



वार्षिक प्रतिवेदन

ANNUAL REPORT 2021-22



सरदार वल्लभभाई पटेल कृषि एवं प्रौद्योगिकी विश्वविद्यालय
मेरठ – 250 110, उत्तर प्रदेश

SARDAR VALLABHBHAI PATEL UNIVERSITY OF AGRICULTURE & TECHNOLOGY,
MEERUT-250110 (U.P.)



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2021-22



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SLOGANS

AGRICULTURE

Agriculture is the backbone of the livelihood security system of nearly 700 million people in the country and we need to build our food security on the foundation of home grown food.

—M.S. Swaminathan

VETERINARY

Never believe that animals suffer less than humans. Pain is the same for them that it is for us. Even worse, because they cannot help themselves.

—Louis J. Camuti

POST HARVEST TECHNOLOGY

Everything in food is science. The only subjective part is when you eat it. Alton Brown
Food may be defined as material which, when taken into the body, serves to either form tissue or yield energy.....creatin.....or caffeinebecause they neither build tissue nor yield energy.

—Wilbur Olin Atwater

BIOTECHNOLOGY

"Our world is built on biology and once we begin to understand it, it then becomes technology".

—Ryan Bethencourt.

TECHNOLOGY

That the way to achieve higher standards of living for all is through science and technology, taking advantage of better tools, methods and organization.

—Charles E. Wilson

MESSAGE



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Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut



Agriculture is the backbone of country and economic prosperity of India lies in sustainable growth of agriculture and allied sector. Agricultural Universities are playing key role in this journey of transformation through teaching, research and extension activities. Our University is committed to nurture and groom new talent and develop competent human resource to secure the agriculture and allied sector. Skill development and resource management capability of our faculty and students is continuously helping farmers and food industries in particular for sustainable livelihood, efficient use of natural resource, ensuring food security and safety of nation.

The University is dedicated for timely completion of academic activities; scientists are committed to evolve new agricultural technologies for the country's development in general and farmers' upliftment in particular and extension workers are devoted to overall transformation of technologies from lab to land. We are focusing in development of sustainable and nature friendly agricultural technologies and their reach to the small and marginal farmers who contribute a big share in economic development of the country.

I am sure that ceaseless and dedicated efforts made by faculty and staff of the university will be reflected through this annual report. I thank the state and central government, ICAR and the funding agencies for their financial and technical support to the University. The efforts will be continued to achieve new height in research, education and extension for the magnificence of Indian Agriculture.



K. K. SINGH

Vice Chancellor

MESSAGE



Annual Report 2021 - 22



Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut



India is one of the major players in the agriculture sector worldwide and it is the primary source of livelihood for ~55% of India's population. India has the world's largest cattle and buffalo herd, largest area planted to wheat, rice, and cotton, and is the largest producer of milk, pulses, and spices in the world. It is the second-largest producer of fruit, vegetables, tea, farmed fish, cotton, sugarcane, wheat, rice, cotton, and sugar. Agriculture sector in India holds the record for second-largest agricultural land in the world generating employment for about half of the country's population. Thus, farmers become an integral part of the sector to provide us with means of sustenance. The knowledge generation through education and research and its proper dissemination to the stakeholders may further open the doors of developed country. The need of now is income security, food security, nutritional security, environmental sustainability, input efficiency and climate resilient agriculture. All these aspects if taken care properly may set the milestone for agriculture growth and prosperity of the country.

The University is committed for overall development of the students through education, sports, cultural, spiritual, NCC, NSS, health activities, field visits, adventures etc. During the period of report 442 UG, 96 PG and 61 PhD students were admitted in various disciplines and colleges. Total 170 UG, 111 PG and 72 PhD were passed out from the University and most of them are engaged in different National and International organizations and rest are pursuing higher degrees or started their own ventures. The digitization in academic management, examination and administrative management was introduced. E-learning material, books and other learning materials were arranged in the University Library. Good number of publications, experimentation for varietal release, germplasm maintenance and success stories is the reflectance of multidisciplinary, farmers centric and demand driven research and extension activities of the University.

The efforts of faculty and staff are reflected in annual report 2021-22. I would like to congratulate the team members for compilation of this report.



R.K. Mittal

Former Vice Chancellor



ACKNOWLEDGEMENT

The present Annual Report for the year 2021-22 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. K. K. Singh 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, Dr Prabhakar Kumar, Associate Professor & OIC, Department of Veterinary Anatomy and Dr. V.P. Singh Associate Professor & OIC, Department of Livestock Product Technology 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 की स्थापना वर्ष 2000 में कृषि और कृषि विज्ञान से सम्बंधित विषयों में शिक्षा, अनुसंधान और विस्तार के माध्यम से पश्चिमी उत्तर प्रदेश के समग्र विकास के उद्देश्य से की गई थी। विश्वविद्यालय का कार्यक्षेत्र उत्तर प्रदेश के 18 जिलों और 04 मंडलों में है। विश्वविद्यालय के अंतर्गत उत्तर प्रदेश के तीन कृषि जलवायु क्षेत्र आते हैं जो भाभर और तराई, पश्चिमी मैदान और मध्य-पश्चिमी मैदानी क्षेत्र के नाम से जाने जाते हैं। विश्वविद्यालय के उद्देश्यों को पूरा करने के लिए वर्तमान में 06 महाविद्यालय कार्य कर रहे हैं और विभिन्न स्नातक (बीएससी (एजी), बीएससी (बागवानी), बीटेक (जैव प्रौद्योगिकी), बीटेक (खाद्य प्रौद्योगिकी), बीटेक (डेयरी प्रौद्योगिकी), बी.टेक (प्रौद्योगिकी) और बी.वी.एससी और ए. एच. पाठ्यक्रम संचालित कर रहे हैं। विश्वविद्यालय विभिन्न कॉलेजों में एम.एससी, एम.टेक., एम.बी.एससी जैसी विभिन्न स्नातकोत्तर डिग्री भी प्रदान कर रहा है। डॉक्टरेट अनुसंधान के लिए विभिन्न कॉलेजों के विभिन्न विभाग पीएचडी उपाधियों हेतु पाठ्यक्रम भी चला रहे हैं। विश्वविद्यालय इन डिग्रीयों में प्रवेश यूपी कैंटेट, आईसीएआर प्रवेश परीक्षा और एनईईटी (वीसीआई के माध्यम से) के माध्यम से लेता है।

विश्वविद्यालय पूरी तरह से आवासीय है और लगभग 19 विभिन्न छात्रावासों में लड़कों और लड़कियों के लिए अलग-अलग आवासीय सुविधाएं उपलब्ध कराता है। विश्वविद्यालय परिसर में संकाय और कर्मचारियों के लिए आवासीय सुविधाएं भी उपलब्ध हैं। अंतर्राष्ट्रीय छात्रों के लिए अलग अंतर्राष्ट्रीय छात्रावास उपलब्ध है। विश्वविद्यालय अस्पताल चौबीसों घंटे छात्रों और कर्मचारियों को स्वास्थ्य सेवाएं प्रदान कर रहा है तथा विश्वविद्यालय पुस्तकालय में चौबीसों घंटे छात्रों को शिक्षा सुविधाएं मिल रही हैं। खेल और खेल सुविधाएं भी विश्वविद्यालय के खेल परिसरों में अच्छी तरह से स्थित हैं जहाँ आउटडोर और इनडोर के रूप में अधिकांश खेल सुविधाएं उपलब्ध हैं। छात्रों के लिए समूह बीमा सुविधाएं भी उपलब्ध कराई गयी हैं। छात्रों को वित्तीय सहायता के लिए विभिन्न प्रकार की छात्रवृत्तियाँ जैसे समाज कल्याण पोस्टमैट्रिक छात्रवृत्ति, पीडीएफडब्ल्यूएम, आईसीएआर-एसआरएफ, आईसीएआर-जेआरएफ, आईसीएआर-यूजी-एनटीएस, आईसीएआर-पीजी-एनटीएस, यूजीसी-डीएसटी इम्पायर फेलोशिप, जनजातीय मामलों के मंत्रालय छात्रवृत्ति, ओबीसी के लिए नेशनल फेलोशिप, सिंगल चाइल्ड फेलोशिप और नेशनल फेलोशिप ऑफ डिफेंस की सुविधाएं प्रदान कराई जाती हैं। इस वर्ष कुल 1063 विद्यार्थी विभिन्न स्रोतों से 4,95,61,937=00 रुपये की छात्रवृत्ति से लाभान्वित हुए हैं। छात्रों के समग्र विकास के लिए सांस्कृतिक कार्यक्रम (अभिव्यक्ति-2022), वार्षिक खेल प्रतियोगिता (स्पर्धा-2022) भी आयोजित की गई जिसमें 300 से अधिक छात्रों ने भाग लिया और विभिन्न पदक और अन्य पुरस्कार जीते।

पश्चिमी उत्तर प्रदेश की मांग को पूरा करने के लिए विभिन्न अनुसंधान इकाइयों जैसे फसल अनुसंधान केंद्र, बागवानी अनुसंधान केंद्र, पशुधन अनुसंधान केंद्र, मत्स्य अनुसंधान और प्रदर्शन इकाई, पोल्ट्री अनुसंधान और प्रदर्शन केंद्र, निर्देशात्मक पशुधन फार्म परिसर, बीज उत्पादन केंद्र, बीज प्रसंस्करण संयंत्र, वर्मिन अनुसंधान निदेशालय के अंतर्गत खाद इकाई, प्रौद्योगिकी पार्क, मशरूम उत्पादन केंद्र, जैव-एजेंट उत्पादन केंद्र, स्वर्ण जयंती चारा उद्यान और जैविक अनुसंधान ब्लॉक स्थापित की गयी हैं। विश्वविद्यालय विभिन्न केवीके में विभिन्न अनुसंधान इकाइयों का भी रखरखाव कर रहा है। वर्ष के दौरान विश्वविद्यालय में कुल 65 इंटरम्यूरल अनुसंधान परियोजनाएं और 33 बाह्य वित्त पोषित अनुसंधान चल रहे थे। विश्वविद्यालय ने विभिन्न संस्थानों जैसे एनआईपीजीआर-नई दिल्ली, भारत मेट्रोलाजिकल विभाग, पृथ्वी विज्ञान मंत्रालय, भारतीय गेहूं और जौ संस्थान, करनाल, निदेशालय, भारत

सरकार, आईसीएआर-नई दिल्ली के साथ अम्ब्रेला एमओयू, मशरूम अनुसंधान, सोलन, सीसीएस नेशनल इंस्टीट्यूट ऑफ एनिमल हेल्थ, इंडियन फार्मर फर्टिलाइजर कोऑपरेटिव लिमिटेड (इफको), नई दिल्ली, उत्तर प्रदेश राज्य निदेशक रोग नियंत्रण एवं फार्म, पशुपालन विभाग, यूपी, दयाल ग्रुप, मेरठ, आयुर्वेद के माध्यम से रिसर्च फाउंडेशन, आईसीएआर-आईवीआरआई, इज्जतनगर, आईसीएआर-सीआईआरसी, मेरठ, आईसीएआर-आईएआरआई, नई दिल्ली, आईएलएल फाउंडेशन, कीटनाशकों की एक इकाई (इंडिया) लिमिटेड, दिल्ली, आईसीएआर-आईआईएफएसआर, मेरठ और मदन मोहन मालवीय प्रौद्योगिकी विश्वविद्यालय, गोरखपुर सहित कुल 16 संस्थानों से संस्थागत संबंध भी विकसित किए हैं।

विश्वविद्यालय वर्तमान में 21 फलों की फसलों जैसे आम की 30, अमरुद की 08, लीची की 04, अंगूर की 04, नाशपाती की 05, सेब की 03, नींबू की 02, अनार की 01 आदि पर शोध कर रहा है। इसके अतिरिक्त विश्वविद्यालय के वैज्ञानिक बादाम, स्टारफ्रूट, पोमेलो, चीकू, मोरिंगा, कस्टर्ड सेब, वैक्स एप्पल, करोंदा बील, बेर, लोकवाट, शहतूत, कटहल, अंगूर, जामुन आदि पर भी शोध कार्य कर रहे हैं विश्वविद्यालय के वैज्ञानिक कोल फसल, क्रूसीफेरा, खीरा, आलू, प्याज, लहसुन जैसी सब्जियों और मसालों के विभिन्न पहलुओं पर भी शोध कर रहे हैं। फूलों की फसलें जैसे ग्लैडियोलस, गेंदा, गुलदाउदी आदि 40 विभिन्न प्रकार के औषधीय और सुगंधित पौधों पर भी अनुसंधान चल रहा है। पशु चिकित्सा और पशु विज्ञान के वैज्ञानिक पशु स्वास्थ्य और उत्पादन के उत्थान के लिए विभिन्न अनुसंधान कार्य कर रहे हैं। जोनल रिसर्च स्टेशन, नगीना ने भिंडी, लाटू, बासमती चावल आदि की जैव प्रभावकारिता पर काम किया है, जोनल रिसर्च स्टेशन, बुलंदशहर ने कपास के अमेरिकी जर्मप्लाज्म, धान की फसल में खरपतवार प्रबंधन का मूल्यांकन किया है और गेहूं के एनवीटी, एवीटी, आरआई, देर से बोया गया और बहुत देर से बोया गया का परीक्षण भी किया है। जोनल रिसर्च स्टेशन उझानी ने मूंगफली के जर्मप्लाज्म की परिपक्वता, फली की उपज और इस जर्मप्लाज्म पर पोटेथियम और बोरॉन के प्रभाव का मूल्यांकन कार्य पूरा कर लिया है साथ ही साथ सरसों, मटर की फसलों पर सल्फर और जिंक के प्रभाव पर परीक्षण भी किया है। विश्वविद्यालय के संकाय सदस्यों ने विभिन्न राष्ट्रीय एवं अंतर्राष्ट्रीय पत्रिकाओं में कुल 216 शोध पत्र प्रकाशित किये हैं। इसके अतिरिक्त 15 पुस्तकें, 43 पुस्तक अध्याय और 45 से अधिक लोकप्रिय लेख भी प्रकाशित हुए हैं।

विस्तार निदेशालय ने विश्वविद्यालय के अधिकार क्षेत्र के विभिन्न स्थानों पर स्थित 20 विभिन्न के कृषि विज्ञान केन्द्रों के साथ 1 से 7 दिनों की अवधि के 1501 प्रशिक्षण कार्यक्रम आयोजित किए जिसमें 36028 किसान, कृषक महिलाएं और ग्रामीण युवा लाभान्वित हुए। विश्वविद्यालय की विस्तार इकाइयों ने तिलहन, दालें, अनाज, सब्जियां, संकर फसलें, पशुधन और मत्स्य पालन, न्यूट्रिया उद्यान आदि पर फ्रंटलाइन प्रदर्शन भी आयोजित किए जिसमें 4913 किसानों ने भाग लिया और 1831.54 हेक्टेयर क्षेत्र को कवर किया गया। विश्वविद्यालय की विभिन्न विस्तार इकाइयों में कुल 148 प्रौद्योगिकियों का मूल्यांकन और परिष्कृत किया गया। कुल 18339 विस्तार कार्यक्रम चलाए गए और विश्वविद्यालय क्षेत्राधिकार क्षेत्र के 239903 किसानों को लाभ हुआ। विश्वविद्यालय की विभिन्न विस्तार इकाइयों द्वारा 76354 किसानों को कुल 15031 मोबाइल सलाहकार सेवाएं प्रदान की गईं। विश्वविद्यालय के संकाय और वैज्ञानिकों को विभिन्न प्रतिष्ठित एजेंसियों से विभिन्न पुरस्कार (21) प्राप्त हुए। विश्वविद्यालय और केवीके के संकाय सदस्यों ने 15 रेडियो वार्ता और 10 टीवी वार्ताएं दी हैं।



EXECUTIVE SUMMARY

The university was established in year 2000 with the mandate of overall development of Western Uttar Pradesh through agriculture and allied sciences education, research and extension. The jurisdiction area of University is in 18 districts and 04 commissionaires of U. P. covering three agro climatic zones viz. Bhabhar and Tarai, Western Plain and Mid-Western Plain Zones of U.P. To fulfill the mandate of university 06 colleges are currently functioning and providing various UG (B.Sc (Ag), B.Sc (Horticulture), B.Tech (Biotechnology), B.Tech (Food Technology), B.Tech (Dairy Technology), B.Tech (Technology) and B.V.Sc & A.H. degrees. The university is also providing various Post Graduate Degrees like M.Sc, M.Tech., M.V.Sc in different Colleges. For doctoral research PhD degrees are also running in various departments of different colleges. The admission in these degrees is through U.P. CATET, ICAR Entrance Examination and NEET through VCI.

The University is fully residential and separate residential facilities are available for boys and girls in about 19 different hostels. Faculty and staff residential facility is also available in University campus. For international students as separate International hostel is available. In other student's amenities, University Hospital is providing health services to students and staff round the clock. Sports and games facilities are also well placed in form of outdoor and indoor sport complexes where most of the game facilities are available. Group insurance facilities are also available for students. For financial assistance to the students various types of scholarships like Samaj Kalyan Postmatric Scholarship, PDFWM, ICAR-SRF, ICAR-JRF, ICAR-UG-NTS, ICAR-PG-NTS, UGC-DST Inspire Fellowship, Ministry of Tribal Affairs Scholarship, National Fellowship for OBC, Single Child Fellowship and National Fellowship of

Defense. In this year total 1063 students were benefitted with worth of Rs 4,95,61,937=00 scholarship from various sources. For students overall development cultural programme (Abhivyukti-2022), Annual Sports Meet (Spardha-2022) were also conducted in which more than 300 students were participated and won different medals and other prizes.

To cater the demand of Western Uttar Pradesh various research units i.e crop research centre, horticulture research centre, livestock research centre, Fisheries Research and Demonstration Unit, Poultry Research and Demonstration Centre, Instructional livestock farm complex, Seed production centre, seed processing plant, vermin compost unit, technology park, mushroom production centre, bio-agents production centre, golden jubilee forage garden and organic research block under Directorate of Research. The University is also maintaining various research units in different KVVKs.

During the year total 65 Intramural Research Projects and 33 externally funded researches were running in the University. The University has also developed 16 institutional linkages between SVPUAT and other institutions namely NIPGR-New Delhi, India Metrological Department, Ministry of Earth Science, Government of India, Umbrella MOU with ICAR-New Delhi, Indian Institute of Wheat and Barley, Karnal, Directorate of Mushroom research, Solan, CCS National Institute of Animal Health, Indian Farmer Fertilizer Cooperative Limited (IFFCO), New Delhi, The State of Uttar Pradesh through Director Disease Control & Farms, Department of Animal Husbandry, U.P., Dayal Group, Meerut, Ayurved Research Foundation, ICAR-IVRI, Izatnagar, ICAR-CIRC, Meerut, ICAR-IARI, New Delhi, ILL

Foundation, a Unit of Insecticides (India) Ltd., Delhi, ICAR-IIFSR, Meerut and Madan Mohan Malviya University of Technology, Gorakhpur.

The University is currently doing research on 21 fruits crops like 30 varieties of Mango, 08 of Guava, 04 of Litchi, 04 of Grapes, 05 of Pears, 03 of Apple, 02 of Lemon, 01 Pomegranate etc. The University is also working on Almond, Starfruit, Pomelo, Sapota, Moringa, Custard apple, Wax Apple, Karonda Beal, Plum, Loquat, Mulberry, Jack fruit, Grape, Jamun etc. The University Scientists are also covering research on various aspects of Vegetables like Cole crops, Cruciferae crops, Cucurbits, Potato, Onion, Garlic and Spices etc. Research on Flower crops like Gladiolus, Marigold, Chrysanthemum etc and 40 different types of Medicinal and Aromatic Plants is also going on. The Scientists of Veterinary and Animal Sciences are working on various research aspects for uplift of animal health and production. Zonal Research Station, Nagina has worked on Okra, Bio efficacy of LAATU, Basmati rice etc., Zonal Research station, Bulandshahr evaluated the American Germplasm of Cotton, Weed crop management in paddy crop and also conducted trials on wheat NVT, AVT, RI, late sown and very late sown trials. Zonal Research Station Ujhani has completed the evaluation work of Germplasm of Groundnut maturity, pod yield and effect of

potassium and boron on this germplasm and also conducted trials on effect of sulphur and zinc on mustard, peas crops etc. Faculty members of the University in total published 216 research papers in various National and International Journals. Additionally 15 books, 43 book chapters and more than 45 popular articles were also published.

Directorate of Extension alongwith 20 different KVKs located at different places of the jurisdiction area of the University conducted 1501 training programmes of 1-7 days duration in which 36028 farmers, farm women and rural youth were benefitted. The extension units of the University also conducted frontline demonstrations on oilseeds, pulses, cereals, vegetables, hybrid crops, livestock and fisheries, nutria gardens etc. In which 4913 farmers were participated and 1831.54 hectare area was covered. In total 148 technologies were assessed and refined at various extension units of the University. Total 18339 extension programmes were carried out and benefitted 239903 farmers of the University jurisdiction area. Total 15031 mobile advisory services were provided to the 76354 farmers by various extension units of University. The University faculty and scientists received various awards (21) from various agencies of repute. Faculty members of the University and KVKs delivered 15 radio talks and 10 TV talks.





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 six constituent colleges,

College of Agriculture,

College of Biotechnology,

College of Veterinary and Animal Sciences,

College of Technology

College of Post-Harvest Technology & Food Processing

College of Horticulture

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 Vallabhbhai 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 21st 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 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 21st century.



- To generate technically sound man power who can apply their acquired knowledge and skills to diversify and industrialize agriculture for socio-economic 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

Organizational Setup

Her Excellency Smt Anandiben Patel the Governor, Uttar Pradesh is the Chancellor of 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 acts 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 an ex-officio chairman. The 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. The list of Hon'ble members of the Board of Management is given in Annexure-I.

Five meetings of Board of Management were held during the period of report. These meetings were held on 09.07.2021, 29.10.2021, 15.12.2021, 30.03.2022 and 02.05.2022 under the chairmanship of Prof. R. K. Mittal, Former Hon'ble Vice Chancellor and Prof. K.K. Singh, Hon'ble Vice Chancellor put up different matters before the members to take decisions in the welfare of University and Staff.

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.

The list of members of the Academic Council is given in Annexure-II. During the period of report six meetings of academic council viz. 03.07.2021, 08.07.2021, 21.10.2021, 30.11.2021, 9.12.2021 and 18.02.2022 were held under the chairmanship of Prof. R. K. Mittal, former Hon'ble Vice Chancellor & Prof. K. K. Singh Hon'ble Vice Chancellor, SVPUA&T and Dr. B. R. Singh being Registrar of the University



seated as Member Secretary of the academic council.

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.

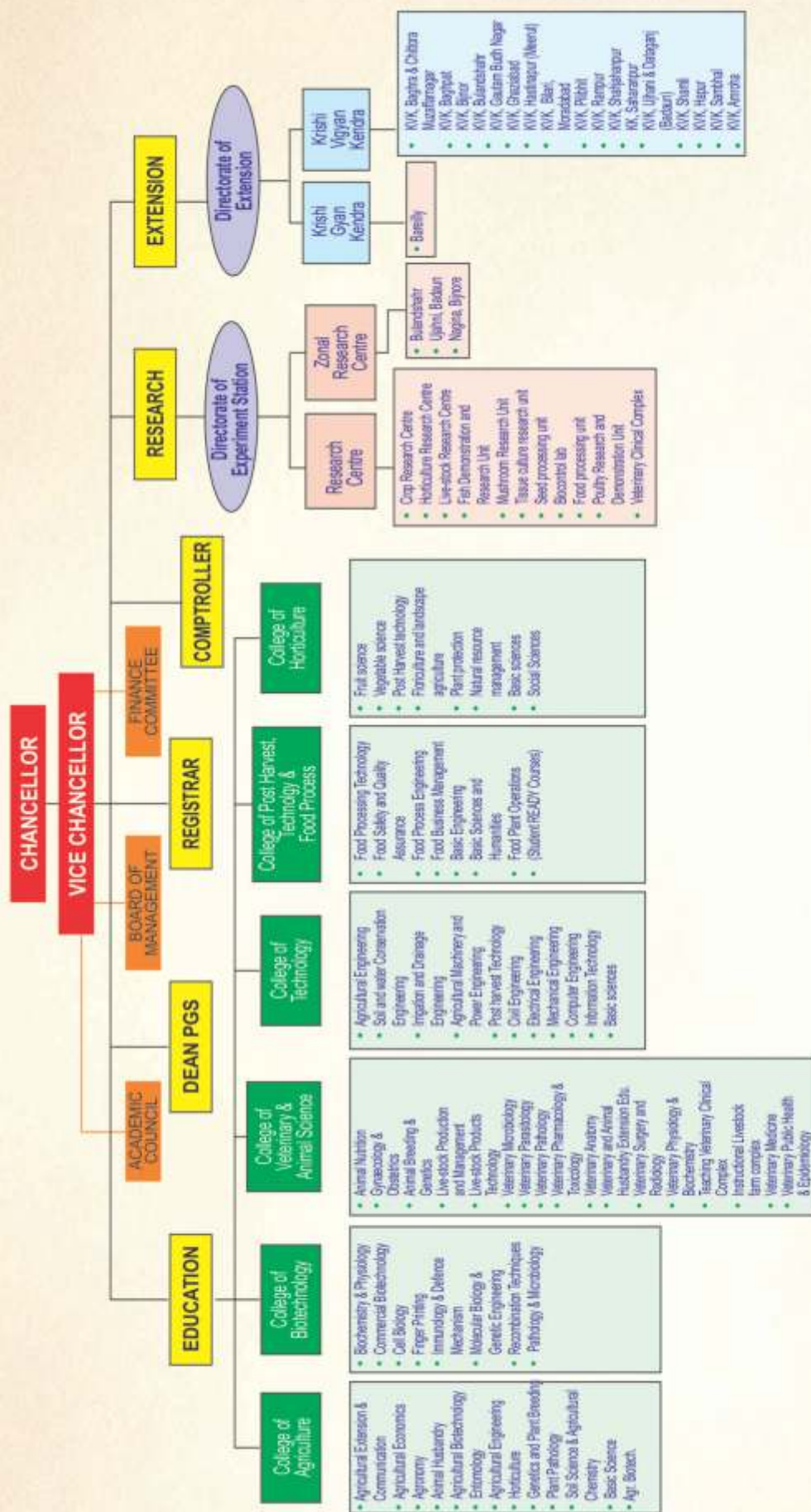
The detailed organizational set-up as well as administrative and functional aspects are given in an organogram).



Prof. K. K. Singh took charge as the new Vice-Chancellor from Prof. D.R. Singh, SVPUAT, Meerut



Prof. K. K. Singh Hon'ble Vice-Chancellor addressing the gathering in SVPUAT, Meerut





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 Husbandry, 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 the four State Agricultural Universities.

Applications for the admission to different courses were invited through the advertisement published in leading daily newspapers. 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, 442 students at UG level, 96 students at PG level and 61 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 & Animal Sciences, College of Horticulture, College of Technology and College of Post-Harvest Technology & Food Processing. A total 170 students at UG level, 111 students at PG level and 72 students at Ph.D. level have successfully completed their respective courses during the period under report (Table 3 & 4).



Students Education Tour at DUVASU, Mathura



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	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	Biotechnology	B.Tech. (Biotechnology)	4 years	Agril. Engg. (Process and Food Engg.)	2 years	Agril. Engg. (Process and Food Engg.)	Minimum 3 years
3	Veterinary & Animal Sciences	B.V.Sc. & A.H.	5 years 6 month	Plant Molecular Biology & Biotechnology	2 years	Plant Molecular Biology & Biotechnology	Minimum 3 years
				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
				Veterinary Biochemistry	2 years	Livestock Products Technology	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		
				Veterinary Extension Education	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
				Centre	-	-	-
				-	-	-	-
4	Horticulture	BSc. (Horticulture)	4 years				
5	Technology	B.Tech (Ag. Engineering)	4 years				
6	Post-Harvest Technology & Food Technology	B.Tech (Food Technology) B.Tech. (Dairy Technology)	4 years 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	Agroonomy	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	10
2	Agricultural Extension and Comm.	03	01	02	01	07
3	Agri. Engg. (Process & Food Engg.)	06	02	02	-	10



4	Agonomy		04	01	02	02	09
5	Animal Husbandry		03	01	02	01	07
6	Entomology		04	01	02	02	09
7	Genetics & Plant Breeding		02	-	01	01	04
8	Horticulture		04	01	02	02	09
9	Plant Pathology		04	01	02	02	09
10	Soil Science & Agril. Chemistry		04	01	02	02	09

Table 3. Student status in university

SN	Name of College	Parameters	Numbers				Total
			Bachelor's	Master's	Ph.D.		
1	Agriculture	Intake (1 st Yr)	135	72	64		271
		Enrolled (1 st Yr)	128	63	40		231
		Passed Out	117	66	72		255
2	Biotechnology	Intake (1 st Yr)	135	12	08		155
		Enrolled (1 st Yr)	92	08	02		102
		Passed Out	53	10	-		63
3	Veterinary & Animal Sciences	Intake (1 st Yr)	83	64	17		164
		Enrolled (1 st Yr)	81	09	06		96
		Passed Out	-	21	-		21
4	Horticulture	Intake (1 st Yr)	44	12	12		68
		Enrolled (1 st Yr)	40	12	12		64
		Passed Out	-	11	-		11
5	Post Harvest Technology & Food Processing	Intake (1 st Yr)	88	-	-		88
		Enrolled (1 st Yr)	68	-	-		68
		Passed Out	-	-	-		-
6	Technology	Intake (1 st Yr)	44	04	04		52
		Enrolled (1 st Yr)	33	04	01		38
		Passed Out	-	03	-		03



Table 2. Number of seats in different degree programmes

SN	Name of College	Parameters	Numbers			
			Bachelor's	Master's	Ph. D.	Total
1	Agriculture	Male	113	42	24	179
		Female	15	21	16	52
		Total	128	63	40	231
2	Biotechnology	Male	49	01	01	51
		Female	43	07	01	50
		Total	92	08	02	101
3	Veterinary & Animal Sciences	Male	54	08	05	67
		Female	27	01	01	29
		Total	81	09	06	96
4	Horticulture	Male	38	07	11	56
		Female	02	05	01	08
		Total	40	12	12	64
5	Post-Harvest - Technology & Food Processing	Male	43	-	-	43
		Female	25	-	-	25
		Total	68	-	-	68
6	Technology	Male	32	02	01	35
		Female	01	02	-	03
		Total	33	04	01	38
Grand Total in University (1+2+3+4+5+6)		Male	329	60	42	431
		Female	113	36	19	158
		Total	442	96	61	599



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- d'f'kv- 06 -500 (14) 03 dated 31-03-2006 and an amount of Rs 1453.32 lacs had been sanctioned 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- d'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.
10. Computer Engg.
11. Information Technology
12. Basic Sciences

The 07 post of Professors, 15 post of Associate Professors, 48 post of Assistant Professors and 1 Post of Dean, College of Technology have been sanctioned by the Government order No: 29/2018/1592/67- d'f'kv- 18 - 500 (03) /17, dated. 11-08-2018. The Post of the Dean is sanctioned with the condition that there will not be any appointment on this post but the senior most professor of this faculty will look after the responsibilities of Dean, college of technology. Presently Dr. B. R. Singh is looking after the responsibility of Dean, college of Technology.

The main objective of the College of Technology is to make provisions of education mainly for rural people of Uttar Pradesh to provide best facilities for research and extension in the field of Agricultural Engineering & Technology.



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.



COLLEGE OF HORTICULTURE



The future of horticulture industry is imp considerably increasing and taking root in western region of UP. The cultivation of horticultural crops especially perishable fruits. European vegetables & Cut flowers in the region has been a very profitable venture not only because the region is a part of National Capital Region (NCR) but also very close to national capital. It is pertinent to mention that there was a proposal of 12 colleges in the original master plan of the university. Of these, the establishment of college of horticulture was one of the prime mandates of the university. The establishment of college of horticulture would not only be helpful in imparting education in horticulture but would also facilitate initiation of research work on the burning problems of horticulture and boosting up the quality production of major horticultural crops in the region. Such a highly specialized college will impart education

and training to the rural and urban youth of different states of country in general and western UP in particular. This will strengthen the efforts to realize the basic objectives of balanced and rapid development of economy of the region. It hardly needs emphasis that without such an educational institution, the development programme in the field of Horticulture cannot be managed 1 adequately. Considering the significance of horticulture in the region, the Uttar Pradesh Government has approved the establishment of college of horticulture in the main campus of university. In order to commence the undergraduate programme successfully in Horticulture from e the academic year 2019-20, the course curricula of B.Sc. (Hons.) Horticulture degree programme has been prepared as per the 5th Dean Committee recommendation.



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. In addition to providing postgraduate students with high quality academic, ICT, psychosocial and social-emotional support services. 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 and pastoral care, enrolment,

registration, examination, compensatory capacity enhancement, postgraduate level ICT empowerment and access to electronic resources for study purposes, postgraduate study resource mobilisation and any other services germane to the optimal provision of postgraduate studies.

- 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. Masters and Doctrate thesis for the session 2020-21 is shown in Table 6.



STUDENTS' WELFARE

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:

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 under-graduate 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 New Girls Hostel and Lal Bahadur Shastri Girls Hostel. Male boarders are housed in ten hostels namely Patel Bhawan, Krishak Hostel, Viveka Nand Hostel, Sir C.V. Raman Hostel, Subhash Bhawan, Gandhi Bhawan, Tagore Bhawan, Khurana Hostel, Nehru Bhawan, APJ Abdul Kalam Hostel, Skill Development Hostel, Type-I, A Block, Type-I, B Block, Type-I, C 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:

Establishment of Mini Gymnasium in Girls Hostel

A Mini Gym was established in Shahid Bhagat Singh Girls Hostel during the year 2017-18 and was equipped with all basic gym equipments.

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.

Culmination of Swatchhta Pakhwada

Hon'ble Prime Minister of India gave a call for "Swachh Bharat" as a mass movement to realize Mahatma Gandhi's dream of a Clean India. Hon'ble Prime Minister desired that a nationwide campaign be organized with the participation of all sections of the society to bring about mass awareness on cleanliness and the government officers should also ensure participation in the cleaning of the government offices and other places. The Hon'ble Prime Minister said it is our social responsibility as citizens of India to help fulfil Mahatma Gandhi's vision of Clean India, by his 152th birth anniversary in 2019. As a responsible citizen, we at Sardar Vallabhbhai Patel University of Agriculture and



Technology, Meerut considering it as our moral duty had organized a Cleanliness Campaign “SWACHHTA Pakhwada” from 1st to 15th September 2022 at our campus.

As a part of the Clean India initiative of the Indian Government and directives from Hon'ble Chancellor/ Governor Uttar Pradesh with reference to Letter No. E-9847/GS dated 2/11/2016 and from Hon'ble Human Resource Minister, Government of India vide D.O. M.11014/02/2016 CDN (PT-1) dated 09/9/2016 'Swachhta Pakhwada' was observed in Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut from 1st to 15th September 2022 with great enthusiasm and activities went in full swing. During this period, University campus was vibrant with various activities and events related to Sanitation. During the Pakhwada several cleanliness activities were initiated on and off the University campus to create awareness about the importance of sanitation and hygiene in our daily lives as well as in the process of nation building.

Lecture on the theme “Swacchta Pakhwada – Ek Kadam Swacchta ki aor” on November 7, 2018 was organised as a part of Swacchta Pakhwada, a 15 day cleanliness initiative taken by the government. The students, staff and faculty were addressed by the Hon'ble Vice Chancellor Prof. Gaya Prasad, on 'Swacchta and its place in Indian Social Ethics.' Immediately after lecture, all the scientific, administrative and supporting staff have taken Mass Swachhta Pledge and then conducted cleanness drive in and around the campus. Earlier as Swachhta Pakhwada began, Professor Gaya Prasad, Vice Chancellor had encouraged the students to identify immediately implementable ideas pertaining to Swachh Bharat. To kick off the events planned during Pakhwada, a productive and intellectually stimulating panel discussion on Swachhta presented a manager's perspective on Swachh Bharat Mission.

Prof. Gaya Prasad, Vice Chancellor, inspired the students to ensure cleanliness around them and the institution and run programs to sensitize all members, including faculty, staff and students to keep the surroundings clean. Many activities were conceptualized and carried out by colleges and committees of SVPUA&T in order to spread the message of Swachh Bharat. The Dean Student Welfare, on the occasion, interacted with the students and motivated them by sharing immediately implementable

ideas pertaining to Swachh Bharat. Some of the cleanness activities conducted during the Swachhta Pakhwada is listed below:

- Weeds from University's main lawns and Hostel surroundings were uprooted.
- Proper cleaning of all the central facilities of University.
- Farm section, footpaths were properly cleaned.
- Hostels and adjoining area were cleaned; all the unwanted grasses were uprooted.
- All the scientist's room were properly cleaned and scientists are being involved in awareness creation among other workers.
- Scientist working tables and room floor of each room were properly cleaned.
- In the administrative block routine cleaning work has been done.
- the main gate area and roof top of main gate was cleaned by removing spider web and other waste materials.

As part of the Swachh Bharat Abhiyan 'Swachhta Pakhwada', Sardar Vallabhbhai Patel University of Agriculture and Technology Meerut organized various other activities such as conducted a seminar on environmental issues related to cleanliness, to create awareness among officers, teachers, staff and students and to enlighten the station staff/local population in promoting the clean India drive. Swachhta pledge taking ceremony at Sardar Vallabhbhai Patel University of Agriculture and Technology Meerut Various cleanliness activities conducted at the University campus creating awareness and organizing seminar on environmental related issue during the Swachhta Pakhwada.

Abhiviyakti 2022 : Cultural programme and Talent Show:

University 18th Foundation Day was celebrated on 2 October, 2022. On this occasion many competitions were organized by the university. University 22nd foundation day was celebrated as a series of many literary, fine arts and cultural events. The events were started from 22/09/2022 and end in the evening of 2 October, 2022. On 2/10/2022. In The morning Foundation day lecture was delivered by Hon'ble Vice Chancellor, Dr. K.K. Singh and Dean Student Welfare, Prof Anil Sirohi in the award ceremony on 02/10/2022 at Ghandhi Hall.



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 TATA AIG. 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 students death.

Blood donation camp

Organised a successful blood donation camp at University in association with blood bank P L Sharma district hospital on 05.09.2022, 42 volunteers donated blood.

"Agricultural Education Day" celebrated

Indian Council of Agricultural Research has designated on 3rd December as "Agricultural Education Day" to commemorate the birth anniversary of first President of Independent India and Union Minister of Agriculture, Bharat Ratna, Dr. Rajendra Prasad. The objective of this day was to expose students including schools to various facets of agriculture and its relevance to country's development, inspire them and attract them towards agriculture, so that they develop interest in agriculture and allied subjects, choose professional career after schooling in some of these courses, engage themselves in agriculture and related activities or become agri-entrepreneurs in future.

Prof. K.K. Singh was the Chief Guest of the event. In his presidential address, he emphasized that agriculture has over 20 disciplines with components related to engineering, computer science, biotechnology, nanotechnology, space technology, etc which would match the diverse aspirations of the current generations. He stressed that agriculture faces multiple challenges, the largest being from the changing climate and called upon the young minds to explore agriculture for

addressing the issues and serving the farmers of our country. More than 300 students participated in various events.

Annual Sports Meet (Spardha 2022)

With the purpose to instill sportsman spirit among students and to enhance their physical and social skills, a three-day Annual Sports Meet 2022-23 was organized from 20.12.2022 to 22.12.2022 at Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut. The selected students from Inter-Colleges/ hostels competitions were nominated for Inter University participation.

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 below.

- 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.



S.N	Name of Scholarship/Fellowship	Category	No. of Students	Amount (Rs.)
1	Samaj Kalyan Postmatric Scholarship, 2021-22	SC/ST	190	47,85,740.00
		OBC	473	2,17,46,190.00
		General	288	1,38,03,798.00
		Minority	40	18,83,581.00
2	PDF WM		01	5,62,280.00
3	SRF From ICAR		04	7,79,999.00
4	JRF From ICAR		00	00.00
5	NTS From ICAR-UG		34	13,47,700.00
6	NTS From ICAR-PG		23	10,82,410.00
7	DST/Inspire Fellowship From UGC		06	24,67,539.00
8	Ministry of Tribal Affairs Scholarship		01	3,66,500.00
9	National Fellowship for OBC		01	3,80,000.00
10	Single Child Fellowship		01	1,20,000.00
11	National Fellowship of Defence		01	36,200.00
		Total	1,063	4,95,61,937.00



CELEBRATION

Celebration of 128th Birth Anniversary of Dr. Babasaheb Ambedkar

Dr. Babasaheb Ambedkar's 127th Birth Anniversary was celebrated on 14th April, 2022 with a lecture presentation on 'Dr. Babasaheb Bhimrao Ambedkar' by Dean Student Welfare, Prof. Anil Sirohi. On this occasion Dr. R.K. Mittal, Hon. Vice Chancellor, SVPUAT, Meerut, Dr. Anil Singh Director of Research & Dean Students Welfare, other officers, staff and students remained present. Prof. R.K. Mittal, Hon. Vice Chancellor, SVPUAT, Meerut delivered an inspirational lecture about Dr. Babasaheb Ambedkar. Students of Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut celebrated the birthday anniversary of Dr. Ambedkar by cutting a cake, at the Mini Auditorium College of Agriculture. Student said Dr. Ambedkar's vision had transformed the country and gave a new hope to the downtrodden. Hon'ble Vice Chancellor cut the cake and was distributed to the students. Many participating Officers and staff also expressed their views on the contributions made by Bharat Ratna Dr. Baba Saheb Bhimrao Ambedkar.

Anti-terrorism Day observed

Anti-Terrorism Day was observed by the Sardar Vallabhbhai Patel University on May 21st 2021 to commemorate the death anniversary of the former Prime Minister Rajiv Gandhi. On this day Dean Student Welfare Prof. Anil Sirohi took the pledge and administered the same to all officers and Students present in the hostels of the University. Students were made aware, regarding dangers of terrorism, violence and its effect on people, society and nation as a whole.

World Environment Day

Under the leadership of the Hon'ble Vice Chancellor Prof. R.K. Mittal, Dean Student Welfare, faculty, staff and students of University, a massive Tree Planting programme was organized at the campus premises and Hostels on June 5th, 2022. Prof. K.K. Singh, Hon'ble Vice chancellor of SVPUAT, Meerut inaugurated the programme organized under the joint auspices of the Dean Student Welfare and Department of Horticulture and planted tree saplings to mark the occasion. The University Registrar, the Director of Extension, Dean,

Colleges, other officers of the University felicitated the function. Faculty and other staff, students and laborers of various institutions of SVPUAT, Meerut as well as neighboring residents were also present during the programme and actively participated in the day long planting festivity. They also vowed to maintain and conduct regular weeding around the planted trees. Throughout the main campus, maintenance and cleaning operations were conducted around already planted areas during the day.

International Yoga Day

As part of worldwide International Yoga Day, 2021, Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut has also observed this day on June 21, 2021 in its campus at Faculty Club with the theme "Yoga for Harmony and Peace". This was a great opportunity to imbibe the value of discipline. Yoga is a mental, physical and spiritual practice that needs to be carried every day. A Yoga session of around two hours between 7 am and 7:30 am in which campus community including faculty, officers, staff and students took part enthusiastically and practiced various 'asanas' of Yoga and pranayama.

Dr. Anil Sirohi, Dean Student Welfare and coordinator of the event emphasized on the importance of the day. He stressed on the need of practicing Yoga and Yoga as a way of life.

Prof. R.K. Mittal, Vice Chancellor briefed audience there is simple way called "YOGA" through which we can make all the body parts healthy and perfect. This is a practice of different body postures, "ASANAS" which helps a lot to become healthy, fit and fine. Yoga can remove the stress, depressions from human mind and resulting a better health and a better mood. Yoga is a kind of meditation and peaceful environment is required to do Yoga. Morning timing is the best suitable time for Yoga. India is recognized as the Leader in Yoga. Whatever you may be looking for, yoga has it on offer, he told in last.

A Yoga practitioner, Sh. Vinod Sharma was invited to demonstrate various Yoga postures and explain correct way of doing "asanas".

Yoga session was started with chanting of 'Pranay Mantra OM' followed by Sookshma Vyayam,



Vajrasana, Sarpasana, Anlom Vilom, Nadi Shodhan Pranayama and Bhramaree Pranayama. Prayers were recited before and after the programme. Practice of regular yoga helps various parts of the body to perform their functions smoothly and in proper coordination. It also strengthens the immune system and does internal cleansing of blood, body parts, body systems, organs, veins & arteries. It brings a one, in harmony and peace. Members present in the session expressed their experiences and stated that they were feeling relaxed, refreshed and calm after the session.

The following Asanas and Postures were exercised by everybody. Everyone got the feeling of relaxation and stress-freeness.

1. NADISODHAN PRANAYAM

Benefits:- Excellent breathing technique to calm and center the mind, works therapeutically for most circulatory and respiratory problems, Releases accumulated stress, Helps harmonize the left and right hemispheres of the brain, Helps purify and balance the nadis, the subtle energy channels, Maintains body temperature.

2. BHRAMARI PRANAYAM

Benefits:- Instant way to relieve tension, anger and anxiety, Gives relief if you're feeling hot or have a slight headache, Helps mitigate migraines, Improves concentration and memory, Builds confidence, Helps in reducing blood pressure.

3. UTTANPADASANA

Benefits:- Cures stomach disorders like acidity, indigestion and constipation, Strengthens the abdominal organs, Strengthens the back and hip and thigh muscles, Helpful for those suffering from gas problems, acidity, arthritis pain, heart problems and waist pain, Cures back pain, Helps to reduce tone the stomach muscles, Helpful for loosing weight, Good for diabetes patients, Improve the function of digestive systems, Remove gases from the intestine.

4. PADMASANA

Benefits:-It helps Calms the brain, increase the hungry, Helps to relax the body, stretches the ankles and knees, stimulate the abdomen, spine and bladder, stretches the spine.

5. PAWAN MUKTASANA

Benefits:-The abdominal muscles are tensed and the internal organs are compressed which increases the blood circulation and stimulates the nerves, increasing the efficiency of the internal organs, Blood circulation is increased to all the internal organs, Digestive system

is improved, Relieves constipation, Strengthens the lower back muscles and loosens the spinal vertebrae, Sterility and impotence, Reduces fats in the abdominal area, thighs and buttocks.

6. SHASHANKASANA

Benefits:-This asana relaxes the mind and relieves depression, It tones the pelvic muscles and relieves sciatic pain, It can help in sexual disorders, It gives a good relaxing stretch to the upper body.

7. SHAVASANA

Benefits:-It relaxes your whole body, Releases stress, fatigue, depression and tension, Improves concentration, Cures insomnia, Relaxes your muscles, Calms the mind and improves mental health, Excellent asana for stimulating blood circulation, Beneficial for those suffering from neurological problem, asthma, constipation, diabetes, indigestion.

8. PARVATASANA

Benefits:-Parvatasana stretches the spine. It helps practitioners below 18 years to gain some height, It sets right respiratory disorders including asthma, It helps to reduce back pain, It improves the ability to stay focused.

9. MAKARASANA

Benefits:-This asana can be done as a relaxation pose between other asanas or it can be relaxation method when you are tired. You can be in this asana for a prolonged period of time if you are tired after a workout. It gives deep relaxation to the shoulders and the spine. It can benefit all parts of the body as it stretches your body almost from head to toe.

10. BHUJANGASANA

Benefits:-Stretches muscles in the shoulders, Decreases stiffness of the lower back, Strengthens the arms and shoulders, Increases flexibility, Improves menstrual irregularities, Elevates mood, Firms and tones the buttocks, Improves circulation of blood and oxygen, especially throughout the spinal and pelvic regions, Improves digestion, Strengthens the spine, Soothes sciatica, Helps to ease symptoms of asthma

11. MARKATASANA

Benefits:- Flexible spine, Ribs and lungs are exercised, Cures diabetes, Large intestine gets exercised, constipation and gas is cured, Extremely effective in relaxing mind and body. Develops memory, increases self-knowledge and enhances creativity

At the end of auspicious session of “International Yoga Day”, everybody took a pledge to include Yoga in one's daily routine like other necessary activities



and also inspire others to include Yoga in their daily life.

Anti ragging campaign:

Anti ragging committee was constituted on 11/07/2019 and antiragging squads were deputed to

control ragging in Hostel premises w.e.f. 7.30 PM to 12.00 Mid night. Besides this anti ragging banners and boards were displayed at various locations in the university campus.



GLIMPSES OF CELEBRATIONS





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 Vallabh Bhai Patel University of Agriculture and Technology, Meerut. The area consists of four revenue divisions i.e. Meerut,

Saharanpur, Moradabad and Barielly comprising total 18 districts, namely – Meerut, Ghaziabad, Baghpat, G.B. Nagar, Bulandshahr, Saharanpur, Muzaffarnagar, Moradabad, Bijnore, Rampur, J.P. Nagar, Barielly, 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	02
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.

The University research aims to develop need based research projects through sustainable and eco-friendly



scientific and technical approaches for developing agricultural technologies/practices/agricultural machines and equipments which can bring about a far reaching impact on productivity and profitability of crops, animals and fishes and develop new products for value addition, enhance income generation and in turn the socio-economic up-liftment of the people of Western Uttar Pradesh. During the year under report, out of the thirty three (33) Externally Funded Research Projects, 07 were newly sanctioned 26 ongoing projects. The University also took up, from time to time, the contingency research projects and station research and trials which are of great concern and need immediate attention in the region. The University was successful in developing location specific recommendations and research findings on agriculture and allied disciplines for the farmers and agri-entrepreneurs of the Western Uttar Pradesh.

A number of recommendations have been made that helped in the development of agro based crop improvement, plant protection, and economically sustainable technologies specific for different agro-climatic conditions of the region. During the year 2021-22, 61.20 quintals of breeder seeds of field crops were produced against the target of 60.00 quintals at university farm. Moreover 1237.79 quintals of foundation, 86.80 quintals certified and 26.56 quintals truthfully labeled seed were also produced.

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

Research Units Headquarter

1	Crop Research Center	8	Seed Processing Plant
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. Status of university and externally funded research projects (2021-22)

During the year 2021-22, University carried out 65 (sixty five) Intramural Research Projects (IRPs) under University Funded research Programmes and 33 (thirty three) externally Funded research Projects. The details of the

research projects are given below

I. Externally Funded Research Projects (EFRP)

During the year 2021-22, University carried out Thirty three (33) externally funded research Projects. The details of the research projects are given below :

S.N	Name of the Project	Name of P.I.	Total	Funding Agency
1	AICRP on nematode in cropping system	Dr. Kamal Khilari	27.36	AICRP
2	AICRP on rice improvement project.	Dr. Rajendra Singh,	24.24	AICRP
3	AICRP on Mushroom	Dr. Gopal Singh,	2.20	AICRP
4	Characterization of Chickpea germplasm resource to accelerate genomic assisted crop improvement	Dr. Kamal Khilari	102.80	DBT
5	Effect of drought stress on growth and carotenoid biosynthesis gene and its accumulation in tomato	Dr. Naresh Pratap Singh,	50.65	DBT
6	Promotional of Agricultural Mechanization for In-situ Management of Crops Residue in the State of Uttar Pradesh.	DEE	340.00	ICAR
7	National Animal Disease Control Programme Center on FMD	Dr. Amit Kumar,	15.00	ICAR
8	Institutional capacity building leading to accreditation of college of veterinary and animal science, SVPUA&T, Meerut (NAHEP)	Dr. Anil Sirohi	99.23	ICAR
9	Institutional capacity building leading to accreditation of college of biotechnology, SVPUA&T, Meerut (NAHEP)	Dr. Anil Sirohi	100.00	ICAR
10	Creation of seed infrastructure facilities	Dr. Gaje Singh,	52.50	ICAR
11	Mega Seed Project	Dr. R.B. Yadav	36.75	ICAR
	AICRP Mustard (Voluntary Centre)	Dr. Mukesh Kumar	0.30	ICAR - DRMR
13	AICRP on Forage Crops (Voluntary Centre)	Dr. L. K. Gangwar	0.50	ICAR-IGFRI
	AICRP on Wheat & Barley (Voluntary Centre)	Dr. L. K. Gangwar	5.80	ICAR - IIWBR
15	Mobile Veterinary clinical service for dairy animal in western U.P.	Dr. Amit Verma	23.50	IFFCO



16	IFFCO-TOKIO	Dr. Amit Verma	3.00	IFFCO TOKIO
17	Agromet advisory services project (GKMS)	Dr. U.P. Shahi	12.60	Min of earth sc.
18	Forecasting agricultural output using space, Agro meterology and land based observation (FASAL).	Dr. Yogesh Kumar,	4.50	Min of earth sc.
19	Strengthening of krishi Vigyan Kendra's Running Under area Jurisdiction of the University	DEE	1325.85	RKVY
20	Establishment of Referral analytical laboratory for microbial toxins and environmental polloutants/toxicants	Dr Amit Kumar	375.00	RKVY
21	Functionalization of Hatchery Unit and Entrepreneurship Development at Poultry Research and Training Centre	Dr. D.K. Singh	20.88	RKVY
22	Strengthening and Modernization of Food Processing Unit	Dr. Neelesh Chauchan	161.00	RKVY
23	Establishment of Agro-processing centre	Dr. Suresh Chandra	205.20	RKVY
24	Establishment of Critical care unit for farm and companion animals at veterinary clinical complex	Dr. Tarun Sarkar	351.68	RKVY
25	Evaluation of wheat varieties of Shriram Fertilizers and chemicals Delhi	Dr. L.K. Gangwar,	5.50	Shri Ram Fertilizer
26	Souce, Rate and Time study of POLY4 in Sugarcane in North India (U.P.)	Dr. U.P. Shahi,	12.00	Sirius Minerals India Pvt.
27	Centrally Sponsored Scheme on spices under NHM	Dr. Manoj Kumar	2.17	Spice Board
28	Establishment of Centre of excellence on Basmati rice.	Dr. Kamal Khilari	515.25	State Govt.
29	Field efficacy of Sulfosulfuron 75%WG on the resistance of Phalaris minor	Dr. Vivek Yadav, Nagina	9.24	Sumitomo India Ltd.
30	Development of Follicle Stimulatng 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
31	Utilization of paddy straw as compete fodder block by treating with Gomutra (Indigenous cow urine)	Dr. Ahamed Fahim	70.68	UPCST
32	Bio-efficacy of UPST 119, as sett treatment against pest in Sugarcane White grub (Holotria serratta), Early shoot borer (Chilo infuseatellus) Termites (Odontotermes. spp) & sutworm, 2021 and 2022	Dr. Rajendra Singh	12.94	UPL Limited Mumbai
33	Bio-efficacy and phytotoxicity of GPI-1820 (Granular insecticide) against insect pests of Sugarcane crop	Dr. Rajendra Singh	14.00	UPL Limited Mumbai



2. Institutional linkage

With a view to strengthen curricular research activities, the University has established strong linkages for higher education, research and training. Areas of cooperation include the subject of mutual interest and contribution towards

strengthening agricultural education and research in the state of Uttar Pradesh SVP UA&T has signed MoU with following national universities/institutes and private sector organizations.

S.N	MoUs	Date of Sign.
1	National Institute of Plant Genome Research (NIPGR), New Delhi.	21-04-2018
2	India Meteorological Department, Ministry of Earth Science, Government of India.	26-04-2019
3	ICAR, New Delhi (Umberala MoU)	07-09-2020
4	Indian Institute of Wheat and Barley Research, Karnal,	10-06-2020
5	Directorate of Mushroom Research, Solan, Himachal Pradesh,	09-11-2020
6	CCS National Institute of Animal Health, Baghpat	13-06-2020
7	Indian Farmer Fertilizer Cooperative Limited (IFFCO), New Delhi	07-11-2020
8	The State of Uttar Pradesh Through Director Disease control & Farms, Department of Animal Husbandry, U.P.	27-01-2021
9	Dayal Group, Meerut.	04-03-2021
10	Ayurvet Research Foundation.	18-03-2021
11	ICAR-Indian Veterinary Research Institute (IVRI), Izatnagar, Bareilly.	07-08-2021
12	ICAR - Central Institute for Research on Cattle (ICAR-CIRC)	03-11-2021
13	ICAR-Indian Agriculture Research Institute, New Delhi	19-02-2022
14	ILL Foundation, a Unit of insecticides (India) Ltd. Delhi	21-02-2022
15	ICAR – Indian Institute of Farming Systems Research (IIFSR), Modipura, Meerut	01-04-2022
16.	Madan Mohan Malaviya University of Technology (MMMUT), Gorakhpur, U.P.	20-04-2022



3. 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 15.12 Ha.

At old building (Total area = 3.54)	At siwaya block (Total area 11.58 hac.)
• Under orchard = 2.03	• HRC =4.98
• Open cultivated area = 0.53	• VRC & veg. Seed prod. =2.04
• Nursery area = 0.41	• Herbal garden =1.30
• Road + irrigation channel = 0.37	• NHB Project =1.00
• Area under wooden tree = 0.20	• Spices Project =0.94
	• Salt affected area =0.83
	• Office & other structures =0.46
	(Area under orchard=6.33, open cultivated area =3.92, salt affected area =0.83, office & other structures area=0.46)

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

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

crop produce for export purposes.

- Crop Improvement
- Crop Production

Major crops under experimentation:

Fruits:

Mango : 1.Dushahari 2. Langra 3. Ramkela 4. Rataul 5. Amrapali 6. Chaunsa 7. Mallika 8. Mithwa malda 9. Neelam 10. Gulab jamun 11. Bombay green 12. Surkhuru 13. Burma surkha 14. Husn-aara 15. Rasgulla 16. Alfanso 17. Gaurjit 18. Saurabh 19. Totapari 20. Surya 21. Swarnrekha 22. Ambika 23. Arunika 24. Kesar 25. Pusa arunima 26. Dushahari -51 27. Manjari 28. Ketki vihar 29. Himayat pasand 30. Evergreen

Guava: Pant Prabhat, L-49, Redfleshed, Punjab Pink, Shweta, Dhawal, Hisar safed & Lalit

Litchi: 1.Shahi 2.Bedana 3.Rosescented 4.Culcuttiya

Grapes: Parlette, Beauty seedless, Himrod & Navrang

Pear: Gola, Baggugosa, Punjab gold, Punjab nector, Punjab beauty

Peach: Saharanpur Prabhat, Sharbati, Shan-e-Punjab, Early grand and Nectrain

Apple: Anna, Dorset golden, HRMN-99

Lemon: Pant lemon-1, Indore seedless

Pomegranate: Muskat white

Others: Grape fruit, Almond, Star fruit, Pomelo, Sapota, Moringa, Custard apple, Wax Apple, Karonda Beal, Plum, Loquat, Mulberry, Jack fruit, Grape, Jamun 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 H.R.C.

1. Development of an efficient micro propagation system of dragon fruit (*Hylocereus undatus*) and assessment of genetic fidelity of in-vitro derived plants using molecular markers.
2. Studies on vegetative, reproductive and biochemical parameters of pear cultivars as affected by bio-fertilizers under the climatic conditions of western U.P.
3. Effect of foliar nano-nitrogen and chelated zinc on growth, flowering, yield and quality parameters of guava (*Psidium guajava* L.) under western U.P. conditions.
4. Effect of plant growth regulator on flower induction and genetic diversity analysis using molecular marker in Brinjal.
5. Effect of nutrient management on growth, yield and quality of garlic (*Allium sativum*) Cv. Yamuna safed-3.
6. Genetic fidelity assessment of strawberry (*Fragaria ananasa* Duch.) using Morpho-Physio-Biochemical and Molecular markers.”
7. D² analysis and direct and indirect selection parameter for yield and its component in Gladiolus.
8. Study to identify suitable time & technique of propagation in Peach (*Prunus persica* L.) under western U.P. conditions.”
9. Studies to identify suitable vegetative propagation technique in guava (*Psidium guajava* L.) cv. Dhawal under western U.P. conditions.
10. Eco-friendly utilization of organic manure and fly ash on growth, flowering and quality attributes in chrysanthemum (*Dendranthema grandiflora* Tzvelev.)
11. Genetic analysis for yield and its contributing traits in pea (*Pisum sativum* L.)
12. Assessment of genetic diversity in Chrysanthemum (*Dendranthema grandiflora* Tzvelev.) based on morpho-agronomic traits.
13. Effect of INM on growth, yield, quality and profitability of bulbs of onion (*Allium cepa* L.)
14. Studies on morphological and bearing behavior of Guava (*Psidium guajava* L.) Cultivars under western Uttar Pradesh.”
15. Morphological and molecular marker based screening of Tomato genotype (*Solanum lycopersicum* L.) for Ty-2 gene.
16. Influence of foliar spray of NAA and Zinc on growth, flowering, yield & quality of guava under western UP conditions.
17. Genetic analysis for yield and its component traits in Bottle gourd.
18. Effects on PGR's on vegetative propagation of lemon (*Citrus limon*) Cv pant lemon-1, under western UP.
19. Studies on genetic diversity and molecular characterization of Tomato.
20. Effect of different on vase life of dahlia cut flowers, expression analysis of senescence associated genes (SAG) and their in-sileo analysis.
21. Studies on canopy management on yield and quality in pear under western UP conditions.
22. To study and identify time and techniques of propagation of peach under western UP conditions.
23. Assessment of genetic variability and molecular characterization of pea.
24. The analysis of genetic diversity in potato.
25. Effect of different bio-stimulant on growth yield and post-harvest attributes of dahlia.
26. Effect of different sources of organic manures and inorganic fertilizers on growth, flowering and yield of gladiolus (*Gladiolus hybridus* Hort.)
27. Influence of bio-fertilizers on vegetative grown flower, quality, bulb yield of gladiolus.
28. Study of genetic diversity analysis in amaranth (*Amaranthus* sp.) by using morpho-agronomic traits.
29. Effect of integrated use of manure and fertilizer on growth and yield of Potato (*Solanum tuberosum* L.) cv. Kufri mohan.
30. Effect of nutrients management practices on growth and yield of coriander (*Coriander sativum* L.) var. Sarvati.
31. Effect of nutrients management practices on growth and yield of Garlic (*Allium sativum* L.)



var. G-282.

32. Effect of Beejamrit and Jeevamrit on growth and yield of Onion (*Allium cepa* L.) cv. NHRDF Red-3.
33. Characterization and evaluation of different germplasm of Onion (*Allium cepa* L.) for NWPZ of UP.
34. Characterization and evaluation of different germplasm of Garlic (*Allium sativum* L.) for NWPZ of UP.
35. Characterization and evaluation of different germplasm of vegetable mustard (Saag Sarson) for NWPZ of UP.
36. Studies on vegetative growth, flowering and yield of different varieties of Banana.
37. Studies on vegetative growth, flowering and yield of different varieties of Grapes.
38. Varietal trail of Turmeric
39. Germplasm (42) evaluation of turmeric
40. Seed production of turmeric
41. Established a cafeteria block of improved cultivars of Vegetables crops.

Other important works completed during 2021-22:

1. 2.0 ha. Area cleaned & prepared back side the COH.
2. 0.6 ha. Area cleaned, leveled & prepared in front of staff club.
3. Intercrops of Pulses & oilseed crops started in orchards as per direction.
4. Seed production of Potato produced 55.5 qt. and stored in cold store.
5. And also produced 07.0 qt. seed production of turmeric under orchard as intercrops for the sowing of next season.

4. Livestock Research Centre :

SVPUAT, Meerut has huge diversified livestock population. Under this university two full fledged farms i.e. Livestock Research Centre (LRC) and Instructional Livestock Farm Complex are presently running by utilizing best possible available resources. At LRC cattle and buffalo are reared and at ILFC-II unit sheep, goat, pig, horse and duck are reared.

Both the units are aimed to conserve the superior germplasm of Sahiwal cattle breed, Murrah buffalo breed, Barbari goat breed, Muzaffarnagari sheep breed and large white Yorkshire pig breed. These livestock farms provide facilities to under-graduate teaching programme as per VCI norms and to facilitate the research work of post graduate and Ph. D degree programmes. These livestock farms provide extension training programme to un-employed rural youth on entrepreneurship skill development on dairy, goat and pig farming.

Faculty Associated with Livestock Research Centre

Mandates of LRC and ILFC-II unit:

- Conservation of superior germplasm of Sahiwal cattle breed and Murrah buffalo breed.
- Conservation of superior germplasm of Barbari goat breed, Muzaffarnagari sheep breed and large white Yorkshire pig breed.
- To facilitate under-graduate teaching programme and research work of post graduate and Ph. D degree programme.
- To provide extension training programme on entrepreneurship skill development on dairy, goat and pig farming.

Infrastructure of LRC and ILFC-II unit:

Livestock Research Centre is having four animal sheds closed type and one animal shed semi-open type. This centre is having one feed and fodder storage building. This centre is having 45 acres fodder cultivation area at Chirodi farm Block A and around 15 acres fodder cultivation area at main campus.

Instructional Livestock Farm Complex is having two animal sheds for sheep and goat, one shed for pig, one shed for horse and one shed for duck. This centre is having one feed storage unit. This centre is having 5 acres fodder cultivation area at main campus.



S. No.	Name of P.G student	Research topic	Department	College	Ongoing/completed
1	Shambhavi Mishra	Studies on fertility associated factors and MX2 gene expression for early pregnancy diagnosis	VGO	COVAS	Completed
2	Aman Srivastav	Studies on expression of CCL8 & CXCL 10 as early pregnancy marker in Buffalo	VGO	COVAS	Completed
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	Completed
4	Rajesh Kumar	Effect of dietary betaine supplementation on growth performance, immune and biochemical profile of murrah buffalo calves	Animal Husbandry	COA	Completed
5	Ayush Maurya	Impact of nickel supplementation on growth, antioxidant and immune status of Sahiwal growing heifers	Animal Husbandry	COA	Ongoing
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	Ongoing

Total Livestock strength upto 31.03.2022- 165 (Cattle & Buffaloes)

	Female Stock				Male Stock			Total
	Adult	Heifers	Female	Total	Adult	Male	Total	
Murrah Buffaloes	37	20	17	74	12	17	29	103
Sahiwal Cattle	14	06	14	34	16	12	28	62

Fodder Production at Livestock Research Centre (2021-22)

Name of crops	Average Area	Status
Rabi		
Barseem+ Mustard green fodder	52acre	Fed to livestock
Kharif		
Oat green fodder	54acre	Fed to livestock

5. Quality Seed production during 2021-22

Total 1412.35 quintals seed was produced at University farm

Kharif, 2021

Foundation seed	497.61 Qtl
Truthfully labelled seed	08.31 Qtl
Pulse	02.80 Qtl
Sub-total	508.72 Qtl.

Rabi, 2021-22

Breeder Seed	61.20 Qtl
Foundation seed	710.30 Qtl

Certified seed	86.80 Qtl
Oil Seed	29.88 Qtl
Truthfully labelled seed	07.61 Qtl
Puls	07.84 Qtl.
Sub-total	903.63 Qtl.

6. Mushroom Research & Training Center

Mushroom Spawn Laboratory, Meerut was started to validate and disseminate the technology developed as well as mushroom research and popularize mushroom as secondary agriculture and entrepreneurship along with the existing farming system. The Mushroom spawn laboratory was established in 2008 with the



financial help of National Horticulture Board and Uttar Pradesh Council of Agriculture Research. Since April, 2015 it was recognized as the ACRIP Co-operating center, Meerut by ICAR-DMR, Solan. In September 2022, it was converted into MRTC by Rashriya Krishi Vikas Yojana of Director of Agriculture of U.P. The mandates of MRTC is to conduct trials with improved mushroom varieties, cultivation practices related to crop production and crop protection measures, all aim to increase production, productivity and utilization of mushroom in the country. Major activities under the project are:

- I. To conduct survey of naturally occurring mushroom, catalogue the edible/medicinal species and explore possibilities of cultivation of promising species.
- II. To evaluate the promising and high yielding strains for regional adaptability bases on Agro-climatic zone.
- III. To carry trial for standard production techniques for different mushrooms.
- IV. To explore possibility of selection of cheaper locally available substrates for mushroom cultivation.
- V. To supply good quality spawn to the mushroom growers.
- VI. Popularization of mushroom cultivation in different areas.

In the year 2022 two (02) Masters' students completed their thesis on Shiitake mushroom and Lion's Mane mushroom, four (04) research papers has been published, two (02) training of one day and one (01) training of three days were conducted in which sixty participants took part, under experiential learning on mushroom has been worked for 3 months. Commercial spawn 262.2 kg were supplied to farmers while mushroom 262kg (oyster and milky type) has been supplied to mushroom consumers from MRTC.

7. Zonal Research Station, Nagina (Bijnor)

Research Project:-

1. Bio- efficacy & Standardization of dose of Danza Power in Okra from Sumitomo Chemicals India Ltd.

Results:

In Okra, highest values of yield attributes fruit/plant (19.22), length of fruit (11.18 cm), diameter

of fruits (2.02 cm), fruit weight (16.72 g) and yield (13.10 t/ha) was recorded with Danza power @ 325 g/ha which was found statistically at par with Danza power @ 250 g/ha - fruit/ plant (19.17), length of fruit (11.13 cm), diameter of fruits (1.94 cm), fruit weight (16.48 g) and yield (12.69 t/ha).

Conclusion:

The result from the experimental trial revealed that application of Danza power @ 250 g/ha and 325 g/ha was found at par and superior in terms of growth attributes and yield attributes namely fruits/plant, fruit length, fruit diameter & average fruit weight. Hence we can recommend farmers to use Danza power @ 250 g/ha on Okra.

No phyto-toxicity symptoms were observed in any of the doses of Danza power even upto 500g /ha and hence, it can be used safely at the recommended rate in okra for yield enhancement.

2. Bio- efficacy & Phytotoxicity of LAATU on growth and yield of Rice. From Sumitomo Chemicals India Ltd.

Results:

Highest grain yield 47.48 q/ha was recorded with LAATU GR @ 15 kg /ha which was at par with LAATU GR @ 10kg/ha (47.23 q/ha) followed by LAATU GR @ 5 kg/ha (44.24 q/ha) as compared to control (42.30 q/ha). Highest values of straw yield (59.38 q/ha) was recorded with LAATU GR @ 15 kg /ha which was at par with LAATU GR @ 10 kg /ha (59.08 q/ha) significantly superior over other treatments under test.

Conclusion:

On the basis of results Laatu @ 15 kg/ha and @ 10kg/ha are found better and at par for better yield and yield attributes of rice. So, we can recommend Laatu @ 10 kg/ha for Rice. It is Non Phytotoxic to Rice at various dosage like @ 10 kg/ha, 15 kg/ha and 20 kg/ha.

Agronomical Experiments Conducted During Kharif:- 2021

- i. Evaluation of Imazethapyr (10% SL) Herbicide tolerant basmati rice NIL's under dry direct seeded rice condition

Imazethapyr herbicide tolerant basmati near isogenic line two genotypes Viz. IET 1816 (5.54



t/ha) and IET 1815 (4.50 t/ha) recorded significantly higher grain yields and superior to other entries and checks.

ii. Developing A Suitable Package of Practices For Higher Yield In Dry Dsr System

Mechanical line sowing of seeds resulted in the highest grain yield (5.4 t/ha). Similarly, among weed control methods, pre-emergence herbicide application (Pretliachlor) @ 0.75 kg ai/ha + manual weeding twice (20 & 40 DAS) resulted in the highest grain yield (4.98 t/ha), however it was found at par with pre- + post-emergence herbicide treatments (4.85 t/ha) i.e. Pretilachlor @ 0.75 kg ai/ha as pre and bispyribac sodium @ 20 g ai/ha as post emergence.

iii. Long Term Trial on Weed Dynamics Under Different Establishment Methods

Highest grain yield (4.50 t/ha) was recorded with Transplanting as compared to Dry direct Seeding and wet direct seeding. The Sedges > Grasses > BLW dominance was recorded at active tillering stage. Leptochloa chinensis was found most prominent weed in all the establishment methods.

iv. Nano-Fertilizers For Increasing Nutrient Use Efficiency, Yield And Economic Returns In Transplanted Rice.

Nano urea treatment not influenced significantly the grain yield. Recommended dose of Nitrogen through urea resulted the highest grain yield (3.64 t/ha) compared to 50% RDN + 2 foliar spray of nano-urea (2.50 t/ha) and 75% RDN + 2 foliar spray of nano-urea (3.12 t/ha).

v. AVT-2 Early Transplanting (ETP)

Among the 9 entries under test, Entry IET26790 (3.67 t/ha) & IET 28359 (3.61 t/ha) were found promising.

vi. AVT-2 Irrigated mid early (IME))

Among the 7 entries under test, Entry IET28396 (4.84 t/ha), IET 28032 (4.75 t/ha) & IET 28033 (4.60 t/ha) were found promising.

vii. AVT-2 Medium Slender (MS)

Among the 5 entries under test, Entry IET28757 (4.70 t/ha), IET 28746 (4.63 t/ha) & IET 23834 (4.52 t/ha) were found promising.

viii. AVT-2 Costal Saline Tolerant Varietal Trial (CSTVT)

Among the 3 entries under test, Entry IET 27847

(3.93 t/ha) & IET 27057 (3.91 t/ha) were found promising.

ix. AVT-2 Bio-fortified

Among the 4 entries under test, Entry IET 28714 (3.64 t/ha) & IET 28984 (3.59 t/ha) were found promising.

x. AVT-2 Irrigated Medium (IM)

Among the 4 entries under test, IET 28108 (3.46 t/ha) & IET 27686 (3.43 t/ha) were found promising.

Plant Breeding Experiments Conducted During Kharif: – 2021

i. Initial Variety Trial -Basmati. (IVT-BT)

Highest grain yield (6967 kg/ha) was recorded with entry 2012 followed by entry 2007 (5411 kg/ha). Entry 2001 takes less time (86 days) and entry 2016 takes maximum time (112 days) to flowering.

ii. Collection, evaluation, selection and maintenance of rice germplasm

570 rice germplasm has been maintained.

iii. Initial Hybrid Rice Trial- Early (IHRT-M).

Highest grain yield (7021 kg/ha) was recorded with entry 3005 followed by entry 3001 (6107 kg/ha). Entry 3014 takes less time (106 days) to flowering and entry 3003 takes maximum time (126 days) to flowering.

iv. Initial Hybrid Rice Trial- Early (IHRT-ME).

Highest grain yield (7321 kg/ha) was recorded with entry 2919 followed by entry 2911 (6558 kg/ha). Entry 2902 takes less time (98 days) to flowering and entry 2807 takes maximum time (109 days) to flowering.

v. Initial Hybrid Rice Trial- Early (IHRT-E).

Highest grain yield (8360 kg/ha) was recorded with entry 2802 followed by entry 2805 (7346 kg/ha). Entry 3019 takes less time (83 days) to flowering and entry 2807 takes maximum time (109 days) to flowering.

vi. Evaluation of Rice hybrids under different agroclimatic conditions of U.P.

Highest grain yield (6815 kg/ha) was recorded with entry RH 28 followed by entry RH 13 (6691 kg/ha). Entry RH 15 takes less time (91 days) to flowering and entry RH 22 takes maximum time (120 days) to flowering.



vii. Initial Variety Trial –Aromatic Short Grain. (IVT-ASG)

Highest grain yield (5957.06 kg/ha) was recorded with entry 5107 followed by entry 5102 (5119.35 kg/ha). Entry 5110 takes less time (86 days) and entry 5103 takes maximum time (117 days) to flowering.

viii. Advance varietal trial of wheat (timely sown irrigated condition) under All India Coordinated Wheat Improvement Project (AVT-IR-TS-TAS).

Highest grain yield (6822.5 kg/ha) was recorded with NW-TS-102 followed by NW-TS-105 (6570.0 kg/ha). Entry NW-TS-105 takes less time (142 days) followed by NW-TS-103 (143 days) to maturity.

Experiments Conducted During Rabi: – 2021-11

i. Advance varietal trial of wheat (Late sown irrigated condition) under All India Coordinate Wheat Improvement Project (AVT-IR-LS-TAS).

Highest grain yield (5810.0 kg/ha) was recorded with NW-LS-206 followed by NW-LS-205 (5510.0 kg/ha). NW-LS-205 takes less time (103 days) to maturity.

ii. Advance varietal trial of wheat (timely sown restricted irrigated condition) under All India Coordinated Wheat Improvement Project (AVT-RI-TS-TAS).

Highest grain yield (6010.0 kg/ha) was recorded with NWRI -301 followed by NWRI-305 (5832.50 kg/ha). NWRI 317 takes less time (138 days) to maturity.

iii. Advance varietal trial of wheat (MABB) under All India Coordinate Wheat Improvement Project (AVT-IR-TS-MABB).

Highest grain yield (6510.0 kg/ha) was recorded with HD 2967 followed by PBW 509 (6475.0 kg/ha). DBW 222 takes less time (140 days) to maturity.

Seed Production (Area, Production and Productivity):

Year	Season	Crop/variety	Area (ha)	Production (q)	Productivity (q/ha)
2021	Kharif	Pusa Basmati 1509	3.5	85.00	24.20
2021-22	Rabi	Wheat (HD 3086) Breeder seed	4.00	125.00	31.25

8. Zonal Research Station, Bulandshahr

Year	Season	Crop	Research Activities
2021	Kharif	Cotton	Evaluation of Desi cotton germplasms
			Evaluation of American germplasms of cotton
		Paddy	Experiment on weed control measures in paddy crop
			Total 13 varieties demonstrated for farmers
2021-22	Rabi	Wheat	Research trials on varietal evaluation are being conducted in collaboration with IIWBR, Karnal All India co-ordinated wheat NIVT, AVT, RI, Late Sown and very late sown trials.



Seed production programme

Kharif 2021					
1	Paddy	Pusa-1509	1.20	37.10	30.91
		Pusa-1121	0.424	9.40	22.16
Rabi 2021 -22					
2	Wheat	DBW-222	1.20	62.60	52.16
		DBW-187	1.20	50.75	42.29
		DBW-173	0.80	31.35	39.18

9. Zonal Research Station -Ujhani

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 thousands 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.

Staff Position:-

S. No.	Name	Designation
1.	Dr. S. B. Singh	Prof. Plant Breeding
2.	Dr. A.K. Chaubey	Prof. Soil Science
3.	Sri Yogeshwar Mani Tripathi	Tractor Operator
4.	Sh. Naresh Kumar	Book Binder
5.	Sri Chandra Pal	Animal Attendant

Experiments Conducted During Kharif: – 2021

- Collection, evaluation, selection and maintenance of germplasm and segregating populations of groundnut.
Plants were selected on the basis of maturity (105 to 125 days) and gave more than 60 gms per plant pod yield.
- Evaluation of groundnut genotypes for pod yield and maturity
- Effect of potassium and boron nutrition on yields and economics in groundnut (*Arachis hypogaea* L.) in light-textured Entisol.

Pod yield data presented in Table indicate that application of split doses of potassium, half as basal and half as topdressing at 45 DAS and boron along with recommended N,P&S gave higher pod yield during both the year of experimentation. Significantly higher mean pod yield were recorded at recommended dose of potassium, half as basal and half as topdressing at 45 DAS during Kharif 2021 and 150% of RDK by basal during Kharif 2022 and at 2.0 kg B/ha level during both the year of experimentation. However, maximum pod yield were recorded with higher level of nutrients application.



Statistically non- significant increase in pod yield of groundnut were recorded with the application of different combinations of K & B.

- iv. Seed and oil yield of Sesame (*Sesamum indicum* L.) as influenced by Sulphur and Boron nutrition grown in light textured Entisol.

Seed yield data presented in Table 2.2a & b indicate that Til crop responded to application of sulphur & boron. A linear increase in seed yield was recorded with increasing level of S & B application. Application of 40.0 kg/ hasulphur along with recommended dose of fertilizers gave maximum seed yield of Til and it was significantly higher over all the remaining treatments during both the years while, application of 2.0 kg and 1.0 kg boron/ha along with R.D.F.(60:30:20kg NPK/ha) gave maximum seed yield of Til during Kharif 2020 & 2021 respectively. Interaction effect of S x B was observed statistically non-significant during both year of experimentation.

- v. Collection, selection, evaluation and maintenance of germplasm and segregating populations of groundnut

Plants were selected on the basis of maturity (105 to 125 days) and gave more than 60 gms per plant pod yield.

- vi. Special varietal trial on timely sown irrigated (MABB-NWPZ) wheat. {Marker Assisted Backcross Breeding}.

Highest grain yield (54.68 q/ha) was recorded by variety PBW – 901 followed by PBW - 677(54.45 q/ha) and DBW - 187 (53.30 q/ha)

Experiments Conducted During Rabi: 2021-22

- i. Collection, evaluation, selection and maintenance of germplasm And segregating populations of mustard

Germplasm and segregating populations maintained successfully. Selection was made on the basis of superior plant type, maturity and seed size.

- ii. Advance varietal trial on wheat (restricted irrigation, one irrigation at 45 to 50 days after sowing).

Highest grain yield (23.26 q/ha) was recorded by entry NW-RI - 307 followed by NW-RI – 303 (22.40 q/ha) and NW-RI - 309 (21.74 q/ ha) Table No. 1.3 .

- iii. Advance varietal trial on timely sown irrigated wheat.

Highest grain yield (56.73 q/ha) was recorded by entry NW-TS - 105 followed by NW-TS - 113 (54.95q/ha) and NW-TS – 111 (53.21 q/ha).

- iv. Advance varietal trial on late sown irrigated wheat.

Grain yield data presented in revealed that significant differences in grain yield of wheat entries (LS-IR) were recorded. Highest grain yield (61.13 q/ha) was recorded by Entry LS – 203 (PBW – 771) followed by LS – 205(60.55q/ha; PBW - 834) and LS – 206 (57.08 q/ha; DBW - 173).

- v. Response of field pea (*Pisum sativum* L.) to sulphur and zinc application in light textured soil of Mid- Western Plains of U.P.

Application of Zinc and S in field pea crop increased the grain yield over recommended dose of fertilizer (20:60:40 kg N, P₂O₅ and K₂O /ha). Maximum grain yield 3861.11 kg was obtained with the application of 5.0 kg Zn + 40 kg S per ha. Zn x S interaction did not increased grain yield significantly. However, significantly higher and maximum grain yield (3671.29kg/ha) was recorded with the application of 40 S kg/ha level while significant increase in grain yield was recorded at 2.5 kg Zn / ha level. C:B ratio also showed beneficial effect with the application of Zn & S in field pea crop.

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

Application of Zinc, Boron and S along with recommended dose of fertilizers in mustard crop increased the seed yield over recommended dose of fertilizer (120:60:40 kg N, P₂O₅ and K₂O /ha). Maximum and significantly higher seed yield 3193.33 kg/ha was obtained with the application of 5.0 kg Zn+1.0kg B + 40 kg S/ha along with R.D.F. Followed by 5.0 kg Zn + 40 kg S (2993.33kg/ha) and 5.0 kg Zn+1.0kg B/ha (2940.00kg/ha) along with R.D.F. C:B ratio also showed beneficial effect with the application of Zn, B & S in mustard crop

Major Achievement

- i. To harvest higher grain yield of field pea in light-textured soils of Mid – Western Plains of U.P.. The Field Pea crop should be nourished with 5.0kg Zinc, 1.0kg Boron/ha and seed should be inoculated with Bio-fertilizers (*Rhizobium* &



PSB) along with recommended dose of fertilizer (20:60:40:20 kg N, P₂O₅, K₂O & S/ha).

- ii. To harvest higher pod yield and economic return of groundnut in light- textured soils of Mid – Western Plains of U.P. groundnut crop should be nourished with recommended dose of fertilizer (20:30:45:20 kg N, P₂O₅, K₂O & S/ha) +2.0 t. vermi- compost + 20 kg ZnSO₄ + 1.0 kg B/ha + 0.1% FeSO₄ foliar application at 45 & 60 days after sowing and seed should be inoculated with Rh.+PSB

Technology Released for Farmers:-

Keeping in view the responsibility for development of suitable package of agro-technology for sustained productivity and efficient nutrient management for different crop, particularly oil seeds and pulses grown in drier and warm agro-climatic conditions of Mid-Western Plain Zone, the research work was planned

and successfully carried out and technology released for farmers :- “50”

- A. Research papers published in journals: 46
- B. Research Articles & Abstracts: 29
- C. Popular Articles: 26

Book & chapter:-

- i. Strategic research and extension plan (srep) of budaun district:-
Actively participated in preparing 'Strategic Research and Extension Plan (SREP) of District-Budaun U.P. under Agricultural Technology Management Agency (ATMA) as core member of SREP Preparation Team During 2006.
- ii. Krishi darshika: literature for farmers use
- iii. Zyad- Farming of Ground and Taramira: Rabi Faslo ki saghan paddhtiya, Department of Agriculture in U.P.

Crop Production details %

Kharif 2021

S.N	Crop	Variety	Quantity (Qtl)	Remark
1-	Pearl millet	Hybrid	82-50	Auction
2-	Urd	Alankar	10-10	Auction
3-	Urd	PU-31	02-45	NSC Bareilly
4-	Sesame	T - 78	0-145	Auction
5-	Groundnut	TG - 26	2-20	For sale at station
6-	Sanai	---	2-10	For green manuring

Seed Produced 2021-22.

A. Intake to National Seeds Corporation Ltd. Bareilly

Crop	Variety	Area (ha)	Production (q.)	Productivity(q. /ha)
Seed Production Centre Kisarua				
Wheat	DBW - 222(F-I)	6.24	284 .04	46.48
Zonal Research Centre, Ujhani				
Wheat	H D - 3226 (F- I)	4.94	118.16	25.57

B. Processed seed:

Wheat	JHW - 261	--	4.4	-
Wheat	H D - 3059	--	2	-
Wheat	DBW - 187	--	6.9	
Wheat	DBW - 222	--	6	
Wheat	H D - 3226	-	3.2	



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 2021-22 includes trainings, demonstrations, field days, kisan melas, Kisan goshthies, 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 2021-22 in which 36028 farmers farm women and rural youth participated.

S.No.	Districts	Location of KVKs	Year of Establishment
1.	Meerut	Hastinapur	1992
2.	Saharanpur	Saharanpur	1992
3.	Rampur	Dhamora	1992
4.	Ghaziabad	Muradnagar	1992
5.	Bijnor	Nagina	1992
6.	Badaun	Ujhani	1992
7.	Muzaffarnagar	Baghra	1994
8.	Shahjahanpur	Niyamatpur	1995
9.	Pilibhit	Tandabijesi	2000
10.	Baghpat	Khekra	2005
11.	G.B. Nagar	Noorpur Chholas	2005
12.	Moradabad	Rustam Nagar, Bilari	2005



13.	Bulandshahr	Bulandshahr	2008
14.	Sambhal	Paltha Mithanpur	2018
15.	Shamli	Jalalpur	2018
16.	Amroha	State Agril. Farm Tarapur	2018
17.	Hapur	Babugarh	2018
18.	Muzaffarnagar-II	Chittora	2018
19.	Badaun-II	Dataganj	2018
20.	Moradabad-II	Thakurdwara	2019

Training, Front Line Demonstrations and On Farm Trials

Prime mandate of KVKs is to disseminate the developed technologies through various methods of technology dissemination such as trainings, front line

demonstrations (FLDs) and on farm trials (OFT). The trainings, FLDs and OFTs organized by all the 20 KVKs working under SVPUAT during the Period 2021-22 have been given in following Tables-

3. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	1045	17530	3865	21395
Rural youths	1179	18752	4251	22993
Extension functionaries	263	3197	512	3709
Sponsored Training	165	4999	858	5557
Vocational Training	54	1046	192	1238
Total	2706	45524	9678	54892

4. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	776	313	61
Pulses	893	332	50
Cereals	1467	565.18	635
Vegetables	326	38.15	75
Other crops	727	434.74	5
Hybrid crops	9	1.5	-
Total	4198	1684.57	826
Livestock & Fisheries	309	4533 (Chicks & buffaloes)	682
Women Empowerment	30	0.2	-
Other enterprises (Nutri Garden)	98	1.47	-
Other enterprises	278	145.3	19
Total	715	146.97	701
Grand Total	4913	1831.54	1527



5. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	93	337	361
Livestock	17	83	89
Various enterprises	38	129	248
Total	148	549	698
Technology Refined			
Crops	-	-	-
Live stock	-	-	-
Various enterprises	-	-	-
Total	-	-	-
Grand Total	148	549	698

6. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	11055	184667
Other extension activities	7284	55236
Total	18339	239903

7. 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	1616	201	357	90	629	237	3130
	Voice only	4799	116	381	86	860	598	6840
	Voice & Text both	4202	94	87	53	459	166	5061
	Total Messages	10617	411	825	229	1948	1001	15031
	Total farmers Benefitted	43057	3702	7584	634	15137	6240	76354



8. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	4,786.67	96,85,652.00
Planting material (No.)	1,71,720.00	17,537.00
Bio-Products (kg)	39,610.00	80,300.00
Livestock Production (No.)	--	--
Fishery Production (No.)	--	--
Other Production	701.89	6,23,683.00
Other Production (Milk)	1004.30 lit	45,193.50
Mushroom Production	20 Kg	2,000.00
Vermi Production	800 Kg	4,000.00

9. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value (Rs.)
Soil	2,757.00	2,36,539.00
Water	17	--
Plant	14	--
Total	2,788.00	2,36,539.00

10. HRD and Publications (KVKs)

SN	Category	Number
1	Workshops	60
2	eConferences	80
3	Conferences	44
4	Meetings	218
5	Trainings for KVK officials	94
6	Visits of KVK officials	176
7	Book published	26
8	Training Manual	30
9	Book chapters	31
10	Research papers	19
11	Lead papers	10
12	Seminar papers	18
13	Extension folder	130
14	Proceedings	42
15	Award & recognition	23
16	Ongoing research projects	17



10. (A) HRD and Publications (Directorate of Extension)

• Sardar Patel Krishi News Letter :Quarterly News Letter

Sr. No.	Name of Publication	No. of Editions	Image
1	Quarterly News Letter	Jan.2022-March.2022	
2	Quarterly News Letter	April 2022 – June 2022	

• Leaflets

Sr. No.	Name of Leaflets	Year of Published	Image
1	Go-Adharit Prakarthik Kheti	April, 2022	
2	Azadi Ki 75 Anniversary : Azadi Ka Amrit Mahotsav	May, 2022	



• Booklets

Sr. No.	Name of Booklet	Year of Published	Image
1	Krishak Utpadan Sangthan (FPO)	June, 2022	

11. Award/Honour

Name	Award	Year	Society/Organization
Pramod Kumar	Dairy Scientist Award	2021	ATDS
Dr. K. K. Singh	Award for Scientist (Best Scientist)	2021	South Asia Management Association, Singapore
KVK, Bijnor	Best Report Presentation Award (Third)	2021	ATARI Kanpur
Dr. Omvir Singh, Professor & Head KVK, Hastinapur	Ch Charan Singh Kisan Samman Diwas Award (कृषि प्रसार के क्षेत्र में विशिष्ट योगदान हेतु)	2021	Govt of U.P
Dr. K.N. Tiwari & Rakesh Tiwar	First Prize “Jaid Faslon me Sarvottam Posak Tatv Prabandhan”	2021	Khad Patrika Fertilizer Association of India, New Delhi
Dr S. K. Verma (SMS -Horticulture)	Young Scientist Award.	2021	New Age Mobilization Society, New Delhi. Held at IIMT. Univ., Meerut.
Dr S. K. Verma (SMS -Horticulture)	Best KVK Scientist Award-2020	2021	4 th International conference held at Shobhit Deemed University, Modipuram, Meerut (U.P.)
Dr. Vikas Kumar	Best KVK Scientist Award-2020	2021	Society of Scientific Development, Meerut
Brijesh Kumar	Innovation farmers award	2022	--
Pushpuraj	Best Farmers Award	2022	--
Kulwant Singh	Dayal Innovative Award	2022	--
Anant Poddar	Dayal Innovative Award	2022	--
Shyam Lal Singh	Innovative farmers award 2022	2021-22 (15.02.2022)	ICAR-CPRI, Modipuram on Aloo Divas
Omveer Singh	IARI Innovative Farmer Award - 2022	2021-22 (09-11.03.2022)	IARI, New Delhi



Name	Award	Year	Society/Organization
Narendra Kumar Agrawal	Utkrisht Krishak Samman	2022-23 (14.06.2022)	33rd Foundation Day of Agricultural Research Council, UPCAR and ISRI Lucknow
Dr. K. K. Singh	International Young Educationist and Motivator Award	2022	Edwin incorporation, Dubai
KVK Bijnor	KVK Extension Innovation Award	2022	SVPUA&T, Meerut, Sponsored by DAYAL Group, Meerut
Sh. Sharad Kumar (KVK Adopted farmers)	Best Farmers award	2022	SVPUA&T, Meerut, Sponsored by DAYAL Group, Meerut
Sh. Yogesh Baliyan	Best Innovative farmer Award	2022	ICAR
Dr S. K. Verma (SMS -Horticulture)	Best participant Award	2022	Trainers Training Programme on Natural and Organic Farming. 2 -3 March 2022. IIFSR & SVPUA&T., Meerut.

12. RESEARCH/REVIEW PAPER

1. Tripathi, Kirti M., Laxmikant, Arya, Savita, Joshi Sarita & Yadav, Beena (2021). Generating awareness for different therapeutic diets in rural BulandShahr, Uttar Pradesh: Application of difference in differences method. International journal of current Microbiology and applied sciences in the volume, 10 (07) : 89-98.
2. Hasan Tanveer, Singh R.K., Singh S., Singh H. and Pal D. (2021). Genetic diversity analysis in bread wheat (*Triticum aestivum* Linn, Emend Thell.) for yield and its contributing characters. SKUAST Journal of Research 23(2): 145-149.
3. Singh, Pushpendra; Kumar, Jitendra; Singh, Bijendra and Singh, Yesh Pal (2021). Influence of plant growth regulators on growth and flowering in tuberose (*Polianthes tuberosa* L) CV. "Pearl Double". Progressive Agriculture 21(1):48-55
4. Kumar, Subhash; Kumar, Devendra; Singh, Yesh Pal and Singh, Pushpendra (2021). Response of stomatal resistance against water stress at different growth stages I four potato cultivars. Progressive Agriculture 21(1):62-68
5. Mohsin, A., Mohsin, F. and Dhaka, S.S. (2021). Response of mustard varieties to crop geometry under poplar in terai region of Uttar Pradesh. Indian Forester. 47 (1): 57-63.
6. Kumar R., Tripathi N.C., Singh M. and Pal D. (2021). Physico – Chemical and biological properties of soil in rice-wheat cropping sequences of Kanth Tahsil of Moradabad district of Uttar Pradesh. In. 2nd International Web conference on Smart agriculture for Resource Conservation and Ecological Stability. ANRCM, lucknow, dated October 29-31.2021.210p
7. Kumar R., Singh M., Tripathi N.C., Pal D. and Mishra A.K. (2021). Assessment of Soil Quality under Rice-Wheat Farming System of Soil of Thakurdwara Tahsil of Moradabad District, Uttar Pradesh. Crop Diversification and Soil health Management for Sustainable Development. GENE-TECH BOOKS, New Delhi-110002. ISBN:978-81-89729-56-1pp195-202
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- 13. POPULAR ARTICLE**
 1. Mishra, A.K., Kumar, Ravindra and Mishra, S.K. (2021). "Integrated Plant Nutrient Management for Sustainable Agriculture". *Crop Diversification & Soil Health Management for Sustainable Development*.
 2. Mishra, A.K., Kumar, Ravindra and Mishra, S.K. (2021). "Assessment of Soil Quality Under Rice-Wheat farming system of Soil of Thakurdwara Tehsil of Moradabad District, Uttar Pradesh". *Crop Diversification & Soil Health Management for Sustainable Development*.
 3. Sanjay Kumar, S.P.Singh, Y.P.Singh and V.K.Singh (2021). *Prakirtik kheti. KVK, Badaun (U.P.)*.
 4. Y.P.Singh. Sanjay Kumar, S.P.Singh, and V.K.Singh (2021). *Haldi avum Adrak ki Unnat Kheti. KVK, Badaun (U.P.)*.
 5. S.P.Singh, Sanjay Kumar, Y.P.Singh and V.K.Singh (2021). *Khanij Mishran Kiya Hai. KVK, Badaun (U.P.)*.
 6. S.P.Singh, Sanjay Kumar, Y.P.Singh and V.K.Singh (2021). *Gaupashon Ko Namak Kiyun Kitna. KVK, Badaun (U.P.)*.
 7. Yadav, A. Singh, R. Sahu, P.K. Tyagi, A.K. Prasar Karyakartaon ; Urvarak Vikretaon Evam Prashikshanarthi Hetu INM Margdarshika. Murad Nagar, Lakshmi Jan Kaslyan Seva Sansthan, 2021.
 8. Singh, J. Kumar, A., *Olericulture in Modern Era – Biotech Books* 2021.
 9. Tiwari K.N., Tiwari Rakesh – जायद फसलों में सर्वोत्तम पोषक तत्व प्रबन्धन, खाद पत्रिका, अप्रैल 2021, PP.31-44. अमितनाथ, दुष्यंत मिश्र, गीता शर्मा, चंद्रभानु एवं वीना यादव (2021). मशरूम परिरक्षण, मूल्य संवर्धन एवं विपड़न द्वारा आय बढ़ाना। उद्यान रश्मि (अप्रैल 2021–मार्च 2022) अंक 18 (1–2) : 52–56।
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 11. Tiwari Rakesh, Tiwari Ashok & Tiwari K.N.– मृदा स्वास्थ्य संवर्धन और टिकाऊ खेती के लिए जरूरी है समेकित पोषक तत्व प्रबन्धन, खाद पत्रिका, सितम्बर 2021, PP.29-36
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 13. Tripathi, K. M., Sharma, K. and Yadav, V. (2021). An Overview of Awareness Programs on Health Aspects of Various Segments of Society. *International J. Current Microbiology and Applied Sciences*. 10 (07): 739-744.
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 16. Singh, S.P.; Kumar, S.; and Dhaka, S.S. (2021) Aam mein samekit keet Prabandhan (Hindi Article). *MAC Krishi Jagran*, April, 2021 Issue, 57-58p.
 17. Prasad, N. (2021). Swath Parivesh aur Prakatik Praryavaran ka Sanrakshan, *Star Krish*, 9(1):09-12pp
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 20. Singh, Vinita, Rai, Mayank, Singh S.P. and Laxmi Kant (2022). "Quality Management-A Potential Approach to Prevent Post-Harvest Losses of Fruits & Vegetables". *Crop Protection driven Food Safety and Security*.
 21. Sanjay Kumar, S.P.Singh, V.K.Singh and Anand Prakash (2022). *Aadhunik Madhumakkhi Palan. KVK, Badaun (U.P.)*.
 22. Sahu, P.K. Tyagi, N, Yadav, A.K. Chandra, S. Keetnashak Vikretaon Hetu margdarshika (CCIM). New Delhi, K.S.K. Publishers and Distributors.
 23. Singh, S.B., Singh, R, Sahu, P.K. Tyagi, N.,



- Yadav, A.K. Krishi Nivesh Vikretaon Hetu Margdarshika 'Deshi' (DAESI), New Delhi, K.S.K. Publishers and Distributors.
24. Singh, J. Kumar, A., Integrated Farming System and Sustainable Agriculture Biotech Books 2022.
 25. सौरभ माहेश्वरी एवं डा० शकुन्तला गुप्ता (जनवरी-जून 2022). "शहद का घरेलू स्तर पर परीक्षण कैसे करें" गोरखनाथ कृषि दर्पण. पृष्ठ संख्या 67-68.
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 30. Prasad, N. (2022). Samanvit Naasjivi Prabandhan, Star Krish 9(X): 03-07pp
 31. Prasad, N. (2022). Mrida, Star Krish 9(N): 28-32pp
 32. Prasad, N. (2022). Munafe ki fasal menthe/ Piparmint, Star Krish, 9(XI): 23-26pp
 33. Prasad, N. (2022). Puwal evam ghatiya charon ki uriya se upcharit kar Poshak gur kaise badayein, Patel Krishi Gyaneshwari : 34-37pp
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 36. Kushwaha I.K. (2022): Vipin Mushroom Ki Khati.
 37. Kushwaha I.K. and Singh Manoj (2022): Dudharu Pashuyon Ka Santulit Ahaar.
 38. Kushwaha I.K. and Singh Shalini (2022): Aam ki Utpadan Takniki.
 39. Kushwaha I.K. and Tomer Ravindra (2022): Urvarkon Ke Adhar par Poshak Tatav

Prabandhan.

40. Kushwaha I.K., Singh Sukhdev, Singh Manoj, Tomer Ravindra, Kumar Virendra and Naresh Ram (2022): Phasal Avsash Ko Khet Me Khad Banane Ka Adhbhut Kalchar.
41. Kushwaha I.K., Singh Sukhdev, Singh Manoj, Tomer Ravindra, Kumar Virendra and Naresh Ram (2022): Dhan Parali Ka Machino Dawara Prabandhan.

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2. Dr. Krishna Kumar Singh and Dr. Vinod Kumar Singh (2021). "Genetics and Plant Breeding". Namya Press, Darya Ganj, Delhi. ISBN No.978-93-90445-45-5.
3. डा० कृष्ण कुमार सिंह, डा० प्रवीन कुमार एवं डा० विनोद कुमार सिंह ;2021द्व"उच्च आय संवर्धन हेतु कृषि की उच्च उत्पादन तकनीकी" Namya Press, Darya Ganj, Delhi. ISBN No. 978-93-90445-83-7.
4. Kirti M.Tripathi, S.K.Dubey, Sadhna Pandey, Vivek Raj, Savita Arya and Shiv Singh. (2022) "Gramin Mahilaon ke liye suksham udhyam vikas ki sambhavnayein avam yojnayein". Krishi Prashikshan Mein Udhyaimita Vikas, New India Publishing Agency, PP 33.
5. Savita Arya, Kirti M.Tripathi (2022). Role of self help group for self reliance of farm community to boost the economic status. Evergreen Technology for Indian Agriculture, ISBN No.978-93-92851-18-5.
6. Dr Laxmi Kant Saraswat, Dr Virendra Pal Gangwar and Dr. Pramod Kumar Madke (2022). Krishi Technique Dwara Krishi Aay Mein Vridghhi, 2022, pp 1-58.Ruby printers Ghaziabad (UP).

CHAPTER IN BOOK

1. Dr Laxmi Kant and Dr Hansraj Singh. Sarson beej utpadan, 2022: pp1-5.
2. Dr Virendra Pal Gangwar, Dr Laxmi Kant and Dr. Pramod Kumar Madke. Crop residue management in horticulture crop, 2022, pp 6-11.
3. Dr. Laxmi Kant Saraswat, Dr. Vipin Kumar and



Dr. Hansraj Singh, Soil health and extra income in rice-wheat crop rotation: urd and moong been in summer crop. 2022, pp 16-21.

4. Dr. Vipin Kumar and Dr. Hansraj Singh, Dr. Laxmi Kant Saraswat and Dr. Vipin Kumar and Chemical free basmati rice production for Natural Farming, 2022: pp 22-27.
5. Dr. Vinita Singh, Dr Laxmi Kant Saraswat and Dr.Virendra pal Gangwar, Kitcen garden management for good health and quality food: 2022. pp 41-45.
6. Dr. Virendra Pal Gangwar, Dr Laxmi Kant Saraswat and Dr. Vinita Singh, Plants grown in nursery: an art, 2022. pp 46-50.
7. Dr. Virendra Pal Gangwar, Dr Laxmi Kant Saraswat, Vegetable nursery grown in low poly tunnel technique, 2022, pp 50-53.
8. Dr. Virendra Pal Gangwar, Dr Laxmi Kant Saraswat, Scientific technique for papaya nursery, 2022. pp 54-58.

LEAFLET

1. Sarson R H 0749. Dr. Hansraj Singh, Dr. Laxmi Kant, Dr Ashok Kumar and Dr. P K Madke. Year-2021.
2. Major disease and insect control in rice crop. Dr. Hansraj Singh, Dr. Laxmi Kant, Dr Ashok Kumar. Year 2021.
3. Barasat me Pashuo ko langada bukhar se bachaye, Dr. P.K. Madke, Dr. Hansraj Singh. Year 2021.
4. Sarso Beej utpadan; Dr. Hansraj singh, Dr. Laxmi Kant, Dr Ashok Kumar and Dr. P k Madke. Year 2021.
5. Hasan Tanveer, Singh R.K., Singh S., Singh H. 2022. Mentha ki Unnat Prajatiya Evam Utpadan Takniki. By KVK Bilari, Moradabad-I (S. V. P. U. A. & T., Meerut). Prasar Prapatra:1/2022
6. Hasan Tanveer, Singh R.K., Singh S., Singh H. 2022. Ganne ki Vaigynik Kheti. By KVK Bilari, Moradabad-I (S. V. P. U. A. & T., Meerut). Prasar Prapatra:1/2022

14. Paper presented in seminar/symposium (abstract):

1. Singh. K. K., Singh D. P. and Singh Narendra (2021). Bio-fortified Wheat Variety WB-02 for better yield and nutritional security. 23rd ASFC (20-21 Feb, 2021) PP-27.

2. Singh K. K. and Singh D. P. (2021). Bio-fortified Mustard Variety Pusa Double Zero Mustard-31 for better yield and nutritional security. 23rd ASFC (20-21 Feb, 2021) PP-27-28.
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4. Singh K.K. and Singh D. P. (2021). Analysis of yield, performance and adoption of Basmati variety Pusa Basmati-1637 in District Bijnor (U.P.). 23rd ASFC (20-21 Feb, 2021) PP-28.
5. Naresh RK, Singh PK, Ahlawat Prashant, Mishra Arvind Sharma Vipin & Tiwari Rakesh "Laser Assisted Precision Land leveling and organic input with cropping system effects on soil organic carbon libility, Ecosystem, Carbon storage and soil carbon restoration: A review- The Journal of Rural and agricultural research vol 21 No1, 89-99 (2021) Received January 2021 Acceptance June 2021.
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7. Madke P.K., Laxmikan, Gedam P.M., Kumar Manoj and Singh S.P.(2021). Impact of feed ingredients on milk quality. International web conference 4th Global Meet on Science and technology for staying healthy and feeding ever growing population worldwide; 12-13th Sept. 2021, Page 196.
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9. Singh K. K. (2021). Evaluation of high yielding wheat varieties for timely sown condition in district Bijnor (Uttar Pradesh). ISEE National Seminar on Transforming Indian Agriculture Through Pluralistic & Innovative Extension Approaches for Self Reliant India. 04-06 October 2021.



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 11. Dhaka S. S., F. Mohsin, N. C. Tripathi and R. C. Sethi (2021). Evaluation of some safer insecticides against mustard aphid, *Lipaphis erysimi* (Kalt.) and impact on predators. International Conference on Global Perspective in Agricultural and Applied Sciences for Food and Environmental Security (GAAFES-2019) during 1-2 December, 2021 at Kumaon University, Nainital, Uttarakhand organized by Agricultural & Environmental Technology Development Society (AETDS), U.S Nagar. pp 50.
 12. Singh, Vinita, Thakur, Monika, Laxmi Kant and Singh S.P. (2022). "Nutri Kitchen Garden: A Sustainable Alternative to Answer Micronutrients, Malnutrition at House Hold level". Abstract published in 3rd International Conference (Hybrid Mode) on Food, Agriculture and Innovations (ICFAI-2021).
 13. Savita Arya, Kirti M. Tripathi, Sarita Joshi (2022) "Drudgery Reduction in Farm Women Through Improved Grain Cleaning Tool-Hanging Sieve in District Muzaffarnagar, Bulandshahr and Baghpat", 5th International Conference on Advances in Smart Agriculture and Biodiversity Conservation for Sustainable Development, March 04-06, 2022.
 14. Kirti M. Tripathi, Savita Arya, Sarita Joshi, (2022) The Impact of NARI program in Nutri Smart village in District Bulandshahr, 5th International Conference on Advances in Smart Agriculture and Biodiversity Conservation for Sustainable Development, March 04-06, 2022.
 15. Kirti M. Tripathi, Laxmikant Savita Arya and Sarita Joshi, (2022) "Mahila Adhyayan Kendra : A concept to Enhance the Behavioral Knowledge of Rural Women", 5th International Conference on Advances in Smart Agriculture and Biodiversity Conservation for Sustainable Development, March 04-06, 2022.
 16. Vinita Singh, Savita Arya, Kirti M. Tripathi, Sarita Joshi and Veena Yadav (2022). "Biofortification: A Boon to Combat Micronutrient Malnutrition", 5th International Conference on Advances in Smart Agriculture and Biodiversity Conservation for Sustainable Development, March 04-06, 2022.
- Singh, Vinita, Thakur, Monika, Laxmi Kant, Kumar Anant and Singh S.P. (2022). "Nutrition and Health outcomes linked with food insecurity and hidden hunger". Abstract published in 5th National Conference on Doubling Farmers Income for Sustainable and Harmonious Agriculture (DISHA-2022) held during 11th to 12th June, 2022.

15. Seminar, conference, symposia & workshop attended (International)/National

SN	Subject	Organized by	Date
1	Workshop : Quality improvement in production of Basmati paddy for export	--	02.09.2021
2	Dhanuka pesticide team meeting	Dhanuka	01.10.2021
3	Transforming Indian Agriculture Through Pluralistic & Innovative Extension Approaches for Self Reliant India	Banaras Hindu University, Varanasi (Online)	04-06.10.2021
4	Crop Diversification: A way towards Nutritional Security	ICAR-Research Complex for Eastern Region Patna.	26.10.2021
5	Farmer Seminar on Safe Use of Chemicals	HIL India (Govt. of India)	01.11.2021
6	2nd International Agro-biodiversity Congress	Online mode	15-18.11.2021
7	Two days CFLD workshop Banda	Agriculture university, Banda	22-23.11.2021
8	Seminar on Soil Health Day	ICAR	05.12.2021



9	Participation in National Conclave on Nature Farming	Anand Agri. University, Anand Gujrat	16.12.2021
10	CRM Review Meeting	ATARI, Kanpur (Online)	18.12.2021
11	Scientific Advisory Committee Meeting	KVK	29.12.2021
12	Kisan Samman Nidhi Live Streaming	ICAR	01.01.2022
13	CRM Review Meeting	ATARI, Kanpur (Online)	26.02.2022
14	CFLD Review Meeting	ATARI, Kanpur (Online)	28.02.2022
15	Training: Trainers Training Programme on Natural and Organic farming	--	02-03.03.2022
16	Interactive programme	SVPUA&T Meerut, (U.P)	4-5.03.2022
17	Farmers Technical Training	U.P. Govt.	07-09.03.2022
18	Farmers Seminar on Weather forecasting	Ministry of Earth & SVPUA&T, Meerut	15.03.2022
19	AATM NIRBHAR BHARAT: Present Status, Constraints and Solutions	Jabalpur (Online mode)	25-27.03.2022
20	Farmers Technical Training	U.P. Govt.	25-28.03.2022
21	Participated in national seminar on “National dialogue on innovations in agricultural extension: a way forward”	NASC Complex, Pusa, New Delhi	08-09.04.2022
22	Farmers Workshop cum Training (SCSP Programme)	IARI Pusa	05.05.2022
23	Challenges for Agriculture Sector and Food and Nutrition Security during	ICAR-ATARI Kanpur	14-15.05.2022
24	Participation in National KVK Workshop held in YS Parmar University of Forestry, Solan	ICAR, New Delhi	01-02.06.2022
25	Living Sustainably in Harmony with Nature	G.B. Pant National Institute of Himalayan in Environment (NIHE), Himachal Regional Centre, Kullu, Himanchal Pradesh	05.06.2022
26	Workshop on Energy Conservation	UPNEDA	10.06.2022
27	Regional Kharif Gosthi	CCS Univ. Meerut	14.06.2022
28	Krishi Seminar- Prakartik Kheti se Krishi Samradhi, Hon,ble Governer (Guj)	SVPUA&T, Meerut	28.06.2022



RADIO TALKS

Title	Date	Radio station	Scientist
Dhan Ghau Fasal Chakra Mea Fasal Avshesh Prabhandhan	24.09.2021	AIR Najibabad	Dr. Hansraj Singh
फसल अवशेष को जलाने से होने वाली हानि एवं पर्यावरण पर उसका प्रभाव	05.10.2021	AIR Najibabad	Dr. K.K. Singh
कृषि अपशिष्ट से समृद्धि	05.10.2021	AIR Najibabad	Dr. Shakuntala Gupta
गेहूँ की बुवाई में हैप्पी सीडर का प्रयोग व महत्व	05.10.2021	AIR Najibabad	Dr. Rakesh Kumar
कम्प्यूटराईज्ड लेजर लैवलर का कृषि में महत्व	05.10.2021	AIR Najibabad	Er. S K Yadav
Fasal Avshesh Prabhandhan me Dhan ki Kam Avdhi wali prajatiyo ki bhomika	26.11.2021	AIR Najibabad	Dr. Hansraj Singh
Paddy course grain early varieties production & Their parali management sponsored by KVK, Nagina	29.11.2021	AIR Najibabad	Dr. Laxmikant
Pests and disease management in oilseed crops	07.12.2021	AIR Rampur	Dr. S. S. Dhaka
गौ आधारित प्राकृतिक खेती	06.05.2022	AIR Najibabad	Dr. K.K. Singh
खेती के माध्यम से महिला सशक्तिकरण	06.05.2022	AIR Najibabad	Dr. Shakuntala Gupta
Dhan Urvarak Prabhandhan	13.07.2022	AIR Najibabad	Dr. Hansraj Singh
Natural Farming of Sugarcane		AIR Najibabad	
Scientific cultivation of tomato		AIR Najibabad	

TV TALKS

Title	Date	T.V. Channel	Scientist
Dhan Mea Ket Niyantaran	23.08.2021	Hello Kisan	Dr. Hansraj Singh
CRM	26.04.2022	D.D. Kisan, New Delhi	Dr. Hansraj Singh
Bagwan ki Rasoi	27.05.2022	D.D. Kisanchaupal charcha	Dr. Laxmikant
Pradhan Mantri Sichi Yojana	09.06.2022	D.D. Kisanchaupal charcha	Dr. Laxmikant
Pradhan Mantri Sichi Yojana	09.06.2022	D.D. Kisanchaupal charcha	Dr. P.K. Madke
Soil Health Card	22.06.2022	D.D. Kisanchaupal charc	Dr. Hansraj Singh
Micro irrigation Prabhandhan	24.06.2022	D.D. Kisanchaupal charcha	Dr. Hansraj Singh

16. Outside funded projects:

S.No.	Name of Projects	Name of KVK	Funded By
1	National Innovations on Climatic Resilient Agriculture (NICRA)	Baghpat	ICAR, New Delhi through CRIDA Hyderabad
2	Attracting & Retaining Youth in Agriculture (ARYA)	Muzaffarnagar	ICAR
3	Crop Residue Manage Project(CRM)	Saharanpur, Bijnor, Rampur, Muzaffarnagar-II Pilibhit Bulandshahr and Shahjahanpur	ICAR
4	Centre of Excellence	Saharanpur, Bijnor, Baghpat, Rampur, Badaun-	Uttar Pradesh Govt.
5	District Agromet Unit (DAMU)	Shahjahanpur, Bulandshhar and Baghpat	IMD, Ministry of Earth Sciences through ICAR



6	Cluster Front line Demonstration (CFLD) on Oil seeds	All KVKs	ICAR
7	Cluster Front line Demonstration (CFLD) on Pulses	All KVKs	ICAR
8	Swachta Action Plan	All KVKs	ICAR
9	SCSP Program	Bulandshhar and Meerut	IARI Pusa
10	RKVY	Ghaziabad, Rampur, Moradabad-I, Pilibhit, Shahjahanpur, G.Nagar and Badaun-I	Uttar Pradesh Govt.
11	Establishment of IISR Mode Jaggery Unit	Muzaffarnagar-I and Meerut	RKVY

17. Capacity Building Training attended by the KVK scientist

SN	Name	Training tile	No. of days	Date	Held by Society / Organization
1	Dr. S.P. Singh	Application of Molecular & Bio-informatics Tools in Agriculture & Allied Sciences (Online Mode)	14	07-20.07.2021	College of Biotechnology, SVPUA&T, Meerut
2	Dr. Ravindra Kumar	Integrated Parthenium management.	1	19.08.2021	ICAR-Directorate of weed Research, Adhartal, Jabalpur MP
3	Dr Hansraj Singh	NFSM(OS)	02	25-26.08.2021	DD Agriculture, Hapur
4	Dr P.K. Madke	UP skilling of Extension professional in Scientific Dairying	10	21-30.10.2021	ICAR-NDRI, Karnal
5	Dr. S.P. Singh	Molecular Biology Tools & Its Application in Agriculture & Allied Sciences (Online Mode)	14	01-14.12.2021	College of Biotechnology, SVPUA&T, Meerut
6	Dr. A.K. Mishra, Dr. Laxmikant, Dr. Naveen Chandra, Dr. Virendra Singh, Dr. Surender Kumar, Dr. Yesh Pal Singh	Diversification in Agriculture (HRD Training)	02	16-17.02.2022	Directorate of Exten. SVPUA&T, Meerut
7	Ashish Agarwal, Kunvar Ghanshyam, Ashu Arora, Sh. A.K.Singh, Er. S. K. Yadav	Interactive Programme	02	24-25.02.2022	Directorate of Exten. SVPUA&T, Meerut



8	Dr. A.K. Mishra, Dr. S.P. Singh, Dr. Ravindra Kumar, Dr. P.K. Make, Dr. Vipin Kumar Kunvar Ghanshyam, Dr. Ashish Tyagi, Dr. Rakesh Tiwari, Dr. Yesh Pal Singh, Sh. Sanjeev Kumar, Dr S S Dhaka, Dr. Vikas Kumar, Dr. Ravindra Kumar, Dr. Virendra Singh	Trainers Training programme on Natural farming (HRD Training)	02	02- 03.03.2022 (Virtual Mode) & 22- 23.03.2022 (Physical Mode)	Directorate of Exten. SVP UA&T, Meerut & IIFSR, Modipuram, Meerut (Online)
9	Dr. Pramod Kumar, Dr. P.K. Make, Smt Veena Yadav, Dr Hasan Tanveer, Dr Mohan Singh, Dr. Arvind Kumar, Dr. S.P. Singh, Dr. Yesh Pal Singh & Sh. Sanjeev Kumar	HRD Interactive Program training	02	04- 05.03.2022	Directorate of Exten, SVP UA&T, Meerut
10	Dr. Naveen Chandra	Advance Production Technology for cereal and vegetable crops	02	24- 25.03.2022	DE, SVP UA&T, Meerut
11	Dr. Laxmikant	Entrepreneurial Development in Agriculture for Sustainable Growth and Self Reliance	21	24- 16.03.2022	Dep. of Agri. Ext. & Com., RVSKVV, Gwalior (MP)

DISTINGUISHED VISITORS

SN	Name of visitor	Programme	Visit date
1	Sh. Anuj Singh, DM Hapur	Visited KVK Campus & crop cafeteria	04.08.2021
2	Sh. VijayPal Adahti, MLA, Hapur	Visited KVK Campus, Herbal Garden & 75 Amrit mahotsav mein kisan samman samaroh.	15.08.2021
3	Hon'ble VC & Comptroller SVP UA&T, Meerut	Kisan Samman Programme occasion of Independence Day	15.08.2021
4	Sh. Rajendra Agarwal, M.P. Meerut-Hapur	Visited KVK Campus & Seed production field.	10.09.2021
5	Smt. Neelam Kalra, Director, IGRI, Hapur	Chief guest in Plantation Day	17.09.2021
6	Dr. R.V. Ram, Joint Director, DFS, B abugarh, Hapur	Visited KVK Campus, Herbal Garden	28.09.2021
7	Dr. R.K. Mittal, VC, SVP UA&T, Meerut	Visited KVK Campus & MANREGA Work	23.10.2021
8	Hon'ble Minister of Agriculture UP Sri Surya Pratap Shahi	Krishak Samwad by Hon'ble Minister	31.10.2021



10	Dr. K.K. Singh, Director, Mausam Vigyan Vibhag		02.02.2022
11	Dr. Naveen Sah, Jt. Dir., Govt. of India		02.02.2022
12	Dr. R.K. Mittal, VC, SVPUAT, Meerut		06.04.2022
13	Dr. Kamal Tawari, Pro VC, IAS, Panchgavya Vidyapeetam, Kanchipuram (Tamil Nadu)	Visited KVK Campus & Crop cafeteria & Hebal garden	19.04.2022
14	Jila Panchayat Adhyaksh, Sri Gaurav Chaudhary	Celebration of Kisan Bhagidari Prathmikta Hamari	26.04.2022
15	Hon'ble Governor Uttar Pradesh Smt. Anandiben Patel	Visited KVK Shamli Campus & attended Farmers interaction Programme	29.04.2022
16	Hon'ble Governor Uttar Pradesh Smt. Anandiben Patel	Centre and inaugurated the modern jaggery unit	11.05.2022
17	Dr. P.K. Singh, Director Extension, SVPUAT, Meerut	Visited different KVKs of SVPUA&T, Meerut	Jan2022-June 2022
18	Dr. Rajveer Singh, Director ATARI, Ludhiyana		06.06.2022
19	Hon'ble Governor Gujrat Sh. Acharya Devvrat Ji	Attended Prakartik Kheti Sea Krishi Samradhi Seminar	28.06.2022

Visit of Shri. Surya Pratap Shahi, Hon'ble Minister of Agriculture (U.P.)





Hon'ble Agriculture Minister Shri Surya Pratap Shahi Ji
addressing the gathering at KVK, Badaun



Hon'ble Governor Uttar Pradesh Smt. Anandiben Patel Ji
Visited KVK, Shamli & Rudraksh plantation at KVK Campus





Hon'ble Governor Uttar Pradesh Smt. Anandiben Patel Ji Visited KVK, Muzaffarnagar-2 & inaugurated the modern jaggery unit



Smt. Versa Yadav, Jila Panchyat President, Budaun visited at KVK, Ujhani



Hon'ble B.L. Verma Ji, State Minister Govt. of India visited at KVK, Ujhani



Sri. Pradeep Chaudhary, Hon'ble M.P., Saharanpur



Sri. Mukesh Chaudhary, MLA, Nakur Saharanpur



Sri. Rajeev Gumber, Hon'ble MLA, Saharanpur City Saharanpur visited at KVK



DM Bijnor Sh. Umesh Mishra, IAS



Dr. A.K. Singh, Director, IARI, New Delhi



Hon'ble Governor Gujarat Sh. Acharya Devvrat Ji attended
Prakartik Kheti Se Krishi Samradhi Seminar at University



Hon'ble Member BOM SVPUA&T, Meerut
Smt. Suman Tyagi Ji



Dr. P. K. Singh, Director Extension,
SVPUA&T, Meerut



DM Bijnor Sh. Umesh Mishra, IAS



Dr. A.K. Singh, Director, IARI, New Delhi

- Sh. (Capt.) Vikas Gupta, Chairman, UPCAR
- Dr. Rajveer Singh, Director, ICAR-ATARI, Ludhiana
- Shri Suresh Khanna, Cabinet minister, U.P. Govt
- Zila Panchayat Adyaksh, Shahjahanpur
- D.M. and CDO of Shahjahanpur
- Z.P.D., ATARI, Kanpur
- V.C. SVPUA&T., Meerut
- D.E., SVPUA&T., Meerut
- Sri. Pradeep Chaudhary, Hon'ble M.P., Saharanpur
- Sri. Mukesh Chaudhary, MLA, Nakur Saharanpur
- Sri. Rajeev Gumber, Hon'ble MLA, Saharanpur City Saharanpur
- Sri. Davendra Nim, Hon'ble MLA, Rampur Maniharan Saharanpur

20. Infrastructure development:

Name of KVK	Details
Amroha	<ul style="list-style-type: none"> Administrative Building construction completed
Badaun -I	<ul style="list-style-type: none"> Established Poultry Production and processing unit at KVK under Centre of Excellence project. Established Ajola unit at KVK under RKVY project Established Polyhouse unit at KVK under RKVY project Established Vermi Culture unit at KVK under RKVY project Established Interlocking road at Campus under RKVY project Established Tubewell at KVK farm Established boundary wall at farm under RKVY project Established irrigation channel under RKVY project
Baghpat	<ul style="list-style-type: none"> Center of Excellence Implement shed under UPCAR
Ghaziabad	<ul style="list-style-type: none"> IFS Model Fish Unit Poultry Unit Poly House Vermi Compost Unit Soil Testing Lab
Hapur	<ul style="list-style-type: none"> Water harvesting pond Khandja Kachha Road Kachhi Nali Hyum Pipe



Modradabad	▪ Administrative Building, Farmers Hostel, Demonstration Units(2), Fencing, Rain Water harvesting system, Threshing floor, Farm godown, Irrigation Channel, Staff Quarters (6), R.K.V.Y Units (7).
Muzaffaganar - II	▪ Inauguration of Administrative block of KVK, Muzaffarnagar-II at Chitoda Jhal through online mode by Hon'ble Minister of Agriculture, Government of India with State Agriculture Minister Sri. Surya Pratap Sahi and other esteemed dignitaries on 03.01.2022
Shahjahanpur	▪ Administrative Building, 2- Farmer's Hostel, 3- Staff Quarters N0-06, 4- Threshing Floor 5-Farm Godown, 6 - Demonstration Units: NADEP and Vermi -compost Unit, Bio - Control Unit, Honey Bee Unit, Mushroom Production Unit, Azola Unit, Poly House Unit, Poultry Unit, Crop Cafeteria , Net shade House, Home Sc. Unit, DAMU, Cow based Natural Farming Unit, Medicinal and Aromatic plant production demo Unit.
Saharanpur	▪ Food processing Lab (Centre of Excellence)



GAU-ADHARIT NATURAL FARMING Training And Demonstration Unit



Insecticide, fungicide and biofertilizer production and training unit for natural farming



Demonstration Unit under Cow Based Natural Farming (0.4 ha)



Training for natural farming



Demonstration Unit under Cow Based Natural Farming (0.4 ha)

Center of Excellence

In the financial year 2020-21, Centers of Excellence were to be set up at 06 Krishi Vigyan Kendras (Saharanpur, Bijnor, Baghpat, Rampur, Meerut and

Badaun-1) approved by UPKAR, Lucknow at a cost of Rs.300.00 lakh. Out of which 05 have been established at Krishi Vigyan Kendras and tender proceedings have been completed at Krishi Vigyan Kendra, Meerut

Name of the Center of Excellence	Establishment year	KVK Name	Sanction Amount (Rs.)
Center of Excellence on Poultry Production and Processing	2020-21	Badaun-I	50.00
Center of Excellence on Maize Training for Empowerment	2020-21	Rampur	50.00
Center of Excellence on Organic Basmati Rice Production	2020-21	Bijnor	50.00
Center of Excellence on Sugarcane	2020-21	Baghpat	50.00
Center of Excellence on Mushroom and Mango Processing	2020-21	Saharanpur	50.00
Center of Excellence on Vermi-compost Unit and Poly House	2020-21	Meerut	50.00



SUCCESS STORY

1.

Name of KVK	Details
Amroha	02
Badaun-I	100 Success story under DFI submitted to Directorate of Extension
Baghpat	05
Bulandshahr	03
Muzaffarnagar-I	10 (NICRA)
Muzaffarnagar-II	40 success story on doubling farmer income in the jurisdiction area of KVK, Muzaffarnagar-II

HAZIABAD

Improving Lives through Integrated Farming



Name	Rajnish Kumar
District	Ghaziabad
State	Uttar Pradesh
Education	B.Tech
Category	General
Occupation	Fish farming and seed production
Mobile number	9910515234
Firm's name	PVR Aqua
Year of establishment	2018
Position	Owner
Activity	Integrated aquaculture, seed bank, Aqua Park and Fish on wheel
Species	(IMC) and Pangasius
Annual turnover	₹ 2.35 crores
Annual production	375 tonnes
Employment generated	66



Mr Rajnish Kumar is from Patla Village, Ghaziabad District, Ghaziabad, Uttar Pradesh (U. P.). After completing B. Tech in 2004, he worked in various corporate companies for 14 years. While working he had a desire to start his own business and was interested to explore the fisheries sector. After doing extensive research, he entered into the aquaculture industry. He toured various places for a few months and visited a number of farms to study various technologies and practices (RAS/ Biofloc/ In-Pond Raceway System (IPRS)/ & cage culture), and recognized the demand and supply gap domestically and globally. The expandable centered nature of the business further motivated him to venture into the same. He left his job in 2017 and planned his career towards fish farming. In 2018, he started a fisheries project on 12 acres of land in his native place. His entrepreneurial journey was not easy, yet he didn't give up.

In FY 2018-19, he constructed 2 ponds with 150 tonnes production capacity under Pradhan Mantri Matsya Sampada Yojana (PMMSY) and gradually expanded his farm to 50 acres for farming Indian Major Carp (IMC) and Pangasius. Later, he took up the expansion of his firm by starting a seed bank in 2019 with 2 million production capacity. In 2020, his firm was empanelled with NFDB. He undertook backward integration through seed rearing for of catfish. Through nursery, he produced yearlings and developed a live fish market in 2021. He realized that there was a lack of education about fish farming. So he took the initiative to train more than 400 candidates comprising individuals, entrepreneurs, and farmers in fish farming within a span of 12 months. He manages a YouTube channel called "PVR Aqua" to educate and create awareness about fish farming. In the last 4 years, Mr Kumar has brought a revolution in fish farming in his region by disseminating information regarding fish farming.

He aims to expand his farm to 365 acres so that he can harvest one acre of fish daily and provide employment to the youth willing to set up live fish sales facilities in every corner of the national capital region. In future, he is interested to start a feed production unit to optimize the cost and to develop U. P. aqua sector.



HAPUR

"Cleanliness is next to Godliness."
SSV Degree College – District Hapur
By KVK : HAPUR

Babugarh, Hapur - 245201 Mob. No 9411263753

Initiative taken by KVK

Sanitation is more important than independence - Mahatma Gandhi Cleanliness and sanitation are integral part of the Gandhian way of living. The mission was total sanitation for all. Environment is a place where humans, plants and animals live. Keeping it clean and neat is the responsibility of a person. It is necessary to keep our environment clean because we get fresh air, reduce pollution & chronic diseases in human being etc. Cleanliness is the most important way to prevent diseases. Cleanliness should be initiated in all the offices, schools, societies and colleges. Krishi Vigyan Kendra Hapur organized awareness programme on Swachhata Hi Sewa campaign on 06th October, 2021 at SSV Degree College, District Hapur & Village Kaniya kalyanpur, Block – Simbhawali – District Hapur which was actively participated by more than 86 students and teachers & 31 farmers.

Impact/Major Changes

- **Disposal of Solid Waste decomposable / Garbage** – Almost all household have got own garbage pit and the same has used to throw garbage. Villagers use to burn the garbage time to time and the ash used as compost & against insect. This resulted less use of fertilizer and also saving of money as well as environment.
- **Drinking Water** – In recent times, awareness level on drinking water has been increased. Purification of water is believed to be a preventive measure which decreases the possibility of water borne diseases. Boiling the water before consume is the

most effective purification method used by most of villagers. Filter the water by using cotton cloths. It was observed that the abovementioned methods have helped in reducing the diseases like – Dairrhea, Typhoid and other water borne diseases.

- **Construction and Use of Toilet** – It was revealed by many that they do not need toilet because defecation in the open became habit. Non-availability of water or insufficient water was found another reason why some people do not use toilet. Moreover, water sources are located away from the household. Some of the participants said that cleaning the tank is very difficult because few people are available who do this work
 - Dignity of women has been built up.
 - Prevention from diseases like dysentery and malaria.
 - Increase in saving due to less expenditure on treatment of diseases. - Got freedom from fear of wild animals.
 - Overall, cleanliness in the village/city & maintain eco-friendly environment.
- **Disposal of Waste Water** - During last one-year number of soak pits, individual as well as community level, have been contracted. to drain the waste water.
 - No water accumulation on road and around the water source.
 - Amount of mosquitos and housefly reduced.
 - Prevention of discuses resulted increase in saving.
 - Mutual relation among the villagers secured.

Horizontal spread of cleanliness & sanitation

SN	Awareness Programme organized	No. of villages	No. of schools
1	Save drinking water	05	05
2	Disposal of Solid Waste decomposable / Garbage	08	08
3	Construction and use of Toilet	07	07





AWARENESS PROGRAMME ON CLEANLINESS

Name and Contact Details of The farmer : Sri Vikas Tyagi
S/O Sri Chandra Prakash Tyagi Village & Tahsil –Garh
District Hapur (U.P.), Mob. No. 7906908074, 9927809933

Name of the Unit: Mushroom Production & Training center

Situation Analysis

In case of diversification with large scale promotion of mushroom grower of Sri Vikas Tyagi s/o Sri Chandra Prakash Tyagi village & 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 earns low income.

Plan, implement, support and linkage with KVK

To keen interest of Sri Vikas Tyagi for cultivation of mushroom at large scale he contact to KVK Hapur provided to technical support for cultivation and marketing of mushroom, so many time practical demonstration facilitated from Gopal Singh Prof. (Plant pathology) & incharge mushroom production unit SVPUA&T Meerut U.P. Mr Vikas Tyagi to started large scale mushroom production in Sept 2018 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) & incharge mushroom production unit SVPUA&T Meerut U.P.

Output

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 per day and This technology helps him for livelihood, empowerment and make him enthusiastic regards 15 mushroom production unit

established in Hapur and neighboring district employed 8-10 manpower per day.

Outcome

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 Rs 125.00-130.00 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 37500.00 per day expenditure Rs 16500.00, take net income Rs 21000.00 per day and employed 8-10 manpower per day.

Impact

- Technological** : Mr Vikas Tyagi is very happy with this improved production and management technology and set for the example for other farmer of the district & trained for mushroom production through trainings.
- Economic** : Sri Vikas Tyagi started production from 150Kg mushroom per day get in year 2019 and 300 Kg mushroom per day get in Year 2021-22. He take net income Rs 21000.00 per day and employed 8-10 manpower per day. Now a days he earn Rs.2.5 to 3.0 lakh per month to sale the mushroom and compost.
- Social**: With the use technologically advanced trainings in mushroom production field and encourage to mushroom growers, and can be brought about creating more jobs and earning more profit.



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

**BIJNOR**

Impact of evaluated, demonstrated and introduced technologies in district.

1. Varietal Adoption and Expansion in District

Crop	Current Technology	Introduction Year	Potential of Current Tech. (q/ha)	Demo. Yield of current technology (q/ha)	Net Return (Rs/ha)	Technological Gap (q/ha)	Area Covered by Tech. (ha)
Wheat	DBW-187	2019	96.66	71.00	119825.00	25.66	37500
	HD-3226	2019	79.60	57.00	91125.00	22.60	130
	PBW-723	2019	63.20	51.00	76975.00	12.62	350
	HD-2967	2014	66.10	54.25	89372.50	11.85	79000
	WB-02	2017	58.80	53.87	84354.74	4.93	5800
	HPBW-01	2017	64.80	52.50	81240.00	12.30	4800
	DBW-88	2016	69.90	54.00	86900.00	15.90	10450
	HD-3086	2016	71.10	51.50	84275.00	19.60	2500
	WH-1105	2015	71.60	53.37	87734.50	18.23	1850
	DBW-173	2017	57.00	46.62	72500.00	10.38	18700
	PBW-752	2019	60.00	46.00	67983.00	14.00	80
	DBW-90	2016	66.60	46.59	72191.50	20.01	4300
	HD-3059	2014	59.40	47.75	74337.50	11.65	6800
Rice	PB-1509	2014	60.00	54.50	145500.00	5.50	7800
	PB-1637	2018	65.00	57.50	155632.00	7.50	3650
	PB-1718	2019	60.00	52.50	138480.00	7.50	4200
Mustard	PM-31	2018	23.00	17.33	57366.67	5.67	3350
Lentil	(L-4717)	2018	20.00	14.86	38528.00	5.14	610

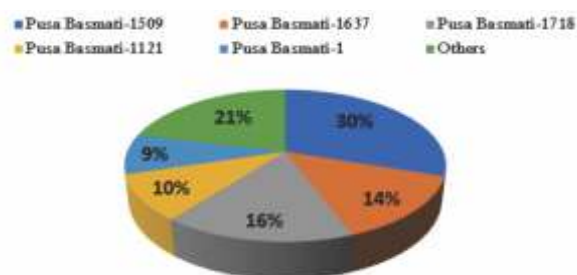


2. Horizontal Spread of Basmati Rice in District Bijnor

Year	Initial Interventions			Lateral Spread in new areas		
	Area (ha)	No. of villages	No. of armers	Area (ha)	No. of villages	No. of farmers
2014	4.0	5	20	-	-	-
2015	5.0	8	25	1100.0	45	105
2016	5.0	10	25	4500.0	67	245
2017	5.0	11	25	5650.0	110	166
2018	5.0	13	25	6575.00	185	350
2019	5.0	14	25	8250.00	315	840
2020	5.0	15	25	11245.00	585	1250
2021	5.0	16	25	19250.00	810	1550

Varietal Adoption (ha) of Basmati Rice Varieties in District

Name of Variety	Adoption (ha)
PB-1509	7800
PB-1637	3650
PB-1718	4200
PB-1121	2500
PB-1	2200
Others	5500

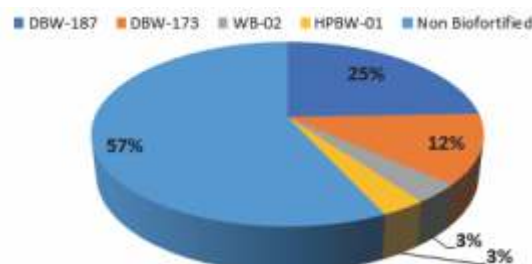


3. Horizontal Spread of Biofortified Wheat Varieties in District Bijnor

Year	Initial Interventions			Lateral Spread in new areas		
	Area (ha)	No. of villages	No. of farmers	Area (ha)	No. of villages	No. of farmers
2017-18	2.0	5	5	-	-	-
2018-19	5.0	8	25	250.0	44	80
2019-20	7.0	12	35	2600.0	110	550
2020-21	9.2	18	72	11350.0	665	915
2021-22	6.9	21	69	65200.00	1780	8510

Varietal Adoption (ha) of Basmati Rice Varieties in District

Name of Variety	Adoption (ha)
DBW-187	37500
DBW-173	18700
WB-02	5200
HPBW-01	4800
Non Biofortified	87400





4. Horizontal Spread of Biofortified Mustard Varieties in District Bijnor

Year	Initial Interventions			Lateral Spread in new areas		
	Area (ha)	No. of villages	No. of farmers	Area (ha)	No. of villages	No. of farmers
2018-19	6.0	10	30	--	--	--
2019-20	6.0	13	30	580.0	215	410
2020-21	5.2	10	22	910.0	735	1100
2021-22	11.2	20	37	3350.00	1120	3510

Varietal Adoption (ha) of Biofortified Mustard Varieties in District:

Name of Variety	Adoption (ha)	
Pusa Mustard-31	3350	
Pusa Mustard-30	165	
Non Biofortified	3500	

5. Horizontal Spread of Biofortified Lentil Varieties in District Bijnor

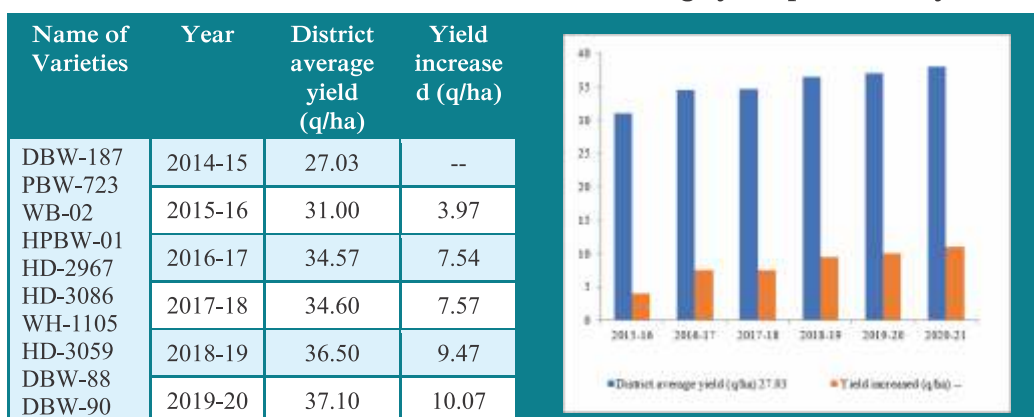
Year	Initial Interventions			Lateral Spread in new areas		
	Area (ha)	No. of villages	No. of farmers	Area (ha)	No. of villages	No. of farmers
2018-19	1.0	08	10	0	0	0
2019-20	2.0	08	10	210.0	40	80
2020-21	5.0	12	20	450.0	85	120
2021-22	10.0	14	25	610.0	140	213

Varietal Adoption (ha) of Biofortified Lentil Varieties in District:

Name of Variety	Adoption (ha)	
Pusa Masoor Ageti	610	
Non Bio-Fortified (PL-8 and Others)	760	



6. Impact of Varietal Diversification of Wheat in district average yield productivity



SHAHJAHANPUR

(A) Bee Keeping

Specific Technology: Production of Honey.

Name of KVK: KVK, Shahjahanpur

Crop and Variety: Name of farmer and Address: Sri Omendra Vikram Singh S/o Sri Mahipal Singh, Village- Nagariya Bujurg, Block-Powayan, Tehsil-Powayan, Shahjahanpur

Background Information about farmer's field: Five years before he started honey bee unit with 20 boxes. In present in his unit 80 boxes are in use with successful Enterpenureship.

Details of Technology Demonstrated:- Provided technical knowledge of bee keeping.

Institutional Involvement: KVK Scientists visited honey bee unit and under their guidance technical updatation of knowledge is provided.

Success Point: The farmer used to get annual income of Rs. 312000.00 from Bee Keeping.

Farmers Feed Back: Farmers appreciated the technology it gave an additional income of Rs. 258000.00



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

1) Before Intervention

Components	Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)
Bee Keeping	20	600 Kg	54000.00	36000.00
Total			54000.00	36000.00

2) Status in 2021

Component Description		Period 2020-21			% increase over base year	
Components	Number	Production (Q/Liter/No.)	Gross Income (Rs.)	Net Income (Rs.)	Production	Income
Bee Keeping	80	2400 kg	312000.00	212000.00	300	488.88
Total			312000.00	212000.00	300	488.88



7. Success Story of Mustard Crop:

Season (Rabi) : 2021-22, Mustard var. RH749

Name of KVK	KVK Shahjahanpur
Crop and Variety	Mustard var. RH749
Name of farmer & Address	Sudhir mohan Vill. Navgawan Block. Dadrol
Background information about farmer field	Irrigated, sandyloam, N:P:K:: 252.3: 53.4: 15.4 Dos 7.10.2021, Doh 10.03.2022
Details of technology demonstrated	HYV RH749@5 kg/ha + Bentonite sulphur@ 25kg/ha + (Mancozeb+Carbendazim) @ 1.25kg/ha + Imidacloprid@0.25l/ha
Institutional Involvement	Technical
Success Point	HYV + sulphur+PP chemicals
Farmer Feedback	Variety is very good. Sulphur increased the oil content.
Outcome Yield (q/ha)	
▪ Demonstration	24.0
▪ Potential yield of variety/technology	25.0
▪ District average (Previous year)	17.5
▪ State average (Previous year)	

Performance of technology vis-à-vis Local check (Increase in productivity and returns)

Specific Technology	Yield (q/ha)	Gross cost (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Farmer practices	17.0	25050	119000	93950	4.7
Demonstration	24.0	28000	168000	140000	6.0
% Increase	41.2	11.7	41.17	49.0	27.7

Photographs:





SAHARANPUR

Success Story-7

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		





Success Story-8

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 License 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





Success Story-8

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 Mushroom 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.				



MORADABAD-II

स्वयं सहायता समूह के माध्यम से मशरूम उत्पादन

मै श्रीमती गार्गी चौहान पत्नी श्री चित्रराज सिंह चौहान निवासी ग्राम रतुपुरा, तहसील ठाकुर द्वारा जिला मुरादाबाद उ०प्र० की निवासी हूँ। मैने एम०ए० गृहविज्ञान में शिक्षा प्राप्त की है। एम०ए० गृहविज्ञान करने के बाद भी मै मात्र एक गृहणी थी, पर मुझे समाज सेवा करने का बहुत शौक था। मैने आसपास की ग्रामीण बेरोजगार पिछड़े व कमजोर वर्ग की 10 महिलाओं को जोड़कर एक कुंज स्वयं सहायता समूह बनाया। जिसमें थोड़ी-थोड़ी बचत करके हमने अच्छी खासी रकम जमा कर ली। हमें सरकार द्वारा भी रोजगार करने के पैसा प्राप्त हुआ। मै कृषि विज्ञान केन्द्र, ठाकुरद्वारा, मुरादाबाद के सम्पर्क में आयी जहाँ से हमें स्वयं सहायता समूह के

माध्यम से मशरूम उत्पादन करने की प्रेरणा एवं तकनीकी सहयोग मिला। मैने एक 60-30 फिट के एक शेड से मशरूम का उत्पादन शुरू किया जिसकी लागत लगभग 40000.00 आयी। मैने बटन एवं ओयस्टर दोनों का उत्पादन शुरू किया, बटन मशरूम के उत्पादन में हमारी लागत लगभग 35000 हजार रुपये आयी और बचत 60000.00 हजार रुपये की हुयी। ओयस्टर मशरूम के उत्पादन में हमारी लागत लगभग 10000 हजार रुपये आयी और बचत 20000 हजार रुपये की हुई और ये सब तीन महीने की खेती से प्राप्त हुआ। जिससे प्रतिएक महिला सदस्य को लगभग 8000 हजार रुपये की आमदनी हुई।



8. Superannuation :

Name of KVK	Name of Staff
Baghpat	Dr. Gajendra Pal, Ex Head KVK has been retired on 31.12.2021
Muzaffarnagar-I	Dr. Anil Katiyar, Professor (Soil Science) on 11.11.2022 Dr. Shripal Rana, SMS (Plant Breeding) in 11.11.2022

9. Any National/International important meeting :

- National KVK seminar Solan (01-02 June, 2022)

SN	Activity	Date	Topic	Organizer
1	Review Meeting	07.07.2022	KVK, Review meeting	Ministry of Agriculture, Lucknow
2	Zoom meeting	16.07.2021	भारत की आजादी का अमृत महोत्सव आत्म निर्भर कृषि रसायन मुक्त बासमती धान की उन्नत उत्पादन तकनीक	KVK, G. B. Nagar
3	Webex meeting	16.07.2021	ICAR Foundation Day	ICAR, New Delhi
4	Zoom Meeting	23.07.2021	Review meeting of CRM project	ATARI Kanpur



5	Zoom Meeting	24.07. 2021	Nutrient Management in Basmati Rice	SVPUA&T, Meerut
6	Zoom meeting	24.07.2021	Kisan Sarthi App	ATARI, Kanpur
7	Zoom Meeting	28.07.2021	Scientific management of major sugarcane disease in western U.P.	SVPUA&T, Meerut
8	Zoom meeting	29.07.2021	Submission of DFI cases on monthly basis	ATARI Kanpur
9	Zoom Meeting	31.07.2021	KVKs review meeting in the Chairmanship of Hon'ble VC, SVPUAT Meerut	SVPUA&T, Meerut
10	Zoom Meeting	19.08.2021	Review meeting of DFI success stories	ATARI Kanpur
11	Zoom meeting	19.08.2021	Kisan Sarthi App training	ATARI Kanpur
12	Zoom Meeting	17.09.2021	Celebration of International Year of Millets 2023 - Preparatory meeting for guidance to the KVKs	ICAR-ATARI Kanpur
13	Zoom Meeting	08.10.2021	Progress Review Meeting of KVKs	SVPUA&T, Meerut
14	Zoom Meeting	12.10.2021	Review of expenditure and other project reports	ATARI Kanpur
15	Zoom Meeting	21.10.2021	Virtual review meeting regarding status of DFI success stories	ATARI Kanpur
16	Webex Meeting	27.10.2021	Review meeting on Special campaign on Swachhta and Pending matters	ICT Unit, ICAR
17	Zoom Meeting	22.11.2021	Inaugural Function CFLD Review Workshop 2021*	BUAT, Banda
18	Webex Meeting	30.11.2021	प्राकृतिक खेती पर चर्चा।	NITI AYO, New Delhi
19	Zoom Meeting	03.12.2021	Celebration of Agricultural Education Day-2021	SVPUA&T, Meerut
20	Zoom Meeting	13.12.2021	Meeting to discuss the program of Honourable PM	ICT Unit, ICAR Link
21	Zoom Meeting	03.01.2022	Inauguration of KVK building of Shamli and Muzaffarnagar-II	SVPUA&T, Meerut
22	Zoom meeting	29.01.2022	Review meeting regarding Expenditure upto 31.12.2021 and plan to utilize remaining grant before 31.03.2022 by KVKs	ATARI Kanpur
23	Zoom Meeting	03.02.2022	Review meeting on DFI Success Stories	ATARI, Kanpur
24	Zoom Meeting	28.02.2022	Review meetings for different projects and special programme going to be conducted by ATARI,	ATARI Kanpur
25	Zoom Meeting	2-3.03.2022	Trainers Training programme on Natural and Organic Farming	PC Unit ICAR-IIFSR
26	Zoom Meeting	11.05.2022	DFI Success stories issues of KVK and Farmers FIRST Project Centers	ICAR-ATARI Kanpur



27	Zoom Meeting	22.06.2022	Review of Progress for Capacity Building Programme on Dairy and Bee Keeping	ATARI Kanpur
28	Zoom Meeting	25.05.2022	Meeting on Kisan Bhagidari for SVPUAT, Meerut KVKs	ICAR-ATARI, Kanpur
29	Review Meeting	28.06.2022	Review Meeting of KVKs	SVPUA&T, Meerut
30	Zoom Meeting	17.09.2021	Celebration of international year of millets 2023	ICAR-ATARI Kanpur
31	Zoom Meeting	25.02.2022	Review meeting & workshop of NARI Programme	ICAR-ATARI Kanpur



OTHER PROGRAMME

CROP RESIDUE MANAGEMENT PROJECT

Programme Conducted	No. of Programme	No. of Participant
Awareness Programme (Village Level)	08	588
Awareness Programme (Block Level)	02	212
College Level	01	200
School Level	02	418
Training (5 Days)	2	50
Whatsapp Group (04)	36 (SMS)	800
Kisan Mela	01	360
Filed Day	01	72
Demonstration on Direct Sowing	50	50
Demonstration on Decomposer	25	25
Collaboration with Line Department	08	5000





SWACHHTA MISSION

Name of Programme	No of Programme	Village covered	No. of Participants
Awareness about Swachhata and cleaning	10	08	280



PROGRAMMES ON NARI AND VATIKA

Name of Nutri Smart Village	Activity	Achievement	
		Number of activity	No. of farmers
Haijarpur	OFTs – Bio-Fortified Crops	1	2
	FLDs – Bio-fortified Crops (activity in no. of Unit)	1	2
	FLDs – Value addition (activity in no. of Unit/Enterprise)	1	3
	Trainings	02	12
	Extension Activities	03	22



Bhurapur	OFTs – Value addition (activity in no. of Unit/Enterprise)	1	5
	FLDs – Bio-fortified Crops (activity in no. of Unit)	1	1
	FLDs – Value addition (activity in no. of Unit/Enterprise)	1	14
	Trainings	3	35
	Extension Activities	20	350



STAFF POSITION

Category	Sanctioned	Filled	Vacant
PC	20	06	14
SMS	120	104	16
Programme Assistant	60	36	24
OS	20	12	08
Steno	20	13	07
Driver	40	17	23
Attendent	40	22	18
Total	320	210	110

1. Scientific Advisory Committee (SAC) Meetings

During the year 2021-22, Twenty meetings of Scientific Advisory Committee (SAC) were conducted to guide and finalize the action plan of KVKs at different KVICs. In which Director Extension and representative of Director ICAR-ATARI, Kanpur were participated.

2. Production and Distribution of quality seed and planting materials

A total of 5652.06 quintal seed of different crops and 192745 seedlings / planting materials of different horticultural crops were produced on the institutional farm of KVKs. This activity contributed in seed replacement, ado Lion and spread of new varieties, seed production at individual farmer's levels / Village level.

3. Soil Testing at KVKs

Soil test based fertilizer recommendation plays a

vital role in ensuring balanced nutrition to crops and reduce cost of fertilizer. KVKs, plays an important role in soil and water analysis. A Total of 2815 soil samples were analyzed during 2021-22 at different KVKs.

4. Farm Advisory Services

Besides OFT, FLD and Trainings the KVKs & KGK Staff organized /participatedn 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 209165 farmers and 19163 Extension personnel were benefited.



Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	6591	19455	527	19982
Diagnostic visits	902	4666	172	4838
Field Day	128	4460	390	4850
Group discussions	113	2125	83	2208
Kisan Ghosthi	359	39050	2101	41151
Film Show	99	6880	280	7160
Self -help groups	141	2083	134	2217
Kisan Mela	91	26977	1513	28490
Exhibition	31	4788	285	5073
Scientists' visit to farmers field	2723	13260	463	13723
Plant/animal health camps	123	13435	360	13795
Farm Science Club	16	481	46	527
Ex-trainees Sammelan	14	2748	236	2984
Farmers' seminar/workshop	65	2655	164	2819
Method Demonstrations	46	290	17	307
Celebration of important days	88	7377	306	7683
Special day celebration	81	5866	309	6175
Exposure visits	30	1520	59	1579
Others	4190	26929	1102	28031
Farmers visit to KVK	3332	15092	481	15573
Total	19163	200137	9028	209165

5. 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. 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.



CENTRAL LIBRARY

Central Library building of Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut which was inaugurated by Hon'ble Chief Minister, Shri Yogi Aadityanath and agriculture minister of Uttar Pradesh on 13 January, 2021. The Library building of SVP UA&T, Meerut is G+1 type. It is being constructed in 5179.85 sqm (GFArea 2775 sqm+First Floor 2404.85sqm) area. The Entrance Fire, Clock room, Issue Counter, Printing/Classification room, Book Binding, Administration room (Librarian, Assistant Librarians), Central Auditorium, Technical Section/Photocopy/Office, Conference room, Periodical section, Reference Books, Reading room, E-Library sections are available at ground floor and Textbook lawn, Reading rooms, Special Reading room, Group study room, Group discussion room, Seminar room are present at the first Floor. The Library has a total Books/Periodicals store capacity of more than one Lakhs Books and seating capacity of more than 550 students. Library Automation is under process.

Library Advisory Committee : For the proper functioning of the library, there as a committee (Library advisory committee / purchase committee,) the meeting of the committee is organized time to time for smooth functioning.

Library Functioning : The Central Library is managed and coordinated by Officer In charge (OIC) of the library on the advice of Library advisory committee and direction of Hon'ble Vice Chancellor of this University. Approximate 427 users accessing library per day physically, of all disciplines of Agriculture and allied Sciences, Veterinary and Animal Sciences, Biotechnology, Fisheries Sciences, Food and Processing, Basic Science, Engineering, Horticulture etc. purpose. The central library open 24 hours for all students and faculty members, library also having reprography facilities for students as well as staff.

Text Book availability : The Library has a total Books/Periodicals store capacity of more than one Lakhs Books and seating capacity of more than 550 students. The Central Library is having total 13,106 books out of these, 8303 are Text and 4803 are Reference Books. Recently, 164 books were procured under ICAR SC –SP Sub Plane in March 2021 and 991 books were Gifted/ donated in Library from different Nobel persons. The books belongs to almost all disciplines of Agriculture and allied Sciences, Veterinary and Animal Sciences, Biotechnology, Fisheries Sciences, Food and Processing, Basic Science, Agricultural Engineering, Horticulture

etc. Library is having 1337 issues of National & International Journals and 1290 Journals have been Gifted/ donated in Library by different Nobel persons. Library is also having total 19 issues of magazine subscribed (English & Hindi) on monthly and weekly basis i.e. India Today, The week, Frontline, C.R.C., Partiyogita Darpan, Kuruchatra, Yojna, Vanita, Reder Digest, Ghrashobha, Science reporter, Biospectrum, Outlook, Sarita, Kirshimangal, Health, Kadembni, VigyanPragati, etc. 13 issues of newspaper subscribed (English & Hindi) on daily and weekly. At present total numbers of 1350 hard copy of PG & Ph. D thesis are available in the library.

Presently library is operated with 10 computers connected with internet facility through LAN and Wi-Fi the available facility of e-Resources like e-Courses developed by ICAR. Government of Uttar Pradesh allocated Rs. 575 lakhs for Establishment and strengthening of new library facility like, purchase of furniture, computers, and complete automation with RFID & book stations, purchase/subscription of book & journals and digitalization of resources.

Subscription of Research Journals, Periodicals, e-Journals, Software, Programmes:

Presently the Library is having 1337 issues of National & International Journals and 1290 Journals have been Gifted/ donated. Library is also having total 19 issues of magazine subscribed (English & Hindi) on monthly and weekly basis i.e. India Today, The week, Frontline, C.R.C., Partiyogita Darpan, Kuruchatra, Yojna, Vanita, Reder Digest, Ghrashobha, Science reporter, Biospectrum, Outlook, Sarita, Kirshimangal, Health, Kadembni, VigyanPragati, etc. 13 issues of newspaper subscribed (English & Hindi) on daily and weekly. At present total numbers of 1350 hard copy of PG (M.Sc. & Ph.D) thesis are available in the library. 58,817 journals are freely accessible through Consortium for e Resources in Agriculture (CeRA).

Publications by Library Staff:

Kumar, S., (2021). Role of Agricultural Libraries and Information Center in Digital Era: A Study. *Frontiers in Crop Improvement* ; Vol 9:287-290.

Kumar, S., (2022). Use and Impact of E- resources among research scholars: A Study of SVP University of Agriculture and Technology Meerut (UP). *Progressive Research an International Journal*. Vol 17 (Special): 237-241.

**PARTICIPATION CONFERENCE BY LIBRARY STAFF:****International**

S. N.	Name of Faculty	International Conference	No of Days	Date	Held by Society/ Organization
1	Dr. Sudesh Kumar (Assistant Librarian)	International web Conference on Innovative and Current Advances in A Agriculture and Allied Science (ICAAAS-2021)	Three days	July 19 - 21, 2021	Society for Scientific Development in Agriculture and Technology Meerut(UP)

National

S. N.	Name of Faculty	Webinar	No of Days	Date	Held by Society/ Organization
1	Dr. Sudesh Kumar (Assistant Librarian)	DELNET Resources & Services	One	23 July, 2021	DELNET–Development Library Network Delhi
2	Dr. Sudesh Kumar (Assistant Librarian)	Effective and Efficient Writing of Research Paper for the Web of Science, Scopus Indexed Journal and Conference Paper Using Typeset Research Studio	One	29 th May 2021	Vatel Hotel & Tourism Business School and Library Resources Center, Sushant University Gurugam.
National Seminar					
	Dr. Sudesh Kumar (Assistant Librarian)	Present Library and new Age Researchers : Challenges of Present Time	One	05-04-2021	Chitkara University Publications, Chandigarh, India

Awards by Library Staff:

International				
S.N.	Name of Faculty	Award	Year	Society/Organization
1	Dr. Sudesh Kumar (Assistant Librarian)	Excellence in Extension Award	July 19-21, 2021	International Conference on Innovative and Current Advances in A Agriculture and Allied Science (ICAAAS-2021)
National Award				
1	Dr. Sudesh Kumar (Assistant Librarian)	National Award of Excellence 2021 includes a glittering trophy, certificate recognizing our research work, Gold medal and membership to editorial board.	2022	Global Management Council, Selection Committee of Glacier Journal Research Foundation



FINANCE

(Indian Rupees in Lakhs)

S. No.	Head	Grants Received	Expenditure
1.	Salary	4133.18	1401.77
2.	Contingency	75.00	75.00
3.	NPS	428.15	410.43
4.	FTT	11.66	11.60
5.	State Share for Electricity	50.00	49.90
6.	State Share for Audit Fees	0.00	0.00
7.	State Project	470.63	343.05
8.	COE (Basmati Rice)	25.00	24.95
9.	State 25% Share	0.00	0.00
10.	COE 06 KVK's COE 06 KVK's (Nirama Share)	150.00	39.67
11.	RKVY Projects	0.00	0.00
	RKVY 07 KVK's Project	295.58	5.62
12.	State Nirman Share		
	1. State Share for Library Construction	0.00	0.00
	2. State Share for Library Books/Others	83.33	3.97
	State Government	5722.53	5065.96
13.	ICAR Project	216.29	124.90
14.	ICAR Development Grant	0.00	0.00
15.	ICAR Library	0.00	0.00
16.	ICAR 75% Share	48.35	48.34
17.	ICAR KVK's	4574.78	3626.13
	Central Government	4839.42	3799.37
18.	University internal Resource (Farm)	238.12	248.42
19.	Education Income	2312.78	1264.12
20.	ICAR KVK's Internal Resource	351.02	121.40
	Internal Resource	2901.92	1633.94
	Total A+B+C	13463.87	10499.27



PUBLICATIONS

RESEARCH /REVIEW ARTICLES:

College of Agriculture

DEPARTMENT OF AGRICULTURAL BIOTECHNOLOGY

- Damse, D.N., Vaishali., Kumar, P., Kumar, M., Yadav, M.K., & Gangwar, L.K. (2021). Evaluation of Diverse Tomato genotypes against Fusarium induced Biotic Stress Condition. *Contemporary Research in India*, 11(1): 75-79
- Damse, D.N., Vaishali., Kumar, P., Chaurasia, M.K., Yadav, M.K., & Gangwar, L.K. (2021). Descriptor based morphological evaluation of tomato genotypes and wild species. *Progressive Agriculture*, 21: 221-228.
- Kumar, J., Kumar, M., Tomar, A., Vaishali., Kumar, P., & Chand, P. (2021). Morphological and Molecular Characterization of Trichoderma spp. from Rhizosphere Soil and Their Antagonistic Activity against Fusarium spp. *International Journal of Plant & Soil Science*, 33(19): 100-112.
- Kumar, S., Singh, N.P., Vaishali., Aastha., Burman, V., Lehri, K., & Kapoor, N. (2021). Analysis of Genetic Diversity in Wheat (*Triticum Aestivum* L.) Using Simple Sequence Repeats Marker. *Chemical Science Review and Letters*, 10(37): 94-102.
- Maurya, R.L., Kumar, M., Sirohi, U., Priya., Chaudhary, V., Sharma, V.R., Datta, S.K., & Yadav, M.K. (2021) An effective micropropagation protocol and determination of the clonal fidelity of in vitro developed microshoots of carnation (*Dianthus caryophyllus* L.) using SSR markers. *Nucleus*, 65(1): 49-55
- Singh, A., Shukla, P.K., Sengar, R.S., & Mishra, P. (2021). Invitro effect of polyethyleneglycol and sorbitol on two banana varieties viz. grand naine and nallabontha to study drought stress. *Journal of Applied and Natural Science*, 13(2): 482-490
- Singh, D., Chaudhary, P., Taunk, J., Singh, C.K., Singh, D., Tomar, R.S., Aski, M., Konjengbam, N.S., Raje, R.S., Singh, S., Sengar, R.S., Yadav, R.K., & Pal, M. (2021). Fab Advances in Fabaceae for Abiotic Stress Resilience: From 'Omics' to Artificial Intelligence. *International Journal of Molecular Sciences*, 22(19): 10535.
- Singh, R., Singh, B., Prakash, S., Kumar, M., Kumar, V., Chand, P., & Vaishali. (2021) Genetic variability heritability and genetic advance in bottle gourd. *Annals of Horticulture*, 14(1): 72-78
- Singh, S., Singh, G., Mishra, P., Singh, R., Singh, D.V., & Sengar, R.S. (2021). Evaluation of different organic additives effects on spawn production of *Cordyceps militaris*. *The Pharma Innovation Journal*, 10(8): 855-858
- Singh, C.K., Singh, D., Taunk, J., Chaudhary, P., Chandra, S., Singh, D., Singh, M.P., Konjengbam, N.S., Singh, M.P., Sengar, R.S., & Sarker, A. (2021). Comparative Inter- and IntraSpecies Transcriptomics Revealed Key Differential Pathways Associated with Aluminium Stress Tolerance in Lentil. *Frontiers in Plant Science*, 1803.
- Verma, V., Vaishali., Sharmila., & Kumar, A. (2021) Nucleotide sequence analysis of phenylketonuria using MATLAB. *Progressive Agriculture*, 21(1): 131-135
- Ali, I., Prakash., Kumar, A., Tripathi, S.K., Sengar, R.S., Singh, J., and Maurya, U. (2022). Effect of different training system on growth of pear. *Biological Forum An International Journal*, 14(3): 906-910.
- Kumar, A., Sengar, R.S., Kumar, R., Pathak., & Singh, A.K. (2022). Integrated Approaches to Develop Drought-Tolerant Rice: Demand of Era for Global Food Security. *Journal of Plant Growth Regulation*, 42: 96-120
- Maan, P., & Sengar, R.S. (2022). Rice straw valorization for ethanol production through



dilute acid pre-treatment. *Annals of Biology*, 38(2): 177-180

Rani, V., & Sengar, R.S. (2022). Biogenesis And Mechanism of microRNA-Mediated Gene Regulation. *Biotechnology and Bioengineering*, 15: 1-8

Singh, A., Sengar, R.S., Singh, R., Shahi, U.P., Yadav, M.K., Vaishali., Gangwar, L.K., & Rajput, V.D. (2022). Effects of zinc oxide nanoparticles for promoting seed germination of rice (*Oryza Sativa* L.) under salinity stress. *Ecology Environment and Conservation*, 28 : 121-126

Singh, A., Sengar, R.S., & Rajput, P. (2022). Regulating antioxidant system by ZnO-NP sinrice under salinity stress condition. Conference 24-29 May 2022 SfedU Russia, Biological diversity of terrestrial and aquatic ecosystem of the steppe zone: problem of study and conservation. pp-475-483,

Singh, A., Sengar, R.S., Sharma, R., Rajput, P., & Singh, A.K. (2022). Nano-priming technology for sustainable agriculture. *Biogeosystem Technique*, 8(1): 79-92.

Singh, A., Sengar, R.S., Rajput, V.D., & Singh, A.K. (2022). Kargi endangered traditional rice variety protection and conservation: A Case Study. Conference 24-29 May 2022 Sfed URussia, Biological diversity of terrestrial and aquatic ecosystem of the steppe zone: problem of study and conservation. pp-469-475.

Singh, S.K., Samsher., Singh, B.R., Sengar, R.S., & Kumar, P. (2022). Development and effectiveness of greenhouse type solar dryer for coriander leaves. *Journal of Environmental Biology*, 43(1): 85-96

Book Chapter

Singh, N.P., Vaishali., Bharti, M., Burman, V., & Sharma, V. (2021). Advances in Biotechnological Tools and Techniques for metatranscriptomics, Book entitled-"Microbial Metatranscriptomics Belowground", Editor: Manoj Nath, Deepesh Bhatt, Prachi Bhargava, D.K. Chaudhary, Springer 10.1007/978-981-15-9758-9_27.

DEPARTMENT OF AGRICULTURAL ECONOMICS

Research/Review articles:

Alam, S., Naresh, R.K., Kumar, S., & Singh, H.L. (2022). Effect of sowing methods and irrigation scheduling on production and productivity of wheat crop. *Biological forum-An International Journal*, 14(a): 445-452

DEPARTMENT OF AGRICULTURAL EXTENSION & COMMUNICATION

Research/Review articles:

Maurya, A.S., Malik, J.S., & Yadav, R.N. (2021). Relationship between Profile of Rural Youth and Attitude towards Agriculture. *Indian Journal of Extension Education*, 57(3): 12-15

Singh, K.M., Verma, S.K., & Singh, L.B. (2021). Impact of CFLD on production and productivity blackgram (Urd). *The Journal of Rural and Agricultural Research*, 21(2): 42-45.

Tsamodimo, T., Singh, D., Yadav, R.N., & Singh, D.K. (2021). Utilization of Mass Media Tools by Post Graduate Students in Agriculture University. *Indian Journal of Extension Education*, 57(4): 52-55.

Yadav, A.S., Yadav, R.N., & Singh, D.K. (2021). Socio-Economic Status of Potato Growers Regarding Potato Production Technology in Western Uttar Pradesh, India. *Indian Journal of Extension Education*, 57(4): 145-150.

Kumar, M., Yadav, R.N., Lodhi, S.K., Kumar, S., & Kumar, P. (2022). Adoption level of mango orchardist regarding mango production technology in Western Uttar Pradesh. *The Pharma Innovation Journal*, 11(5): 283-288.

Kumar, D., Singh, D., Babu, R., & Kumar, M. (2022). A study on knowledge level of the cabbage growers regarding cabbage cultivation in Western Uttar Pradesh. *The Pharma Innovation Journal*, 11(5): 916-920.

Paper presented in seminar/symposium (abstract)

Bharti, S.D., Yadav, R.N., & Yadav, A.S. (2021). Constraints faced by guava orchardists in its



cultivation practices of guava in Muzaffarnagar district of Uttar Pradesh” J.S. University, Shikohabad, Firozabad (U.P.) November 2021 336-339.

Lecture delivered in Kisan Gosthis/TV/Live telecast etc.

Dr. R.N. Yadav on “Changing Paradigm in Agriculture Extension in Integral Institute of Agricultural Science and Technology Lucknow for students and faculty members held on 23-07-2021.

Dr. R.N. Yadav, Dr. D.K. Singh and Dr. L.B. Singh delivered lectures dated on 25-02-2022 in farmers training programme on “Crop Waste Management” in sugarcane, paddy and wheat held from 22-02-2022 to 29-02-2022 organized by KVK Chittora Muzzafarnagar IInd.

Dr. L.B. Singh delivered lectured on Paryavaran evam fasal awshesh prabandhan on 13-10-2021 at radio station Naziabad, Bijnor (UP).

Dr. D.K. Singh delivered lectured on Fasal avashesh ke jalane se hone vali hani on 30-09-2021 at radio station Nazibabad, Bijnor (UP).

Dr. D.K. Singh delivered lectured on Kisan Credit Card Yojna on 23-03-2022 live Telecast Chaupal Charcha Karyakarm at DD Kisan.

DEPARTMENT OF AGRONOMY

Research/Review Articles

Yadav, S., Yadav, R.B., Naresh, R.K., Vivek., & Dhyani, B.P. (2021). Effect of Crop Establishment Methods and Weed Management Practices on Weed Density and Productivity of Basmati Rice (*Oryza sativa* L.). *International Journal of Plant & Soil Science*, 33(22): 235-243

Rajput, P., Singh, A., Vivek., Yadav, R.B., Kumar, M., & Shahi, U.P. (2021). Growth and productivity of basmati rice (*Oryza sativa* L.) as influenced by seedling density and iron and boron biofortification. *The Pharma Innovation Journal*, 10(11): 521-526.

Rastogi, M., Vivek., Naresh, R.K., Yadav, S., Shivangi., Chandra, M.S., Tiwari, H., & Singh,

P.K. (2021). Herbicide efficacy in chickpea (*Cicer arietinum* L) with different weed management methods on productivity, nutrient uptake and profitability. *The Pharma Innovation Journal*, 10(11): 2039-2046.

Indira, G., Yadav, R.B., Vivek., Naresh, R.K., Chandra, M.S., Chandrakanth, A., Shivangi, A., & Nath, A. (2021) Effect of different nutrient management practices on productivity and profitability of double zero Indian mustard (*Brassica juncea* L.). *International Journal of Environment and Climate Change*, 11(12): 10-17.

Kumar, D. Singh, Vivek Kumar, U.P. Shahi Singh (2021) Evaluation of crop and soil dynamics under various moisture regimes and moisture conservation techniques in rice (*Oryza sativa* L.). *International Journal of Plant and Soil Science* 33(21): 76-91.

Shivangi., Vivek., Rana, N.S., Naresh, R.K., Dhyani, B.P., Kumar, R., & Singh, O. (2021) Effect of nutrient and weed management practices on crop growth and productivity of wheat (*Triticum aestivum* L.) under rice-wheat cropping system in typic ustochrept soils. *The Pharma Innovation Journal*, 10(12): 2384-2388.

Kumar, H., Dhyani, B.P., Shahi, U.P., Kumar, A., Vivek., Tomar, A., & Singh, A. (2021) Effect of Zinc and Vermicompost Application on Zinc Content, Uptake and Yield of Late Sown Wheat (*Triticum aestivum* L.). *Journal of the Indian Society of Soil Science*, 69(3): 339-343.

Verma, R., Singh, P.K., Vivek., Naresh, R.K., Chandra, M.S., Maurya D.K., Vedvrat, A., & Gupta, S.P. (2021). Effect of Integrated Nutrient Management (INM) Modules on yield, yield attributes and profitability of Indian mustard [*Brassica juncea* (L.)] in Western Uttar Pradesh. *International Journal of Environment and Climate Change*, 11(12): 324-330.

Choudhary, M., Vivek., & Sharma, P.C. (2021) Response of Management Practices on Growth Parameters and Yield of Wheat under Rice-Wheat Crop ping System in Reclaimed Sodic Soils. *Frontiers in Crop Improvement*, 9: 3293-3297.



Gupta, S.P., Singh, P.K., Vivek., Naresh, R.K., Chandra, M.S., Verma, S.K., Kumar, A., Maurya, D.K., & Gupta, S. (2022) Effect of micronutrients application on productivity and profitability of moong bean (*Vigna radiata* L.). *The Pharma Innovation Journal*, 11(1):1660-1665.

Chandra, M.S., Naresh, R.K., Vivek., Bhatt, R., Kadam, P.V., Kumar, R., Yadav, S., & Kumar, R. (2022). Optimizing Tillage cum Crop Establishment Methods and Nutrient Management Strategies on Crop Productivity, Nutrient Use Efficiency and Grain Quality of Rice (*Oryza sativa* L) in Typic Ustochrept Soils. *Agricultural Mechanization in India*, 53(3): 6813-6835.

Pathak, S.O., Dhyani, B.P., Shahi, U.P., Kumar, A., Vivek., & Singh, S.P. (2022) Basmati rice performance as influenced by application timing of organic N sources. *Indian Journal of Agricultural Sciences*, 92(6):752-756.

Singh, P., Vivek., Singh, P., Shrivastava, M., & Ujjwal, A. (2022) Performance of integrated weed management practices on weed dynamics, productivity and profitability of Greengram (*Vigna radiata* L.) under rice-wheat-greengram cropping system in western Uttar Pradesh. *The Pharma Innovation Journal*, 11(7):101-109.

Singh, P., Vivek, Singh, P. & Ujjawal (2022) Effect of herbicides on weed dynamics, yield and monetary returns of rice (*Oryza sativa* L.). *The Pharma Innovation Journal*, 11(7):3242-3249.

Ujjwal, A., Bazaya, B. R., Vivek, L. P. K., & Tomar, V. (2022). Effect of system of rapeseed intensification on productivity and profitability of gobhi sarson (*Brassica napus*) under irrigated conditions of Jammu region. *The Pharma Innovation Journal*, SP-11(9):1179-1184.

Verma, S. K., Rana, N. S., Vivek, B. P., Singh, B., Verma, A., & Maurya, D. K. (2022). Effect of Novel Sources of Nutrients, their Dose and Mode of Application on Yield, quality and Profitability of Indian Mustard [*Brassica juncea* (L.) Czern & Coss]. *Biological Forum- An International Journal*, 14(3):1385-1390.

Singh, D.K., Vivek., Naresh, R.K., Yadav, R.B., Dhyani, B.P., & Kumar, R. (2022). Effect of weed management on weed density and productivity of Wheat (*Triticum aestivum* L.) under late sown condition. *Journal of Plant Development Sciences*, 14(7):641-645.

Chaithanya, J., Vivek, R. K., Dhyani, B. P., Kumar, R., & Singh, A. (2022). Effect of herbicides on wheat (*Triticum aestivum* L.) productivity and soil fertility status after harvest under different nutrient management practices. *The Pharma Innovation Journal*, 11(10):505-508

DEPARTMENT OF ANIMAL HUSBANDRY

Research/Review paper

Rajkumar., Ali, N., Siddique, R.A., Sahu, D.S., & Singh, R. (2021). Effects of different level of mushroom powder and probiotics on growth performance and carcass characteristics of Broiler chickens. *Animal Nutrition and Feed Technology*, 21:71-72.

Kumar, R., Ali, N., Siddique, R.A., Sahu, D.S., Fahim, A., Singh, R., & Roy, D. (2021). Effect of different levels of mushroom powder (*Agaricus bisporus*) and probiotics (*Saccharomyces cerevisiae*) on carcass traits and hematological responses of broiler chickens. *Journal of Entomology and Zoology Studies*, 9(2):244-248.

Kumar, R., Ali, N., Siddique, R.A., Singh, R., & Sahu, D.S. (2021). Improvement in growth performance of broiler chicken on dietary supplementation of mushroom powder (*Agaricus bisporus*) and probiotics (*Saccharomyces cerevisiae*). *The Pharma Innovation Journal*, SP-10(3):13-17

Moilwa, M.N., RajKumar., Sahu, D.S., Ali, N. & Tomar, K. (2021). Effect of prebiotics supplementation on carcass quality traits in commercial broiler. *Journal of Entomology and Zoology Studies*, 320-323.

Pandey, S., RajKumar., Singh, R., Sahu, D.S., Kumar, D., Tomar, K., & Tiwari, S. (2021). The effect of probiotics and growth stimulants on haematological status in Murrah buffalo.



Pantnagar Journal of Research, 19(2): 318-324.

Pandey, S., RajKumar, Sahu, D.S., Tiwari, S., Kumar, P., Sharma, A., & Tomar, K. (2021). The effect of probiotics and growth stimulants on growth performance of Murrah buffalo. *Pantnagar Journal of Research*, 19(3):533-37.

Kumar, D., Yadav, S.P., Sahu, D.S., Chandra, G., & Maurya, P.S. (2021). Influence of different sources of supplementary chromium on growth, immunity and liver function of buffalo calves. *Indian Journal of Animal Nutrition*, 38(2): 144-150.

Kumar, S., Yadav, S.P., Chandra, G., Sahu, D.S., RajKumar., & Maurya, P.S. (2021). Effect of Betaine Supplementation on Growth Performance of Growing Murrah Buffalo Calves. *Indian Journal of Animal Nutrition*, 38 (3): 266-271.

Kumar, V., Sahu, D.S., Ali, N., Kumar, R., Yadav, S. P., Chandra, G., & Maurya, P. S. (2021). Influence of zinc yeast supplementation on growth performance, antioxidant, and immune status of growing sahiwal calves. *Proceedings of the National Academy of Sciences, India Section B: Biological Sciences*, 91 : 373-379.

Kumar, R., Sahu, D. S., Chandra, G., Yadav, S. P., Kumar, R., Ali, N., Roy, D., & Maurya, P. S. (2022). Effect of Astaxanthin and Copper Supplementation on Growth, Immunity, Antioxidant, and Blood Biochemical Status of Growing Murrah Buffalo Heifers. *Biological Trace Element Research*, 200(12) : 5052-5063.

Tomar, K., Kumar, R., Tyagi, K. K., Gupta, A., Yadav, S. P., Sahu, D. S., Singh, D., Dubey, K.K., & Singh, K. (2022). Performance evaluation of first lactation and lifetime production and reproduction traits of Haryana cattle. *The Pharma Innovation Journal*, 11(6): 2586-2590.

Tomar, K., Kumar, R., Tyagi, K. K., Gupta, A., Sahu, D. S., Yadav, S. P., Singh, D., & Dubey, K.K. (2022). Dispersal and performance of indigenous cattle breeds in different agroclimatic zones of India. *Journal of Experimental Zoology India*, 25(2) : 2663-2668.

Singh, D., Sahu, D.S., Chandra, G., Ali, N.,

Rajkumar., Yadav, S.P., Dubey, K.K., and Tomar, K. (2022). Impact of Silymarin and nano zinc oxides in liver functions of Murrah buffalo calves. *The Pharma Innovation Journal*, 11(7): 1035-1038.

Singh, D., Sahu, D.S., Chandra, G., Ali, N., Rajkumar., Yadav, S.P., Tomar, K., & Dubey, K.K. (2022). Influence of dietary supplementation of Silymarin and nano zinc oxides on protein metabolism of Murrah buffalo calves. *Journal of Experimental Zoology India*, 26 (1) : 111-115.

Dubey, K.K., Yadav, S.P., Chandra, G., Sahu, D.S., Rajkumar., Maurya, P.S., Singh, D., & Tomar, K. (2022). Effect of dietary supplementation of silymarin and nano zinc on protein metabolism of Sahiwal calves. *The Pharma Innovation Journal*, 11(7): 1891-1894.

Dubey, K.K., Yadav, S.P., Chandra, G., Sahu, D.S., Rajkumar., Maurya, P.S., Singh, D., Tomar, K., & Madhesia, P.K. (2022). Supplementation of silymarin and nano zinc oxide in Sahiwal calves; impact of liver function. *Journal of Experimental Zoology India*, 26(2): 2029-2032

Madhesia, P.K., Ali, N., Singh, R., Sahu, D.S., Roy, D., Khan, A., Singh, D., & Duey, K.K. (2022). Comparative study of broiler production practices in Bareilly and Shahjahanpur districts of Western Uttar Pradesh. *The Pharma Innovation Journal*, 11(7): 4774-4776

Singh, D., Ali, N., Sahu, D.S., Bharti, M.K., Faheem, A., & Maddhesia, P.K. (2022). Biochemical and sensory characterization of chicken eggs from different farm production system. *Biological forum- An International Journal*, 14(4) : 232-236

Paper presented in seminar/symposium

(Abstract):

Chandra; N. Ali; S. P. Kumar. and P.S. Maurya. (2021) Yadav, R., Sahu, D.S., Chawla, G., Yadav., Effect of Astaxanthin and Copper Supplementation on Growth Performance and Immunity of Growing Murrah Buffalo Heifers. In compendium of XXIX SAPICON 2021 (Recent



Approach to Escalate Livestock Productivity under Current Socio-economic scenario), pp 13.

Kumar, S., Yadav, S.P., Chandra, G., Sahu, D.S., Kumar, R., & Maurya, P.S. (2021). Effect of Betaine Supplementation on Growth, Immunity, and Blood Metabolites of Growing Murrah Buffalo Calves. In compendium of XXIX SAPICON 2021 (Recent Approach to Escalate Livestock Productivity under Current Socio-economic scenario), pp12

Lecture delivered in Kisan goshi/TV/Livetelecast etc.

Lecture delivered on animal feeding management in farmer fare at S.V.P.U.A.&T Meerut by Dr. Nazim Ali.

Lecture delivered on round the year green fodder availability for animals in farmer fare at S.V.P.U.A.&T Meerut by Dr. D.S.Sahu

Lecture delivered on macro nutrient feeding management in animals for maximum production. by MAITRI, at S.V.P.U.A.&T Meerut by Dr. D.S.Sahu

DEPARTMENT OF BASIC SCIENCE

Research/Review paper

Rashmi., & Baskar, S. (2021). Chemical studies on Fatty oil of *Trewia nudiflora* diflora kernels *Universities Journal of Phytochemistry, Ayurvedic Heights*, 2(31): 26-28.

Sharma, P. (2021). Statistical convergence estimates for (p, q)- Baskakov-Durrmeyer type operators. *Nepal Journal of Mathematical Sciences*, 2(2): 125-130.

Sharma, P. (2021). Iterative combinations for Srivastava-Gupta operators. *Asian European Journal of Mathematics*, 14(7):

Sharma, P. (2021). Statistical approximation by genuine mixed integral type operators. *International Journal of Mathematics and Computer Applications Research*, 11(2): 1-10.

Singh, A., & Singh, B. (2021). Quadratic trend model for forecasting of rice in western Uttar Pradesh. *Environment and Ecology*, 39(3): 584-588.

Amiri, M.A., Prakash, S., Singh, B., & Alam, K. (2021). The Effect of Pinching on Growth and Yield on Chrysanthemum (*Chrysanthemum morifolium*) cv. Snowball. *Progressive Agriculture*, 21(2): 235-238.

Singh, B., & Singh, A. (2021). Identification of mutation point and trend analysis of wheat crop in western Uttar Pradesh. *Environment and Ecology*, 39(4A): 1417-1422.

Singh A., & Verma, V. (2022). Temperature Monitoring System Using Internet of Things. *Excellence in Education*, XI(3): 269-276.

Shankar, A.B., Vaishali., Verma, V., Singh, N.P., & Burman, V. (2022). Phylogeny and Homology Analysis of CHS Gene of Turmeric. *Excellence in Education*, XI (3): 250-268.

Singh, R., Arora, A., Verma, V., Sharma, V. K., & Singh, V. (2022). Certain finite product formulas involving double hypergeometric functions of exton and kampe deferiet. *Excellence in Education*, XI (4): 211-219.

Verma, V., Vaishali., Sharmila., & Singh, R. (2022). Sequence Analysis of Glucosylceramidase (Gaucher Disease) Using MATLAB. *Excellence in Education*, XI(4): 220-226

Sharma, P. (2022). Approximation by Differences on some mixed summation-integral type operators. *Journal of Applied Mathematics and Computation*, 6(2): 230-234.

Sharma, P. (2022). Approximation properties of linear positive operators with differences, *Current journal of Science and Technology* 41(15): 23-28.

Sharma, P. (2022). An Approach to Implement Vedic Mathematics to Agricultural System: A Review. *Agricultural Reviews*. DOI: <https://10.0.73.117/ag.R-2320>.

Singh, B., Singh, A., & Sharma, P. (2022). Transformation of Data in Agricultural Research. *Current Topics in Agricultural Sciences*, 8: 63-71.

Paper presented in seminar/symposium

Rashmi. (2021). Indigenous Tree Borne oil seed: *Diploknema butyracea* (Cheura, The Indian Butter



Tree) presented in 20th Common Wealth forestry Congress held at University of British Columbia, Vancouver, Canada during 16-18 August, 2021.

Rashmi., & Baskar, S. (2021). Chemical studies on Fatty oil of *Trewia nudiflora* kernels In: 20th Symposium on Phytochemistry and Ayurveda: Potential and Prospects held at Dehrdaun on 18th December, 2021.

Rashmi. (2022). Indian Butter Tree: An excellent source of nutrition and livelihood generation abstract submitted and accepted at XV World Forestry Congress building a Green, healthy and resilient future with Forests held at Republic of Korea during 2-6 May, 2022.

Arya, A., & Mishra, A. (2022). A review on replacement of conventional feed ingredients in aquafeeds with unconventional ingredients. In: Souvenir National Seminar on Contemporary Issues in fisheries and Aquaculture held at College of Fisheries, GBPUAT, Pantnagar during 19-20th May, pp. 138.

Arya, A., & Madhu. (2022). Plankton based assessment of the hydrobiology of a fresh water canal in North Western Plains of Uttar Pradesh, India. In: Souvenir National Seminar on Contemporary Issues in fisheries and Aquaculture, held at College of Fisheries, GBPUAT, Pantnagar during 19-20th May, pp. 104.

Sharma, P. (2021). Some Statistical convergence estimates of (p, q) -Lupas-Beta-Stancu operators. In 27th International Conference of International Academy of Physical Sciences (RAMCO), 26-28 October 2021, Central University, Kerala, pp. 123.

Sharma, P. (2021). Approximation of Kantorovich variant of Lupas type operators In 23rd Annual Conference of Vijnana Parishad on Recent development in Mathematics, optimization and computational sciences, Bundelkhand University Jhansi 6-10 September, pp.50.

Books:

Rashmi. (2021). Solid Waste Management: Sustainability through Circular Economy,

Publisher: Springer Nature, DOI: <https://doi.org/10.1007/978-981-15-7525-9>, e-Book ISBN: 978-981-15-7525-9.

Singh, B., Singh, A., & Singh, A. (2022). Estimation Methods of Crop Production at Block Level. LAMBERT Academic Publishing, Germany, pp.1-85. (ISBN: 978-620-4-74943-3)

Sharma, P., Sharma, D., & Singh, B. (2022). Various Problems in Approximation by Linear Positive Operators. LAP LAMBERT Academic Publishing, Germany, pp.1-85. (ISBN: 978-620-4-75055-2)

Singh, A., Singh, B., & Sisodia, B.V.S. (2022). Measurement errors in the assessment of finite population parameters. LAP LAMBERT Academic Publishing, Germany, pp.1-141. (ISBN: 978-620-4-98502-2)

Book Chapters:

Rashmi. (2021). *Diploknema butyracea* (Cheura, The Indian Butter Tree): Source of Tree Borne Oil Seed for Livelihood Generation. In Lesser Known Plants Conservation, Management and Sustainable Utilization Walnut Publications, New Delhi, ISBN: 978-93-91522-33-9, 31-39.

Sharma, P., & Singh, B. (2021). Direct estimations for summation integral type operators in L_p -space 152-159. In Recent advances in agricultural sciences., ISBN: 978-93-91872-30-4.

Sharma, P., & Singh, B. (2021). Statistical approximation for linear positive operators for their (p, q) variants 160-168. In Recent advances in agricultural sciences. ISBN: 978-93-91872-30-4.

Singh, B., & Sharma, P. (2021). Statistical tools for data Inferences 20-30. In Recent advances in agricultural sciences. ISBN: 978-93-91872-30-4.

Singh, B., & Sharma, P. (2021). Application of area level models in estimating the crop production Page 89-96. In Recent advances in agricultural sciences. ISBN: 978-93-91872-30-4.

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डॉ अफरोज, डॉ श्रिया रावत, डॉ आदित्य कुमार, डॉ अरबिन्द सिंह, डॉ अमित कुमार वर्मा एवं डॉ राजपाल दिवाकर (2022)। जाने वन हेल्थ की आवश्यकता और उसकी चुनौतियां। के-जे कृषि जागरण। 24 जनवरी, 2022। ISSN 2455.1074।

डॉ निशांत शर्मा, डॉ श्रिया रावत, हर्षित वर्मा, डॉ अरबिन्द सिंह एवं डॉ राजपाल दिवाकर (2022)। पशुधन प्रहरी। भेड़ एवं बकरी से होने वाले पशुजन्य रोग और उनसे बचाव। 13 अप्रैल, 2022।

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अतुल गुप्ता, कुलदीप कुमार त्यागी, राजबीर सिंह, अरबिन्द सिंह, अमित कुमार वर्मा। (2021)। भारत में पाई जाने वाली दुधारू गाय एवं भैंस की प्रमुख नस्लें। पशुपालन व्यवसाय : आत्मनिर्भरता की ओर एक कदम, अंक : 1 : 23-30.

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Singh, V.P. (2021). Livestock Products Technology. ISBN: 978-93-390591-28-2, New India Publishing Agency, a division of NIPA Genx Electronic Resources & Solutions P. Ltd 101, 103, Vikas Surya Plaza, CU Block, LSC Market, Pitam Pura, New Delhi-110034

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COLLEGE OF POST-HARVEST TECHNOLOGY & FOOD PROCESSING

Compendium of 10th Conference of Indian Meat Science Association and International Symposium on Holistic Approach to the meat food quality and safety in continuum from farm to fork. 25-27 November, 2021

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kinetics of maize grain under varying temperature. *The Pharma Innovation Journal*, SP-11(5): 689-692.

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SEMINAR, CONFERENCE, SYMPOSIA & WORKSHOP

COLLEGE OF AGRICULTURE

Agricultural Extension & Communication

International :

1. Participated in International Conference on entitled : Multidisciplinary Research and Innovative Practices organized J.S. University, Shikohabad, Firozabad (U.P.) held from 26th – 27th November, 2021 and paper presented on Constraints faced by guava orchardists in cultivation practices of guava in muzaffarnagar district of Uttar Pradesh. Authors : Shankar Dayal Bharti, R.N. Yadav, Ankit Singh Yadav.
2. Dr. L.B. Singh, Dr. R.N. Yadav and Dr. D.K. Singh participated in 4th Global Meet on Science and Technology for Staying healthy and feeding overgrowing population worldwide GMST-2020 (held during 12-13 September 2021).

National :

1. Dr. R.N. Yadav, Dr. D.K. Singh, Dr. L.B. Singh, Dr. Dan Singh and Dr. V.K. Singh participated in one day Seminar entitled on : "Agriculture Prosperous through Natural Farming" organized by S.V.P.U.A&T, Meerut hall on 28-06-2022.
2. Dr. R.N. Yadav, Dr. D.K. Singh, Dr. L.B. Singh, Dr. Dan Singh and Dr. V.K. Singh have participated on one day workshop on Entrepreneurship Development Organize by S.V.P.U.A&T, Meerut on 25-05-2022.

ANIMAL HUSBANDRY

National

1. Dr. D.S Sahu attended Xth International Conference and Symposium entitled Holistic approach to the meat food quality and safety in continuum from farm to fork organized by Indian Meat Science Association, held at SVPUA&T, Meerut from 25-27 November 2021

BASIC SCIENCE

International:

1. Dr. Rashmi (2021) attended online 20th Common Wealth Forestry Congress held at University of British Columbia, Vancouver, Canada from 16-18 August, 2021 and presented a research paper titled Indigenous Tree Borne oil seed: *Diploknema butyracea* (Cheura, The Indian Butter Tree).
2. Dr. Rashmi (2022) attended online XV World Forestry Congress building a Green, healthy and resilient future with Forests held at Republic of Korea from 2-6 May, 2022 and presented a research paper titled Indian Butter Tree: An excellent source of nutrition and livelihood generation.
3. Dr. Perna Sharma (2021) attended 27th International Conference of International Academy of Physical Sciences (RAMCO) during 26-28 October 2021 held at Central University, Kerala.

National:

1. Dr. Rashmi (2021) attended 20th Symposium on Phytochemistry and Ayurveda : Potential and Prospects held at Dehrdaun on 18th December, 2021.
2. Dr. Perna Sharma (2021) attended 23rd Annual conference of Vijnana Parishad on Recent development in Mathematics, Optimization and Computational Sciences from 6-10 September 2021 held at Bundelkhand University, Jhansi
3. Dr. Perna Sharma attended workshop on Vedic Mathematics during 4-5 September 2021, held at Bundelkhand University, Jhansi.
4. Dr. Vineeta Verma attended workshop on Involvement and Impact of Pollutants and Carcinogens in Food Chain organized by



Innovation Grants (IG) National Agricultural Higher Education Project, ICAR, New Delhi and College of Biotechnology, Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut (U.P.) on 14 September, 2021 via online mode.

ENTOMOLOGY

International:

1. Participated in International Conference on Research Initiatives for Agriculture Biotechnology & Allied Sciences (ICRIABAS-2021) organized by IIMT University, Meerut and New Age Mobilization, New Delhi from 24-25 April-2021 at IIMT University, Meerut
2. Participated in International virtual seminar on artificial intelligence in agriculture, held Jan., 11-12, 2021 organized by Department of Fingerprinting, College of Biotechnology, SVPUA&T-Meerut
3. Appointment as Minimizing Director 5th International conference on Advances in Smart Agriculture and Biodiversity Conservation for Sustainable Development (SABCD 2022) at JNU, Jaipur on dated (March 4 6, 2022. pp 257.

GENETICS & PLANT BREEDING

National

1. Dr. L.K. Gangwar, attended 60th All India Wheat & Barley Research workers' Meet in virtual mode during August 23-24, 2021 organized by ICAR-IIWBR, Karnal
2. Dr. L.K. Gangwar, participated in the NAAC Manthan 04-05 April, 2022 at APJ Abdul Kalam Technical University, Lucknow
3. Dr. S.K. Singh 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.

4. Dr. S.K. Singh participated online two days International Webinar on "Challenges in global research in agriculture and technology" held on 13-14/07/2021 organized by R.B.S. College Faculty of Agriculture Bichpuri Campus, Agra in collaboration with Indian Society of Genetics, Biotechnology Research and Development.
5. Dr. S.K. Singh participated online zoom meeting on 'Sustainable agriculture intensification for improving food security and climate resilience (ICAR Lecture Series # 21)' held on 13/08/21 organized by ICAR, New Delhi.
6. Dr. Atar Singh participated in One day Brainstroming Session and workshop on Involvement and Impact of pollutants and Carcinogens in Food Chain on September 14, 2021 at SVPUAT, Meerut
7. Dr. Atar Singh participated Natural Farming on 26.06.2022 at SVPUAT, Meerut

PLANT PATHOLOGY

National

1. Dr. Kamal Khilari participated in 8th international conference on "Plant Pathology: Retrospect and Prospect" organised by Indian Phytopathological Society New Delhi on dated 23 & 26 March 2022 at SKN Agriculture University Jobner-Jaipur, Rajasthan.
2. Dr. Kamal Khilari Attended annual review meeting of AICRP (N) held at MPUA&T, Udaipur on 15 to 16 Sep. 2022

SOIL SCIENCE

National

1. Shahi, U.P., Singh, Dhyani, B.P., Singh, Rawal, Yadav, Ashok. (2022). Natural mineral nutrition of table and processing



potato in North India *In* Extended Summaries: Annual Co-operators Conference, 17-18 October, ICAR-CRIDA Hyderabad, p7-9.

2. Shahi, U.P., Singh, Dhyani, B.P., Singh, Sisodia, Singh, T.A. Singh, K.K. (2022) "Medium range weather forecast verification for the Meerut region of western Uttar Pradesh, Extended Summaries, 5th International Agronomy Congress organized by The Indian Society of Agronomy, New Delhi PJTSAU, Hyderabad, Telangana, India November 23-27
3. Shahi U.P., presented paper on "Natural Mineral nutrition of table and processing Potato in North India " in Annual Co-operators' Conference organized by Anglo American Crop Nutrients Pvt Ltd in collaboration with ICAR- CRIDA Hyderabad during 17-18 October 2022.
4. Lecture delivered by Dr U.P. Shahi on 'Agriculture Waste/Crop Residues Burning Management for controlling Air Pollution' in on day 'Clean air workshop' organized by UPPCB Meerut on 25.11.2022.
5. Field experiment on Sugarcane under POLY4 Sugarcane project was visited by Dr Vipin Mishra, Head Agronomist Anglo American Crop Nutrients PVT Ltd and Scientists of project team.

COLLEGE OF BIOTECHNOLOGY

National:

1. Dr Amit Kumar participated and presented oral paper in XXXIV Annual convention of Indian Association of Veterinary Microbiologists, Immunologists and Specialists in Infectious Diseases held during 27-28th May, 2022 at LUVAS, Hisar Haryana.
2. Dr Amit Kumar participated and organized 4th International Conference on ICAAAS held during 12-14th June at Himanchal

Pradesh University, Shimla as coordinator of the conference.

3. Dr.Neelesh Kapoor and Dr. Naresh Pratap Singh participated as Co-Organizing Secretary of 5th International Conference on Advance in Smart Agriculture and Biodiversity Conservation for Sustainable Development, March 04-06, 2022, at JNU Jaipur.
4. Dr. Amit Kumar participated as joint organizing secretary in International Conference of SIIP on Cow pathy.
5. Dr. Amit Kumar participated as organizing coordinator in International conference GRISAAS-21.

COLLEGE OF VETERINARY & ANIMAL SCIENCES

Seminar, conference, symposia & workshop

Organized:

1. 10th conference of IMSA (IMSACON-X) and International Symposium on "Holistic Approach to the Meat Food Quality and Safety Continuum from Farm to Fork" from 25th to 27th November, 2021 at Department of Livestock Products Technology, COVAS, SVPUAT, Meerut in collaboration of Indian Meat Science Association, Hyderabad.
2. 01 day seminar cum brain storming session under ICAR-IG-NAHEP project for MVSc and PhD students of COVAS on 28.03.2022.
3. Training programme of 'Multipurpose artificial insemination technicians in rural India (MAITRI)' under Rashtriya Gokul Mission, Department of Animal Husbandry, Dairying and Fisheries, Govt. of India, organized by SVPUAT, Meerut from March to June 2021.
4. Training programme of 'Multipurpose artificial insemination technicians in rural India (MAITRI)' under Rashtriya Gokul Mission, Department of Animal Husbandry, Dairying and Fisheries, Govt. of India, organized by SVPUAT, Meerut



- from November 11, 2021 to March 16, 2022.
5. One day workshop on "Entrepreneurship Development" for students (UG, PG and PhD) and faculty of the SVPUAT on dated 25.05.2022 at Veterinary Clinical Complex, COVAS, SVPUAT, Meerut
6. Farmer's training on "Skill development cum entrepreneurship training programme on poultry production for rural farmers" sponsored by NABARD organized by COVAS, SVPUA&T from 21-28 February, 2022
7. One week goat farming training organized by SVPUA&T from 03-09 March, 2021
8. One week pig farming training organized by SVPUA&T from 21/03/2022 to 27/03/2022

ATTENDED

National:

1. Dr. Shailja Katoch attended international symposia on "Harnessing the potentials of genome editing tools to augment the productivity and health of farm animals" organized by Animal biotechnology Centre of ICAR- National Dairy Research Institute, Karnal on 19-20th July 2021
2. Dr. Prabhakar Kumar attended XXXV Annual Convention of Indian Association of Veterinary Anatomists & International Symposium on "Modern concepts in Anatomy: New Era Tools in health and Disease" at LUVAS, Hisar (Haryana) during 10th -12th March 2022
3. Dr. Shailja Katoch attended Word Zoonosis Day Webinar on "Preventing future zoonotic pandemics: Interventions at the wildlife-livestock-human interface" organised by ICAR-National Research Centre on Equines in collaboration with National Centre for Diseases Control and Indian Virological Society on 6th July 2021
4. Dr. Shailja Katoch attended National Webinar on "Important animal diseases and their control program in India" organised by ICAR Research Complex for Eastern Region, Patna on 23rd October 2021
5. Dr. Rajeev Singh attended and expressed view as scheduled in One Day Brainstorming session of National Academy of Dairy Sciences, India on "Potential of small ruminants in Dairying" held on 16.08.2021 (On line)
6. Dr. Rajeev Singh attended and was Panelist in One Day Brainstorming session of Association of Mastitis, National Academy of Dairy Sciences, India, NDRI, Karnal on the topic "Mastitis in Dairy Animals" held on 18.08.2021 (On line)
7. Dr. Rajeev Singh attended online in ICAR-NDRI India@75 Campaign-Aajadi ka Amrut Mahotsav held with inaugural lecture "Milk for All, there is No Alternative" 21.08.2021.
8. Dr. Ameer Khan attended Workshop on entrepreneurship development on 25/05/2022 at Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut- 250110 UP,
9. Dr. Vineet Kumar attended 44th annual congress and national symposium of Indian Society for Veterinary Surgery, Pantnagar, India, February 24-26, 2022.
10. Dr. Vijay Singh, Professor & Head (Veterinary Gynaecology & Obstetrics) attended XXXVII Annual Convention of ISSAR and National symposium on "Optimizing animal reproduction through recent techniques of biotechnology, nutraceuticals and alternative medicine" from 16-18, November-2022 at College of Veterinary Science and Animal Husbandry, Jabalpur.
11. Dr. Manish Kumar Shukla, Associate Professor (Veterinary Gynaecology &



Obstetrics) attended XXXVII Annual Convention of ISSAR and National symposium on “Optimizing animal reproduction through recent techniques of biotechnology, nutraceuticals and alternative medicine” from 16-18, November-2022 at College of Veterinary Science and Animal Husbandry, Jabalpur

12. Dr. PS Maurya attended State level stakeholders conference, at Madras Veterinary College, on 22 July 2021 online mode.
13. Dr. PS Maurya attended conference on Harnessing of the potential of genome editing tools to augment the productivity and health of farm animals on July 19th - 20th, 2021 (Animal Biotechnology Centre, NDRI, Karnal)
14. Dr. PS Maurya attended webinar on world zoonoses day, parasitic zoonoses frequently encountered in animals but obscure in human in India organized by Bihar Veterinary College on 06/07/ 2021.
15. Dr. VP Singh, participated in One day

Brainstorming Session and Workshop on “Involvement and Impact of Pollutants and Carcinogens in Food Chain” on September 14, 2021 organized by Innovation Grant (IG), National agricultural Higher Education Project, ICAR, New Delhi at College of Biotechnology, SVPUAT, Meerut.

COLLEGE OF HORTICULTURE

- Seminar, Conference, symposia & Workshop Organised
- 2 days International webinar and 4th global meet on science & technology for staying healthy & feeding ever-growing population worldwide” in collaboration with Hi-Tech Horticultural Society & Prerna foundation, & Society of recent development- Meerut. On 12-13 Sep, 2021, at SVPUA&T, Meerut (UP)
- Horticultural technology developed by the university have been demonstrated in State level horticulture exhibition held at Rajbhawan Lucknow on 04-06 March 2022.

Superannuation

S.N	Name	Designation	Date of Superannuation
1	Prof. Samsher	Professor	30.6.2021
2	Prof. N. S. Rana	Professor	30.6.2021



सरदार वल्लभभाई पटेल कृषि एवं प्रौद्योगिक विश्वविद्यालय, मेरठ

