li>Among varieties highest number of panicles (319) and grain yield (5.18 t/ha) was recorded with IET 26126 which was significantly superior over other varieties/ entries.</li> </ul>
4	Weed dynamics under different rice establishment methods	<ul style="list-style-type: none"> <li>Among the establishment methods highest number of panicles (361) and grain yield (4.98t/ha) was recorded with transplanting which was found significantly superior over puddled direct seeding and wet direct seeding.</li> <li>Among the different weed management practices highest number of panicles (407) and grain yield 5.14 t/ha was recorded with weed free however its difference in number of panicle (396) and grain yield (4.99 t/ha) with chemical weed control (Pre-fb Post emergence herbicide) was statistically at par.</li> <li>Different establishment methods failed to bring any significant difference in weed population and weed biomass.</li> <li>Among the different weed management practices apart from weed free significantly lowest population of weed and weed biomass was recorded with chemical weed control i.e Pre-fb Post emergence herbicide.</li> </ul>
5	Nano-fertilizers for increasing nutrient use efficiency, yield and economic returns in transplanted rice	
6	Evaluation of Imazethapyr herbicide -tolerant Aromatic genotypes under dry direct-seeded condition	
7	Nitrogen response trials on selected AVT- 2 Biofortified rice cultures under high and low input management.	
8	Nitrogen response trials on selected AVT- 2 ETP rice cultures under high and low input management.	

#### Rabi 2020-21

S.No	Name of trials	Achievements
1.	Field evaluation of herbicide AP03 (5.1% EC) on weeds flora of wheat along with succeeding crop	<p>‘Highest earhead/m<sup>2</sup> (297.64) and grain yield (46.37 q/ha) was recorded with AP03 @45 g ai/ha which was significantly superior in earhead/m<sup>2</sup> with other chemicals and at par in grain yield with AP 05 different doses. Lowest weed count and weed dry weight was also found with AP03 @45 g ai/ha however its difference with AP03 @40g ai/ha and AP03 @90 g ai/ha was at par. Highest WCE was recorded with AP03 @90 g ai/ha. During the study period none of the tested doses of the test chemical AP 03 indicated any phyto-toxicity symptoms viz. yellowing, stunting, hyponasty, epinasty, vein clearing etc.</p>

**Kharif 2020****Plant Breeding:**

S. N	Name of Trial	Promising Entries
1	IVT (BT)	Highest grain yield (5318.80 kg/ha) was recorded with entry 1909 followed by entry 1901 (4919.89 kg/ha). Entry 1919 takes less time (95 days) to flowering.
2	AVT-1 (BT)	Highest grain yield (5128.2kg/ha) was recorded with entry 1825 followed by entry 1808(5073.6kg/ha). Entry 1823 takes less time (93 days) to flowering and followed by entry 1824 (93 days).
3	Initial Hybrid Rice Trial-Early (IHRT-E).	Highest grain yield (7008.74 kg/ha) was recorded with entry 3008 followed by entry 3005(6466.39 kg/ha). Entry 3019 takes less time (80 days) to flowering and followed by entry 3006 (82 days).
4	Initial Hybrid Rice Trial-Early (IHRT-ME).	Highest grain yield (8260.3kg/ha) was recorded with entry 3132 followed by entry 3113(7759.7kg/ha). Entry 3124 takes less time (87 days) to flowering and followed by entry 3707 (88 days).
5	Initial Hybrid Rice Trial-Early (IHRT-M).	Highest grain yield (7884.8 kg/ha) was recorded with entry 3217 followed by entry 3215(7175.6 kg/ha). Entry 3212 takes less time (93 days) to flowering and followed by entry 3211&3221 (99 days).
6	Evaluation of Rice hybrids under different agroclimatic conditions of U.P.	Highest grain yield (5787.0 kg/ha) was recorded with entry RH 17 followed by entry RH 19(5420.4 kg/ha). Entry RH 29 takes less time (86 days) to flowering and followed by entry RH 22 (90 days).
7	Development of new Basmati / non-Basmati rice genotypes.	39 Basmati and 74 non-Basmati SPS have been done during <i>Kh</i> 2020 and these will be evaluated during <i>Kh</i> 2021.
8	Station Trial- Basmati	Highest grain yield (63.5q/ha) was recorded with entry NVB 6 followed by entry NVB3 (52.5 q/ha). Entry NVB 6 take less time (90 days) to flowering and followed by entry NVB3 (95 days).
9	Collection, evaluation, selection and maintenance of rice germplasm.	578 rice germplasm has been maintained. 454-scented rice germplasm 50-non-scented rice germplasm 35- Blast resistant germplasm 39- BLB resistant germplasm

**Yield and other traits**

Entry No.	Parentage	Days to 50% Mean	Plant Ht. (cm) Mean	Grain yield (q/ha)	Yield superiority over PB 1(%)
NVB 11	P 1121 x PS 5	99	110.0	50.5	9.8
NVB 12	PS 3 x IPB 1	107	113.5	51.2	11.3
NVB13	PB 1 X PS 2	98	109.5	52.4	13.9
NVB14	PB 1 x PS 4	101	105.8	42.5	-7.6
NVB15	PB 1X Sarbati	98	106.2	48.36	5.1
NVB16	Sarbati x PS 3	94	100.5	58.8	27.8
NVB17	PS 4 X Type-3	105	110.5	43.3	-5.9
PB 1	Check	111	115.0	46.0	-
T. Bas	Check	115	135.0	28.6	-
P S 4	Check	111	109.0	42.1	-

**Rabi 2020-21****Plant Breeding**

S. N.	Name of Trial	Promising Entries
1	Advance varietal trial of wheat (timely sown irrigated condition) under All India Coordinated Wheat Improvement Project (AVT-IR-TS-TAS).	Highest grain yield (7931.3 kg /ha) was recorded with NW-TS-106. NW-TS-103 takes less time (130 days) to maturity

**Rabi 2020-21  
Plant Breeding**

S. N.	Name of Trial	Promising Entries
1	Advance varietal trial of wheat (timely sown irrigated condition) under All India Coordinated Wheat Improvement Project (AVT-IR-TS-TAS).	Highest grain yield (7931.3 kg /ha) was recorded with NW-TS-106. NW-TS-103 takes less time (130 days) to maturity
2.	Advance varietal trial of wheat (Late sown irrigated condition) under All India Coordinate Wheat Improvement Project (AVT-IR-LS-TAS).	Highest grain yield (5961.5 kg /ha) was recorded with NW-LS-203. NW-LS-203 takes less time (78 days) to maturity
3.	Advance varietal trial of wheat (timely sown restricted irrigated condition) under All India Coordinated Wheat Improvement Project (AVT-RI-TS-TAS).	Highest grain yield (5891.3 kg /ha) was recorded with NWRI 304. NWRI 302 takes less time (124 days) to maturity
4.	ERA Trial NWPZ-IR-TS under All India Coordinated Wheat Improvement Project.	Highest grain yield (7631.3 kg /ha) was recorded with E 9. E 2 takes less time (120 days) to maturity

**Rabi 2020-21  
Plant Breeding**

Variety	Class of Seed	Net Weight	Remark
PB 1509	C/S	116.45	Supply to NSC

**Rabi 2020-21  
WHEAT**

Variety	Class of Seed	Net Weight	Remark
HD 3059	CS	138.85	Supply to NSC

**Zonal Research Station- Bulandshahr (Area 10.00 ha)**

This station was established in the year 1905 by the Department of agriculture U.P. as a seed multiplication farm. In the year 1944, this farm was converted in to a research station with the responsibility of cotton research entrusted to the Assistant Economic Botanist (cotton). The status of the research station was further raised during 1951 to the main Cotton Research Station with

post of economic Botanist (Cotton and Tobacco). In May 1973 this research station was transferred to G.B. Pant University of Agriculture & Technology, Pant Nagar and multidisciplinary research work on important field's crop of the region was carried out. After the division of the Uttar Pradesh this station was transferred to S.V.P. University of Agriculture & Technology, Meerut in October, 2000.

**Experiment conducted  
Kharif- 2020**

S. N.	Name of Trial	Results
1	Evaluation of desi cotton germplasms	BD-5 geotype had highest seed cotton yield (1726.00 kg/ha), which was significantly higher than all of the germplasms included in the study except BD-4 (1595.7kg/ha). The difference between BD-5 and BD-4 was non significant alongwith the check Lohit (1013.33 kg/ha)
2.	Evaluation of American cotton germplasms	BH-9 produced highest seed cotton Yield of (1360 kg/ha) followed by BH-2, (1126.7 kg/ha), BH-5 (1140.00kg/ha) BH-7 (1133.3 kg/ha) LH-900 (1260.0 kg/ha) and SH-131(1273.3 kg/ha)
3	Evaluation of American cotton germplasms	BH-14 Produced highest seed cotton yield of 1480 kg/ha which was significantly higher Than that of other germplasm included in the study (Trial-2).
3.	Collection and evaluation of cotton germplasm	242 germplasms of deshi cotton and 162 gemplasm of American cotton were maintained by sowing in single row of 5 m length.



**Rabi 2020-21**

Evaluated Coordinated Trials on Wheat allotted by IIWBR, Karnal. - Dr. Shiv Singh

S. N.	Name of Trial	Promising Entries
1	Advance varietal trial of wheat (timely sown irrigated condition) under All India Coordinated Wheat Improvement Project (AVT-IR-TS-TAS).	NW-TS-106 genotype gave the highest yield 63.0 Qt/ha
2.	Advance varietal trial of wheat (Late sown irrigated condition) under All India Coordinate Wheat Improvement Project (AVT-IR-LS-TAS).	NW-LS-203 genotype gave the highest yield 69.80 Qt/ha
3.	Advance varietal trial of wheat (timely sown restricted irrigated condition) under All India Coordinated Wheat Improvement Project (AVT-RI-TS-TAS).	N 719 genotype gave the highest yield 56.3 Qt/ha
4.	National Initial Varietal Trial NIVT-3A-IR-LS-TAS	N 427 genotype gave the highest yield 58.6 Qt/ha
5	National Initial Varietal Trial NIVT-1B-IR-TS-TAS	N 236 genotype gave the highest yield 57.54 Qt/ha
6	National Initial Varietal Trial NIVT-1A-IR-TS-TAS	N 106 genotype gave the highest yield and followed by N-109
7	ERA Trial NWPZ-IR-TS under All India Coordinated Wheat Improvement Project.	E-13 and genotype gave the highest yield followed by E-8
8	National Initial Varietal Trial NIVT-5A-RI-TS-TAS	

**Seed Production****Kharif 2020****PADDY**

Variety	Class of Seed	Net Weight	Remark
PB - 1509	F/S	44.65	Sale to farmers
PB - 1121	F/S	13.20	
PB - 1637	F/S	10.25	
	<b>Total</b>	<b>68.10</b>	

**Rabi 2020-21****WHEAT**

Variety	Class of Seed	Net Weight	Remark
DBW - 187	F/S	58.20	Sale to farmers
DBW 222	F/S	59.25	
DBW 173	F/S	44.70	
HD 3226	F/S	15.45	
HD 2967	F/S	44.50	
	<b>Total</b>	<b>222.10</b>	

**Zonal Research Station -Ujhani (Area 16.51 ha)**

Zonal Research Centre comes in the Mid-Western Plain Zone of Uttar Pradesh which falls in between 27° 60' and 29° 50' N Latitude and 78° and 80° 40' S Longitude of the State. The altitude in this region varies between 150-300m. The Ganges flow from North to South in the west part of this Zone & separates it from western plain zone. This zone comprises an area of 30.50 thousand square kilo meter, being third largest region of Uttar Pradesh,

accounts for 10.50 per cent of the total reported area under land utilization of the state. The Agro climatic conditions of this zone are dry and warm. Soils are mostly alluvial and neutral to moderately alkaline in reaction with low to medium in organic contents. Average rainfall of this region ranges from 650 mm to 1,600 mm and district Budaun receives minimum rainfall. Almost 90 per cent of rainfall is concentrated in four months from mid June to mid October which is variable and erratic. In





this zone tube wells and canals are the major sources of irrigation but larger area is irrigated through tube wells except Bareilly district. Budaun has the least area under irrigation i.e. approx 44 per cent.

An Agriculture farm of 34.85 acre at Ujhani has been transferred by the State Agriculture Department to G. B. Pant University of Agri. and Tech. Pantnagar to establish a Zonal Research Station at Ujhani, Budaun during December, 1986. The Research works were started after appointment of Chief Scientist and J.R.O. in Oct., 1991 during NARP Phase II, Oct. 1989 to Sept. 30, 1993.

#### Major Achievement during 2020-21

- Application of 20.0 kg Zn + 1.0 kg B /ha along with recommended dose of fertilizers (20:60:40:20 kg N, P<sub>2</sub>O<sub>5</sub>, K<sub>2</sub>O & S /ha) is beneficial in increasing the grain yield of chick pea crop in coarse –textured soils of Mid- Western Plain Zone of U.P..
- In light – textured (loamy sand), low fertile soil of Mid – Western Plain of U.P., for higher grain yield and economic return, field pea crop should be nourished with at least 1.0 kg boron/ha along with recommended dose of fertilizer (20 :60 :40 :20 kg N, P<sub>2</sub>O<sub>5</sub>, K<sub>2</sub>O & S /ha.).

#### Experiments Conducted During Kharif - 2020

1. Collection, selection, evaluation and maintenance of germplasm and segregating populations of groundnut.
2. Evaluation of groundnut genotypes for pod yield and maturity
3. Effect of potassium and boron nutrition on yield on economics in groundnut (*Arachis hypogaea* L.)

#### Seed Produced 2020-21

##### Kharif 2020

##### URD

Variety	Class of Seed	Net Weight (Qt.) 8.20	Remark
PU-31	F/S	24.95	Supply to NSC

GT 26	T/L	2.20	Sale to Farmers
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HD - 3086	F/S	192.20	Supply to NSC
DBW - 187	F/S	240.20	
DBW - 187	F/S	9.20	Sale to Farmers
HD - 3059	F/S	5.00	
DBW - 173	F/S	4.50	
PBW 723	F/S	3.60	
HD 3086	F/S	3.60	
	<b>Total</b>	<b>458.30</b>	
	<b>Grand Total</b>	<b>485.45</b>	

in lite- textured entisol.

#### Experiments Conducted During Rabi : 2020 - 21

1. Collection, evaluation, selection and maintenance of germplasm and segregating populations of mustard.
2. Advance varietal trial on wheat (restricted irrigation, one irrigation at 45 to 50 days after sowing).
3. Advance varietal trial on timely sown irrigated wheat.
4. Advance varietal trial on late sown irrigated wheat.
5. Response of field pea (*Pisum sativum* L.) to sulphur and zinc application in light-textured soil of Mid – Western Plains of U.P.

##### Treatments :

a. Sulphur levels : 0, 20 & 40 kg /ha.

b. Zinc levels : 0, 2.5 and 5.0 kg /ha.

6. Response of Indian mustard (*Brassica juncea* L.) to application of multi- micronutrients in an Ustipsamment soil of Mid- Western Plains of U.P..

##### Treatments :

T1 – Control (RDF : 20:60: 40kg N, P<sub>2</sub>O<sub>5</sub> & K<sub>2</sub>O/ha.)

T2- Zn : @ 5 kg Zn as ZnCl<sub>2</sub>/ha.

T3- Zn + B : @ 5 kg Zn as ZnCl<sub>2</sub> + 1 kg B as borax /ha.

T4- Zn + S1: @ 5 kg Zn as ZnCl<sub>2</sub> + 20 kg S /ha.

T5- Zn + S2: @ 5 kg Zn as ZnCl<sub>2</sub> + 40 kg S /ha.

T6- Zn + B + S2: @ 5 kg Zn as ZnCl<sub>2</sub> + 1 kg B as borax + 40 kg S /ha.

T7- Foliar application of ZnSO<sub>4</sub> (0.5%).

T8 - Foliar application of Borax (0.2%).

T9 - Foliar application of mixture of micronutrients: ZnSO<sub>4</sub> (0.5%) + Borax (0.2%).

Table : Research proposal submitted / ongoing to various agencies.

S.N	Name of the Project	Name of P.I.	Total Rs. (in lacs)	Funding Agency
1.	Establishment of goat unit for conservation and revitalization of superior germplasm of Barbari goat.	Dr. Ahamad Fahim	141.00	RKVY
2.	Establishment of Advance Diagnostic Laboratory for Identification of Livestock Disease in Western U.P.	Dr. Artee Bhatele	291.00	RKVY
3.	Establishment of Agro-processing centre	Dr. Suresh Chandra	205.20	RKVY
4.	Establishment of Critical care unit for farm and companion animals at veterinary clinical complex	Dr. Tarun Sarkar	351.68	RKVY
5.	Establishment of Referral analytical laboratory for microbial toxins and environmental pollutants/toxicants	Dr. Amit Kumar	393.00	RKVY
6.	Strengthening of Krishi Vigyan Kendra's Running Under area Jurisdiction of the University	Dr. S.K. Sachan	1325.85	RKVY
7.	Development of Follicle Stimulating Hormone eluting nanosuspension to augment multiple ovulation and embryo transfer for ex-situ conservation of elite indigenous cattle.	Dr. Manish Kumar Shukla	21.89	UPCAR
8.	Establishment of Centre of excellence on Basmati rice.	Dr. Kamal Khilari	515.25	S. Govt.
9.	Mega Seed Project	Dr. R.B. Yadav	36.75	ICAR
10.	All India coordinated rice improvement project.	Dr. Rajendra Singh	24.24	ICAR
11.	AICRP on nematode in cropping system	Dr. Kamal Khilari	27.36	ICAR
12.	AICRP on Mushroom	Dr. Gopal Singh	2.20	ICAR
13.	Promotional of Agricultural Mechanization for In-situ Management of Crops Residue in the State of Uttar Pradesh	Dr. S.K. Sachan	340.00	ICAR
14.	Joint Demonstration project on efficacy of Fluensulfone (NIMITZ 2GR) on different crops	Dr. Kamal Khilari	10.50	ICAR
15.	Institutional capacity building leading to accreditation of college of biotechnology, SVPUA&T, Meerut	Dr. Anil Sirohi/Dr. Ravinder kumar	100.00	ICAR
16.	Institutional capacity building leading to accreditation of college of veterinary and animal science, SVPUA&T, Meerut	Dr. Anil Sirohi/ Dr. V.P. Singh	99.23	ICAR
17.	Proforma for submission of proposal under creation of seed infrastructure facilities	Dr. Gaje Singh	52.50	ICAR
18.	Characterization of agriculturally important locally available microorganisms and their utilization as bio-inoculants for the suppression of soil borne pathogens and growth promotion in Phaseolus vulgaris (French bean) and Lens esculenta (lentil)	Dr. Ramesh Singh	10.44	CST Lucknow
19.	Micropropagation of stable hermaphrodite papaya and promotion among the western U.P.	Dr. R.S. Sengar	11.94	CST Lucknow
20.	Creation of Bioinformatics infrastructure facility for the promotion of Biology teaching through bioinformatics (BTBI) scheme 006Ff BTISnet	Dr. Jitendra Singh	6.50	DBT
21.	Production of disease-free Banana ( <i>Musa sapientum</i> ) plants through Tissue culture Technique for establishment of nursery and distribution of cost plantlets among farmers	Dr. R.S. Sengar	23.34	DBT
22.	Utilization of rumen digesta waste from slaughter house as alternative local protein source and economical ration production and controlling environmental pollution.	Dr. Ajit Kumar	19.63	DBT



23.	Characterization of Chickpea germplasm resource to accelerate genomic assisted crop improvement	Dr. Kamal Khilari	102.80	DBT
24.	Establishment of mother plant nurseries for high pedigree planting material for fruit crops	Dr. Arvind Kumar	45.70	NHB
25.	Centrally Sponsored Scheme on spices under NHM	Dr. Manoj Kumar	2.17	Spice Board
26.	Forecasting agricultural output using space, Agro meteorology and land based observation (FASAL).	Dr. Yogesh Kumar	4.50	Min of earth sc.
27.	Agromet advisory services project (GKMS)	Dr. U.P. Shahi	25.00	Min. of earth sc.
28.	Analysis of biomass hydrolysis and ethanol production by fungal crude enzymes	Dr. R.S. Sengar Poonam Maan	33.00	UGC, New Delhi
29.	Mobile Veterinary clinical service for dairy animal in western U.P.	Dr. Amit Verma	23.50	IFFCO
30.	Assessment of POLY -4 (polyhalite) for productivity, quality of potato an K, S use efficiency in soils of western plain zone of Uttar Pradesh.	Dr. U.P. Shahi	20.00	Sirius Minerals Plc London.
31.	Evaluation of bio efficacy of new fungicide product NF 171 against late blight of potato	Dr. Kamal khilari	7.22	ADAMA
32.	Effects of aquasorv on potato production under drought stress conditions	Dr. R.S. Sengar	4.00	SNF Pvt . Ltd
<b>Total</b>			<b>4277.39</b>	

#### Submitted New Project Proposals to different funding agencies

S.N.	Name of Project	Name of PI	Funding Agency	Project Amt.
1	Establishment of Centre for Heavy Metal Accumulation in Major Fruits and Vegetable Crops of Western Uttar Pradesh	Dr. Rekha Dixit	RKVY	252.00
2	Modernization of Vegetable Research Center for Quality Produce of Vegetable under irrigation system	Dr. Vipin Kumar	RKVY	324.18
3	“Strengthening of New Central Library” at Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut	Dr. Rachna Varma	RKVY	570.00
4	Strengthening of Krishi Vigyan Kendra's running under area jurisdiction of the University	Dr. S.K. Sachan	RKVY	1373.40
5	Strengthening Of Boundmry Wall At Research Farm Of University (Chirori - A), & Pcp,Crc,Hrc,Prtc And Frtc At Main Campus	Dr. Jaivir Singh	RKVY	267.55
6	Strengthening and renovation of existing approach roads to covas, polyclinic,HRC,PCP and shoulders/patri along the road and drain in main campus	Dr. Jaivir Singh,	RKVY	857.91
7	Establishment of Bee- Keeping for Teaching, Research and Training to Students and Farmers in Western U.P.	Dr. D V Singh	RKVY	89.20
8	Establishment of Hi-tech protected structures for quality production of vegetables.	Dr. Vipin Kumar	RKVY	79.00
9	Establishment of Vertical farming system for production of quality vegetables.	Dr. Satya Prakash,	RKVY	210.91



10	Modernization of Livestock farm for genetic improvement, value addition, product certification and marketing for entrepreneurship development of farmers and rural youth	Dr. Tarun Kumar Sarkar	RKVY	136.00
11	Functionalization of Hatchery Unit and Entrepreneurship Development at Poultry Research and Training Centre	Dr. D.K. Singh	RKVY	50.07
12	Establishment of mobile Veterinary clinic for augmenting livestock farmer's income by providing treatment and diagnostic services at their step	Dr. Prem Sagar Maurya	RKVY	83.05
13	Strengthening and Modernization of Food Processing Unit	Dr. Neelash Chauhan	RKVY	184.80
14	Enhancement of income of flower growers through extension tools in western U.P.	Dr. Dan Singh	RKVY	16.500
15	Strengthening of practical crop production instructional unit.	Dr. Mukesh Kumar	RKVY	78.76
16	Establishment of semen analytical laboratory for semen certification and quality assurance of breeding cattle and buffalo bull semen of Western U.P.	Dr. R. A. Siddique	RKVY	247.00
17	Quality control of milk and milk products for entrepreneurship development and employment generation in rural sector.	Dr. V. P. Singh	RKVY	354.50
18	Establishment of reproductive physiology laboratory and diagnostic centre for diagnosis of reproductive problems in livestock.	Dr. Rakesh Kumar Singh	RKVY	110.00
19	Establishment of formalin free veterinary anatomy educational museum and platination laboratory.	Dr. Prabhakar Kumar	RKVY	109.80
20	Income and employment generation for livestock farmers of uttar pradesh through capacity building in never technologies of animal husbandry.	Dr. Mohd. Ameer Khan	RKVY	32.00
21	Establishment of plant tissue culture facility for production of quality planting material of economically important crops.	Dr. Sweta Mishra	RKVY	261.60
22	Establishment of frozen semen production centre for indigenous bulls.	Dr. Vijay Singh	RKVY	499.20
23	Establishment of embryo transfer laboratory for conservation of elite sahiwal cows.	Dr. M.K.Shukla	RKVY	198.95
24	Establishment of animal biotechnology laboratory for biotechnology oriented research programmes for improving animal health and productivity of domestic animals in western U.P.	Dr. R. A. Siddique	RKVY	218.50
25	Establishment of plant viruses diagnostics and forecasting referral laboratory for horticulture crops in western U.P.	Dr. Jitender Singh	RKVY	357.00
26	Development of Mobile and web based application for online veterinary consultancy services.	Dr. Amit Kumar Verma	RKVY	27.35
27	Establishment of Mashroom Research and Training Center.	Dr. Gopal Singh	RKVY	95.00



28	Molecular markers based sex determination at nursery stage in papaya ( <i>Carica papaya</i> L.) and micropropagation of quality planting material	Dr. M.K. Yadav	RKVY	132.50
29	Establishment of Jamunapari and Sirohi goat unit at ILFC-II, SVPUA&T, Meerut.	Dr. T.K. Sarkar	RKVY	88.00
30	Strengthening of laboratories for advance research on crop improvement.	Dr. Atar Singh	RKVY	150.00
31	Incidence, diagnosis and ameliorative measures for various causes infertility in cattle and buffaloes of Meerut region.	Dr. Ashutosh Tripathi	RKVY	88.45
32	Strengthening of tissue culture laboratory for micropropagation of important plants and development of entrepreneurship for the students and farmers.	Dr. Mukesh Kumar	RKVY	75.20
33	Modernization of postmortem unit and establishment of biomedical waste management facility of COVAS, SVPUAT, Meerut.	Dr. Naresh Chandra	RKVY	47.50
34	Establishment of fish farming based economically viable integrated farming module for recycling and increased water use efficiency	Dr. Archana Arya	RKVY	25.00
35	Establishment of Hi-tech protected structures for quality production of vegetables	Dr. Vipin Kumar	RKVY	176.67
36	Establishment of vertical farming system for production of quality vegetables	Dr. Satya Prakash	RKVY	91.52
37	Establishment of advanced centre for diagnosis and therapeutics of animal infertility	Dr. Manish Kumar Shukla	RKVY	142.75
38	Technological interventions in development and assessment of milk based nutraceuticals for human health and Immunity	Dr. V.P.Singh	RKVY	167.20
39	Desi Cow Based Natural Farming at Krishi Vigyan Kendras of University	Dr. S.K. Lodhi	RKVY	165.00
40	Drone: A vital tool for surveillance and management of diseases and insect-pests in crops of western U.P.	Dr. Ramesh Singh	RKVY	20.00
41	Assessment of Highway Pollution Damages for Selected Vegetables quality with a special reference to identification and functional analysis of related gene in Western U.P.	Dr. Vaishali	UPCAR	24.18
42	Collection, evaluation and adoption of Aromatic plants and updating their production in Western Uttar Pradesh.	Dr. Satya Prakash	UPCAR	22.94
43	Collection, Evaluation and Utilization of underutilized germplasm of vegetable in Western Uttar Pradesh.	Dr. Vipin Kumar	UPCAR	24.15
44	Development and Identification of Improved Genotype(s) of Sesame ( <i>Sesamum indicum</i> L.)	Dr. L.K. Gangwar	UPCAR	53.58
45	Development of cost effective fish feed using unconventional feed ingredients to increase the growth efficiency of fishes ( <i>H.fossilis/Clarias</i> ) using feed additives.	Dr. Dan Singh	UPCAR	25.00
46	Development of cost effective fish feed using unconventional feed ingredients to increase the growth efficiency of fishes using feed additives.	Dr. Archana Arya	UPCAR	25.00
47	Development of Plant based Antiparasitic Prophylactic Measures for Small Ruminants	Dr. Shweta Anand	UPCAR	24.20





48	Development of SVPmEXTapp	Dr. Naresh Pratap Singh	UPCAR	21.00
49	Efficacy of Zinc nano-fungicides against different seed-borne mycotic diseases of Wheat ( <i>Triticum aestivum</i> )	Dr. Amit Kumar	UPCAR	24.18
50	Efficacy of Zinc nano-fungicides against different seed-borne mycotic diseases of Wheat ( <i>Triticum aestivum</i> )	Dr. Neelesh Kapoor	UPCAR	24.18
51	Enhance Income of Flower Growers through Extension Tools in Western Uttar Pradesh	Dr. Dan Singh	UPCAR	24.99
52	Enhancement in Digestibility and Nutrient utilization efficiency of Paddy straw by Ammoniation technique.	Dr. D.S. Shahu	UPCAR	25.00
53	Enhancing nitrogen and phosphorus use efficiency for wheat and rice using microbial inoculants.	Dr. Shalini Gupta	UPCAR	25.00
54	Evaluation of genetic and phytochemical diversity with functional analysis of sesamin biosynthesis gene in sesame	Dr. Naresh Pratap Singh	UPCAR	24.18
55	Functionalization of Hatchery Unit and Entrepreneurship Development at Poultry Research and Training Centre.	Dr. D.K. Singh	UPCAR	50.07
56	Morpho-chemical, Oxidative and genotoxic damage in selected vegetable crops in response to heavy metal pollutants and maintenance of genome stability	Dr. Shalini Gupta	UPCAR	24.75
57	Population dynamics and biological efficacy of PGPR for enhancing nutrients use efficiency and managing major seed borne disease in Basmati rice.	Dr. Ramesh Singh	UPCAR	24.00
58	Residual analysis of antibiotics in poultry meat and eggs of Western Uttar Pradesh (Meerut)	Dr. D.K. Singh	UPCAR	24.98
59	Status of anthelmintic resistance in small ruminants for integrated parasite management	Dr. Alok Kumar Dixti	UPCAR	24.20
60	Status of anthelmintic resistance in small ruminants for integrated parasite management.	Dr. V.P. Singh	UPCAR	23.69
61	Surveillance of drug residue in poultry products and development of cost effective herbal therapy for safe poultry production.	Dr. Amit Kumar	UPCAR	20.70
62	Surveillance of tick borne diseases and development of ITK based alternate therapy	Dr. Amit Kumar	UPCAR	23.00
63	Proposal under strengthening component of star college scheme	Dr. Manish Kumar Shukla	DBT	112.00
64	Strengthening component of Star College Scheme.	Dr. Pankaj Chauhan	DBT	81.00
65	Establishment of embryo transfer laboratory for conservation of elite indigenous cattle breeds.	Dr. Manish Kumar Shukla	UPCAR	675.84



## DIRECTORATE OF EXTENSION

The Directorate of Extension started functioning with the inception of university in the Year 2000 with a team at head quarter and KVK's in different districts of the area jurisdiction. At present 20 KVKs *i.e.* Baghra (Muzaffarnagar), Ujhani (Badaun), Khekra (Baghpat), Nagina (Bijnor), Noorpur Chholas (G.B. Nagar), Muradnagar (Ghaziabad), Hastinapur (Meerut), Rustamnagar, Bilari (Moradabad), Dhamora (Rampur), Saharanpur, Niyamatpur (Shahjahanpur), Tandabijesi (Pilibhit), Bulandshahr, Sambhal, Dataganj (Badaun-II), Shamli, Amroha, Babugarh (Hapur), Chittora (Muzaffarnagar-II) and Moradabad-II are working under administrative control of the university. There is a strong team of extension scientists and supporting staff at Head Quarter to monitor and support extension activities under the supervision of Director Extension. Establishment of ATIC as single window advisory unit for advisory, diagnostic services and supply of critical inputs is on the cards. The salient features are given as below-

### Transfer of Technology

The Directorate of Extension Education provides extension services to the farmers of western Uttar Pradesh through various programmes and activities at

headquarter as well as through KVKs. The programmes implemented during 2020-21 includes trainings, demonstrations, field days, kisan melas, Kisan goshies, crop seminars, exhibitions, radio talks, TV telecast, film shows etc. Transfer of technology activities were planned and coordinated through KVKs located in different districts. Efforts were made for different farm advisory services by maintaining coordination with various Colleges of the University, state departments of agriculture, fisheries, animal husbandry, rural development, NGO groups and different Extension agencies undertaking projects on upliftment of farmers.

### Training Programmes

The scientists of the Directorate of Extension Education and Krishi Vigyan Kendras conducted a variety of training programmes during the period to meet the needs of farmers, field functionaries, unemployed youth and school dropouts in order to increase farm production and supplement the income in the field of agriculture, animal husbandry and family welfare. As many as 1501 training programmes of 1-7 days duration were organized during 2020-21 in which 36028 farmers farm women and rural youth participated.

### 1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	901	16392	2542	18934
Rural youths	123	1202	196	1398
Extension functionaries	240	3081	440	3521
Sponsored Training	198	10756	658	11414
Vocational Training	39	730	31	761
<b>Total</b>	<b>1501</b>	<b>32161</b>	<b>3867</b>	<b>36028</b>

### 2. Field Demonstrations

During the period under report, a total of 2288 demonstrations on cereals, oilseeds, pulses, vegetables, fruit crops etc were laid out on the farmers' fields in an area of 885.67 ha.

#### 2.1 Front-line demonstrations on oilseeds

The Directorate of Extension Education through KVKs conducted 212 demonstrations covering an area of 77.20 ha in different districts. These demonstrations included single and multi-component technologies like improved

seed, nutrient management, weed management and insect-pest management etc. in mustard, toria and groundnut.

#### 2.2. Front-line demonstrations on pulses

A total of 865 demonstrations were laid out by the different KVKs covering an area of 311.25 ha on the farmers fields to judge the performance of new varieties, IPM practices and weed management in major pulses of Western U.P like Urd bean, lentil, pigeon pea and Mungbean.

### Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	212	77.2	—
Pulses	865	311.25	—
Cereals	771	269.64	—
Vegetables	90	19.3	—



Other crops	280	188.28	–
Hybrid crops	70	20.0	–
<b>Total</b>	<b>2288</b>	<b>885.67</b>	<b>–</b>
Livestock & Fisheries	226	–	241
Women Empowerment	48	–	–
Other enterprises	150	8.62	215
<b>Total</b>	<b>424</b>	<b>8.62</b>	<b>456</b>
<b>Grand Total</b>	<b>2712</b>	<b>894.29</b>	<b>456</b>

### 3. On-farm trials (OFTs)

The Directorate of Extension Education through KVKs laid out nearly 220 on-farm trials in different

districts. Varietal evaluation, cropping systems evaluation and crop management technologies were tested against farmers practices.

### Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	182	91	412
Livestock	32	16	134
Various enterprises	6	3	20
<b>Total</b>	<b>220</b>	<b>110</b>	<b>566</b>

### 4. Scientific Advisory Committee (SAC) Meetings

During the year 2020-21, Eighteen meetings of Scientific Advisory Committee (SAC) were conducted to guide and finalize the action plan of KVKs at different KVKs.

### 5. Production and Distribution of quality seed and planting materials

A total of 5098.22 quintal seed of different crops and 212820 seedlings/planting materials of different horticultural crops were produced on the institutional farm of KVKs. This activity contributed in seed replacement, adoption and spread of new varieties, seed production at individual farmer's levels / Village level.

### Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	5098.22	96,57,779.60
Planting material (No.)	212820	50,371.50
Bio-Products (kg)	13,085.75	1,39,415.00

### 6. Farm Advisory Services

Besides OFT, FLD and Trainings the KVKs & KGK Staff organized / participated in various advisory services like Animal health camp, Celebration of important days, Diagnostic visits, Exhibition, Exposure visits, Ex-trainees meet, Farm science club, Farm schools, Farmers visit to KVK, Field day, Film

show, Group discussions, Kisan ghosthi, Kisan mela, Lecture as expert, Method demonstrations, Radio talk, Scientists' visit to farmers field, Seed treatment campaign, Self -help groups, Soil health campaign. Through these various activities under farm advisory services a total of 19220 farmers and 193123 Extension personnel were benefited.

### 7. Extension activity

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	Total
Advisory services	6467	19351	640	19991
Awareness programme under CRM	5	435	0	435



Celebration of important days	55	4417	256	4673
COVID-19 Jagrukta programme	2	46	0	46
Diagnostic visits	1418	3949	190	4139
Exhibition	42	11704	833	12537
Exposure visits	33	1175	63	1238
Ex-trainees Sammelan	4	175	10	185
Farm Science Club	4	144	9	153
Farmers' seminar/workshop	18	884	43	927
Farmers visit at KVK	2665	6046	206	6252
Field Day	118	3459	245	3704
Field Harvest day	1	72	0	72
Film Show	92	4785	172	4957
Five days Training under CRM	2	50	0	50
Foundation Day (SVPUA&T, Meerut)	1	17	0	17
Group discussions	194	4541	133	4674
Horticulture Training at KVK	10	250	15	265
Kharif and Rabi Abhiyan	4	161	9	170
Kisan Ghosthi	349	42303	1311	43614
Kisan Mela	75	21314	1412	22726
Kisan Samman Diwas	0	132	59	191
Krashak Kalyan Diwas	1	84	0	84
Lecture delivered	352	30793	731	31524
Live streaming – PM Kisan Nidhi	1	18	2	20
Live telecast of Inauguration of Academic Building (RLBCAU, Jhansi)	1	15	5	20
Mahila Kisan Diwas	3	185	10	195
Method Demonstrations	58	635	43	678
Mobilization of Degree College Students	1	125	0	125
Mobilization of School and School Students	5	508	0	508
Others (pl. specify)	2584	3558	49	3607
Parthenium eradication campaign	2	48	0	48
Plant/animal health camps	2	287	15	302
Poshan Mah	8	559	25	584
Scientists' visit to farmers field	2887	12179	170	12349
Self -help groups	39	758	42	800
Soil Health Cards Distribution	855	800	55	855
Special day celebration	44	4152	271	4423
Sushan Diwas	1	165	4	169
Swachhta Pakhwada Abhiyan	28	1358	75	1433
Visit of farmers & farmers group.	271	1072	0	1072
Visit to farmers to KVK	511	2693	125	2818
World Food Day	1	31	3	34
World Honey Bee Day	1	34	0	34
World Soil Health day	4	304	80	384
World Women Day	1	36	5	41
<b>Total</b>	<b>19220</b>	<b>185807</b>	<b>7316</b>	<b>193123</b>





## 8. Crop Cafeteria

Crop Cafeteria / Technology Park are one of the important features of each KVK to demonstrate the technological option available for the farmers of the district. The KVKs demonstrated the latest agro-technologies such as latest varieties of field crops, fruit & vegetables, agro forestry, intercropping, medicinal & aromatic plants, raised bed planting, use of bio-agents, low tunnel for nursery raising, new crops and many more in their Crop Cafeterias/Technology Park developed at KVK campus.

## 9. Mid Term Review Action Plan Work Shop of KVK

Mid term Review Workshop of 20 KVKs of University jurisdiction was organized by Directorate of Extension during 29-30 November 2020. In this workshop progress



report & Action plan (April 2020-March 2020) were presented by concern Sr. Scientist & Head of KVKs. Dr. Santanu Dubey, Principal Scientist, ICAR-ATARI, Kanpur and Dr. S.K. Sachan, Director Extension Chaired the technical session.

## 10. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	Total
SVPUA&T, Meerut KVK	Text only	5088	471	571	54	1365	353	7902
	Voice only	3244	632	485	195	1512	784	6852
	Voice & Text both	2000	115	88	56	533	174	2966
	<b>Total Messages</b>	<b>10332</b>	<b>1218</b>	<b>1144</b>	<b>305</b>	<b>3410</b>	<b>1311</b>	<b>17720</b>
	<b>Total farmers Benefitted</b>	<b>34636</b>	<b>5381</b>	<b>6242</b>	<b>1900</b>	<b>15289</b>	<b>6559</b>	<b>70007</b>

## 11. HRD and Publications

SN	Category	Number	SN	Category	Number
1	Workshops	81	10	Research papers	57
2	eConferences	12	11	Lead papers	4
3	Conferences	88	12	Seminar papers	20
4	Meetings	148	13	Extension folder	108
5	Trainings for KVK officials	25	14	Proceedings	40
6	Visits of KVK officials	94	15	Award & recognition	7
7	Book published	5	16	Ongoing research projects	14
8	Training Manual	12	17	Technical Reports	12
9	Book chapters	29			

## 12. Details of Soil, Water and Plant Analysis

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	4502	4433	558	4,24,480.00
Water	75	45	15	--
<b>Total</b>	<b>4577</b>	<b>4478</b>	<b>573</b>	<b>4,24,480.00</b>

## SUCCESS STORY

### Bio-fortified Lentil Variety Pusa Masoor Ageti: A successful cultivation

<b>Introduction</b>	Technology (Variety) Pusa Masoor Ageti is developed by the IARI, New Delhi released during 2017. The variety Pusa Masoor Ageti contains 65.00 ppm iron as compare
<b>KVK intervention</b>	The area under Mustard is about 3000 ha in district Bijnor. Commonly grown Mustard varieties are PL-8, NL-1 and other old varieties. Variety Pusa Masoor Ageti was introduced and demonstrated by KVK Bijnor during Rabi-2018-19 & 2019-20 at 20 farmer's field through FLD.
<b>Output</b>	The average yield at Farmers field was 13.62 qt per ha (16.25 qt. maximum yield per ha.) with cost of cultivation of Rs. 32280.00 per ha. The average net profit per ha was recorded Rs. 38285.00 per ha.
<b>Outcome</b>	This technology may be capable for increasing extra net return of farmers due higher yield, short duration nature of crop (105 days) and better quality comparison to other varieties.
<b>Impact</b>	The area under this variety has now spread to more than 65 ha in just one year. Farmers are all satisfied with the yield of this variety and also claim that it is better in quality. The successful farmer is Sri Aarush Gahlot Village – Rajupura Manju, Block – Kotwali, District- Bijnor.



### Bio Fortified Wheat Variety DBW-173 : A Successful cultivation

Name of KVK Krishi Vigyan Kendra, Nagina (Bijnor)	
<b>Introduction</b>	Technology (Variety) DBW -173 is developed by the IIWBR, Karnal released during 2018. The variety DBW-173 rich in iron (40.70 ppm) and protein (12.50%) in comparison to 28.00 ppm iron 8-10 % protein in other wheat varieties.
<b>KVK intervention</b>	The area under Wheat is about 1,45,000 ha in district Bijnor, out of that about 80,000 ha area is Late sown condition. Commonly grown timely sown wheat varieties HD-3059, DBW-16, and PBW-226. Variety DBW-173 was introduced and demonstrated by KVK Bijnor during Rabi-2018-19, 2019-2020 and 2021 at farmer's field through OFT & FLD.
<b>Output</b>	The average yield at Farmers field was 47.62 qt per ha (55.00qt. maximum yield per ha.) with cost of cultivation of Rs. 46780.00 per ha. The average net profit per ha was recorded Rs. 71585.63 per ha. Maturing with 120-122 day crop duration, bold grained variety resistant against yellow rust and leaf blight.
<b>Outcome</b>	This technology may be capable for increasing extra net return of farmers due higher yield and higher enrichment with zinc and iron that resulted chapatti is making better quality comparison to other varieties.

## Impact

The area under this variety has now spread to more than 3200 ha in just two year. Farmers are all satisfied with the yield of this variety and also claim that it is better for chapatti making. The successful farmer is **Sri Ajay Kumar** Village – Bagwada, Block – Noorpur, District- Bijnor.



## STORY-3.

### Kitchen gardening for nutritional security and supplements house hold income

<b>Introduction</b>	Kitchen garden is easy way to meet balanced dietary requirements of rural house. Vegetables are selected considering the prevailing food habits and climatic conditions of the areas, and with the larger goal of ensuring availability of wholesome and nutritious food. In 2019 Rabi, Krishi Vigyan Kendra, Nagina conducted Front Line Demonstration on Kitchen Garden. In these demonstrations, seeds were distributed to farm women. Smt. Seema Singh, a resident of Burapur village block Kotwali, Nagina (Bijnor) a progressive woman initiated kitchen gardening. This initiative helped her to ensure food security and also in improving the nutritional status of her family. Regular intake of nutrient rich vegetables like pea, onion spinach, sugar beet, turnip, radish, carrot, fenugreek and coriander improved nutritional status of family.				
<b>KVK intervention</b>	Krishi Vigyan Kendra, Nagina promotes kitchen garden (100 sqm <sup>2</sup> ) with an aim to improve nutrition security and to supplement house hold income. KVK also motivates farm women through training and demonstrations to adopt Kitchen Garden.				
<b>Output</b>					
<b>Particulars</b>	<b>Yield (kg/100m<sup>2</sup>)</b>	<b>Gross Cost (Rs./ 100m<sup>2</sup>)</b>	<b>Gross Return (Rs./ 100m<sup>2</sup>)</b>	<b>Net Return (Rs./Unit)</b>	<b>B:C Ratio</b>
<b>Demonstration</b>	105	598	1680	1082	1.80
<b>Local Check</b>	78	560	1248	688	1.22
<b>Outcome</b>	Krishi Vigyan Kendra, Nagina distributed hybrid vegetable seeds to 20 families. The vegetables in the kitchen garden harvested for throughout the season which save per day expenditure on vegetables. This ultimately led to a saving for family with availability of fresh vegetable. Good quality seed with diversity of vegetables improves nutritional security of farm women and her family.				
<b>Impact</b>	Economically Kitchen gardens help to increase household income, otherwise significant portion of the family income spent in purchase of vegetables. Social Benefits of Kitchen gardens include direct contribution to household food security by increasing availability, accessibility, and utilization. Kitchen gardening also help in utilization of available land resource in more productive way.				





## Impact of evaluated, demonstrated and introduced technologies in district Bijnor (U.P.)

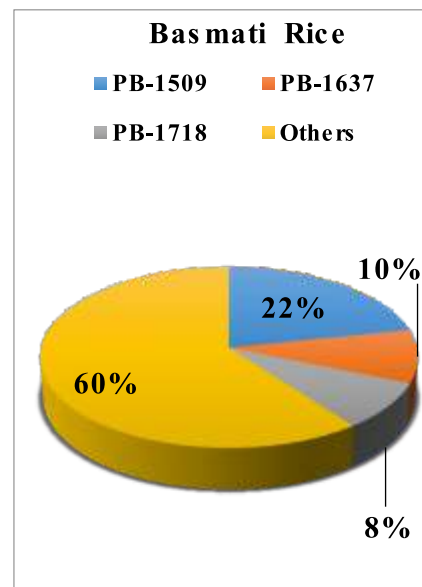
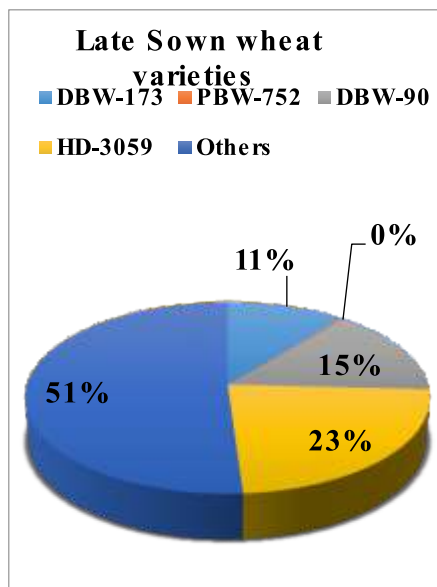
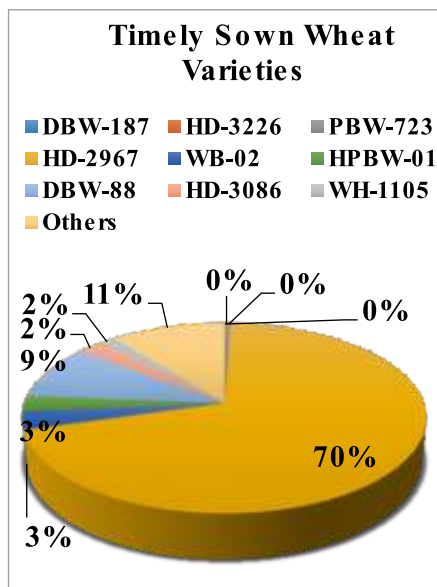
### (A) Crop Production Technology

Crop	Technology	Introdu- ction Year	Demo. yield (q/ha)	Check. yield (q/ha)	Techno- logical Gap (q/ha)	Additional net profit (Rs./ha)	Area Covered by Tech. (ha)
Sugarcane	Nutrient Management	2009	750	625	125	25175.00	100000
	Atrazine @ 2.0 kg and 2, 4-D @ 1.0 l/ha	2009	685	600	85	19745.00	25000
	ZnSo <sub>4</sub> and FeSo <sub>4</sub> (25 and 20 kg/ha)	2010	713	567	146.00	29409.00	50000
	Trench method of sugarcane sowing	2010	1487.5	1081.25	406.25	138962.00	65000
	Halosulfuron methyl 75% WG @ 90gm / ha	2017	980.00	937.50	42.5	17475.00	500
	Drip irrigation and fertigation	2018	1352.00	1120.00	232.00	63400.00	100
	Sugarcane + French Bean	2010	1458.68	1012.50	446.00	-	150
	Sugarcane + Bottle gourd	2010	777	600	177	10000.00	500
	Sugarcane + Okra (Bhindi)	2010	853	600	253	28000.00	1000
	Sugarcane + Cucumber	2010	962	600	362	55000.00	800
	Sugarcane + Mustard intercropping	2015	1272.31	1127.50	144.81	29771.00	15000
	Sugarcane + Lentil intercropping	2015	1252.50	1127.50	125	27067.00	100
	Sugarcane + potato intercropping	2015	2182.88	1127.50	1055.38	289399.00	300
	Nursery plantation under late sown condition	2017	1476.25	1036.25	440	139600.00	200
	Use of Ratoon manager	2018	1095	902.50	192.50	55825.00	50
Wheat	Balance fertilization in wheat	2011	43.50	37.00	6.50	-	1500
	Sulfosulfuron + Carfentrazne (33 + 25 gm)	2010	53.20	43.50	9.70	12044.00	5000





	Salfosulfuron 75% + Metsulfuron 5% (Ready mix) @ 40 gm / ha	2015	52.75	44.5	8.25	14980.00	25000
	Mesosulfuron methyl 3 % + Idosulfuron methyl 0.6 % (Ready mix) @ 400	2015	51.25	43.50	7.72	12558.00	5000
	Clodinafop 15% WP + Metsulfuron methyl 20% WP	2015	51.50	43.13	8.37	18462.00	45000
<b>Rice</b>	Balanced fertilization in hybrid rice	2009	73.72	63.92	9.80	10180.00	15000
	Pretilachlor @ 1.5 l/ha	2009	61.6	50.9	10.70	9465.00	4200
	Bensulfuron methyl 0.6 % Pretilachlor 6% @ 10 kg /ha	2010	68.00	55.0	13.00	17500.00	2000
	Oxadigryl 80% W.P @ 112.5 gm /ha	2015	58.2	44.40	13.8	15469.00	10000
	Bispyribac Sodium 10% SC @250 ml /ha	2011	60.75	50.13	10.62	18257.00	20000
<b>Mustard</b>	Variety YSH-0401	2017	13.08	11.24	1.84	6552.00	20000
	Sulphur @ 40 kg/ha and Boron @ 1.5 kg/ha	2015	13.98	11.54	2.44	6658.00	20000
	Recommended dose of Sulphur	2010	12.63	11.25	1.38	4970.00	25000
<b>Urd</b>	ICM	2016	11.66	9.18	2.48	11932.00	2000
<b>Lentil</b>	ICM	2016	10.39	8.07	2.32	4206.00	200



## Entrepreneurship Development

### (I) Entrepreneurs Developed through Participatory Seed Production

A progressive farmer Sharad Kumar Singh, attended training Programmes at Krishi Vigyan Kendra

Bijnor during 2020 and learnt the skill of growing quality Seed Production technique. Due to high demand of seeds newly released wheat and paddy varieties, Sharad Kumar Singh has taken own field for seed production. The seed production activity is supervised by the KVK scientists.

**Seed production and seed supply of farmers to farmers**

Year	Crop	Varieties	Seed Produced (q)	Total distributed seed (q)	Seed Supplied to farmers
2014-15	Paddy	PB-1509	180.00	52.00	112
	Wheat	HD 2967	110.50	62.50	70
		DB W 88	87.00	32.00	45
		WH 1105	98.00	24.00	40
		HD 3086	91.00	18.50	32
2015-16	Paddy	PB-1509	71.00	40.75	80
	Wheat	HD-2967	300.00	159.50	125
		HD-3086	26.25	18.80	35
		DBW-88	24.25	20.00	16
		DBW-90	22.50	18.75	19
		DBW-71	21.25	4.00	10
		HD-3059	75.00	52.00	60
2016-17	Paddy	PB-1509	188.00	40.00	93
	Wheat	HD-3086	29.00	17.00	11
		HD-2967	160.00	125.00	92
		HD-3059	48.00	34.00	46
		DBW-88	56.00	41.50	55
		DBW-90	46.00	39.85	48
		DBW-90	46.00	39.85	48
2017-18	Paddy	PB-1509	110.00	45.00	112
		PB-1637	32.00	32.00	60
	Wheat	HD-3086	52.00	32.00	22
		H-2967	155.00	120.00	315
		DBW-88	26.00	18.00	35
		DBW-90	24.00	10.00	22
		HD-3059	50.00	32.00	50
		WB-02	12.75	12.00	18
2018-19	Paddy	PB-1509	110.0	22.00	112
		PR-126	33.0	5.00	18
		NDR-3112	13.0	2.00	8
		PB-1637	32.0	24.00	60
		PR-126	65.0	18.00	41
	Wheat	HD-3086	54.00	28.00	22
		HD-2967	150.00	124.0	315
		DBW-88	25.00	12.00	35
		DBW-90	22.00	7.00	22
		HD-3059	50.00	33.00	50
		HD-3086	53.00	12.00	28
		WB-02	12.75	12.00	28
2019-20	Paddy	PB-1718	10.50	5.50	11
		PB-1728	10.00	3.75	8
		PB-1509	120.00	40.00	80
		PB-1637	30.00	22.00	68
		PR-126	65.00	18.00	41

**Extra income through Participatory seed production**

Year	Crop	Extra income through seeds Rs.
2015-16	Paddy	2,84,000.00
	Wheat	6,50,600.00
2016-17	Paddy	80,875.00
	Wheat	6,91,490.00
2017-18	Paddy	2,92,000.00
	Wheat	5,83,230.00
2018-19	Paddy	1,85,500.00
	Wheat	6,55,000.00



2019-20	Paddy	2,35,000.000
	Wheat	5,45,000.00
2020-21	Paddy	2,10,000.00

**Recognition and Awards:** Sri Sharad Kumar Singh achieved first prize of Rs 1,00,000.00 in wheat production (Variety HD-2967) in all over Uttar Pradesh during 2020, felicitated by Uttar Pradesh government.

Presently other 80 farmers fully engaged in participatory seed production mode. Some major farmers as given below :-

SN	Name of Famers	Address
1	Mr. Pankaj Kumar	Sarifpur, Kotwali
2	Mr. Mukesh Kumar	Shadipur Begam, Kiratpur
3	Mr. Yaduveer Singh	Athai Aheer, Noorpur
4	Mr. Satish Kumar	Sidiyawali, Noorpur
5	Mr. Ajay Kumar	Bagwada, Seohara
6	Mr. Badan Singh	Murliwala, Afzalgarh
7	Mr. Balram Singh	Nansiawala, Dhampur
8	Mr. Dharmandra Kumar	Pawati, Haldaur
9	Mr. Bhupendra Singh	Kalakhari, Kotwali
10	Mr. Sharwan Kumar	Jalpur, Najibabad

#### (I) Vermi-compost Production as Entrepreneurship

Till date employment generation for rural youth is a very crucial issue, keeping in mind these fact Krishi Vigyan Kendra, Bijnor playing significant role in the Development of Entrepreneurship in the form of establishment of Vermi-compost Production units, during 2012-13 to till now. The identified farmers of different villages were trained on different aspects of Vermi-compost Production techniques. After training the trained farmers are established Vermi-compost production units and earned about 1.5-3.0 lac per year. Details are as below:



Year	No. of Unit	Production (qt)	Income generated by the farmers
2012-13	02	250 - 500 qt per unit per year	1.50 - 3.00 Lac per unit per year
2013-14	07		
2014-15	10		
2015-16	12		
2016-17	15		
2017-18	17		
2018-19	20		
2019-20	22		
2020-21	35		

**Successfull farmer :** After motivation and technical guidance of Agronomist of KVK, Bijnor, many farmers produce Vermi Compost successfully. Some names of Successful farmers are given below:

1. Sh. Virendra Kumar, Nagina, Block – Kotwali
2. Sh. Narendra Singh, Village – Hakikatpur Veerchand, Block - Kotwali
3. Sh. Jitendra Singh, Village – Baruki, Block – M. Devmal
4. Sh. Shakeel Ahamad, Town – Seohara, Block – Seohara
5. Sh. Ankit Kumar Tyagi, Village – Dhela Ahir, Blok – Noorpur
6. Sh. Rakesh Kumar, Village – Shahnajarpur Kort, Block – Noorpur



#### DETAIL OF VERMI-COMPOST UNIT

18 Feet long and 4 feet width, having 14 beds.

A Cost of production			
1	Animal Dung 200 quintal @ Rs. 40/ q	:	8,000.00
2	Transportation cost Rs. 10@quintal	:	2,000.00
3	6 Labour @ Rs. 300/day for Mixing, Bed filling and punging	:	1,800.00
4	20 Labour for packaging & Filtering @ Rs. 300/ day	:	6,000.00
5	Other Cost	:	4,000.00
	<b>Total (Rs.)</b>		<b>21,800.00</b>
	<b>Total Cost - Repetition of work about 9 times therefore (21,800 x 9)</b>	:	<b>1,96,200.00</b>
B Income			
1	Prepare compost about 100 quintal each time (100 X 9 =900)	:	
2	Selling Price @ 600 /quintal	:	
3	Selling Cost (Rs.) = 900 x 600	:	5,40,000.00
4	Income by earthworm selling (1 quintal)	:	30,000.00
	<b>Total Income (Rs.)</b>	:	<b>5,70,000.00</b>
	<b>Net Profit (A B)</b>	:	<b>3,73,800.00</b>

#### (iii) Single Bud Nursery Preparation of Sugarcane as Entrepreneurship

For employment generation of rural youth, reduction in cost of cultivation, time management of planting, enhancement of germination percentage, effective control of disease, preparation of Single bud nursery gets opportunity for Entrepreneurship. Some farmers successfully prepare nursery and get profit and generate

employment to other persons, presently Govt. of India provides financial support for this purpose. Keeping in mind the facts KVK, Bijnor trained identified farmers of different villages on different aspects. At present Sh Suresh Singh Chouhan, village – Sarkara Chakrajmal, Sh Mukesh Kumar, village – Begampur Shadi, Sh. Kulveer Singh, village – Tisotra, Tejpal, Village – Rampur Vidar, Block - Noorpur Successfully prepare nursery.

Year	No. of Farmers
2019-20	05
2020-21	15

#### (iv) Organic Farming

For the purpose of employment generation of farming community and production of quality farm produce, KVK, Bijnor motivated and trained farmers and rural

youth of district to organic farming. The impact seeing visually many farmers grown sugarcane, wheat, rice, etc. successfully on organic mode. Presently about 200 farmers engaged organic farming.



Year	No. of Farmers
2015-16	12
2016-17	25
2017-18	40
2018-19	90
2019-20	150
2020-21	200

#### Successful farmers :

1. Sh. Rajendra Singh, Village – Umari, Block – Noorpur
2. Sh Brahmpal Singh, Village – Agari, Block – Haldour
3. Sh Sudhir Tyagi, Village – Sikari Bujurg, Block – Nahtour
4. Sh. Surjeet Singh, Village – Beeruwala, Block – Najibabad
5. Sh. Jitendra Singh, Village – Bilai, Block – Haldour
6. Madan Pal Singh, Village – Suhagpur, Block – Haldour

#### (i) Intercropping in sugarcane with Relay cropping

Resource utilization, employment generation and nutritional security are important issues in current situation. Intercropping in sugarcane with Relay cropping played very significant role for above said purpose. Under the guidance KVK Sh. Jitendra

Kumar, Village – Fulsandi, Block – Nahtour growing Sugarcane + Wheat + Mustard under intercropping system and Sugarcane + Kashifal intercropping after harvesting of Kashifal he growing onion.

#### (ii) Entrepreneurship through Mushroom cultivation

Mushroom production promoted by the KVK in the district Bijnor. Regular rural youth trainings for self employment generation were conducted for the popularization of Mushroom production. Sh. Vikas Kumar a progressive and educated farmer started a commercial unit of Mushroom production & all technical support provided by the KVK. He was properly trained by the KVK, Nagina on every minute aspect of commercial mushroom production. The unit producing mushroom throughout the year and one unique example of Mushroom production is giving here under:-



#### Detail of Results obtained due to the adoption of technologies

SN	Particular	Amount (Rs.)
i.	Cost of production per 5 q compost	1,800.00
ii.	Spawn	700.00
iii.	Labour	1,000.00
iv.	Other expenses	400.00
	<b>Total</b>	<b>3,900.00</b>
	<b>Gross Cost (Rs.) : 3900.00X 25q compost</b>	<b>97,500.00</b>
v.	Average production from 5 q compost - 150 Kg Mushroom	
vi.	Price realized (Rs. per kg.)	110.00
vii.	Gross Income	16,500.00
viii.	Net Income	12,600.00
	<b>Gross Income (Rs.) : 12,600.00 X 25 q compost</b>	<b>3,15,000.00</b>



### KVK, BAGHPAT

**Nutri garden is becoming popular among farming community for combating malnutrition and stay healthy**

**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 throughout 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 CB: ratio is again noticeable and almost higher in recommendation practice than local practice .It is 1:5.57 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.



## KVK, BAGHPAT

### Organic farming of wheat

**Situation analysis/ Problem statements:-** Mr. Vijay Singh, village Sunhera, district Baghpat a farmer who was selected for the demonstration. He was doing organic farming and earlier involved with local variety of Wheat. This variety was low in yield.

**Plan, Implement and Support:-** With the interaction of KVK scientist he was motivated for soil testing to get the carbon content check and advice for the use of green manuring along with earthworm manure, indigenous cow dung manure, fossil, ghanjeevamrit, belpatra, neem, niboli, arc, deciduous, sour buttermilk, waste decomposer and organic molasses sugar with improved variety of wheat i.e. HD2967. KVK scientist also advised him for line sowing.

**Output:-** Mr. Vijay Singh adopted all above practices by incorporating line sowing.

**Outcome:-** After adopting the recommended practices advised by KVK scientist, yield was increased from 9.6 Q to 15.6 q in 0.25 ha of land.

**Impact:-** Mr. Vijay Singh is becoming one of the progressive and learned farmers for others with regards to popularization of HD2967. This technology helps him for livelihood, empowerment and makes him enthusiastic

regards wheat production. He is one of the progressive farmer after becoming a part of KVK activities and gets their effectiveness for his own development. Mr. Vijay Singh is very happy with this improved production and management technology and sets forth an example for other farmers of the district. Mr. Vijay Singh is becoming one of the progressive and learned farmers for others with regards to popularization of organic farming. This technology helps him for livelihood, empowerment and makes him enthusiastic regarding organic farming. He is one of the progressive farmer after becoming a part of KVK activities and gets their effectiveness for his own development. Mr. Sanjay Singh is very happy with this improved production and management technology and sets forth an example for other farmers of the district.



## KVK, BULANDSHAHR

### Case Success Story of Turmeric

Back Ground	Details of farmer
<ul style="list-style-type: none"> <li>No Commercial Cultivation of Turmeric.</li> <li>Farmer's use local varieties.</li> <li>Introduction of variety Pant Pritam &amp; Vallabh Priya.</li> <li>Encouragement of turmeric as an intercrop in Mango orchard.</li> </ul>	<p>Name : Sh. Gy anendra Singh</p> <p>Village : Ali pur Gijhori, Bulandshahr.</p> <p>Area : 4.7 ha.</p> <p>Varieties : Pant Pritam, Vallabh Priya, Roma, Rashmi.</p> <p>Other Activities : Establishment of Turmeric Processing plant in 2013.</p>





Year	Area (ha)	Yield raw(qt.)	Yield Powder(qt.)	Power Rate (Rs./qt)	Gross Return (Rs. Lacs)	Cost of Cultivation (Rs in Lac\$)	Net Return (Rs in Lacs )
2014	0.5	105.0	17.0	9000.00	1.53	0.51	1.02
2015	2.0	430.0	77.4	9000.00	6.97	2.25	4.72
2016	3.0	655.0	121.2	7000.00	8.48	4.10	4.38
2017	3.6	760.0	140.6	8000.00	11.25	5.20	6.05
2018	3.8	810.0	150.5	8000.00	12.04	5.50	6.54
2019	4.10	860.0	165.5	8000.00	12.50	5.60	6.74

Area Under turmeric was 2.5 ha. In 2014

## KVK, BULANDSHAHR

### Case Study of Maize

#### Back Ground

- Lack of sui table varieties for cob purposes.
- Farmer's use local varieties.
- Introduction of variety HQPM -1 & Double.
- Encouragement of suitable cob maize varieties.

#### Technology transfer:

- Seed rate:20 kg /ha
- Spacing - 60 x 30 cm
- NPK – 120:60:40+ 25 kg Zink
- IPM Techno

Year (Kharif)	Total area ( ha.)	Area under old/ Improved varieties (ha.)		
		Comp. var.	Double	HQPM
2013	31100	51 %	34 %	15 %
2014	32200	42 %	38 %	20 %
2015	34600	32 %	45 %	23 %
2016	39500	27%	48%	25%
2017	42700	23%	50%	27%
2018	50500	17%	54%	29%
2019	52000	18%	56%	31%

Area under Imp. Var. maize increased from 49 % to 83 %.

Yield /ha ( Cob weight)		Net Income / ha.	
Comp. var.	HQPM-1	Comp. var.	HQPM-1
42.00	58.0	60000.00	92000.00







**Name :** Sh. Ashok Kumar  
**Village :** Aulina, Bulandshahr.  
**Mobile No :** 8755121460

Sh. Ashok Kumar holds 1.5 acre land in his village. In which 0.5 acre is under planted crop. He realized that income earned from the land is too low to earn bread for family and fulfill basic requirements of the family. He attended different trainings organized by KVK in his village. After attending technical training on vermicompost unit establishment he decided to start one in 2018. KVK supported him in all the scientific technicalities in establishing the unit. He managed to get earthworms from Ghaziabad. Established 1 bed unit in few days with his efforts. KVK scientists made frequent visit to his place. He started contacting road side nurseries in Bulandshahr to Sikandrabad road and

prepared packets of 500gm, 1 kg and 2 kg. The quality of is good and thus attracted the attention of nursery growers. Now he has 42 to 45 vermicompost beds and earns Rs 10000 to 12000 per months by selling it. He extended his area of selling from Bulandshahr to Noida road side nurseries. Mr. Ashok Kumar also gives technical training of same to farmers and till date gave training to 52 farmers in which 15 farmers established their own unit for their personal use in their own vegetable fields. They also provide vermicompost to other farmers in nearby villages. Mr, Ashok is highly thankful to kvk as with money he also earned respect among line departments. He is called as a resource person on vermicompost technicals. He received 4 awards for his efforts and extension of technology.

Year	No of Beds	Yield (qt)	Gross Return (Rs )	Cost of Cultivation (Rs)	Net Return (Rs)
2018	7	7.350	44100	12000	32000
2019	45	405.0	202500	72000	130500

### KVK, GHAZIABAD

**Name and Contact Details of the Farmer :** Vijay Kasana, 9350627350, 9222232,  
**Email :** [vijaykasana28@gmail.com](mailto:vijaykasana28@gmail.com)  
**Name of the Unit :** LUCKY BEE FARM, 1931, Krishna Vihar, Teela Sahbajpur, Loni Ghaziabad, (U.P.) 201102

**Situation Analysis :** Between 2014 and 19, the economic situation of beekeepers not only improved through beekeeping but also through it the agricultural sector has seen a lot of positive impact. During this period, beekeepers have produced not only honey but also other products like pollen, Propolis and beeswax on a large scale. This has not only increased the domestic market of honey but also increased foreign exchange through exports. Have been received. At present, Indian beekeepers are making maximum profit by working with scientific methods. Beekeeping not only benefits a particular person, but is also a friendly insect for farming, but the pollination process has seen a lot of benefit in the crops of the farmer. Pulses and oilseeds crops help to increase the yield by more than about 30 percent. Along with farming, beekeeping is absolutely necessary to double the income of farmers. Only then will the farmer be prosperous and healthy.

**Plan, Implement, Support and Linkage with KVK :** We started beekeeping in the year 2006, inspired by the knowledge of beekeeping given by agricultural scientists

in DD National's Krishi Darshan program. Initially we started the work from 27 Bee Colony which we increased to 43 boxes in one year, after which we got technical information by contacting our Krishi Vigyan Kendra, Ghaziabad and made it a full time employment. The Krishi Vigyan Kendra has a big role to play for the success of anyone associated with the agricultural sector, in the year 2007, we increased our number of colonies to 200 by taking a loan of five lakh rupees in the Khadi Village Industries Commission's Rural Generation Program Scheme, making the first Around 9300 kg of honey was produced in the year itself, which earned us a net profit of around 340000, where we produced a huge amount of honey in the crop season, while in the off season we put a box for pollinating apple orchards in Himachal to meet the government. In the year 2013, we established a bee box and equipment manufacturing unit, so that beekeepers can easily get boxes and equipment, given the lack of bee hives and equipment to the right standard of beekeeping. Can. Exposure visits in various states for the last several years, and participated as



experts in training programs and beekeeping seminars, with special support from Krishi Vigyan Kendra, Ghaziabad, through Krishi Vigyan Kendra where we got technical information. At the same time we got an opportunity to showcase our products and equipment through the agricultural fair held from time to time. For which we especially thank the Center for Agricultural Sciences. In the year 2017, the honey mission program was launched by the Prime Minister to promote madhumakhi farming by the Government of India and to double the income of farmers, in which through the tender process by our firm Lucky Bee Farm, through the Khadi Village Industries Commission. Bee colonies and other equipment were supplied in many states including the state. In the last three years, we have distributed about ten thousand bee colonies and equipment in various states, so that along with us we have also provided employment to an average of twenty to twenty five people, at present our organization “Association of Progressive Beekeepers and Agro Farmers” Various training programs and awareness campaigns are being run for progressive farmers, for the past many years we have been working as a professional training associate with Krishi Vigyan Kendra and State Beekeeping Extension Center through which employment oriented jobs in rural areas Training and giving benefits of the government-run scheme are included. We have also made a big effort on setting up village development centers in Uttarakhand and Haryana state and a plan for cow based rural development. At present, our organization has five thousand bee colonies for which twenty people get employment for the whole year.

**Output :** Since 2007, Lucky Bee Farm has been making steady progress in the field of beekeeping. In which we not only increased the number of bee colonies but from this we also collected many valuable bee products which mainly include honey, pollen and wax. These bee products have not only been used for human health but are also in great demand in the cosmetics industry. With which beekeepers can earn large amounts of profit.

While Lucky Bee Farm made a profit by producing a large amount of honey from bee colonies, by creating modern bee boxes, it also established a source of income by supplying bee boxes to government institutions and general beekeeping in various states of the country. Today we are also making a profit by manufacturing 5 000 to 7000 boxes every year and selling them in different states of the country.

**Outcome :** We are working towards making the youth aware and be self-reliant towards beekeeping in rural

areas of India. In the coming time, work is being done to make Self Help Groups and Association of Beekeepers at different places in the state to make them self-sufficient.

Our organization has set a target of establishing a mini integrated beekeeping development center in district Ghaziabad through which a cluster of bee keepers has been targeted to employ 500 people in the district itself. For which work is going on at a rapid pace. Efforts are being made from time to time through Krishi Vigyan Kendra Ghaziabad to establish utility between beekeeping and agriculture between beekeepers and general farmers.

We are working towards making the youth aware and be self-reliant towards beekeeping in rural areas of India. In the coming time, work is being done to make Self Help Groups and Association of Beekeepers at different places in the state to make them self-sufficient.

More difficult than making any product, it has to be sold to the market at a good rate, in this order, bee spinach produces a lot of honey, but it is unable to market it at a good rate.

For the first time in India work has been started on the Mobile honey processing unit project, So that in the area where a large number of bee colonies are planted, the mobile processing unit in the same area can be taken and its honey can be processed and given to beekeepers. By which beekeeping can connect with the direct consumer and send their product at a higher price. In the coming time, the mobile honey processing unit will establish a revolutionary step in the field of beekeeping in India.

The Krishi Vigyan Kendra at Ghaziabad aims to make farmers and small bee keepers aware of new technology and provide them with high level training.

A number of multi-faceted programs are planned to promote organic farming throughout the state and to bring together the utility of bee colonies for it. It is also planned to sensitize the silent eyelids of the state towards other bee products and provide new and technical equipment to produce them.

### **Impact**

**(a) Technological :** From time to time, through technical information from the Krishi Vigyan Kendra, we provided technical guidance to the ordinary beekeeper to increase his work efficiency. Given the lack of new and modern equipment in traditional beekeeping in India, we made beekeepers aware of this by building high-end modern equipment such as stainless-steel-made honey extractors and other tool kits. As a result, the best quality honey was obtained in India, which is in great demand in the international market. Since the beginning of beekeeping

in our country, ordinary beekeeping has been extracting honey only from the brood chamber, which not only affected the quality of honey but also had a negative impact on the bee colony. Made the parents aware of extracting honey with super chambers and got them boxed on government grants.

(b) **Economic** : Lucky Bee Farm is also increasing the

production of quality honey continuously. Since the year 2013, in all the states of the country, a fixed source of income has also been generated from the sale of bee boxes and its equipment through government and non-governmental mediums. The table of honey produced by us in the last 4 years is given below. Due to the increasing level of beekeeping in India, Today the demand for Indian honey is everywhere in the world.

Year	No of Beds	Yield (qt)	Gross Return (Rs )	Cost of Cultivation (Rs)	Net Return (Rs)
2019-20	7	7.350	44100	12000	32000
2020-21	45	405.0	202500	72000	130500

Lucky bee farm is earning 30-35 Lakhs per year for all bee keeping activities. For example honey production, Bee keeping by products like pollen, wax etc. And supply of bee colonies and bee hives to various government institutions.

#### **Social :**

At present our organization “Association of Progressive Beekeepers and Agro Farmers” Various training programs and awareness campaigns are being run for progressive farmers, for the past many years we have been working as a professional training associate with Krishi Vigyan Kendra and State Beekeeping Extension Center through which employment oriented jobs in rural areas Training and giving benefits of the government-run scheme are included. We have also made a big effort on setting up village development centers in Uttarakhand and Haryana state and a plan for cow based rural development. At present, our organization has five thousand bee colonies for which thirty five people get employment for the whole year.

Beekeeping is not only beneficial for honey production but it is also a golden opportunity to provide employment in agriculture. While beekeeping has increased a certain income to beekeepers and improved their standard of living, on the other hand it has great utility for the agricultural sector. Beekeeping and agriculture are complementary to each other, indiscriminate pesticide growth in crops and the weathering effect on crops have been a major bad influence on the process of mercury. Beekeeping can be a very simple and useful way to improve it is According to the data given by agricultural scientists, beekeeping can increase the yield up to 30% in crops. To increase this, we have organized many programs and awareness programs at block level in association with Krishi VigyanKendra.

#### **Processing and value addition in fruits and vegetables (cottage industry)**

**Surekha Nagi village indergarh Block- Rajapur, Distt. –Ghaziabad (U.P.) ph.7503332230**

Surekha Nagi husband was Physically challenged, later on he suffered kidney transplantaion, suddenly family came in the financial crisis due to hospitalization.

She was in dilemma whether to opt for a job or to start her own business. She decided to do some worthwhile for the rural and urban people through acquired skills and knowledge. She opted for her own business (pickle Making).

#### **Training**

Good days started when she participated in training on food processing and value addition in fruits and vegetables, organized by KVK, Ghaziabad.



#### **Achievements**

After training, in beginning she started her business by making 5 kg of mango pickles. She went door to door selling her product. People liked her pickles that give her moral boost, so she started making different types of Pickles like. Amala pickle, lemon pickle, red chilli, green chilli pickle etc.

She made a brand name Manya food products letter on sea registered her brand name Manya in fssai She



products are being sold in and around local market and Delhi NCR.

### Impact

To meet increasing demand and supply of pickles she also formulated self helpgroups of 20-25 farm women for technical backup and other assistance. She earned net profit of RS 20000/month long with different types of pickles she also prepare chips, papad dal bari, jawe etc. She also acting as a master trainer and giving training to the rural women in the nearby villages.

### Award

She was awarded with mahila kisan award 2019 by the KVK.Ghaziabad.

### Integrated Farming System

Due to increasing cost of cultivation & shrinking the cultivable land agriculture is not a profitable business. Most of the small & marginal farmers are not able to fulfill their fundamental needs due to having limited land.

Among them Sh. Devendra Singh S/O Shri Surat Singh belonging to Milak Rawli village of district Ghaziabad is one who was also suffering with the same above said problem & He was so disappointed that he wanted to give up the farming because of having 2.0 acre land (not sufficient for his livelihood). Before 5 year ago he came in contact with Krishi Vigyan Kendra, Muradnagar, Ghaziabad in a training programme & suggested to go for integrated farming system. He connivance & started to make vermicompost & to do apiculture. He started his work with 10 unit (10x03 fit) of vermicompost & 5 boxes of apiculture. At first year he produced 100 Qtl. of earned Rs. 52600/- after 05 year (2018-19) in he earned Rs. 813000/- through vermicompost Rs. 540000/-, honey Rs. 198000/- and Worms Rs. 75000/-.

Now he is very happy and confident and thinking about to launch one another product vermiwash. Though he is making it but not at commercial scale.

SN	Year	Product	Qty. (Qtl./kg)	Rs.			
				Rate	Cost	Profit	Net Profit
1	2013-14	Vermi-compost	120 Qtl.	350/ Qtl.	3000	42000	39000
		Honey	100 kg	150 /kg	1400	15000	13600
Total					4400	57000	52600
2	2015-16	Vermi-compost	450 Qtl.	380/ Qtl.	17000	171000	154000
		Honey	270 kg	150 /kg	5000	40500	35500
Total					22000	211500	189500
3	2016-17	Vermi-compost	730 Qtl.	385/ Qtl.	35000	281050	246050
		Honey	685 kg	160 /kg	17500	109600	92100
Total					52500	390650	338150
4	2017-18	Vermi-compost	1050 Qtl.	400/ Qtl.	55000	420000	365000
		Honey	1030 kg	180 /kg	25000	185400	160400
		Worms	400 kg	200 /kg	-	80000	80000
Total					80000	685400	605400
5	2018-19	Vermi-compost	1400 Qtl.	450/ Qtl.	90000	630000	540000
		Honey	1200 kg	190 /kg	30000	228000	198000
		Worms	250 kg	200 /kg	-	50000	50000
Total					120000	908000	788000
Grand Total					275900	2210550	1934650

### KVK, HAPUR

In case of diversification with large scale promotion of mushroom grower of Sri Vikas Tyagi s/o Sri Chandra Prakash Tyagivillage&Tahsil –Garh District Hapur progressive 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 support for cultivation and marketing of mushroom, so many time practical



demonstration facilitated from Dr Gopal Singh Prof.(Plant pathology) & in-charge mushroom production unit SVPUA&T Meerut U.P. Mr Vikas Tyagi to started large scale mushroom production in Sept 2019 in the chairmanship of Hon'ble Vice Chancellor Prof. Gaya Prasad and supervision ship of Dr S.K,Sachan Director Extension with technical support of Dr H.R.Singh Prof. & Head KVK Hapur and Dr Gopal Singh Prof.(Plant pathology) & in-charge mushroom production unit SVPUA&T Meerut U.P.

### Output

Mushroom production was started at small scale with the technical support of KVK Ghaziabad. Scope & demand of market he started large scale production and established with financial support of bank Sri Vikas Tyagi started production from 05 Kg mushroom per day 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 37500.00 per day

expenditure Rs 16500.00 , take net income Rs 21000.00 per day 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.



## KVK, PILIBHIT

### Technology identified for Dissemination

#### Pant Pili Sarson – 1

#### Identified by KVK Pilibhit

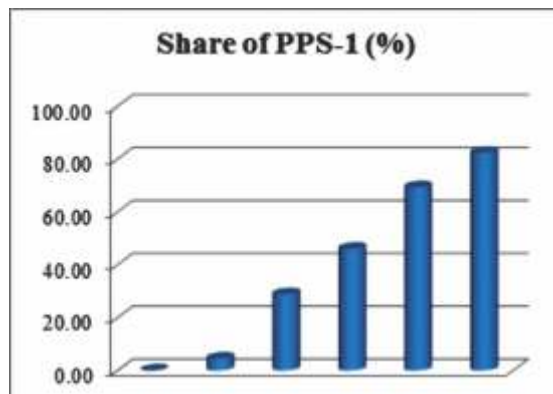
**Need of the district-** In Pilibhit district mustard/ toria is sown at approximately 16500 ha. area . Here most of the mustard is sown after harvesting of paddy and followed by sugarcane crop. The conventional toria varieties like PT-303 and PT-507 were sown by the farmers, which did not fetch good profit to the farmers. The toria varieties perform well if they are sown upto 20 September but it

could not be done as the harvesting of paddy is done upto 15 November in the district. The late sowing of toria varieties could not give good yield of the crops.

So the farmers needed a mustard variety of short duration so that it could fit between the paddy and sugarcane crop in the district. KVK Pilibhit identified and introduced Pant Pili Sarson-1 variety in Rabi 2012-13 season through Front line demonstrations. It soon gained the popularity and the area of the variety is increasing year after year giving farmers a good crop as well as profit.

**Table: Area expansion of the mustard variety PPS-1 in district Pilibhit**

Year	Area of Mustard/ Toria (ha.)	Area of PPS-1 (ha.)	Share of PPS-1 (%)
2015-16	16683	20	0.12
2016-17	16572	762	4.60
2017-18	16334	4723	28.92
2018-19	16562	7645	46.16
2019-20	16683	11581	69.42
2020-21	16481	13582	82.41



### KVK, Shahjahanpur

**Specific Technology:** Production of Shimla Mirch on FIRBS method with mulching and drip irrigation.

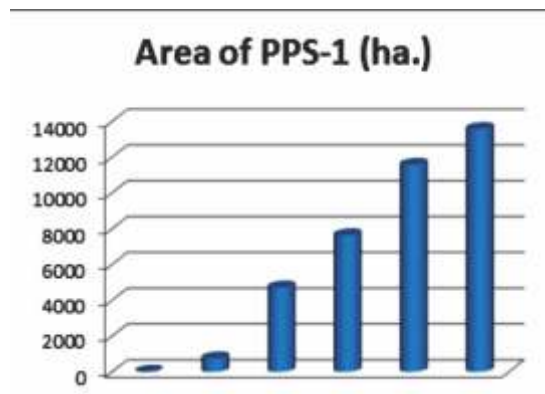
**Crop and Variety:** Shimla Mirch, Artillado

**Name of farmer and Address:** Sri Tara Singh S/o Sri Sohan Singh, Village- BahadurpurDiuriya, Block-Khutar, Tehsil-Powayan, Shahjahanpur

**Background Information about farmer's field:** As per the soil test report:-

- Available N:P:K- 170:60:70
- Farming Situation:- Irrigated
- Previous Crop:- Dhaincha for green manuring
- Sowing Date:- 02.09.2019 to 04.09.2019
- Harvested date:04.11.2019 to 25.01.2020 and 24.02.2020 to 05.05.2020

**Details of Technology Demonstrated:-**Hybrid seed variety Artillado on FIRBS method with mulching and



drip irrigation.

**Institutional Involvement:** Technical guidance to adopt FIRBS method of sowing with polythene mulch to save field moisture and weeds control and also suggested drip irrigation.

**Success Point:** Efficient use of ground water by using drip irrigation. It also reduced incidence of pest and diseases and weeds.

**Farmers Feed Back:** Farmers appreciated the technology it gave an additional income of Rs. 446000.00 as compare to traditional method.

**Yield (q/ha):** Potential yield of variety

**District average (2019) –** 250q/ha

**State Average (2019):-**200q/ha

**Performance of Technology vis-a-vis local check (Increase in productivity and returns)**

Used practice	Yield (q/ha)	Gross Cost (Rs./ha)	Gross Income (Rs./ha)	Net Income (Rs./ha)	B:C Ratio
Farmers practice	300	150000.00	360000.00	210000.00	2.40
Demonstration	580	250000.00	696000.00	446000.00	2.78
% Increase	93.33	66.66	93.33	112.38	15.83



**Specific Technology:** Use of high yielding variety, INM and IPM.

**Crop and Variety:** Lentil, PI08

**Name of farmer and Address:** Sri Sirish Kumar Saxena S/o Sri Avinash Chandra Saxena, Village- Kutwapur, Block-Bhawalkhera, Tehsil- Sadar, Shahjahanpur

**Background Information about farmer's field:** As per the soil test report:-

- Available N:P:K- 170.5:55.21:69.11
- Farming Situation:- Irrigated
- Soil Type: Sandy Loam
- Previous Crop:- Paddy
- Seasonal Rainfall: 153.6mm
- No. of Rainy Days: 12
- Sowing Date:- 09-11-2019
- Harvested Date: 21.03.2020

**Details of Technology Demonstrated:-**

HYV seed (PL 08) @ 30 Kg/ha

[Mancozeb+carbendazim@1.25kg/ha](#)

Imidachloprid @ 0.25l/ha

Sulphur (WP) @ 2.5kg/ha

**Institutional Involvement:** Technical guidance to adopt line sowing in first fortnight of November, basal

application of full dose of phosphorus and potash through DAP and MOP and Starter dose of Nitrogen. Use of secondary nutrient-sulphur as bentonitesulphur. Timely use of insecticide and fungicide to save the crop from insect pest and diseases.

**Success Point:** Adoption of HYV PL 08 and focus on INM and IPM with good agronomic intercultural operations has increased the production and productivity of lentil in the district.

**Farmers Feed Back:** The technology is very effective in enhancing the production and productivity of lentil. The economic gain is better than traditional farmers practice.

**Yield (q/ha): Potential yield of variety**

**District average (2019) – 10.52/ha**

**State Average (2019):-8.54q/ha**

**Performance of Technology vis-a-vis local check (Increase in productivity and returns)**

Used practice	Yield (q/ha)	Gross Cost (Rs./ha)	Gross Income (Rs./ha)	Net Income (Rs./ha)	B:C Ratio
Farmers practice	16.8	27050	75600	48550	2.79
Demonstration	25.5	31700	114750	83050	3.62
% Increase	51.8	17.2	51.78	71.06	29.74



**Bio-fortified Varieties of Wheat for nutritional security and getting extra income: KVK Bijnor (U.P.)**

Malnutrition has emerged as one of the most serious health issues worldwide. The consumption of unbalanced diet poor in nutritional quality causes malnutrition. Deficiency of proteins, essential amino acids, vitamins and minerals leads to poor health and increased susceptibility to various diseases, which in turn lead to significant loss in farm family income and affect the socio-economic structure. The newly developed

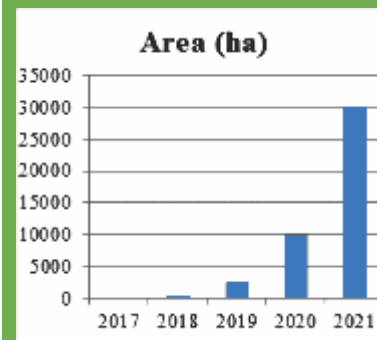
Biofortified crop varieties besides serving as an important source for livelihood to poor people assume great significance in nutritional security and gaining extra income.

The KVK, Bijnor demonstrated newly released Biofortified varieties of Wheat- DBW-187, DBW-173, WB-02, HPBW-01 and PBW-752 for getting extra income with nutritional security in comparison to other varieties.



### Impact of Biofortified Wheat Varieties in District Bijnor

Biofortified Wheat Varieties	Year	Average Yield (q/ha)	Net Return (Rs/ha)	Area Expansion (ha)
WB-02	2017	53.87	91500.00	Starting Year
WB-02, HPBW-01, DBW-173,	2018	51.61	85152.33	250
WB-02, HPBW-01, DBW-173, DBW-187, PBW-752	2019	54.36	92500.00	2600
WB-02, HPBW-01, DBW-173, DBW-187, PBW-752	2020	58.50	96400.00	9945
WB-02, HPBW-01, DBW-173, DBW-187, PBW-752	2021	58.00 (Approx.)	98000.00 (Approx.)	30000 (Approx.)

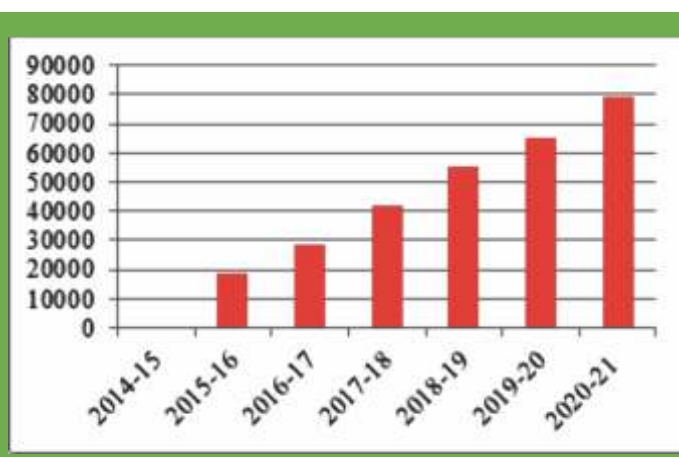


### Wheat variety HD-2967 is Big way for District Bijnor (U.P.)

The area under wheat is about 1, 45,000 ha in Bijnor district commonly grown wheat varieties PBW-343, PBW-550, HD-2851 and HD-2894. HD-2967 variety was released in 2011 and was demonstrated by KVK during Rabi 2014-15 at 40 farmer's field. The average yield at farmers field was recorded 48.83 q/ha (yield

decrease due to heavy rainfall against potential yield). During 2015-16 the variety gave average yield 54.25 q/ha with the cost of cultivation of Rs. 43750/-. The average net profit per ha was recorded Rs. 83356.00/- . Due to disease free, high yield and give better yield in adverse condition the area under this variety has now spread to more than 79,000 ha in just four years and fully replace Var.PBW-343 from district.

Year	Yield (q/ha)	Area Coverage (ha)
2014-15	48.83	Starting year
2015-16	54.25	18500
2016-17	56.45	28500
2017-18	55.00	42000
2018-19	54.35	55,000
2019-20	54.50	65,000
2020-21	53.50	79,000





### Economic analysis of mushroom production (based on per qt. compost)

Enterprises	Total cost (Rs.)	Average productivity (qt.)	Average sale price (Rs./qt)	Gross return (Rs./qt)	Net return (Rs./qt)	BCR
Button Mushroom	4250	2.50	12500	31250.00	22700.00	7.30

#### Successful Farmers/Farm women:

Mrs. Shama parveen Village Faridpur Kaji, near mount litera zee school, Meerut road, Bijnor born in a farming family. She completed her MBA from Dehradun in 2010. Then she started working in manufacturing industry of garments in New Delhi, but that provide her limited comfort for his livelihood and then she returned back in village and pursued farming as profession in 2018. She came to learnt about the prospect and opportunities in mushroom farming on TV channel DD kisan. She registered her for training program on it, under skill India in KVK Nagina, Bijnor and successfully completed 28 days (200 Hrs) training programme.

Mrs. Shama parveen the entrepreneur started with 50 mushroom beds. Initially she invested Rs. 25000 for one unit mushroom cultivation. After 45 days an approximate 1250 kg mushroom was harvested and sold at 110 rupees/kg with net return Rs. 980000. She explored the


market demand and start selling value added product like badi, papad, pickle etc. She established S.A agro food and agriculture product enterprise and start to cultivate both oyster and button mushroom. She starts to supply dry mushroom to pharmacy industry and earn good income. She also established mushroom production and training centre in her village where she provide training to about 10-15 farmers per month. She started working in cooperative manner with 20-25 farmers of Bijnor to capture market avenues and satisfy market demand.

Her success of the enterprise not only provides her better source of income but also, good source of living and self satisfaction. She earn about 4lakh per annum she obtain all her technical support from KVK Nagina Bijnor. From 2020 onwards Mrs. Shama has been utilized as domain skill trainer in mushroom cultivation for undertaking training for rural self employment.

Year	Training	Participant	Unit establish
2017	01	20	05
2018	02	40	30
2019	02	40	55
2020	02	40	125





SN	Title of Technology	Name of Investigator	Outcomes
1	<b>Mushroom Production</b>	<b>Dr. Hansraj Singh</b>	Mushroom production was started at small scale with the technical support of KVK Hapur .Scope & demand of market he started large scale production and established with financial support of bank sri Vikas Tyagi started production from 05 Kg mushroom per day get average rate Rs125.00-130.00 per Kg total income of Rs 625.00-650.00 per day. Now a days 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 per day and employed 8-10 manpower per day.
<b>Name and Contact Details of The farmer :</b>		<b>Sri Vikas Tyagi</b> <b>S/O Sri Chandra PrakashTyagi</b> <b>Village &amp;Tahsil –Garh District Hapur (U.P.),</b> <b>Mob. No. 7906908074, 9927809933</b>	



Inauguration of Manyuk Agro by Hon'ble VC Prof. Gaya Prasad

Mushroom Production Unit



**Mushroom Production & marketing training prog. joint organized by KVK Hapur & Manyuk Agro. Garh**

S.N.	Title of Technology	Name of Investigator	Outcomes
01	Women Empowerment through SHGs	<b>Dr. Savita Arya, SMS/Assoc. Professor (H.Sc)</b>	<ul style="list-style-type: none"> <li>- Presently Total 18 SHGs were running by KVK</li> <li>- Total 21 Lacs were deposit in Bank Accounts of SHGs</li> <li>- Total 121 Women's were Benefitted</li> <li>- SHGs were involved in Making Jhadooo, Toilet Cleaner, Phenol, Harpec, Soaps, Running Milk Collection Centre and Provide Cerdit Support to Members.</li> </ul>



## Story

1	Name	Dr. Vipin Panwar S/o Sh. Suresh Pal Verma		
2	Village & Post	Bahedi Gujjar		
3	Block	Punwarka		
4	District	Saharanpur		
5	Mob. No.	8208542149		
6	Educational Qualification	Ph.D		
7	Training			
	A	Training received on Crop residue Management, Poultry and Mushroom from KVK Saharanpur		
	B	Radio Activity Training		
8	Experience			
	A	8 years' experience in Tissue Culture		
	B	Organic production and marketing of Black wheat, Purple Wheat and Banana since 2018.		
9	Startup Institute	Establish "Ram Agrotech Ltd." And marketing of different food products after receiving "IN POP" registration. In 2021 Fish production started in Bio-Flock Tank Method.		
10	Adopted Enterprises	Integrated farming system(Fish-Banana-Vermicomposting-Mango-Wheat)		
11	Turn Over			
	Year	Enterprises	Expenditure (Rs. In Lakh)	Income (Rs. In Lakh)
	2018	Vermi Compost – 100 Ton	5.00	8.10
	2019	Banana – 1800 Plants	1.50	3.50
	2020	Black & Purple Wheat – 1.0 ha	0.8	1.70
	2021	Fish Production – 12 Tanks	15.00	--
12	Recognition			
	1	Awarded by Ayush Minister U.P. in Kisan Samman Diwas		
	2	Member of Governing Board ATMA Saharanpur and SAC KVK Saharanpur		







## Story

1	Name	Sh. Sudhir Saini S/o Sh. Jai Pal Singh
2	Village & Post	Khusalipur
3	Block	Muzaffarabad
4	District	Saharanpur
5	Mob. No.	9761905686
6	Educational Qualification	Graduate and Yoga Diploma
7	Training	
	A	100 days training on fruit & Vegetable preservation from Department of Horticulture
	B	Certified trainee of Mushroom Grower (200 hrs) and Animal Health Worker (300 hrs) under PMKVY from KVK Saharanpur.
	C	Vocational training on value addition from KVK Saharanpur.
8	Experience	Manufacturing of different food value added products and their marketing since 2011.
9	Startup Institute	Establish "Royal Food Ltd." And received FSSAI Licence for marketing of value added products.
10	Adopted Enterprises	Food processing unit, Medicinal and Aromatic Farm (Fig – 1880, Sahjan – 10, Allovera – 0.2 ha etc.)
11	Turn Over	Rs. 35 Lakh
12	Recognition	Awarded "Kisan Samman" in Kisan Samman Diwas 2019 by DM Saharanpur





## Story

1	Name	Sh. Himanshu Saini S/o Sh. Rishi Pal Saini				
2	Village & Post	Murtazapur				
3	Block	Sadauli Kadeem				
4	District	Saharanpur				
5	Mob. No.	9027893050				
6	Educational Qualification	High School				
7	Training	Certified trainee of Mushroom Grower (200 hrs) under PMKVY and Mushroom Enterpriser (ARYA) from KVK Saharanpur.				
8	Experience	Production and marketing of Ganoderma, Oyster & Button Mushroom since 2019.				
9	Startup Institute	Establish Marketing Cluster Group for Mushroom products marketing.				
10	Adopted Enterprises	Ganoderma, Oyster and Button Mush Unit				
11	Turn Over					
	Year	Oyster	Button	Ganoderma	Expenditure (Rs. In lakh)	Income (Rs. In lakh)
	2019	600 Beg	350 Beg	--	0.35	0.72
	2020	3900 Beg	500 Beg	1000 Beg	0.70	1.20
12	Recognition	Awarded as "Kisan Samman" in Kisan Samman Diwas 2020 by Ayush Minister, U.P.				



## CELEBRATIONS

- i. Celebrate World Honey Bee Day at KVK, Ujhani on 20.05.2021.
- ii. Celebration of Poshak Maah at KVK, Ujhani on 17.07.2020.
- iii. Celebration of Constitution Day at KVK, Ujhani on 26.11.2020.
- iv. Celebration World Soil Health Day at KVK, Ujhani on 05.12.2020.
- v. Celebration of Mahila Kisan Diwas at KVK, Ujhani on 18.01.2021.
- vi. Celebration of International Women's day at KVK, Ujhani on 08<sup>th</sup> March, 2021.

Activities/Programme	Date	Place	No. of programmes	No. of Farmers	TOTAL
World Women Day	15.10.2020	KVK	01	41	41
World Food Day	16.10.2020	KVK	01	34	34
Sushan Diwas	25.12.2020	KVK	01	169	169
International women Day	08.03.2021	KVK	01	44	44
World Women Day	15.10.2020	KVK	01	55	55
Kisan Samman divas	23.12.2020	KVK	01	60	60
Sushan Diwas	25.12.2020	KVK	01	75	75
International women Day	08.03.2021	KVK	01	55	55

1	<b>Date of event organised</b>	17.09.2020
2	<b>Title of the event</b>	Celebrating Poshan Maah
3	<b>Objective of the event organized</b>	Celebrating Poshan Maah Emphasis on Poshan Thali To create awareness among Aaganwadi and Farm Women to establish Nutrition Garden
4	<b>Text Write-up information</b>	In this occasion 56 Aaganwadi Worker and 14 farm women participated in the programme. The chairmen Hastinapur was the chief guest in this programme. Vegetable seeds kits sponsored by IFFCO were distributed to the participants.



1	<b>Date of event organised</b>	18.09.2020
2	<b>Title of the event</b>	Awareness programme on Kitchen Gardening
3	<b>Objective of the event organised</b>	To Establish Nutrition Garden To motivate Aaganwadi workers and Farm Women to establish Roof Top Gardening.



1	Date of event organised	22.09.2020
2	Title of the event	Awareness programme on Balance Diet and How to save Nutrient during Cooking
3	Text Write up information	Balance diet How to save Nutrient during cooking
4	Programme Details	Demonstration through poster presentation on balance diet and How to save Nutrient during processing 15 Aaganwadi Workers 12 farm women and rural youth participated the programme at KVK Hastinapur Meerut



1	Date of event organised	28.09.2020
2	Title of the event	Nutritional Importance & Home level preparations from Moringa (Sahjan)
3	Text Write up information	lgtu gS vkS'kf/k dk HkaMkj lgtu dh iRrha] lw[kh iRrh vkSj Qyh dk mi;ksx
4	Programme Details	Village – Samaspur . In this occasion 10 Aaganwadi Worker and 12 farm women participated the programme.



## Swachhata Abhiyaan

SN	Name of Activity	No. of Activity	No. of participants
1	Awareness Programme at village level	15	298
2	Awareness Programme at KVK	06	106
3	Dusting & Cleaning of centre	Regular	
4	Hand sanatization programme	01	78





#### Celebration of International Mahila Diwas

A programme has been conducted on Nutritional Garden awareness Programme for rural farm women on the occasion of International Mahila diwas on 08 March 2021.

Sushashan Diwas was celebrated on 25, Dec 2020 at KVK Campus. On the occasion 131 farmers were present





## PUBLICATION-2020-21

### COLLEGE OF AGRICULTURE

#### RESEARCH ARTICLES

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211. Sharma, A. K., Kumar, A., Sohal, J.S., Rahal, A. and Yadav, S. K. (2020). Assessment of antimicrobial and immunomodulatory activities of hot aqueous extract of *Calotropis procera* leaves. *J. of Immunology & Immunopathology.* 22(02): 187-196.
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214. Kumar, A., Kumar, J., Prakash, S. and Kumar, V. (2020). Studies on biochemical parameters of Pomegranate (*Punica granatum* L.) with special reference to red aril cultivars DOI: International Journal of Chemical Studies 2020; 8(5): 1453-1457 <https://doi.org/10.22271/chemi.2020.v8.i5t.10506>.

## BOOK

- Sohal J. S. and Kumar A. (2020). COVID-19: Insights into Pathogen and Disease. Published by Society of Immunology and Immunopathology, India. pp 38. ISBN No. 978-93-5408-517-8.
- Singh S.P. (Chief Editor) and Kumar A. (Editor) et al., 2020. Souvenir and Compendium book of International web Conference on Global Research Initiatives for sustainable Agriculture and Allied Sciences (GRISAAS-2020) held during 28-30<sup>th</sup> December, 2020. Published by Rama publishing house. ISBN NO : 978-93-88821-86-5
- Dr, Pankaj Kumar, Dr.Jitender and Dr. Amit Kumar (2021). Training Manual entitled "Application of Molecular and Bioinformatics Tools in Agriculture and Allied Sciences"
- Dr. Amit Kumar, Dr. Harshit Verma, Dr. Jitender Singh, Dr. Ravindra Kumar and Dr. Anil Sirohi (2021). Newer Approaches to Combat Antimicrobial Resistance
- Kapoor N. (2021). Advancement in Biological Approaches for Crop Improvement. ISBN No. 978-93-8888888-8, Walnut Publication.
- Kapoor N. (Co-Editor) (2021). Souvenir of 4<sup>th</sup> International conference on "Global Approaches in Natural resources Management for Climate Smart Agriculture during pandemic era of COVID-19", published by Learning Media Publication, Meerut (ISBN: 978-81-948799-5-4).

## BOOK CHAPTER

- Singh, N. P. and Vaishali (2020). Plant Disease Management using Biotechnology: RNA Interference. In Plant Diseases Diagnosis and Management in Sustainable Agriculture, Ed. P. Kumar, A.K. Tiwari, M. Kamle and Z. Abbas, Apple Academic Press (Taylor and Francis): ebook. pp 13. ISBN: 978-0-42905-721-2.

- Singh N. P. (2021). Chapter-"Advances in Biotechnological Tools and Techniques for metatranscriptomics" in book entitled-"Microbial Metatranscriptomics Belowground", Editor: Manoj Nath, Deepesh Bhatt, Prachi Bhargava, D.K. Chaudhary. ISBN 978-981-15-9757-2 ISBN 978-981-15-9758-9 (eBook) Springer.
- Singh N. P. (2021). Chapter "Relevance in metatranscriptomics in symbiotic associations between plants and rhizosphere microorganisms" in book entitled- "Microbial Metatranscriptomics Belowground", Editor: Manoj Nath, Deepesh Bhatt, Prachi Bhargava, D.K. Chaudhary. ISBN 978-981-15-9757-2 ISBN 978-981-15-9758-9 (eBook) Springer.
- Annu Yadav, Jitender Singh, Koushlesh Ranjan, Pankaj Kumar, Shivani Khanna, Madhuri Gupta, Vinay Kumar, Shabir Hussain Wani, and Anil Sirohi (2020). Heat Shock Proteins: Master Players for Heat-stress Tolerance in Plants during Climate Change (Chapter-9) 167-212 in Book Heat Stress Tolerance in Plants: Physiological, Molecular and Genetic Perspectives edited by Shabir H. Wani and Vinay Kumar. publisher Wiley. ISBN: 978-1-119-43236-4.
- Ranjan K., Bharti M.K., Siddique R.A., Singh J. (2021). Metatranscriptomics in Microbiome Study: A Comprehensive Approach. In: Nath M., Bhatt D., Bhargava P., Choudhary D.K. (eds) Microbial Metatranscriptomics Belowground. Springer, Singapore. [https://doi.org/10.1007/978-981-15-9758-9\\_1](https://doi.org/10.1007/978-981-15-9758-9_1)
- Koushlesh Ranjan, Riaz Ahmed Siddique, Mahesh Kumar Bharti, Jitender Singh (2021). Geminivirus: Indian Scenario in Plant Viruses: Evolution and Management Editors: Rajarshi Kumar Gaur, Nikolay Manchev Petrov, Basavaprabhu L. Patil, Mariya Ivanova Stoyanova (Online) Springer, Singapore. ISBN: 978-981-10-1405-5 (Print) 978-981-10-1406-2.
- Amit Kumar, Jitender Singh and Ravindra Kumar (2021). Next-generation sequencing: A boom for the identification of Antimicrobial Resistance: Malyaj R Prajapati, Mrinal Srivastava, Aakansha Manav, Amit Kumar, Jitender Singh and Ravindra Kumar (2021). In Proceeding- Newer Approaches to Combat Antimicrobial Resistance. International workshop on Antimicrobial Resistance: Current Scenario and Future Prospects (page no. 46- 53). Published by



SVPUAT, Meerut.

- Amit Kumar, Jitender Singh and Anil Sirohi (2021). Quorum Sensing: a mechanism involved in the transfer of drug resistance genes. In Proceeding- Newer Approaches to Combat Antimicrobial Resistance. International workshop on Antimicrobial Resistance: Current Scenario and Future Prospects (page no. 54-59). Published by SVPUAT, Meerut.
- Harshit Verma, Amit Kumar, Mrinal Srivastava, Surendra Upadhyay, Malyaj R Prajapati and Jitender Singh (2021). Antibiotic Resistance: Harshit Verma, Amit Kumar, Mrinal Srivastava, Surendra Upadhyay, Malyaj R Prajapati and Jitender Singh (2021). In Proceeding- Newer Approaches to Combat Antimicrobial Resistance. (page no. 40-45). Published by SVPUAT, Meerut.

## Participation of Faculty In Training/Conferences/symposium/workshop Etc.

### COLLEGE OF BIOTECHNOLOGY

- Dr. Rekha Dixit attended 15 days training programme on Intellectual Property Rights in Agricultural Research & Education in India held during 12-28, Sept. 2020 under NAHEP and IP and TM unit of ICAR Headquarters, Pusa New Delhi.
- Dr. Rekha Dixit attended one day International workshop on Antimicrobial Drug Resistance: Current Scenario and Future Prospects held on 18 March 2021 at College of Biotechnology SVPUAT, Meerut and NAHEP.
- Dr. Naresh Pratap Singh attended one day International workshop on Antimicrobial Drug Resistance: Current Scenario and Future Prospects held on 18 March 2021 at College of Biotechnology SVPUAT, Meerut and NAHEP.
- Dr. Neelesh Kapoor attended one day International workshop on Antimicrobial Drug Resistance: Current Scenario and Future Prospects held on 18 March 2021 at College of Biotechnology SVPUAT, Meerut and NAHEP.
- Dr. Amit Kumar attended one day International workshop on Antimicrobial Drug Resistance: Current Scenario and Future Prospects held on 18 March 2021 at College of Biotechnology SVPUAT, Meerut and NAHEP.
- Dr. Jitendra Singh attended one day International workshop on Antimicrobial Drug Resistance:

Current Scenario and Future Prospects held on 18 March 2021 at College of Biotechnology SVPUAT, Meerut and NAHEP.

- Dr. Anil Sirohi attended one day International workshop on Antimicrobial Drug Resistance: Current Scenario and Future Prospects held on 18 March 2021 at College of Biotechnology SVPUAT, Meerut and NAHEP.
- Dr. Pankaj Kumar attended one day International workshop on Antimicrobial Drug Resistance: Current Scenario and Future Prospects held on 18 March 2021 at College of Biotechnology SVPUAT, Meerut and NAHEP.
- Dr. Pankaj Chauhan attended one day International workshop on Antimicrobial Drug Resistance: Current Scenario and Future Prospects held on 18 March 2021 at College of Biotechnology SVPUAT, Meerut and NAHEP.
- Dr. Ravindra Kumar attended one day International workshop on Antimicrobial Drug Resistance: Current Scenario and Future Prospects held on 18 March 2021 at College of Biotechnology SVPUAT, Meerut and NAHEP.
- Dr. Akash Tomar attended one day International workshop on Antimicrobial Drug Resistance: Current Scenario and Future Prospects held on 18 March 2021 at College of Biotechnology SVPUAT, Meerut and NAHEP.
- Dr. Purushottam attended one day International workshop on Antimicrobial Drug Resistance: Current Scenario and Future Prospects held on 18 March 2021 at College of Biotechnology SVPUAT, Meerut and NAHEP.
- Dr. Sandeep Kumar attended one day International workshop on Antimicrobial Drug Resistance: Current Scenario and Future Prospects held on 18 March 2021 at College of Biotechnology SVPUAT, Meerut and NAHEP.
- Dr. Rekha Dixit attended three days training programme on Advanced Bioinformatics Tools and its Applications in Agriculture held during 22-24 Feb. 2021 at ICAR-NAARM, Hyderabad and College of Biotechnology, SVPUAT, Meerut.
- Dr. Anil Sirohi attended three days training programme on Advanced Bioinformatics Tools and its Applications in Agriculture held during 22-24 Feb. 2021 at ICAR-NAARM, Hyderabad and College of Biotechnology, SVPUAT, Meerut.
- Dr. Ravindra Kumar attended three days training programme on Advanced Bioinformatics Tools and its Applications in Agriculture held during 22-24





Feb. 2021 at ICAR-NAARM, Hyderabad and College of Biotechnology, SVPUAT, Meerut.

- Dr. Pankaj Kumar attended three days training programme on Advanced Bioinformatics Tools and its Applications in Agriculture held during 22-24 Feb. 2021 at ICAR-NAARM, Hyderabad and College of Biotechnology, SVPUAT, Meerut.
- Dr. Pankaj Chauhan attended three days training programme on Advanced Bioinformatics Tools and its Applications in Agriculture held during 22-24 Feb. 2021 at ICAR-NAARM, Hyderabad and College of Biotechnology, SVPUAT, Meerut.
- Dr. Amit Kumar attended three days training programme on Advanced Bioinformatics Tools and its Applications in Agriculture held during 22-24 Feb. 2021 at ICAR-NAARM, Hyderabad and College of Biotechnology, SVPUAT, Meerut.
- Dr. Jitendra Singh attended three days training programme on Advanced Bioinformatics Tools and its Applications in Agriculture held during 22-24 Feb. 2021 at ICAR-NAARM, Hyderabad and College of Biotechnology, SVPUAT, Meerut.
- Dr. Shalini Gupta attended three days training programme on Advanced Bioinformatics Tools and its Applications in Agriculture held during 22-24 Feb. 2021 at ICAR-NAARM, Hyderabad and College of Biotechnology, SVPUAT, Meerut.
- Dr. Akash Tomar attended three days training programme on Advanced Bioinformatics Tools and its Applications in Agriculture held during 22-24 Feb. 2021 at ICAR-NAARM, Hyderabad and College of Biotechnology, SVPUAT, Meerut.
- Dr. Purushottam attended three days training programme on Advanced Bioinformatics Tools and its Applications in Agriculture held during 22-24 Feb. 2021 at ICAR-NAARM, Hyderabad and College of Biotechnology, SVPUAT, Meerut.
- Dr. Naresh Pratap Singh attended three days training programme on Advanced Bioinformatics Tools and its Applications in Agriculture held during 22-24 Feb. 2021 at ICAR-NAARM, Hyderabad and College of Biotechnology, SVPUAT, Meerut.
- Dr. Neelesh Kapoor attended three days training programme on Advanced Bioinformatics Tools and its Applications in Agriculture held during 22-24 Feb. 2021 at ICAR-NAARM, Hyderabad and College of Biotechnology, SVPUAT, Meerut.
- Dr. Sandeep Kumar attended three days training programme on Advanced Bioinformatics Tools and its Applications in Agriculture held during 22-24

Feb. 2021 at ICAR-NAARM, Hyderabad and College of Biotechnology, SVPUAT, Meerut.

- Dr. Shweta Misra attended three days training programme on Advanced Bioinformatics Tools and its Applications in Agriculture held during 22-24 Feb. 2021 organized by ICAR-NAARM, Hyderabad and College of Biotechnology, SVPUAT, Meerut.
- Dr. Rekha Dixit attended 15 days training programme on Psychology of Learning held during 01-15 May 2020 organized by ICAR-NAARM, Hyderabad.
- Dr. Amit Kumar attended 15 days training programme on Psychology of Learning held during 01-15 May 2020 organized by ICAR-NAARM, Hyderabad.
- Dr. Rekha Dixit attended 30 days training programme on Massive Open Online Course on Designing e Learning content held during 01-30 July 2020 organized by ICAR-NAARM, Hyderabad.
- Dr. Narash Pratap Singh attended 30 days training programme on Massive Open Online Course on Designing e Learning content held during 01-30 July 2020 organized by ICAR-NAARM, Hyderabad.
- Dr. Neelesh Kapoor attended 30 days training programme on Massive Open Online Course on Designing e Learning content held during 01-30 July 2020 organized by ICAR-NAARM, Hyderabad.
- Dr. Naresh Pratap Singh attended one day workshop on Online workshop on "HPTLC techniques and its applications in agriculture held during 03 Nov. 2020 organized by Department of Plant Molecular Biology & Biotechnology, ASPEE College of Horticulture and Forestry, Navsari Agricultural University, Navsari.
- Dr. Jitendra Singh attended seven days Online Training programme on Essential of Bioinformatics held during 22-28 March 2021 organised by IDP-NAHEP and Sher-e Kashmir university of Science and Technology, Kashmir, Jammu and Kashmir.
- Dr. Jitendra Singh attended twenty-one days Online training on Bacterial genomes: Accessing and analysing microbial genome data held during May 2020 organised by Wellcome genome campus advanced courses and scientific conferences.
- Dr. Neelesh Kapoor attended one day Online workshop on "HPTLC techniques and its applications in agriculture held during 03 Nov. 2020 organised by Department of Plant Molecular Biology & Biotechnology, ASPEE College of Horticulture and Forestry, Navsari Agricultural





University, Navsari.

- Dr. Neelesh Kapoor attended fourteen days Faculty training entitled Application of molecular and bioinformatics tools in agriculture and allied sciences held during 11-24 Nov. 2020 organised by Centre of Excellence (CST, UP) & Bioinformatics Infrastructure Facility (DBT, New Delhi), College of Biotechnology, SVPUA&T, Meerut.
- Dr. Sandeep Kumar attended fourteen days Faculty training entitled Application of molecular and bioinformatics tools in agriculture and allied sciences held during 11-24 Nov. 2020 organised by Centre of Excellence (CST, UP) & Bioinformatics Infrastructure Facility (DBT, New Delhi), College of Biotechnology, SVPUA&T, Meerut.
- Dr. Amit Kumar attended 30 days training programme on online Lessons from Ebola: Preventing the next pandemic held during 01-30 April 2020 organized by Harvard University, Cambridge, UK.
- Dr. Amit Kumar attended 02 days SPARC-INDO-US Immunology workshop held during 12-13 June 2020 organized by IIT, Ropar and The George Washington University, USA.
- Dr. Amit Kumar attended 01 online workshop on scientific writing and research ethics for medical and clinical science community held during 19 Sept. 2020 organized by DBT/Wellcome Trust India Alliance.

### Paper Presented in Seminar/ Symposium (Abstract):

- 1 Upadhyay, S., Bhordia, A., Kumar, A., Srivastava, M., Verma, A.K., Singh, J., Verma, H., and Kumar A. (2020). 16S rRNA based metagenomic investigation of the uterine bacterial microbiota, their prevalence and antimicrobial resistance pattern of isolates from the clinical cases of cattle mastitis. International web Conference on Global Research Initiatives for sustainable Agriculture and Allied Sciences (GRISAAS-2020) held during 28-30<sup>th</sup> December, 2020. pp 143.
- 2 Sharma, P., Yadav, S. K., Kumar, A., Singh, V. K., Singh, R., Pathak, V. and Swain, D. K. (2021). Deterimental effects of acrylamide induced toxicity on brain and its amelioration in wistar rats. International web Conference on Global Research Initiatives for sustainable Agriculture and Allied Sciences (GRISAAS-2020) held during 28-30<sup>th</sup> December, 2020. pp 136.
- 3 Bhordia, A., Upadhyay, S., Kumar, A., Singh, J., Kumar, R. and Verma, A.K. (2021). Cultural, morphological and biochemical characterization of bovine milk sample and comparison of microbiota in healthy and mastitic milk sample. International web Conference on Global Research Initiatives for sustainable Agriculture and Allied Sciences (GRISAAS-2020) held during 28-30<sup>th</sup> December, 2020. pp 251.
- 4 Maurya, S., Narang, R., Narang, P., Jain M., Kumar, A., Aseri, G.K., Yadav, P., Khare, N., Sharma, D., Singh D. and Sohal, J.S. (2020). Paraffin slide culture (PSC): A novel technique to isolate and characterize non-tuberculosis mycobacteria (NTM). International E-conference on Immunology in 21<sup>st</sup> Century for improvising one health by Society for Immunology and Immunopathology, India, held at SVPUAT, Meerut during 7-8 August, 2020. pp136.
- 5 Kaur, R., Jain M., Kumar, A., Sharma, D., Aseri, G.K., and Sohal, J.S. (2020). Discovery of phytochemicals with potential antiviral activity for COVID19 virus using in silico approach: a new avenue of antiviral antibiotics. International E-conference on Immunology in 21<sup>st</sup> Century for improvising one health by Society for Immunology and Immunopathology, India, held at SVPUAT, Meerut during 7-8 August, 2020. pp-179.
- 6 Jain M., Kumar, A., Polavarapu R., Sharma, D., Aseri, G.K., and Sohal, J.S. (2020). Development of novel penside antibody detection lateral flow assay based on specific biomarkers for rapid and onsite screening of paratuberculosis. International E-conference on Immunology in 21<sup>st</sup> Century for improvising one health by Society for Immunology and Immunopathology, India, held at SVPUAT, Meerut during 7-8 August, 2020. pp-180.
- 7 Jain M., Kumar, A., Polavarapu R., Sharma, D., Aseri, G.K., and Sohal, J.S. (2020). Recombinant Johnin (rJohnin) assay for the DTH based screening of paratuberculosis. International E-conference on Immunology in 21<sup>st</sup> Century for improvising one health by Society for Immunology and Immunopathology, India, held at SVPUAT, Meerut during 7-8 August, 2020. pp-181.
- 8 Suman et al (2020). Assessment of biofilm producing *Staphylococcus epidermidis* in skin and soft tissue infections in tertiary care hospitals. International E-conference on Immunology in 21<sup>st</sup> Century for improvising one health by Society for Immunology and Immunopathology, India, held at SVPUAT, Meerut during 7-8 August, 2020.



- 9 Mishra S., Kumar S., **Kapoor N.**, Sirohi A. and Yadav S. (2021). CRISPR tools for crop improvement. Global Approaches in Natural resources Management for Climate Smart Agriculture during pandemic era of COVID-19 organized by ATDS and Shobhit University, Meerut on Feb., 26-28, 2021 pp 273.

### Lead papers presented in conferences

- 1 Rahal, A. and Kumar, A. (2020). Drug resistance : What can be the way forward. International web Conference on Global Research Initiatives for sustainable Agriculture and Allied Sciences (GRISAAS-2020) held during 28-30<sup>th</sup> December, 2020. pp 51-53.
- 2 Verma, A. K., Deepak, D., Kumar A. and Singh A. (2020). Foot and mouth disease: Current Indian scenario and control strategy. International web Conference on Global Research Initiatives for sustainable Agriculture and Allied Sciences (GRISAAS-2020) held during 28-30<sup>th</sup> December, 2020. pp 33-36.
- 3 Singh, S. P., Barjendra, P., Singh, P.B. ,Sarashwat, S. K., Singh, Y.K., Mishra, M., Prakash, H.G., Rana, R., Bhati, H.P., Gaur, S. C., Kumar, A., Rajawat, B. S. and Ahmad, T. (2020). Global research initiatives for sustainable agriculture. International web Conference on Global Research Initiatives for sustainable Agriculture and Allied Sciences (GRISAAS-2020) held during 28-30<sup>th</sup> December, 2020. pp 5-12.
- 4 Dr Rekha Dixit delivered lecture on “Genomic Approaches for Enhancing Phosphorus Use efficiency in crops” during Online Faculty Training on “Application of Molecular and Bioinformatic Tools in Agriculture and Allied Sciences” by Centre of Excellence in Agriculture Biotechnology Council of Science and Technology, UP and DBT funded BIF held from December 11-24, 2020.



## AWARDS

### College of Biotechnology

Dr Rekha Dixit received Best Women Scientist held at February 26-28, 2021 organised by 4<sup>th</sup> International Conference Global Approaches in Natural Resource Management for Climate Smart Agriculture (GNRSA 2020) during Pandemic Era of COVID19 organized by Shobhit Deemed University, Modipuram, Meerut and ATDS Ghaziabad.

Dr Rekha Dixit received Best Teacher Award held on April 24-25, 2021 organized by New Age Mobilization Society, New Delhi

Dr. Aksh Tomar received I- Best Poster Award held on 29 Jan., 2020 orgnaized by National Seminar on Ethnomedicinal Wealth of India: Conservation and Sustainable Management. Organized by Department of Botany R.G. (P.G.) College, Meerut.

Dr. Aksh Tomar received III- Best Poster Award held on 29 Jan., 2020 orgnaized by National Seminar on Ethnomedicinal Wealth of India: Conservation and Sustainable Management. Organized by Department of Botany R.G. (P.G.) College, Meerut.

Dr. Jitendra Singh received Best Oral Presentation Award held on 28-30 Dec., 2020 orgnaized by National Seminar on Ethnomedicinal Wealth of India: Conservation and Sustainable Management organized by International web conference on Global research Initives for Sustainable Agriculture and Allied Sciences.

Dr. Amit Kumar received Fellow Award-2020 orgnaized by Society for Immunology and Immunopathology, India.

Dr. Amit Kumar received Fellow Award-2020 orgnaized by Scientific Development in Agriculture and Technology (SSDAT), India.

Dr. Amit Kumar received Best Oral Presentation Award held on 28-30 Dec. 2020 orgnaized by International web Conference on Global Research Initiatives for sustainable Agriculture and Allied Sciences.

Dr. Amit Kumar received SIIP Prakash Best Poster Presentation Award held on 07-08 Aug. 2020 orgnaized by International E-conference on Immunology in 21<sup>st</sup> Century for improvising one health by Society for Immunology and Immunopathology, India, held at SVPUAT, Meerut.

Dr. Amit Kumar received Best Poster Presentation Award held on 07-08 Aug. 2020 orgnaized by

International E-conference on Immunology in 21<sup>st</sup> Century for improvising one health by Society for Immunology and Immunopathology, India, held at SVPUAT, Meerut.

Dr. Shweta Mishra received Established Teacher Award held on 28 Feb. 2021 orgnaized by ATDS Society at Shobhit University, Meerut.

Dr. Shweta Mishra received Best Teacher Award held on 04-06 Oct. 2020 orgnaized by Uttrakhand.

Dr. Neelesh Kapoor received Young Scientist Award held on 28 Feb. 2020 orgnaized by National Gladiolus Trust, Jammu J&K, India at Shobhit University, Meerut.

Dr. Naresh Pratap Singh received Young Biotechnologist Award held on 26-28 Feb. 2021 orgnaized by ATDS Society at Shobhit University, Meerut.

### Workshop Organized

1. International e-Conference on Immunology in 21<sup>st</sup> Century for Improvising One-Health organized from August 7-8, 2020. 754 participants
2. A Webinar on Wild Life and Human Conflict: A Long Journey Ahead organized on August 16, 2020. 358 participants
3. A Webinar on Microbiome, Immunity and Vaccines organized on August 30, 2020. 726 participants
4. One Health National Webinar on AMR-Mitigation for Food Safety organized on October 30, 2020. 273 participants
5. National Webinar on “Emerging Potential of Bioenterprenurship: Prospects & Way Forward for Rural Development” (Online) organized on December 03, 2020. 1901 participants
6. A training was organized on “Application of molecular and bioinformatics tools in agriculture and allied sciences”, in collaboration with Centre of Excellence (CST, UP) & Bioinformatics Infrastructure Facility (DBT, New Delhi) during December 11-24, 2020. 38 participants
7. International Virtual Seminar on “Artificial Intelligence in Agriculture” Organized by Department of Fingerprinting, College of Biotechnology, SVPUAT, Meerut, January 11-12, 2021. 633 participants
8. NAHEP Sponsored Online Training Programme on Advanced Bioinformatics Tools and its Applications



in Agriculture organized by ICAR-NAARM during February 22-24, 2021. 14 participants

9. One Day International Workshop on “Antimicrobial Drug Resistance: Current Scenario and Future Prospects on March 18, 2021 organized by College of Biotechnology, SVPUAT, Meerut under NAHEP-IG scheme. 396 participants

## COLLEGE OF AGRICULTURE

### Attendance in conference/symposium/training/workshop etc.

Dr. Vivek attended webinar on changing scenario of vegetable production and marketing in pandemic period during 28 July, 2020 at SVPUA&T, Meerut

Dr. Vivek attended webinar on national educational policy during 28 August, 2020 at SVPUA&T, Meerut

Dr. R.B. Yadav and Dr. Vivek attended webinar on post harvest management and value addition of agri product under PMFME scheme during 29 October, 2020 at SVPUA&T, Meerut

Dr. R.K. Naresh and Dr. Vivek attended webinar on quality improvement and proficiency testing of soil laboratories in India during 31 October, 2020 at Indian Institute of Soil Science, MP.

Dr. Vivek attended webinar on emerging potential of bio entrepreneurship prospects and way forward to rural development during 03 December, 2020 at SVPUA&T, Meerut

Dr. Vivek and Dr. R.K. Naresh attended webinar on Gene editing for crop improvement during 24 December, 2020 at SVPUA&T, Meerut

Dr. Vivek attended webinar on Artificial intelligence in Agriculture during 11-12 January, 2021 at SVPUA&T, Meerut

Dr. R.K. Naresh and Dr. Vivek attended webinar on International Virtual Conference on CO<sub>2</sub> and Green Technologies during 1st July, 2020 at Shobhit Univ., Meerut.

Dr. R.K. Naresh and Dr. Vivek attended webinar on 4th Internal Conference on Global Approaches in Natural Resource Management for Climate Smart Agriculture (GNRSA) during Pandemic Era of COVID – 19 during 26-28 February, 2021 at Shobhit Univ., Meerut.

Dr. R.N. Yadav has attended in International Virtual Seminar on “Artificial Intelligence in Agriculture” Organized by College of Biotech, SVBPUA&T, Meerut held from 11 – 12 January, 2021

Dr. L.B Singh has participated in International E-

Conference on “Role of Environment and National Science in Covid-19 times” organized by I.C.R.E. NSCT – 2020 held, from 29 to 31, July, 2020

Dr. L.B Singh has participated in International Virtual Seminar on “Artificial Intelligence in Agriculture” Organized by Department of Fingerprinting, College of Biotechnology, S.V.P.U.A&T, Meerut U.P, during 11- 12, Jan, 2021.

Dr. L.B. Singh has participated International Webinar on Climate Resilient Agriculture for Food & Health Security organized by M.P.U of Agriculture & Technology, Udaipur, Rajasthan.

Dr. R.N. Yadav, and Dr. D.K. Singh has participated in National Webinar on “Changing Scenario of Vegetable Production and Marketing in Pandemic Period” Organized by college of Horticulture SVPUA&T, Meerut Held on 28, July, 2020.

Dr. R.N. Yadav and L.B Singh have participated in National Webinar on “Millets as Smart Food; Harnessing Opportunities Boosting Immunity and Nutritional Security” organized by UPCAR on the occasion of thirty two foundation day on Uttar Pradesh Council of Agril. Research, Lucknow held on 14/06/2021.

Dr. R.N. Yadav and Dr. L.B Singh have participated in an online workshop on NAHEP Component 2A; Activities & Implementation of Academic Management System Project Information Management System (AI Mobile App) organized by Jointly ICAR-IASRI held was 9-10 July, 2020.

Dr. L.B Singh has participated online National Webinar on “Avenues and Challenges for Agri-Entrepreneurship for a Self-Reliant Community Organized by College of Home Science, SKRAU, Bikaner, Rajasthan on 07, July, 2020.

Dr. L.B Singh has participated online National webinar on the occasion of World Soil Health Day Celebration 2020 on the Topic “ Soil Health and Agriculture Sustainability Organized by Directorate Research, M P U of Agriculture and Technology, Udaypur, Rajasthan on 05, Dec., 2020.

Dr. L.B Singh has participated national webinar on “ Student Ready Programme for Entrepreneurship and Employability” Organized by Rajasthan College of Agriculture, M P U of Agriculture and Technology, Udaypur, Rajasthan, dated 25, Feb, 2021.

Dr. L.B. Singh has participated online National webinar on Sustainable Strategies for enhancing Productivity & Profitability in Dry land Agriculture ”Organized by Directorate Research, M P U of





Agriculture and Technology, Udaypur, Rajasthan, dated 29, June, 2021.

Dr. R.N Yadav has participated in online National Seminar intitled “Strategy For Strengthening Agricultural Education Under Changing Scenario of Covid – 19” Organized by Swami Keshwanand Rajasthan Agricultural University, Bikaner.

Dr. Rajbir Singh attended a International e-Conference on “Immunology in 21<sup>st</sup> Century for Improving One-Health, Department of Animal Husbandry & Dairying, Govt. of India. held during 7-8<sup>th</sup> August, 2020 at SVPUAT, Meerut.

Dr. D.S.Sahu attended 4<sup>th</sup> International conference on global approaches in natura resource management for climate smart agriculture (ATDS, Ghaziabad) held during 26-28 Feb. 2021 at Shobhit University, Meerut.

Dr. Archana Arya attended one day International Webinar on Global Panel Policy: Harnessing Aquaculture for Healthy Diets, on 15th February, 2021 organized by World Fish, Malaysia.

Dr. Archana Arya attended International Webinar on Building Forward Better with Aquatic Foods on October 13, 2021, organized by Committee on Food Security (CFS), World Fish, Malaysia.

Dr. Archana Arya attended International webinar “Women in science and their role in modern agriculture” on 26th August, 2020 organised by CIMMYT and BAU, Sabour.

Dr. Archana Arya attended International Webinar on 'Intellectual property Rights, An Overview: Myth & Realities on 6th June, 2020, organized by KLE Society's Science and Commerce college, Kalamboli, Navi Mumbai.

Dr. Deepak Sisodia as Co-Organizer & Chairman, Technical Committee organized an International e Conference on 'Immunology in 21<sup>st</sup> Century for Improvising One Health at College of Biotechnology, SVPUAT, Meerut from August 07-08, 2020

Dr. Archana Arya attended one day Seminar on "Technology led Fisheries Development in Uttar Pradesh" under Pradhan Mantri Matsya Sampada Yojana, on 26th August, 2020 organized by CIMMYT and BAU, Sabour.

Dr. Vineeta Verma attended Webinar on “Art of Writing Research Papers ” organized by BVICAM, New Delhi on 25 September, 2020.

Dr. Vineeta Verma attended Webinar on “Robotics

and Automation Process” organized by BVICAM, New Delhi on 12 September, 2020.

Dr. Vineeta Verma attended Webinar on “COVID-19: Threat or Opportunity” organized by BVICAM, New Delhi on 1 August, 2020.

Dr. Vineeta Verma attended Webinar on “Unleashing Data Science and AI” organized by BVICAM, New Delhi on 8 August, 2020.

Dr. Vineeta Verma attended Webinar on “BlochChain-Technological Perspective” organized by BVICAM, New Delhi on 18 July, 2020.

Dr. Vineeta Verma attended Webinar on “ICT Tools and Software's for Teaching and Learning ” organized by Faculty of Education National Post Graduate College, Lucknow, Uttar Pradesh, India on 3 July 2020.

Dr. Vineeta Verma attended Webinar on “5G Myth busters and benefits for Indian environment” organized by BVICAM, New Delhi on 02 July, 2020.

Dr. Vineeta Verma attended Webinar on “COVID-91 and Environment Linkages” organized by Department of Environmental Science, Baba Bhimrao Ambedkar University, Lucknow in collaboration with Society for Environmental Sustainability & Springer Nature on 29 June, 2020.

Dr. Vineeta Verma attended Webinar on “IT Project: The Key Management Areas for Success” organized by BVICAM, New Delhi on 19 June, 2020.

Dr. Vineeta Verma attended Webinar on “Post Covid-19 Research Advancement in the Arena of Agricultural, Environmental and Life Sciences” organized by Research and Education Development Society (regd.) in the association with Unnat Bharat Abhiyan Cell, C.C.R. (PG) College, Muzaffarnagar, Uttar Pradesh, India during 15-16 June, 2020.

Dr. Bhim Singh attended National Webinar on “Application of mathematical modeling and statistical learning on Covid-19 and its related problems” organized by Bareilly College, Bareilly on June 07, 2020.

Dr. Bhim Singh attended National Webinar on “Improving crop production under climate changes: Issue and Challenges” organized by Bhavdiya Educational Institute, Ayodhya (U.P.) on 15 June, 2020.

Dr. Bhim Singh attended National e-workshop/Webinar on “गणित के अनुप्रयोग एवं उसके समसामयिक वैज्ञानिक तथा तकनीकी शब्दावली का हिंदी में उपयोग ” Jawaharlal Nehru University, New Delhi during 14-16 June, 2020.



Dr. Bhim Singh attended faculty Development programme on “Role of Latex in Scientific writing” organized by Babu Banarasi Das Northern India Institute of Technology, Lucknow from June 19-21, 2020.

Dr. Bhim Singh attended International Webinar on “Impact of Covid-19 on farmers” organized by KPS Degree College, Kakurua, Lalitpur (U.P.) held on June 22, 2020.

Dr. Bhim Singh attended a Webinar on “Cyber Security” organized by UEM, Jaipur on 26 June, 2020.

Dr. Bhim Singh attended National Webinar on “Better data better lives” jointly organized by Department of Mathematics & Statistics, Mohan Sukhadia University & Department of Statistics, MPUAT, Udaipur (Raj.) on 29 June, 2020.

Dr. Bhim Singh attended National Webinar on the occasion of National Statistics Day on 29<sup>th</sup> June organized by N.A.S. College Statistics Association & Department of Statistics, University of Lucknow.

Dr. Bhim Singh participated in national level online quiz on probability conducted by the Department of Statistics in Association with IQAC, Periyar, E.V.E. College (Autonomous), Tiruchirappalli on 30.06.2020.

Dr. Deepak Sisodia as a Co-Organizer organized a workshop on AMS, Mobile app and PIMS with IASRI, New Delhi from 09-10 July, 2020.

Dr. Deepak Sisodia as a convener organized a webinar on Changing Scenario of Vegetable Production & Marketing in Pandemic Period at SVPUA&T, Meerut on 28<sup>th</sup> July, 2020.

Dr. Deepak Sisodia as a Secretary, Technical Committee organized a Webinar on Post pandemic challenges and opportunities in Animal Health at College of Veterinary and Animal Science, SVPUAT, Meerut on 14<sup>th</sup> August, 2020.

Dr. Deepak Sisodia as Co-Organizer & Secretary, Technical Committee organized a Webinar on 'Emerging Potential of Bio-Entrepreneurship Prospects and Way Forward for Rural Development at College of Biotechnology, SVPUAT, Meerut on 3<sup>rd</sup> December, 2020.

Dr. Deepak Sisodia as a Co-Organizer organized a Webinar on Artificial Intelligence in Agriculture at College of Biotechnology, SVPUAT, Meerut from January 11-12, 2021.

Dr. D.N.Mishra attended 4<sup>th</sup> International

Conference on “Global Approaches in Natural Resource Management for Climate Smart Agriculture (GNRSA- 2020) during Pandemic Era of COVID-19” held on February 26-28, 2021 at Conference Hall, Shobhit University, Modipuram, Meerut, UP, India.

Dr. Gaje Singh Participated in International virtual seminar on artificial intelligence in agriculture, held Jan., 11-12, 2021 organized by deptt. of Fingerprinting, College of Biotechnology, SVPUA&T-Meerut.

Dr. Rajendra Singh attended 4<sup>th</sup> International Conference on “Global Approaches in Natural Resource Management for Climate Smart Agriculture (GNRSA- 2020) during Pandemic Era of COVID-19” held on February 26-28, 2021 at Conference Hall, Shobhit University, Modipuram, Meerut, UP, India.

Attended National conference on “Immunology in 21<sup>st</sup> Century for Improvising one-health” at SVPUA&T Meerut on 7-8 August 2020.

Attended webinar on “ Changing scenario of vegetable production and marketing in pandemic period” at SVPUA&T Meerut during 28 July 2020

Online participated in National seminar on “Adhik Aay evam surkshit Paryavaran hatu Samenkit keet Prabandhan evam upyogeekeet Palan” Organized Division of Entomology, IARI, New Delhi held on 8th Oct 2020.

Dr. L.K. Gangwar and Dr. Mukesh Kumar, attended 59<sup>th</sup> All India Virtual Workshop of Wheat & Barley Scientists Meet held ICAR-Indian Institute of Wheat and Barley Research, Karnal during 24-25 August, 2020

Dr. L.K. Gangwar, Dr. SK Singh and Atar Singh participated two days online workshop on Academic Management System on July 09-10 organized by IASRI, New Delhi.

Dr. LK Gangwar of the department participated in the presentation organized by ICAR, New Delhi on the subject of Mendelian Genetics to Modern Genomics on 11 July, 2020.

Dr. SK Singh participated one day online workshop on 'Learning Management System (LMS) held on 18 July, 2020 organized by IASRI, New Delhi.

National Awareness Garden Quiz by Dr. L.K. Gangwar, Professor of the Department, which was participated online on 25.07.2020 in the Department of Horticulture, Chel Shivnath Singh Shanditya Postgraduate College (Sambandh Ch. charan Singh



University, Meerut) and excelled. Certificate received.

Dr. L.K. Gangwar of the department, regarding the action plan of trials to be conducted for crop improvement on wheat in the year Rabi 2020-21 by ICAR-Indian Institute of Wheat and Barley Research, Karnal. Participated in the video meeting held on 27.07.2020.

Dr. L.K. Gangwar attended webinar entitled “Mainstreaming underutilized crops: The story of foxtail millet” at Bioingene.com during 06 August 2020

Dr. S.K. Singh attended webinar on “Soil of India and crop nutrients” organized by Bio International. net during 13 August 2020

Dr. L.K. Gangwar attended webinar entitled “Post Pandemic challenges and opportunities in Animal Health” at Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut during 14 August 2020

Dr. S.K. Singh participated one day online workshop on 'National Education Policy 2020' held on 25 August 2020 organized by SVPUA&T, Meerut.

Dr. Pooran Chand attended webinar entitled “Role of women in developing a climate smart seed system in the Philippines” organized by International Potato Centre, Peru held on 19 August 2020

Dr. Pooran Chand attended International webinar “The Importance of Soft Skills in Academia” organized by Bioingene.com during 05 Sept., 2020.

Dr. LK Gangwar participated in the online workshop/training program on 12-28 September 2020 on the topic of intellectual property rights in agricultural education and research in India under the National Agricultural Higher Education Project by the Indian Council of Agricultural Research.

Dr. S.K. Singh participated one day online workshop on 'Production of Basmati Rice for Export' held on 24 / Sept. 2020 organized by BEDF in coordination with KVK, Bijnore, U.P.

Dr. L.K. Gangwar attended Considerable prospects on seed: Protection, quality assurance and supply system held on 10 September 2020 at ICAR-Indian Institute of Seed Sciences, Maun

Dr. S.K. Singh attended online Hon'ble PM's programme on common mortaring 75th anniversary /foundation day of FAO on dated 16 October 2020 and release of coin and 17 biofortified varieties of eight crops developed by ICAR

(link:<https://pmevents.ncog.gov.in/>).

Dr. S.K. Singh attended Guest Lecture on Post harvest processing and value addition of food crops: Current scenario and future thrust on dated 16 October 2020 organized by college of Post Harvest Technology and Food Processing, SVPUA&T, Meerut U.P.

Dr. L.K. Gangwar, Dr. Pooran Chand, Dr. S.K. Singh and Dr. Atar Singh attended National Webinar on Post Harvest Management and Value Addition of Agri Produce under PMFME at College of Post Harvest Technology, SVPUA&T, Meerut during 29 October 2020.

Dr. L.K. Gangwar attended webinar “AI transformation in Higher Education: Significance of Personalized Learning in Higher Education” organized by ASSOCHAN, INDIA during 10 November 2020

Dr. L.K. Gangwar, Dr. Pooran Chand, Dr. S.K. Singh and Dr. Atar Singh attended International Virtual Seminar on “Artificial Intelligence in Agriculture” by College of Biotechnology, SVPUAT, Meerut during 11 November 2020

Dr. L.K. Gangwar and Dr. S.K. Singh attended National webinar on Emerging potential of Bio-entrepreneurship: Prospects and way Forward for Rural Development organized by College of Biotechnology, SVPUAT, Meerut during 03.12.2020

Dr. S.K. Singh participated online zoom meeting on 'Inauguration of Golden Jubilee Forage Garden' held on 22/12/20 organized by All India Coordinated Research Project (AICRP/ICAR) on forage crops and utilization, IGFR, Jhansi U. P.

Participated online zoom meeting on 'Inauguration virtual classroom and Agri-Diksha Eeb Education Channel (The feature of digital learning in agriculture education) held on 16/04/21 organized by NAHEP, ICAR, New Delhi.  
<https://zoom.us/j/94870068466>.

Dr. Atar Singh attended Refresher course on Role of Biometrics in crop improvement at University of Horticultural Sciences, Bagalkot, Karnatka during 27 July to 21 August 2020

Dr. L.K. Gangwar attended National Level Online Training Programme on “Emerging Trends in Seed Production Technology and Quality Control Framework for Effective Seed Supply Chain of Horticulture Crops” organized by Department of Biotechnology and Crop Improvement, College of Horticulture, Bidar (University of Horticultural





Sciences, Bagalkot), Karnataka during 28.12.2020 to 06.01.2021.

Dr. Vaishali participated five days training programme on Emerging Trends, Issues and Challenges in Next Generation Technology held on 20-24 July, 2020 Organized by Faculty of Engineering and Technology, Rama University, Kanpur.

Dr. D. K. Singh attended 30 days training programme on Massive Open Online Course on Designing e Learning content held during 01-31 July 2020 organized by ICAR-NAARM, Hyderabad.

Dr. D. K. Singh attended 03 days Online Training on Writing research papers for high impact factors journals and effective research proposals held during 15-17 Dec. 2020 organized by Centre for Advanced Agricultural Sciences and Technology (CAAST) Mahatma Krishi Vidyapeeth, Rahuri, Ahmednagar.

Dr. L. B. Singh attended 06 days Training on Soft skills to enhance professional efficiency and effectiveness held during 17-22 Aug. 2020 organized by NAHEP Centre for advance Agriculture Science & Technology (CAAST) for Climate Smart Agriculture and Water Management (C.S.A.W.M.) Mahatma Phule Krishi Vidyapeeth, Rahuri, Ahmadnagar (Maharashtra).

Dr. Perna Sharma attended 13 days Training on Gender Sensitization held during 27 July- 08 Aug. 2020 organized by UGC-HRDC, Osmania University, Hyderabad.

Dr. Perna Sharma attended 05 days online workshop on Inculcating Universal Human Values in Technical Education held during 23-27 July 2020 organized by All India Council for Technical Education (AICTE).

Dr. Perna Sharma attended 06 days training on Prominence of Mathematics in Diverse Sectors held during 15-20 July 2020 organized by Science and Humanities of Hindustan College of Engineering and Technology.

Dr. Perna Sharma attended 08 days training on Technological tools and their management in online teaching held during 14-21 Aug. 2020 organized by MJP Rohilkhand University, Bareilly.

Dr. Deepak Sisodia attended 02 days Workshop on AMS, Mobile app and PIMS held during 09-10 July 2020 organized by IASRI, New Delhi.

Dr. Deepak Sisodia attended 01 day workshop on Learning Management System held on 18 July 2020 organized by Education division, ICAR, New Delhi.

Dr. G. Singh attended 01 day workshop on Maun Palan Ke Labh Avam Unka Prabandhan held during 23 Nov. 2020 organized by KVK, Saharanpur.

Dr. Tulsi attended 01 day workshop on Maun Palan Ke Labh Avam Unka Prabandhan held during 23 Nov. 2020 organized by KVK, Saharanpur.

Dr. S.K. Sachan attended 01 day workshop on Maun Palan Ke Labh Avam Unka Prabandhan held during 23 Nov. 2020 organized by KVK, Saharanpur.

Dr. G. Singh attended 01-day workshop on Maun Palan Ke Labh Avam Unka Prabandhan held during 24 Jan. 2021 organized by Village Jadoda, District-Saharanpur.

Dr. Tulsi attended 01-day workshop on Maun Palan Ke Labh Avam Unka Prabandhan held during 24 Jan. 2021 organized by Village Jadoda, District-Saharanpur.

Dr. S.K. Sachan attended 01-day workshop on Maun Palan Ke Labh Avam Unka Prabandhan held during 24 Jan. 2021 organized by Village Jadoda, District-Saharanpur.

Dr. Atar Singh attended 26 days Refresher Course on Role of Biometrics in crop improvement held during 27 July to 21 Aug. 2020 organized by University of Horticultural Sciences, Bagalkot, Karnataka.

Dr. Atar Singh attended 02 days Refresher Course on open source resources and copy right issues held during 26-27 Nov. 2020 organized by MPKV, Rahuri under ICAR-NAHEP.

Dr. L. K. Gangwar attended 10 days training on Emerging Trends in Seed Production Technology and Quality Control Framework for Effective Seed Supply Chain of Horticulture Crops held during 28 Dec. to 06 Jan. 2021 organized by Department of Biotechnology and Crop Improvement, College of Horticulture, Bidar (University of Horticultural Sciences, Bagalkot), Karnataka.

Dr. D. S. Sahu attended 05 days online vocational training on advancements in physiological function tests in domestic animals and pets. held during 1-5 March, 2021 organized by College of Veterinary and A. H. Junagadh Agri. University Junagadh (Gujarat).

Dr. D. S. Sahu attended 05 days Online training programme on Smart Dairy farming: Boosting productivity through innovations held during 18-22 Aug. 2020 organized by NAHEP-CAAST, Navsari Agriculture University, Navsari, (Gujarat).

Dr. Ramesh Singh attended 05 days Introduction to plant Bio-security and Plant Quarantine,





Identification and management held during 12-16 Oct. 2020 organized by National Institute of Plant Health Management, Rajendra Nagar Hyderabad.

Dr. Yogesh Kumar attended 05 days Statistical Yield Forecasting held during 23-27 Nov. 2020 organized by Indian Meteorology Department, Ministry of Earth Science, Gov, of India.

Dr. U.P. Shahi attended 30 days training programme on Massive Open Online Course on Designing e Learning content held during 01-31 July 2020 organized by ICAR-NAARM, Hyderabad.

Dr. U.P. Shahi attended 01 day training programme on online training on AUAMS held during 09 July 2020 organized by ICAR-IASRI New Delhi.

## AWARDS

Dr. Vivek received Life Time Achievement-2021 organized by New Age Mobilization, New Delhi.

Dr. D.S. Sahu received Established held during 26-28 Feb. 2021 organized by GOREA, Rearch foundation jaipur at Shobhit University, Meerut.

Dr. Rasmi Singh received Best Author Award-2020 organized by Universities Journal of Phytochemistry and Ayurvedic Heights, Dehradun.

Dr. D. N. Mishra received Life Time Achievement Award-2021 organized by ATDS(GZB).

Dr. Rajendra Singh received Gladiolas Award -2021 organized by ATDS(GZB).

## College of Veterinary & Animal Sciences

### TRAINING ATTENDED

Dr. Shweta Anand attended 21 days online International Training cum Orientation Programme on Advances in Pharmacology: Addressing the Paradigm Shift in Clinical and Paraclinical sciences held during 28 Dec., 2020 to 21 Jan. 2021 organized by Dept of VPT, College of Veterinary Science and Animal Husbandry, Rewa (M.P).

Dr. Yusuf Dar attended 04 days Training on Fundamentals of Equine locomotion, foot disorder and its therapeutics: a farriery approach held during 17-20 Aug. 2020 organized by College of Veterinary Science & Animal Husbandry, Rewa (MP).

Dr. Prabhakar Kumar attended 21 days Training on MOOC on Information handling skills for teaching, learning and research held during 01-21 March 2021 organized by Prof. Jayashankar Telangana State Agricultural University, Hyderabad.

Dr. Prashant M. Gedam attended 04 days Training on

Effective online curriculum delivery; Tools and methods for online teaching and evaluation; Promoting gender equality in animal husbandry sector; Stress management at workplace held during 22-25 March 2021 organized by COVAS under ICAR-IG-NAHEP.

Dr. Aditya Kumar attended 04 days Training on Effective online curriculum delivery; Tools and methods for online teaching and evaluation; Promoting gender equality in animal husbandry sector; Stress management at workplace held during 22-25 March 2021 organized by COVAS under ICAR-IG-NAHEP.

Dr. R.K. Singh attended 04 days Training on Effective online curriculum delivery; Tools and methods for online teaching and evaluation; Promoting gender equality in animal husbandry sector; Stress management at workplace held during 22-25 March 2021 organized by COVAS under ICAR-IG-NAHEP.

Dr. Gulab Chandra attended 04 days Training on Effective online curriculum delivery; Tools and methods for online teaching and evaluation; Promoting gender equality in animal husbandry sector; Stress management at workplace held during 22-25 March 2021 organized by COVAS under ICAR-IG-NAHEP.

Dr. Shailja Katoch attended 04 days Training on Effective online curriculum delivery; Tools and methods for online teaching and evaluation; Promoting gender equality in animal husbandry sector; Stress management at workplace held during 22-25 March 2021 organized by COVAS under ICAR-IG-NAHEP.

Dr. Akshay Garg attended 04 days Training on Effective online curriculum delivery; Tools and methods for online teaching and evaluation; Promoting gender equality in animal husbandry sector; Stress management at workplace held during 22-25 March 2021 organized by COVAS under ICAR-IG-NAHEP.

Dr. Vipul Thakur attended 04 days Training on Effective online curriculum delivery; Tools and methods for online teaching and evaluation; Promoting gender equality in animal husbandry sector; Stress management at workplace held during 22-25 March 2021 organized by COVAS under ICAR-IG-NAHEP.

Dr. Ram Kumar Singh attended 04 days Training on Effective online curriculum delivery; Tools and



methods for online teaching and evaluation; Promoting gender equality in animal husbandry sector; Stress management at workplace held during 22-25 March 2021 organized by COVAS under ICAR-IG-NAHEP.

Dr. Surbhi Tyagi attended 04 days Training on Effective online curriculum delivery; Tools and methods for online teaching and evaluation; Promoting gender equality in animal husbandry sector; Stress management at workplace held during 22-25 March 2021 organized by COVAS under ICAR-IG-NAHEP.

Dr. Jenny K John Gedam attended 04 days Training on Effective online curriculum delivery; Tools and methods for online teaching and evaluation; Promoting gender equality in animal husbandry sector; Stress management at workplace held during 22-25 March 2021 organized by COVAS under ICAR-IG-NAHEP.

Dr. Alok Dixit attended 04 days Training on Effective online curriculum delivery; Tools and methods for online teaching and evaluation; Promoting gender equality in animal husbandry sector; Stress management at workplace held during 22-25 March 2021 organized by COVAS under ICAR-IG-NAHEP.

Dr. Prem Sagar Maurya attended 04 days Training on Effective online curriculum delivery; Tools and methods for online teaching and evaluation; Promoting gender equality in animal husbandry sector; Stress management at workplace held during 22-25 March 2021 organized by COVAS under ICAR-IG-NAHEP.

Dr. R. A. Siddique attended 04 days Training on Effective online curriculum delivery; Tools and methods for online teaching and evaluation; Promoting gender equality in animal husbandry sector; Stress management at workplace held during 22-25 March 2021 organized by COVAS under ICAR-IG-NAHEP.

Dr. Ajit Kumar attended 04 days Training on Effective online curriculum delivery; Tools and methods for online teaching and evaluation; Promoting gender equality in animal husbandry sector; Stress management at workplace held during 22-25 March 2021 organized by COVAS under ICAR-IG-NAHEP.

Dr. Desh Deepak attended 04 days Training on Effective online curriculum delivery; Tools and methods for online teaching and evaluation;

Promoting gender equality in animal husbandry sector; Stress management at workplace held during 22-25 March 2021 organized by COVAS under ICAR-IG-NAHEP.

Dr. Gulab Chandra attended 05 days Training on “Advancements in Physiological Function Tests in Domestic Animals and Pets held during 01-05 March 2021 organized by Department of Veterinary Physiology and Biochemistry, College of Veterinary Science and Animal Husbandry, Junagadh Agricultural University, Junagadh.

Dr. Koushlesh Ranjan attended 31 days MOOC training Designing E-learning content held during 01-31 July 2020 organized by ICAR-NAARM, Hyderabad.

Dr. Mohd. Ameer Khan attended 31 days MOOC training Designing E-learning content held during 01-31 July 2020 organized by ICAR-NAARM, Hyderabad.

Dr. Shriya Rawat attended 31 days MOOC training Designing E-learning content held during 01-31 July 2020 organized by ICAR-NAARM, Hyderabad.

Dr. J.P. Singh attended 31 days MOOC training Designing E-learning content held during 01-31 July 2020 organized by ICAR-NAARM, Hyderabad.

Dr. Koushlesh Ranjan attended 31 days MOOC training Designing E-learning content held during 01-31 July 2020 organized by ICAR-NAARM, Hyderabad.

Dr. Kuldeep Kumar Tyagi attended 31 days MOOC training Designing E-learning content held during 01-31 July 2020 organized by ICAR-NAARM, Hyderabad.

Dr. M.K. Shukla attended 31 days MOOC training Designing E-learning content held during 01-31 July 2020 organized by ICAR-NAARM, Hyderabad.

Dr. Shailja Katoch attended 31 days MOOC training Designing E-learning content held during 01-31 July 2020 organized by ICAR-NAARM, Hyderabad.

Dr. Ram Kumar Singh attended 31 days MOOC training Designing E-learning content held during 01-31 July 2020 organized by ICAR-NAARM, Hyderabad.

Dr. A.K. Verma attended 31 days MOOC training Designing E-learning content held during 01-31 July 2020 organized by ICAR-NAARM, Hyderabad.

Dr. Rajesh Mandil attended 31 days MOOC training Designing E-learning content held during 01-31 July 2020 organized by ICAR-NAARM, Hyderabad.



Dr. Shweta Anand attended 31 days MOOC training Designing E-learning content held during 01-31 July 2020 organized by ICAR-NAARM, Hyderabad.

Dr. A.K. Dixit attended 31 days MOOC training Designing E-learning content held during 01-31 July 2020 organized by ICAR-NAARM, Hyderabad.

Dr. Vinod Kumar Varun attended 31 days MOOC training Designing E-learning content held during 01-31 July 2020 organized by ICAR-NAARM, Hyderabad.

Dr. Shurbhi Tyagi attended 31 days MOOC training Designing E-learning content held during 01-31 July 2020 organized by ICAR-NAARM, Hyderabad.

Dr. Koushlesh Ranjan attended 15 days MOOCS on Psychology of learning held during 01-15 May 2020 organized by ICAR-NAARM, Hyderabad.

Dr. Shriya Rawat attended 15 days MOOCS on Psychology of learning held during 01-15 May 2020 organized by ICAR-NAARM, Hyderabad.

Dr. Mohd. Ameer Khan attended 15 days MOOCS on Psychology of learning held during 01-15 May 2020 organized by ICAR-NAARM, Hyderabad.

Dr. M.K. Shukla attended 15 days MOOCS on Psychology of learning held during 01-15 May 2020 organized by ICAR-NAARM, Hyderabad.

Dr. Akhil Patel attended 15 days MOOCS on Psychology of learning held during 01-15 May 2020 organized by ICAR-NAARM, Hyderabad.

Dr. Amit Kumar Verma attended 15 days MOOCS on Psychology of learning held during 01-15 May 2020 organized by ICAR-NAARM, Hyderabad.

Dr. Desh Deepak attended 15 days MOOCS on Psychology of learning held during 01-15 May 2020 organized by ICAR-NAARM, Hyderabad.

Dr. Vinod Kumar Varun attended 15 days MOOCS on Psychology of learning held during 01-15 May 2020 organized by ICAR-NAARM, Hyderabad.

Dr. Akhil Patel attended 08 days MOOCs programme on Innovative Ideas for Entrepreneurship Development in Livestock Sector held during 14-21 Sept. 2020 organized by ICAR-MANAGE, Hyderabad.

Dr. Amit Kumar Verma attended 45 days Ag MOOC Agriculture entrepreneurship held during 01 May-14 June 2020 organized by BHU, Varanasi, IIT Kanpur and Common wealth of Learning.

Dr. Vinod Kumar Varun attended 14 days training Application of molecular and Bioinformatic tool in Agriculture & allied Sciences during 11-24 Feb.

2021 organized by Centre for excellence in Agri Biotechnology, SVPUAT.

Dr. Naresh Chnadra attended 14 days training Application of molecular and Bioinformatic tool in Agriculture & allied Sciences during 11-24 Feb. 2021 organized by Centre for excellence in Agri Biotechnology, SVPUAT.

Dr. Vinod Kumar Varun attended 04 days online course on Basics of small animal laparoscopy held during 24-27 May 2020 organized by Department of Veterinary surgery & Radiology, MVC, MAFSU, Nagpur Maharashtra.

Dr. Ajit Kumar Singh attended 04 days online course on Basics of small animal laparoscopy held during 24-27 May 2020 organized by Department of Veterinary surgery & Radiology, MVC, MAFSU, Nagpur Maharashtra.

Dr. Vivek Malik attended 04 days online course on Basics of small animal laparoscopy held during 24-27 May 2020 organized by Department of Veterinary surgery & Radiology, MVC, MAFSU, Nagpur Maharashtra.

Dr. Vinod Kumar Varun attended 21 days training on Advances in Clinico-pathological Diagnosis of Farm Animals Diseases: A Radical Approach in Doubling Farmer's income held during 05-25 Feb., 2021 organized by Department of Veterinary Pathology, College of Veterinary Science & A.H., Rewa.

Dr. Naresh Chandra attended 21 days training on Advances in Clinico-pathological Diagnosis of Farm Animals Diseases: A Radical Approach in Doubling Farmer's income held during 05-25 Feb., 2021 organized by Department of Veterinary Pathology, College of Veterinary Science & A.H., Rewa.

Dr. Akhil Patel attended 05 days training Advances in Reproductive Health Management in Canine held during 08-12 Feb. 2020 organized by DBT-GADVASU Canine Research Centre and Network Project at IVRI.

Dr. Jenny K John attended 30 days training Faculty induction program held during 04 Feb. – 05 March 2021 organized by Academic staff college, Kannur university, Kerala.

Dr. M.V. Jithin attended 21 days training on MOOC on Information Handling Skills for Teaching, Learning and Research held during 01-21 March 2021 organized by PJTSAU, Hyderabad.

Dr. Shriya Rawat attended 21 days training on Application of novel methods in prevention and control of zoonoses and ensuring food safety held during 18 Feb.- 03 March 2021 organized by





Department of Veterinary Public Health and Epidemiology, College of Veterinary Science & A.H., Jabalpur.

Dr. Shailja Katoch attended 21 days training on Application of novel methods in prevention and control of zoonoses and ensuring food safety held during 18 Feb.- 03 March 2021 organized by Department of Veterinary Public Health and Epidemiology, College of Veterinary Science & A.H., Jabalpur.

Dr. A.K. Dixit attended 21 days training on Application of novel methods in prevention and control of zoonoses and ensuring food safety held during 18 Feb.- 03 March 2021 organized by Department of Veterinary Public Health and Epidemiology, College of Veterinary Science & A.H., Jabalpur.

Dr. Akshay Garg attended 21 days training on Application of novel methods in prevention and control of zoonoses and ensuring food safety held during 18 Feb.- 03 March 2021 organized by Department of Veterinary Public Health and Epidemiology, College of Veterinary Science & A.H., Jabalpur.

## AWARDS

Dr. Amit Kumar Verma received Excellence in Teaching Award-2020 organized by SSDAT, Meerut.

Dr. Amit Kumar Verma received Best Poster Award organized by International web conference on Global research initiative for sustainable Agriculture and Allied Sciences.

Dr. Amit Kumar Verma received Best Oral Presentation Award organized by International web conference on Global research initiative for sustainable Agriculture and Allied Sciences.

Dr. Naresh Chandra received Shikshak Shiromani Award organized by Samaj Vikas Sansthan, Jagriti Vihar, Uttar Pradesh, India.

Dr. Naresh Chandra received Young Scientist Award organized by 4<sup>th</sup> international conference Global Approaches in Natural Resource Management for Climate Smart Agriculture (GNRSA-2020).

Dr. Jenny K John received Special Jury Award organized by JIVA, Kerala.

Dr. Vinod Kumar Varun received Best M.V.Sc Thesis award-2021 organized by Agro Environmental Development Society (AEDS), Rampur Uttar Pradesh.

Dr. Vinod Kumar Varun received Global Poultry Academic Award organized by Padmshree Dr. B.V.Rao Poultry Entrepreneurs Global Icon Award 2020 by Pashudhan Praharee.

Dr. Vipul Thakur received Excellence in Extension Award-2021 organized by Agricultural Technology Development Society (ATDS).

Dr. Alok Kumar Dixit received Ram Singh Memorial National Animal Welfare Award – 2020 – National Excellence award.

Dr. Mohd. Ameer Khan received Best Extension Worker Award-2020 organized by Agricultural Technology Development Society (ATDS).

Dr. Rakesh Kumar Singh received Best Veterinarian Award-2020 organized by Agricultural Technology Development Society (ATDS).

Dr. Prabhakar Kumar received Certificate of Excellence in Reviewing by Asian Journal of Research in Animal and Veterinary Sciences.

Dr. Shweta Anand received Certificate of Excellence in Reviewing by Asian Journal of Medicine and Health.

Dr. Vipul Thakur received Excellence in Extension Award organized by Society for Scientific Development in Agriculture and Technology (SSDAT), Meerut

Dr. V.P. Singh received Fellowship for Scientific Research and Development organized by Scientific Research and Development, Edwin Group of Publications, Jabalpur.

Dr. V.P. Singh received Honorary Fellowship organized by Scientific Research and Development, by Journal of Life Science.

Dr. Rakesh Kumar Singh received Certificate of Winner organized by pashudhan praharee.

Dr. M.K. Shukla received Best article Human Health: The Role of Veterinarians by ePashupalan.

Dr. M.K. Shukla received Best article award by ePashupalan.

Dr. M.K. Shukla received Ram Singh Memorial National Animal Welfare Award National Excellence Award by Pashudhan Praharee.

Dr. Akhil Patel received Ram Singh Memorial National Animal Welfare Award National Excellence Award by Pashudhan Praharee.





# BUDGET OF THE UNIVERSITY FINANCE 2020-21

## UNIVERSITY FINANCE

### A. Head-wise Receipt and Expenditure

(Indian Rupees in Lakhs)

S. No.	Head	Grants Received	Expenditure
<b>I. Revenue</b>			
1.	General	10017.00	10017.00
2.	Farm	372.00	363.50
3.	Teachers	1950.00	1923.00
4.	Projects (UP)	1343.00	1343.00
5.	ICAR Development grant	1050.00	1050.00
6.	ICAR Projects	542.00	542.00
7.	ICAR Projects 75%- U.P.25%		
	A. ICAR 75%	88.00	88.00
	B. U.P.25%	22.00	22.00
8.	Krishi Vigyan Kendra (Farms)	221.00	197.00
9.	Krishi Vigyan Kendra, ICAR	5783.00	5783.00
10.	CATET	15.00	12.00
	<b>Total</b>	<b>21404.14</b>	<b>21342.29</b>
<b>II. Capital</b>			
1.	UPGovt. Grant	1945.49	1945.49
2.	ICAR Grant	3314.00	3314.00
	<b>Total</b>	<b>5259.49</b>	<b>5259.49</b>
	<b>Grant Total</b>	<b>26663.63</b>	<b>26601.78</b>



## ANNEXURE-I

# OFFICERS OF THE UNIVERSITY

<b>Chancellor</b>	<b>Hon'ble Governor of Uttar Pradesh</b>
<b>Vice-Chancellor</b>	Prof. (Dr.) R. K. Mittal
<b>Registrar</b>	Dr. D. K. Singh
<b>Directorate of Research</b>	Dr. Anil Sirohi
<b>Directorate of Extension Education</b>	Dr. S. Krishnan
<b>Dean of Post Graduate Studies</b>	Prof. Samsher
<b>Dean, College of Agriculture</b>	Prof. N.S. Rama
<b>Dean, College of Biotechnology</b>	Dr. Ravindra Kumar
<b>Dean, College of Veterinary &amp; Animal Sciences</b>	Dr. Rajbir Singh
<b>Dean of Student Welfare</b>	Dr. Anil Sirohi
<b>Librarian</b>	Dr. Rachna Varma
<b>Controller of Examination</b>	Dr. B. P. Dhyani
<b>Comptroller</b>	Smt. Laxmi Mishra

## ANNEXURE-II

# BOARD OF MANAGEMENT

S. N.	Name & Designation	Address	Status
1	Dr. R. K. Mittal, Vice-Chancellor	SVPUA&T, Meerut	Chairman
2	Hon'ble MLA	Vacant	Member
3	Hon'ble MLA	Vacant	Member
4	Hon'ble MLC	Vacant	Member
5	Principal Secretary, Agriculture	Uttar Pradesh, Lucknow	Member
6	Principal Secretary, Finance	Uttar Pradesh	Member
7	Principal Secretary, Higher Education	Uttar Pradesh	Member
8	Director, Agriculture Department	Uttar Pradesh	Member
9	Director, Animal Husbandry	Uttar Pradesh	Member
10	Shri Nikhil Kumar Tyagi, Livestock Breeder	S/o Late Sh. Rajkumar Tyagi, Saharanpur	Member
11	Shri Aman Dayal, Agricultural Industrialist	S/o Sh. Abhay Dayal Fertilizers, Delhi Road, Meerut	Member
12	Dr. Mahesh Kaushik, Agriculture Scientist	Mohammadpur Lala, Meerut	Member
13	Shri Mahohar Singh Tomar, Progressive Farmer	Rajpura, Meerut	Member
14	Smt. Suman Tyagi, Woman Social Worker	Vikas Khand, Bijnor	Member
15	Dr. K. K. Singh, Asistant Director General, (Farm Engineering) ICAR representative	ICAR, New Delhi	Member
16	Registered Graduate	Vacant	Member
17	Smt. Laxmi Mishra, Comptroller	SVPUA&T, Meerut	Member Secretary



### ANNEXURE-III

## ACADEMIC COUNCIL

S.N.	Name	Designation	Status
1	Dr. R.K. Mittal	Vice-Chancellor	Chairman
2	Prof. Samsher	Dean, PGs/College of Post Harvest Tech./Head	Member
3	Dr. N.S. Rana	Professor & Dean, Agriculture	Member
4	Dr. B.R. Singh	Registrar/Secretary, Academic Council/Dean Tech./Head Agril. Engg.	Member
5	Dr. Anil Sirohi	Prof. & Director, Agricultural Experiment Station/DSW	Member
6	Dr. Rajbir Singh	Prof. & Dean, College of Veterinary & Animal Sciences	Member
7	Dr. Ravindra Kumar	Prof. & Dean, College of Biotechnology	Member
8	Dr. Bijendra Singh	Prof. & Dean, College of Horticulture	Member
9	Dr. Vivek	Prof. & Head, Agronomy	Member
10	Dr. B.P. Dhyani	Prof. & Head, Soil Science & Agricultural Chemistry	Member
11	Dr. D.N. Mishra	Prof. & Head, Entomology	Member
12	Dr. Nazim Ali	Prof. & Head, Animal Production	Member
13	Dr. Gopal Singh	Prof. & Head, Plant Pathology	Member
14	Dr. Satya Prakash	Prof. & Head, Horticulture	Member
15	Dr. R.N. Yadav	Prof. & Head, Agricultural Extension & Communication	Member
16	Dr. Sunil Malik	Prof. & Head, Floriculture & Land Scaping Architecture	Member
17	Dr. L.K. Gangwar	Prof. & Head, Genetics & Plant Breeding	Member
18	Dr. Pankaj Kumar	Prof. & Head Biochemistry & Physiology	Member
19	Dr. Aarti Bhatele	Prof. & Head, Veterinary Pathology	Member
20	Dr. Rajeev Singh	Prof. & Head, Veterinary Gynaecology & Obstetrics	Member
21	Dr. Rachana Verma	Prof. & Head, Veterinary Pharmacology	Member
22	Dr. D.K. Singh	Prof. & Head, Livestock Production & Mgt.	Member
23	Dr. Amit Kumar	Prof. & Head, LFC Livestock Production & Mgt.	Member
24	Dr. Rashmi	Prof. & Head, Basic Science	Member
25	Dr. Shiv Singh	Prof., Agronomy	Member
26	Dr. S.B. Singh	Prof., Genetics & Plant Breeding	Member
27	Dr. A.K. Chaubey	Prof., Soil Science & Agricultural Chemistry	Member
28	Dr. Pooran Chand	Prof., Genetics & Plant Breeding	Member
29	Dr. Ramji Singh	Prof., Plant Pathology	Member
30	Dr. D.K. Singh	Prof., Agricultural Extension & Communication	Member
31	Dr. Kamal Khilari	Prof., Plant Pathology	Member
32	Dr. Pushpendra Kumar	Prof. & Head, Agricultural Biotechnology	Member



33	Dr. R.S. Sengar	Prof., Agricultural Biotechnology	Member
34	Dr. R.B. Yadav	Prof., Agronomy	Member
35	Dr. Satendra Kumar	Prof., Soil Science & Agricultural Chemistry	Member
36	Dr. Gaje Singh	Prof., Entomology	Member
37	Dr. Satendra Kumar	Prof., Directorate of Extension	Member
38	Dr. L.B. Singh	Prof., Agricultural Extension & Communication	Member
39	Dr. Mukesh Kumar	Prof., Directorate of Extension	Member
40	Dr. H.L. Singh	Prof. & Head, Agricultural Economics	Member
41	Dr. Prashant Mishra	Prof., Plant Pathology	Member
42	Dr. D.V. Singh	Prof., Entomology	Member
43	Dr. Mukesh Kumar	Prof., Floriculture & Land Scaping Architecture	Member
44	Dr. R.K. Naresh	Prof. & PG, Faculty Secretary Agronomy	Member
45	Dr. Rekha Dixit	Prof. & Head, Commercial Biotechnology	Member
46	Dr. Tarun Sarkar	Prof. & Head, Veterinary Medicine	Member
47	Dr. Rachana Verma	Prof. & Head, Veterinary Pharmacology	Member
48	Dr. Vijay Singh	Prof. & Head, Veterinary Gynecology & Obstetrics	Member
49	Dr. Rajveer Singh	Prof., Agronomy	Member
50	Dr. Rajkumar	Faculty Secretary, College of Agriculture	Member
51	Dr. S.P. Yadav	Prof., Animal Production	Member
52	Dr. Alok Dixit	Associate Prof., Veterinary Parasitology	Member
53	Dr. Amit Kumar	Faculty Secretary, College of Biotechnology	Member
54	Dr. Akash Tomar	OIC, Recombination DNA Techniques	Member
55	Dr. Purshottam	OIC, Pathology and Microbiology	Member
56	Dr. Veer Pal Singh	OIC, Livestock Product Technology	Member
57	Dr. Mohd. Ameer Khan	OIC, Veterinary Animal Husbandary Extension Education	Member
58	Dr. Devashis Roy	OIC, Animal Nutrition	Member
59	Dr. R.K. Singh	OIC, Veterinary Physiology & Biochemistry	Member
60	Dr. Kuldeep Tyagi	OIC, Animal Genetics & Breeding	Member
61	Dr. Prabhakar Kumar	OIC, Anatomy	Member
62	Dr. Vivak Kumar	OIC, Farm Machinery & Power Engineering	Member
63	Dr. Suresh Chandra	OIC, Food Process Engineering	Member
64	Dr. Neelesh Chauhan	OIC, Food Safety & Quality Assurance	Member
65	Dr. Vivek Malik	OIC, Veterinary Surgery & Radiology	Member
66	Dr. Jaivir Singh	OIC, Irrigation & Drainage Engineering	Member
67	Dr. Jitendra Singh	Faculty Secretary, College of Biotechnology	Member
68	Dr. Shewta Mishra	OIC, Finger Printing	Member
69	Smt. Laxmi Mishra	Finance Comptroller	Member
70	Dr. D. K. Singh	Registrar	Member Secretary

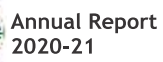




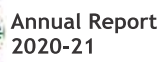
## Finance Advisory Council

S. N.	Name	Designation	Status
1	Prof. R. K. Mittak	Vice-Chancellor, SVPUA&T	Chairman
2	Principal Secretary, Agriculture	Uttar Pradesh, Lucknow	Member
3	Principal Secretary, Finance	Uttar Pradesh	Member
4	Principal Secretary, Higher Education	Uttar Pradesh	Member
5	Nominee of Academic Council notimed by the Hon'ble Vice Chancellor	SVPUAT	Member
6	Director	UPAgriculture Institute, Lucknow	Member
7	Smt. Laxmi Mishra	Finance Comptroller, SVPUAT	Member Secretary





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## सरदार वल्लभभाई पटेल कृषि एवं प्रौद्योगिक विश्वविद्यालय, मेरठ, उत्तर प्रदेश

