The Centre for Advanced Agricultural Science and Technology (CAAST) on Climate Smart Agriculture and Water Management (CSAWM), MPKV, Rahuri had organized various need based online training programmes for the farmers, students and scientists, faculty during the lockdown period in view of Coronavirus disease (COVID-19) pandemic situation. A large number of trainees not only from Maharashtra state but other states from across the country and even from abroad participated in these e-training programmes.

National Online Webinar on Bioenergy: A Climate Smart Renewable Energy organized June 30, 2020. A National online webinar on Bioenergy, a Climate Smart Renewable Energy: Present Status and Future Prospects was organized by the Centre for Advanced Agricultural Science and Technology for Climate Smart Agriculture and Water Management, Mahatma Phule Krishi Vidyapeeth, Rahuri. The keynote speaker of the webinar was Shri. Nitin Gadkari, Hon'ble Minister for Road Transport and Highways of India, Shipping and Micro, Small and Medium Enterprises, Government of India. At the outset Vice Chancellor Dr. K. P. Viswanatha welcomed Shri. Gadkari. He stated the importance of this online webinar. Dr. S. D. Gorantiwar, Head, Agril. Engg. and Principal Investigator, CAAST-CSAWM, MPKV, Rahuri briefed about the CAAST project.

Hon'ble Minister Shri. Nitin Gadkari guided the participants about bioenergy, current status of utilization of bioenergy, Future prospects for its use and Entrepreneurship opportunities for bioenergy. He said that bioenergy production can play a major role in the agriculture and rural sectors. Diversification of agriculture to energy production like bioethanol could add to farmers income. Bioethanol production from sugarcane and other farm produce would be a profitable alternative for the farmers. We need also to focus on ethanol and power generation from biomass, he said. The Government has started the Bamboo Mission which is a good alternative for diversification. We have to convert knowledge into wealth and more research and development in agriculture is needed, he emphasized. The SAUs are a catalyst in the development of agricultural economy, he added. Shri. Gadkari further said that bio CNG could be produced from organic waste and sewage water. He interacted with the participants and answered the queries. This online webinar was coordinated by Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. S. R. Gadakh, Director of Research and Extension Education, Dr. S. D. Gorantiwar, PI, CAAST-CSAWM, Dr. M. G. Shinde, CO-PI, CAAST-CSAWM, Research Associates Dr. V.S. Malunjkar (SWCE) and Er. M.A. Tamboli (Comp. App.), CAAST-CSAWM, MPKV, Rahuri. Dr. Pharande expressed vote of thanks. A total of 1550 participants including Hon'ble Vice Chancellors from SAUs of
Maharashtra, faculty, scientists, farmers and students from Indian Agricultural Universities attended the online webinar via Webex, Facebook and YouTube Platforms. Online certificates of participation were awarded to these participants following the submission of the online quiz.

**e-training programme organized on Advances in Smart Food Processing Technologies**

June 4-15, 2020. The CAAST-CSAWM project of MPKV, Rahuri had organized a one week online training programme on Advances in Smart Food Processing Technologies. Dr. R. T. Patil, Former Director, ICAR-CIPHET, Ludhiana, Mrs. Sumedha Jalgaonkar, Food Safety Consultant, Auditor and Trainer, Pune, Dr. Chandrashekhar Sonar, Research Associate, Washington State University, USA, Mr. Avinash Wagh, Regional Manager, Grainpro INC (Post Harvest Solutions for Dried Agricultural Commodities), Pune, Mr. Sameer Saxena, Assistant General Manager (QA & NPD), GCMMF, Er. Vilas Shinde, Chairman and Managing Director, Sahyadri Farmers Producer Company Ltd., Nashik, Mr. Shrikrisna Gangurde, Director, AV Broilers, Nashik, Dr. N. C. Saha, Chairman, India Biomass project under INDUS and Former Director, Indian Institute of Packaging, Dr. K. U. Methkar, Deputy Director, FSSAI Western, Mumbai, Dr. N. J. Thakor, Former Dean, Faculty of Agricultural Engineering, Dr. BSKKV, Dapoli, Dr. Sharangouda Hiregoudar, Associate Professor and Head, Centre for Nanotechnology, CAE, UAS, Raichur, Dr. Ashish K. Singh, Principal Scientist, Dairy Technology Division, NDRI, Karnal, Dr. Prakash Aute, Zonal Head, Fresh Product Division, GCMMF Ltd., Mumbai and Mr. Santosh Karale, Proprietor, Nihira Food Engineering LLP, PCNTDA, Pune were the resource persons for this training programme. The training course included twenty technical sessions viz., Food safety and international food safety standards for food industries, Cold chain management of food materials, Smart handling and storage of food grains, Advances in smart processing of dairy and milk product, Smart food processing and FSSAI, Application of nanotechnology in food and agriculture, Advances in dairy processing and marketing, Recent advances in smart food packaging, Entrepreneurship development opportunities based on ICAR-CIAE, Bhopal technologies, Innovative smart packaging for food products, Recent advances of agriculture for food, feed and energy, Microwave assisted and pressure assisted thermal processing and packaging consideration, Smart modular food processing units, Advance e-platforms for marketing in food processing industries, Advances in oil extraction technologies, Microencapsulation of bioactive food ingredients, Application of nanotechnology in smart food processing, How to set up the food processing industry?, Advances in biobased biodegradable packaging for horticultural produce and Opportunities and challenges of food products export from India.

Dr. Chindi Vasudevappa, Vice Chancellor, National Institute of Food Technology Entrepreneurship and Management (NIFTEM), Haryana was the key note speaker for the inaugural programme. Dr. K. K. Singh, Member, NRM, ASRB, Dept. of Agricultural Research and Education, Ministry of Agriculture and Farmers
Welfare, GOI, New Delhi was the chief guest. Vice Chancellor Dr. K. P. Viswanatha presided over the inaugural function. Dr. Vasudevappa spoke on the topic Opportunities and new technologies developed in food processing industries. Dr. Singh mentioned the importance of smart technologies in food processing. Dr. Viswanatha elaborated the importance of smart food processing technologies.

Shri. Subhash Desai, Hon'ble Minister for Industries, Mining and Marathi Language, Government of Maharashtra was the chief guest for the valedictory programme. Vice Chancellor Dr. K. P. Viswanatha chaired the programme. Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. S. R. Gadakh, Director of Research and Extension Education, Dr. D. D. Pawar, Associate Dean, Dr. A. S. College of Agril. Engg. and Technology, Convener Dr. S. D. Gorantiwar PI, CAAST-CSAWM and Co-Convener Dr. M. G. Shinde, CO-PI, CAAST-CSAWM were present on this occasion. Shri. Desai in his address put forth the policy of the State Government on food processing aspects. He further highlighted the scope and future of food industries and opportunities for rural youth in food processing sector. Dr. Viswanatha welcomed the chief guest and stated the importance of processing technologies. Dr. Pharande introduced the chief guest. Dr. Pawar extended the vote of thanks. Dr. V.P. Kad, Associate Professor (APE) and Member, CAAST-CSAWM was the organizing secretary and Dr. G.B. Yenge, Assistant Professor (APE) was the joint organizing secretary of the training program. Research Associates Er. K. S. Borse (WREM), Dr. V. S. Malunjkar (SWCE), Er. M. A. Tamboli (Comp. Appl.) and Dr. N. J. Deshmukh (PP) were the training co-ordinators. Total 460 participants were benefitted from this online training programme.

Expert lecture organized on the occasion of World Environment Day-2020

June 5, 2020. MPKV, Rahuri celebrated the World Environment Day-2020. Key note speeches of the experts were organized on this occasion through online mode by CAAST-CSAWM project. The programme started with the preamble by Dr. P. L. Kulwal, Professor, Dept. of Botany, State Level Biotechnology Centre and CAAST-CSAWM member, MPKV, Rahuri. Dr. Alok Kumar Sikka, IWMI Representative-India and Principal Researcher, International Water Management Institute, New Delhi was the Chief Guest. Vice Chancellor Dr. K. P. Viswanatha chaired the function. Dr. A. L. Pharande, Dean, Faculty of Agriculture welcomed the dignitaries. Ms. Indira Prakash delivered a lecture on Time for Nature and Ms. Shailly Kedia on Greening Post COVID-19 Economic Recovery. Dr. Sikka guided on biodiversity and its importance. Dr. Viswanatha highlighted the importance of environment. Dr. S. R. Gadakh, Director of Research and Extension Education extended the vote of thanks. Research Associates Dr. N. J. Deshmukh (Plant Prot.) and Dr. S. G. Kanade (Agro. Met.) were the Programme Co-ordinators. Dr. Deshmukh anchored the programme. More than 500 participants attended the programme.
Online Webinar organized on Locusts: Myths and Reality, how to tackle?

June 9, 2020. A one day online webinar on Locusts: Myths and Reality, how to tackle if we come across? was jointly organized by the Centre for Advanced Agricultural Science and Technology for Climate Smart Agriculture and Water Management, and Department of Agricultural Entomology, MPKV, Rahuri through online mode. Dr. S. N. Puri, Former Vice Chancellor, MPKV, Rahuri and CAU, Imphal inaugurated the webinar and highlighted the important points for management of locust. Dr. S. D. Gorantiwar, Head of Agricultural Engineering and Principal Investigator, CAAST-CSAWM, MPKV, Rahuri gave preamble of the project. Dr. G. M. Patel, Head, Department of Entomology, SADU, Sardar Krishinagar, Dantiwada; Dr. Chandish Ballal, Former Director, ICAR-NBAIR, Bengaluru; Dr. A. G. Chandele, Former Associate Dean, College of Agriculture, Pune; Dr. M. V. Deshpande, Former Principal Scientist, NCL, Pune; Dr. S. S. Nakat, Technical Advisor, Kanbiosys Pvt., Ltd, Pune and Dr. G. T. Gujar, Former Head, Division of Entomology, IARI, New Delhi were the resource persons for this webinar. The webinar course included sessions on different topics as: Locust biology and Management; Ecofriendly Management of Locusts, Limitation of aerial applications of Insecticides in the management of locusts, Metarhiziu, a key for the successful control of locust menace, Biorational for the effective control of locusts and Locust research in the country. The webinar was followed with the valedictory function in which Dr. P. K. Chakrabarti, Member, Agricultural Scientist Recruitment Board, DARE, New Delhi was the Chief Guest. Vice Chancellor Dr. K. P. Viswanatha chaired the function. Dr. C. S. Patil, Head, Dept. of Agricultural Entomology, MPKV, Rahuri took review of the programme. Dr. A. L. Pharande, Dean, Faculty of Agriculture welcomed the dignitaries. Dr. Chakrabarti enlightened the function and registered the importance of locust pest and policies for the management of locust. Dr. Viswanatha said that this is the right time to educate the farmers on management aspects of locust. Dr. M. G. Shinde, Co-PI, CAAST-CSAWM extended the vote of thanks. Research Associates Dr. N. J. Deshmukh (Plant Prot.) and Dr. P. B. Kale (Biotechnology) were the Programme Co-ordinators. Dr. Deshmukh anchored the programme. About 503 participants attended this webinar.

e-training programme on Sustainable Sugarcane Production organized

June 10-12, 2020. A three day online training programme on Sustainable Sugarcane Production was jointly organized CAAST-CSAWM, MPKV, Rahuri and Vasantdada Sugar Institute, Pune. Dr. S. D. Gorantiwar, Head of Agril. Engg. and PI, CAAST-CSAWM was the convener and Dr. M. G. Shinde, Professor, Dept. of SWCE and Co-PI, CAAST-CSAWM was the co-convener of this training. Dr. B. D. Bhakare, Head, Dept. of Soil Science and Agril. Chemistry was the Organizing Secretary and Dr. Priti Deshmukh, Scientist, Vasantdada Sugar Institute, Pune was Joint Organizing Secretary of this training programme. Dr. Bhakare,
Krishibhushan Sanjiv Mane, Progressive farmer, Ashta, Sangali, Dr. B. S. Raskar, Sugarcane Specialist, Central Sugarcane Research Station, Padegaon, Satara, Mrs. Sudha Ghodke, Scientist, Dept. of Agril. Microbiology, VSI, Pune, Dr. Anil Chinchmalatpure, Head, CSSRI, Regional Research Station, Bharuch, Gujarat, Dr. Yogesh Thorat, Scientist, Indian Sugarcane Research Institute, Biological Pest control Centre, Pravaranagar and Dr. Dharmendrakumar Phalke, Assistant Professor, Dept. of Soil Science and Agril. Chemistry, College of Agriculture, Pune were the experts for this training. Experts cover all aspects of sustainable sugarcane production, integrated nutrients, pest and disease management in sugarcane, sugarcane trash management and improvement in soil organic carbon and sustainable soil health management. They highlighted the soil salinity management, irrigation and 100 tonn sugarcane production formula and also made aware the farmers, scientist and researchers about productivity of sugarcane by improving soil health and sustainable agriculture. The valedictory function was held online under the chairmanship of Vice Chancellor Dr. K. P. Viswanatha. Mr. Shivajirao Deshmukh, Director General, VSI, Pune was the chief guest and Mr. Vikas Deshmukh, Director, VSI, Pune was guest of honour. On this occasion Dr. Gorantiwar gave preamble about CAAST-CSAWM project. Dr. Bhakare took review of the training program. Dr. Viswanatha emphasized on enhancing sugarcane productivity by improving soil health through use of vermicompost and green manuring. Mr. Deshmukh expressed satisfaction about the programme which would benefit the farmers. Dr. Shinde introduced and welcomed the guests. Dr. Preeti Deshmukh expressed vote of thanks. Total 450 farmers, faculty and students from all over Maharashtra participated in this programme.

**Online training programme on Cotton Production Technology organized**

June 15-16, 2020. A two day online training programme on Climate Change and Cotton Production Technology was organized by CAAST-CSAWM and Cotton Improvement Project, MPKV, Rahuri. Dr. R. S. Wagh, Cotton Breeder, Cotton Improvement Project, MPKV, Rahuri; Dr. C. S. Patil, Head, Dept. of Agril. Entomology, MPKV, Rahuri; Dr. S. P. Gawande, Scientist, Plant Pathology Division of Crop Protection, ICAR-Central Institute for Cotton Research, Nagpur; Dr. N. K. Bhute, Assistant Entomologist, Cotton Improvement Project, MPKV, Rahuri; Dr. Dattatray Pacharne, Assistant Professor, Dept. of Agronomy, Cotton Improvement Project, MPKV, Rahuri were the resource persons for this training programme. The training included sessions on different topics like Current Status of Cotton and different Varieties, Improved Technology for Cotton Production, Integrated Pest management of Cotton, Integrated Disease Management...
of Cotton and Precautions to be taken during handling and spraying of pesticides. The training programme was followed by the valedictory programme in which Dr. Ashok Dhawan, Vice Chancellor, VNMKV, Parbhani was the Chief Guest. Dr. K. P. Viswanatha, Vice Chancellor, MPKV, Rahuri was the chairman for this programme. Dr. V. N. Waghmare, Director, Central Institute of Cotton Research, Nagpur was the Guest of Honour. Dr. A. L. Pharande, Dean, Faculty of Agriculture welcomed all the dignitaries. Dr. Dhawan enlightened the function and registered the importance of how to overcome threats in cotton production. Dr. Viswanatha guided on importance of cotton and the problems faced by the farmers in increasing cotton yield. Dr. Waghmare guided on cotton production technology. Dr. Wagh extended the vote of thanks. Research Associates Dr. N. J. Deshmukh (Plant Prot.), Dr. P. B. Kale (Biotechnology) and Er. M. A. Tamboli (Computer.) were the Programme Co-ordinators. Dr. Deshmukh anchored the programme. About 504 farmers and 44 KVK SMSs from all over Maharashtra took part in the training programme.

Online training programme on Soil and Water Conservation Interventions organized

June 22-26, 2020. A one week online training programme on Soil and Water Conservation Interventions for Climate-Smart Watershed was organized by CAAST-CSAWM, MPKV, Rahuri. Dr. S. D. Gorantiwar, Head of Agril. Engg. and PI, CAAST-CSAWM, MPKV, Rahuri and Convener of workshop briefed about importance of this workshop. Dr. M. G. Shinde, Co-PI, CAAST-CSAWM and Co-Convener welcomed the experts and participants registered for training course. Dr. A. A. Atre, Organizing Secretary gave brief introduction on different topics of Climate Smart Watershed. Dr. Akhilesh Kumar, Professor, Dr. Satishkumar, Professor SWCE, University of Agricultural Sciences, Raichur, Dr. Ushamani P., Dy. General Manager, NABARD, Maharashtra Regional Office, Pune, Er. Yugandhar Mandavkar, Trustee, GRASP, Aurangabad, Mr. Jayant Patil, Consultant, Green Earth Consultants, Er. Sachin Kamble, Asstt. General Manager, NABARD, Maharashtra Regional Office, Pune, Er. Madhav Gholkar, Senior Researcher, WOTR, Pune Dr. Sachin Nandgude, Head, Dept. of SWCE, MPKV, Rahuri, Dr. M. G. Shinde, Professor, SWCE, MPKV, Rahuri and Dr. V N. Barai, Associate Professor, SWCE, MPKV Rahuri were the experts. They covered the topics on Rainwater Harvesting for Climate Smart Watershed, Watershed Management and Climate Change, Assessment of Hydrological Water Balance of the Watershed under Semi-arid tracts of Northern Karnataka, Climate Smart Conservation Planning with Erosion Modeling: A Case Study of Climate Sensitive Konkan Region, In-Situ Soil and Water Conservation measures, Climate Change Projections in Maharashtra and Implications on Agriculture-Water, Watershed Management for Climate Change Adaptation: A Case Study of Kadwanchi Watershed Project, Climate Resilient Agriculture: A holistic approach for Sustainable Watershed Management, Initiatives of NABARD in Watershed Development and Management, Role of
NABARD for climate proofing of watersheds. The valedictory programme of this training was held in presence of Guest of Honor Mr. Kapil Shirsat (IAS), District Magistrate, Bihar. Vice Chancellor Dr. K. P. Viswanatha presided over the programme in presence of the Chief Guest Dr. R. C. Srivastava, Vice Chancellor, Dr. Rajendra Prasad Central Agricultural University, Pusa, Bihar. The training programme was coordinated by Research Associates Dr. V. S. Malunjkar (SWCE), Er. K. S. Borse (WREM) and Er. M. A. Tamboli (Comp. App.). Dr. Barai expressed thanks.

**Online training programme on Sustainable Pomegranate Cultivation organized**

May 29 to June 2, 2020. The Centre for Advanced Agricultural Science and Technology for Climate Smart Agriculture and Water Management (CAAST-CSAWM), MPKV, Rahuri had organized a one week farmers online training programme on Challenges and Remedies for Sustainable Pomegranate Cultivation under Climate Change. The expert Dr. Harihar Kausadikar, Director of Extension and Education, MCAER, Pune; Dr. Ashok Walunj, Assistant Professor, Entomologist, Dryland Fruit Crop Scheme, MPKV, Rahuri; Dr. Govind Hande, State Level Technical Advisor (Export), National Horticulture Mission, Commissionerate of Agriculture, Pune; Dr. Kiran Raghuvanshi, Associate Professor, Plant Pathologist, Lonavla, Tal. Maval, Dist. Pune; Shri. Mukesh Shukla, Export Management, Syngenta Pvt. Ltd., Ahmedabad; Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM and Head of Agril. Engineering, MPKV, Rahuri; Dr. Devdas Meshram, Senior Scientist, ICAR-NRC on Pomegranate, Solapur; Dr. Vikram Kad, Associate Professor and CAAST-CSAWM Member, Dept. of Agricultural Process Engineering, Dr. ASCAE&T, MPKV, Rahuri; Shri. Ravindra Pawar, Progressive Farmer, At.Po. Satmane, Tal. Malegaon, Dist. Nashik and Shri. Kiran Wagh, Progressive Farmer, Tal. Satana, Dist. Nashik were the resource persons for this training programme. The training course included 9 sessions on different topics like Improved Pomegranate Plantation and Bahar Management, Nutrient Management under Climate Change, Integrated Management of major pests of Pomegranate, Pomegranate export and marketing, Integrated Management of major diseases of Pomegranate, Technology for higher and sustainable production of pomegranate, Drip Irrigation for Pomegranate, Post Harvest Technology for Pomegranate and Progressive Farmers Technologies.

Dr. (Mrs.) Jyotsana Sharma, Acting Director and Principal Scientist, NRC on Pomegranate, Solapur was the Chief Guest for the valedictory programme. Vice Chancellor Dr. K. P. Viswanatha presided over the function, Shri. Prabhakar Chandane, President, Pomegranate Growers Association of India and Shri. Sivlingappa Sankh, President, Pomegranate Growers Association of Maharashtra were the Guests of Honor. Dr. A. L. Pharande, Dean, Faculty of Agriculture welcomed the dignitaries. Dr. Gorantiwar briefed about the programme. Dr. Sharma enlightened the function and registered the importance of the pomegranate. Shri. Chandane and Shri. Sankh guided on export and marketing of pomegranate. Dr. Viswanatha guided on development of tissue culture plants and its importance. Dr. T. A. Narute, Organizing Secretary and Head, Dept. of Plant Pathology and Agril Microbiology, MPKV, Rahuri extended the vote of thanks. Research
Associates Dr. N. J. Deshmukh (Plant Prot.) and Dr. Mangesh Baviskar (Horticulture) were the Programme Co-ordinators. Dr. Deshmukh anchored the programme. Total 903 farmers and 107 KVK SMSs participated in this programme.

International Yoga Day celebrated

June 21, 2020. The International Yoga Day was celebrated online in view of COVID-19 pandemic situation. Vice Chancellor Dr. K. P. Viswanatha performed various asans of yoga in his bungalow under the guidance of Yoga Teacher Mr. Suresh Shedge in the university. Dr. Viswanatha greeted the staff, students on eve of International Yoga Day and hoped that we need to regularly practice yoga and certainly we would overcome the present crisis. All the staff, students practiced yoga in their houses on this day.

Mr. Mohan Wagh appointed as Registrar of MPKV

June 5, 2020. Mr. Mohan Wagh has been appointed as the Registrar of MPKV, Rahuri by the Government of Maharashtra. He joined his duties on June 5, 2020. He already has an experience of Registrar of DrBSKKV, Dapoli. Mr. Wagh is an alumni of MPKV and College of Agriculture, Dhule. He has also an additional responsibility of District Superintendent Agricultural Officer of Akola district. Mr. Wagh has executed and implemented innovative ideas for effective transfer of agricultural technologies to the farmers in the State Department of Agriculture, M. S. His experience would benefit the university.

June 1, 2020. Dr. Milind Ahire, Head, Department of Agriculture Extension and Communication, MPKV, Rahuri has been given the additional responsibility of Associate Dean, Punyashlok Ahilyadevi Holkar College of Agriculture, Halgaon.

June 1, 2020. Dr. C. D. Deokar, Professor of Plant Pathology, College of Agriculture, Dhule, has been given the additional responsibility of Associate Dean, College of Agriculture, Dhule

Online sale of Phule onion seed evokes huge response

June 8, 2020. The online sale of Phule onion seed varieties of Phule Samarth and Basvant-780 evoked a huge response from the farmers of the state. The university under the guidance of Vice Chancellor Dr. K. P. Viswanatha and Director of Research Dr. S. R. Gadakh developed an online seed portal for sale of onion seed in view of Covid-19 pandemic situation. A total sale of 4220 kg seed worth Rs. 63 lakhs was incurred in a single day. Farmers from ten districts of Maharashtra viz., Pune, Aurangabad, Ahmednagar, Nasik, Solapur, Jalgaon, Dhule, Parbhani, Jalna and other districts purchased this seed in online mode. Dr. A. V. Solanke, Chief Scientist, Seed and all scientists from Seed cell took efforts for facilitating this process.
AICRP on Mushroom awarded with the Best Performing AICRP Centre Award

June 8-9, 2020. The AICRP on Mushroom at College of Agriculture, Pune has been first time bestowed with the Best Performing AICRP Centre Award for the year 2019-20 during the virtual Annual Workshop (2019-20) held under the chairmanship of Dr. Trilochan Mohapatra, Hon’ble Secretary, DARE and Director General, ICAR, New Delhi. The workshop had the auspicious presence of Dr. A. K. Singh, DDG (HS), ICAR, New Delhi, Dr. T. Janakiram, ADG, ICAR, New Delhi and Dr. V. P. Sharma, Director and Project Coordinator, ICAR-Directorate of Mushroom Research (DMR), Solan, and H. P. Vice Chancellor Dr. K. P. Viswanatha and Directors Dr. A. L. Pharande and Dr. S. R. Gadakh, Associate Dean Dr. G. N. Khot congratulated the AICRP on Mushroom team for this achievement.

ICAR FFP farmers earn more from chickpea seed production

June 2, 2020. The university is implementing the ICAR Farmer FIRST programme in Chinchvihire and Kangar villages of Ahmednagar district. The Integrated Farming System model is being focused through this project. Crop demonstrations of chickpea production technology (Var. Phule Vikram) on 50 acre area were implemented through this project in these two villages during the rabi season 2019-20. Around 15 farmer participants were involved in the chickpea seed production programme of Seed Hub project of AICRP on Pulses Improvement Project of MPKV, Rahuri. A complete technology package including variety seed replacement, seed treatment with biofertilizers (Rhizobium, PSB), integrated nutrient management, interculturing and integrated pest and disease management and guidelines for seed production was given to the farmers through training programme. Foundation seed was provided to the farmers along with regular field visits by university scientists. A total seed production of 75 qtl. worth income of Rs. 3,90,000/- was generated for the farmers. Thus, an additional income of Rs. 26,000/- was harvested by each farmer (purchase rate of Rs. 5200 per qtl.) which is more than the market price. This seed is sufficient for horizontal expansion of Phule Vikram chickpea variety on 107 ha area.

Online workshop on Production Mechanization Systems and Way Forward held

June 8, 2020. An online workshop on Challenges posed by COVID-19 Pandemic on Production Mechanization Systems and the Way Forward during COVID-19 and Post COVID-19 Period was organized by the ICAR-Central Institute of Agricultural Engineering, Bhopal under the chairmanship of Dr. K. Alagusundaram, Deputy Director General (Engg.), ICAR, New Delhi. Dr. Kanchan K. Singh, ADG (Farm Engg.), ICAR, New Delhi and Dr. S. N. Jha, ADG (Process Engg.), ICAR, New Delhi co-chaired the workshop. Dr. V. K. Tewari, Director, IIT, Kharagpur was present for the workshop. In this workshop there were zonewise presentations. The workshop started with presentation of Dr. C. R. Mehta, Director, CIAE, Bhopal in which he presented the national perspective and described the impact of crisis due to COVID-19 pandemic over agricultural mechanization in India. Dr. Tulshidas
Bastewad, Professor and Principal Investigator, AICRP on Farm Implements and Machinery, MPKV, Rahuri presented the cropping pattern and the improved technologies developed by MPKV, Rahuri as well as commercially available for the farmers based on cropping pattern, soil type, agro climatic zone and need of the farmers to overcome the issue of labour scarcity particularly in western region. Total 127 participants from entire nation participated in the workshop. Dr. D. D. Pawar, Associate Dean, DrASCAE&T, Dr. S. M. Nalawade, Head, Dept. of Farm Machinery and Power Engg., Prof. V. D. Deshmukh, Assistant Professor, Prof. M. M. Pacharne, Assistant Professor, Er. R. K. Rathod, Senior Research Assistant (Agril. Engg.), MPKV, Rahuri participated in the workshop.

**Online Annual Review Workshop of ICAR Farmer FIRST programme held**

June 17-18, 2020. The online Annual Review Workshop of ICAR Farmer FIRST programme for the year 2019-20 was organized in virtual mode due to the present Covid-19 pandemic situation. The workshop was held under the chairmanship of Dr. Trilochan Mohapatra, Hon'ble Secretary, DARE and Director General, ICAR, New Delhi. Dr. A. K. Singh, DDG (AE), ICAR, New Delhi, Vice Chancellors of SAUs, Directors of ICAR institutes, Dr. V. P. Chahal, ADG (AE), ICAR, New Delhi, Directors of ATARI from all over the country, Directors of Extension Education of SAUs were present online for this workshop. Presentations of 52 ICAR FFP centres across the country were conducted during the two day workshop. Dr. P. B. Kharde, PI, ICAR FFP of MPKV, Rahuri presented the progress of the university project which was appreciated by the dignitaries.

**Online training programme on Kharif Crop Management organized under ICAR FFP**

June 26, 2020. An online training programme on Kharif Crop Management was organized under the ICAR Farmer FIRST programme in coordination with Department of Agriculture. Dr. S. R. Gadakh, Director of Research and Extension Education chaired the programme. Dr. Lakhan Singh, Director, ICAR-ATARI, Pune, Shri. Mahendra Thokle, Taluka Agriculture Officer, Rahuri, Dr. P. B. Kharde, Officer Incharge, Communication Centre and PI, ICAR FFP and Co-PIs Dr. Sanjay Mandakmale, Dr. Ulhas Surve, Dr. B. A. Deshmukh and Dr. S. S. Sadaphal were present on this occasion. Dr. Gadakh in his presidential address said that there is a satisfactory start of monsoon this year and we need to harvest its benefit. The farmers need to implement technologies like seed treatment, proper depth of sowing, plant population, fertilizer management and plant protection for enhancing crop production. Dr. Lakhan Singh expected that farmers need to get the knowhow of agricultural technologies through training programmes. He expressed satisfaction on the progress of MPKV's ICAR FFP. Shri. Thokle assured positive collaboration for the project. Dr. Kharde at the outset presented the activities of ICAR FFP.
and said that the kharif crops demonstrations have been planned on 150 acre area in the ensuing kharif season. Dr. M. P. Deshmukh, Soybean Breeder, ARS, Kasbe Digras guided the farmers on soybean production technology. Dr. N. S. Kute, Senior Scientist, AICRP on Pulses presented the red gram production technology and Dr. R. T. Suryavanshi, Assistant Professor, Bajra Research Project, College of Agriculture, Dhule guided on bajra production technology. Dr. Sadaphal anchored the programme, while, Dr. Deshmukh expressed thanks. Around fifty farmers were present for the online training programme. Shri. Vijay Shedge, SRF and Field Assistants Shri. Kiran Magar and Shri. Rahul Korhale took efforts in organizing the programme.

**NCC Commanding Officer Colonel Jeevan Zhende visited MPKV**

June 15, 2020. The NCC Commanding Officer Colonel Jeevan Zhende visited MPKV, Rahuri. He said that the NCC Headquarters had organized an online training programme on awareness of COVID 19 for NCC cadets in virtual mode. He said that the NCC cadets were made aware of the Coronavirus disease (COVID-19) pandemic and the prevailing situation. They were trained on safety measures, hygiene and health measures to be followed during this period. Colonel Zhende said that the NCC cadets are well equipped for such situation since they are disciplined and cooperative in nature. They will help to make people aware of this pandemic and it would benefit the rural masses. The NCC would certainly contribute towards it, he said. He had discussion with Dr. D. D. Pawar, Associate Dean, DrASCAE&T, MPKV, Rahuri. Dr. Sachin Nandgude, Head, Department of SWC, Prof. Sunil Fulsawange, NCC Officer, MPKV, Rahuri were present on this occasion.