



MPKV HAPPENINGS

April 2020

The Centre for Advanced Agricultural Science and Technology (CAAST) on Climate Smart Agriculture and Water Management (CSAWM), MPKV, Rahuri had organized various needbased 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 eTraining programmes.

eTraining programme on Aeroponics and Hydroponics Technologies organized



April 25-29, 2020. A one week online training programme on Aeroponics and Hydroponics Technologies for Precision Agriculture was organized by the Centre for Advanced Agricultural Science and Technology (CAAST) on Climate Smart Agriculture and Water Management (CSAWM), MPKV, Rahuri. Mr. K. Prabhu Sankar, CEO, IAC Krishitech, Pvt. Ltd., Coimbatore; Mr. B. Vijay Mohan, CEO, Neoponics Projects India Pvt. Ltd., Coimbatore; Mr. R. Parthiban, Team leader, IT Developments, IAC Krishitech Pvt. Ltd., Coimbatore; Mr. Rahul Mhaskar, Director, Techxellance Agrotech Pvt. Ltd., Mumbai; Mr. Akash Parekh, Director, Techxellance Agrotech Pvt. Ltd., Mumbai; Mr. Sagar Waghmare, Assistant Professor, Dept. of Civil Engg., Mr. S. G. Balkundri, Institute of Technology, Belgavi; Er. Shyam Bhadane, Chief Grower, Hopfenbauer Farms Pvt, Ltd., Pune were the resource persons for this eTraining. The training covered different aspects of Aeroponics in four sessions viz., Session I-Fundamentals of Aeroponics; Session II-Aeroponics cultivation; Session III-Aeroponics farms; Session IV-Automated Aeroponics and its sensitivity; and Session V-IoT and AI driven Aeroponics farms, whereas, the sessions on Hydroponics



included Session I- Hydroponics Technology, Introduction, hydroponics vs. soil farming and different Hydroponics growing systems; Session II-Hydroponics plant growth requirements, water and nutrient managements; Session III-Overview of Commercial Hydroponics and its cost economics; Session IV-Hydroponics for Strawberry and Hops. All the speakers covered the practical aspects of the

Aeroponics and hydroponics, its importance, cultivation practices, design, automation, marketing of the produce, cost economics etc.

Mr. Kailash Chaudhary, Hon'ble Minister of State for Agriculture and Farmers Welfare, Govt. of India, New Delhi was the Chief Guest for the online valedictory function. Vice Chancellor Dr. K. P. Viswanatha presided over the function. Dr. Amol Shinde, Additional Private Secretary to Union Minister of State for Agriculture, New Delhi was the guest of honour. The function also had special presence of Dr. A. L. Pharande, Dean, Faculty of Agriculture and Dr. S. R. Gadakh, Director of Research and Extension Education. Hon'ble Minister Mr. Kailash Chaudhary in his address narrated the demands of the huge population, need of high production from agriculture and need of advanced technologies like Aeroponics and hydroponics in this direction. He appreciated the involvement of the scientists, researchers, youth and farmers in increasing the produce and production of the Indian agriculture. Due to their efforts India reduced its imports in foodgrains, he said. In his presidential address Vice Chancellor Dr. Viswanatha said that the advanced technologies in agriculture are essential for high produce and for maximizing outcomes. He briefed about the university efforts in reaching farmers through online training programmes. Dr. Shinde suggested to organize similar training for farmers and Farmers Producer Organizations. Dr. S. D. Gorantiwar, Head, Department of Agricultural Engineering and PI, CAAST-CSAWM, MPKV, Rahuri at the outset gave the preamble. Dr. Pharande welcomed all the dignitaries and gave introductory remarks. Dr. Gadakh narrated the importance of the Aeroponics and Hydroponics technologies in precision agriculture.. Dr. U. S. Surve, Co-Convenor and Member of CAAST-CSAWM extended the vote of thanks. Dr. M. A. Patil, Research Associate (IDE), Dr. M. N. Baviskar, Research Associate (Hort.) and Er. Mohasin Tamboli, Research Associate (CS&E), CAAST-CSAWM, MPKV, Rahuri were the Programme Coordinators. Dr. M. G. Shinde, Co-PI, CAAST-CSAWM anchored the programme.

Online training programme on Protected Cultivation Technologies for Climate Smart Agriculture



April 21-28, 2020. A one week online training programme on Protected Cultivation Technologies for Climate Smart Agriculture was organized by the Centre for Advanced Agricultural Science and Technology (CAAST) on Climate Smart Agriculture and Water Management (CSAWM), MPKV, Rahuri. This training was attended by 230 participants. The training was divided into 17 sessions on different topics related to protected cultivation viz., Polyhouse cultivation technology: Concepts, importance, types of structures and selection criteria, site selection, care to be taken during erection, feasibility of technology in Indian context, Controlling climate in Protected structures, media, bed preparation and soil sterilisation, different cladding

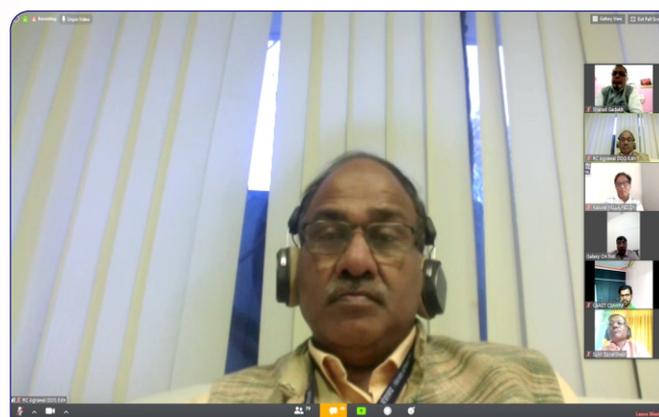


materials, Automation for climate control, irrigation and fertigation, Irrigation and Nutrient management, General plant physiology for protected cultivation, Crop selection and cultivation of exotic vegetables and flowers, Cultivation of flowers under protected conditions, Pest and Disease Management in polyhouse, Plant protection, Marketing of polyhouse and shadenet house produce, Net house utility as a low cost technology and subsidy guideline, Government

Schemes and documentation process for erection of protected cultivation structures, plastic mulching, the concept, types and science behind it, Strength, opportunities and future of protected cultivation in India including one live practical demonstration session on farmer's field. During this training course participants developed an overall understanding of protected cultivation structures (Polyhouse and Shade net house), climate control systems in protected cultivation, planning and maintaining the crops, irrigation and fertigation, automation in polyhouse, soil media, plant protection inside polyhouse and shade net house. Participants were well acquainted with marketing strategies, different policies, government schemes, subsidies and guidelines for protected cultivation structure. For this two week training course eminent experts from Protected Cultivation Industry were invited to deliver lectures.

This two weeks training was followed by online valedictory function in which Dr. Ashok Dalwai, Chief Executive Officer, National Rainfed Area Authority, Ministry of Agriculture and Farmers Welfare, Government of India was the Chief Guest. Vice Chancellor Dr. K. P. Viswanatha chaired the programme. The Guests of Honour were Mr. Nevil Alphonso, Director of Agriculture, Govt. of Goa and Dr. K V. Prasad, Director, ICAR-Directorate of Floricultural Research, Pune. Dr. A. L. Pharande, Dean, Faculty of Agriculture and Dr. S. R. Gadakh, Director of Research and Extension Education were also present. Dr. M.G. Shinde, Co-PI, CAAST-CSAWM gave preamble at the start of the function. Later, Dr. S. D. Gorantiwar, Head, Department of Agricultural Engineering and PI, CAAST-CSAWM gave the review of the training programme.

One week online eTraining programme on Digital Farming in Context of Precision Water Management organized



April 9-11, 2020. A one week online training course on Digital Farming in Context of Precision Water Management was organized by the Centre for Advanced Agricultural Science and Technology

(CAAST) on Climate Smart Agriculture and Water Management (CSAWM), MPKV, Rahuri in an online mode through Zoom video conferencing application. Er. Tushar Karande, Manager, Digital Farming Solutions, Netafim Irrigation India Pvt. Ltd., Pune was the resource person for this training course. Hundred eligible candidates were selected for the training from 732 registered candidates from MPKV, Rahuri and other agricultural universities. The training course included seven sessions on different themes as: Theme I- Introductions to Digital Farming; Theme II-Basics of Digital Farming in Irrigation and Fertigation; Theme III- Controllers for digital farming; Theme IV-Dosing Machines and fertigation units; Theme V-Different Sensors; Theme VI-Software for digital farming and Theme VII-Accessories required digital farming. eTraining was started with the preamble by Dr. S D. Gorantiwar, Head, Department of Agricultural Engineering and Principal Investigator, CAAST-CSAWM. At the end of each session, there were interaction sessions either directly or through chat box and online quiz and assignments. The key takeaway of all the lectures was delivered by Er. Tushar Karande where he highlighted that the digital farming is the need of the present agriculture and allows complete automation of the irrigation and fertigation process providing all the benefits of automation.

The training programme was followed with the valedictory function in which Dr. R. C. Agrawal, National Director, NAHEP and DDG (Edn.), ICAR, New Delhi was the Chief Guest. Vice Chancellor Dr. K. P. Viswanatha presided over the online function and Dr. Prabhat Kumar, National Coordinator, CAAST-NAHEP, ICAR, New Delhi was the Guest of Honour. Dr. A. L. Pharande, Dean, Faculty of Agriculture welcomed all the dignitaries. Dr. Agarwal enlightened the function and registered the importance of the digital farming for precision water management. Dr. Prabhat Kumar stated the global scenario of the digital farming and its importance. Dr. Viswanatha shared the microscale management of the precision water management and the efforts taken by the university for their farmers by developing different technologies. Dr. M. G. Shinde, Co-PI, CAAST-CSAWM extended the vote of thanks. Dr. M. A. Patil, Research Associate (IDE) and Dr. M. N. Baviskar, Research Associate (Hort.), CAAST-CSAWM were the Programme Co-ordinators. Dr. M. A. Patil anchored the programme.

Online e-Training programme on e-Resources of Libraries and Publication Ethics



April 20-24, 2020. A one week online training programme on e- Resources of Libraries and Publication Ethics organized by the Centre for Advanced Agricultural Science and Technology (CAAST) on Climate Smart Agriculture and Water Management (CSAWM), MPKV, Rahuri. Prof. Dattatray Sankpal, Librarian, Annasaheb Waghire College, Saswad, Dr. Ravi Kumar, University Librarian, PJTAU, Hyderabad, Dr. Muthamilarasan

M., Assistant Prof., Dept. of Plant Sciences, University of Hyderabad, Mr. Vivian Thomas, Former faculty, COA, Pune, Dr. Santosh Kharat, Librarian, PUMBA, Savitribai Phule Pune University, Prof. Vikrant Kelkar, Faculty, PUMBA, Savitribai Phule Pune University were the resource persons for this training programme. The CAAST-CSAWM had selected 230 eligible candidates for the training from 897 registered candidates from MPKV, Rahuri and other agricultural universities. The training course included six sessions on different

topics as: Topic I-Openly Available e-Resources; Topic II-Useful e-Resource of Agriculture Sciences; Topic III-Publishing in Sciences : Strategies and Tactics; Topic IV-How to write scientific research papers; Topic V-Plagiarism and Academic Integrity; Topic VI-Intellectual property rights. e-Training was started with the preamble by Dr. S.D. Gorantiwar, Head, Department of Agricultural Engineering and PI, CAAST-CSAWM, MPKV, Rahuri.

In the concluding online programme Dr. Chandra Shekara, Director General, CCS National Institute of Agril. Marketing, Jaipur was the Chief Guest. Vice Chancellor Dr. K. P. Viswanatha presided over the programme. Dr. K. Veeranjanyulu, Librarian and Head, NIT, Warangal and Former University Librarian & PPJTS Professor, Hyderabad, was the Guest of Honour. Dr. A. L. Pharande, Dean, Faculty of Agriculture welcomed all the dignitaries. Dr. Chandra Shekara enlightened the trainees and registered the importance of the e-resources and publication. Dr. K. Veeranjanyulu guided on how to publish scientific papers and their importance, whereas, Dr. Viswanatha guided on scientific writing and importance of e-Resources. Dr. M. G. Shinde, Co-PI, CAAST-CSAWM proposed the vote of thanks. Dr. N. J. Deshmukh, Research Associate (Plant Prot.) and Er. M. A. Tamboli, Research Associate (Computer.), CAAST-CSAWM were the Programme Coordinators.

Online training programme on Personality Development organized



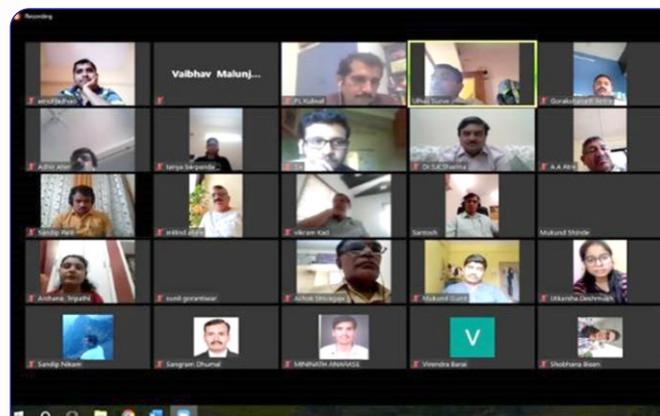
April 14-18, 2020. A one week online training course on Personality development, effective communication skills and stress management was organized by the Centre for Advanced Agricultural Science and Technology (CAAST) on Climate Smart Agriculture and Water Management (CSAWM), MPKV, Rahuri. The inaugural function was organized in presence of Dr. K. D. Kokate, Former DDG (Agril. Extension), ICAR, New Delhi and

former Director of Extension Education, MPKV, Rahuri. He gave the presidential remarks and briefed the importance of personality development and communication skills and stress management. Dr. A. K. Singh, Deputy Director General, (Agril. Extension), ICAR, New Delhi was the Chief Guest for valedictory function. He stressed the importance of communication skills and stress management for positive environment and the necessity to communicate with farmers during the contingency situation.

The Chairman of the valedictory programme Vice Chancellor Dr. K. P. Viswanatha said that the University is making efforts to educate the farmers through online training programmes. Dr. A. L. Pharande, Dean, Faculty of Agriculture and Dr. S. R. Gadakh, Director of Research and Extension Education also guided the trainees. Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM was the Convener, while, Dr. M. G. Shinde, Co-Principal Investigator, CAAST-CSAWM was the Co-Convener of the training programme. Dr. M. C. Ahire, Member CAAST and Associate Dean, College of Agriculture, Dhule was organizing secretary of the training programme. The expert Mr. Thomas Vivian delivered lecture on communication skills and personality development, Prof. Subhas Randive on stress management, Mr. Sushil Dhanawde on communication in times of uncertainty, Dr. Shashikant Khalane on interpersonal

communication and emotional intelligence, Mrs. Sumita Chavare on strategies for stress management. Total 600 participants participated in the training programme. The overall training programme was coordinated by Dr. S. N. Ghadge and Dr. S. A. Dhenge, Research Associates, CAAST-CSAWM, MPKV, Rahuri.

One week online training programme on Digital Marketing organized



April 7-11, 2020. A one week online training course on Fundamentals of Digital Marketing was organized by the Centre for Advanced Agricultural Science and Technology (CAAST) on Climate Smart Agriculture and Water Management (CSAWM), Mahatma Phule Krishi Vidyapeeth (MPKV), Rahuri, Maharashtra. This training program aimed to develop an overall understanding of digital marketing in particular, social media tools, search engine marketing, mobile marketing, email marketing, digital display marketing etc. for agriculturebased organizations. The training course was organised in an online mode through Zoom video conferencing application. Mr. Swapnil Kharde, Consultant (Digital Marketing), and Assistant Professor, IMERT, Pune, Mr. Purvish Diwanji, Director, Sahyadri Agro (Retails), Nashik and Mr. Gaurav Vats, Head, Indian Society of Agribusiness Professionals, New Delhi were the resource persons invited for this training course. The CAAST-CSAWM had selected 61 eligible candidates for the training from 200 registered candidates from MPKV, Rahuri and other Agricultural Universities. The training course included 8 sessions viz., Introduction of Digital Marketing, WhatsApp Business, Email Marketing, Role of Digital Marketing in Agribusiness, Google My Business and YouTube Channel, Use of Digital Marketing in Sahyadri Farmers Producer Company, Digital graphic design (canva) and Social Media Marketing (Face Book). The training course was started with the preamble by Dr. S D. Gorantiwar, Head, Department of Agricultural Engineering and Principal Investigator, CAAST-CSAWM, MPKV, Rahuri. At the end of each session, there were interaction sessions either directly or through chat box and online quiz and assignments. Vice Chancellor Dr. K. P. Viswanatha presided over the valedictory function in online mode. Dr. M. G. Shinde, Co-Principal Investigator, CAAST-CSAWM extended the vote of thanks. Dr. V. S. Malunjkar and Er. M. A. Tamboli, Research Associate (Comp. App.) were the Programme Coordinators.

Training programme on Fuzzy Logic and its applications for Climate Smart Agriculture organized through online mode

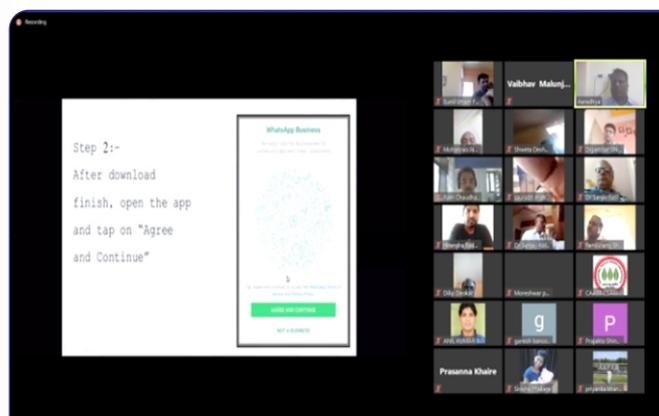
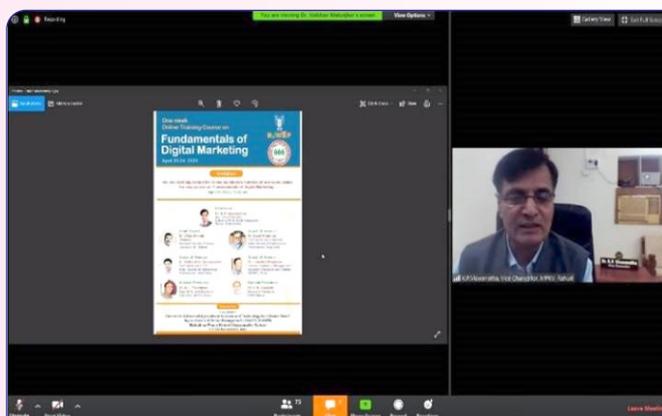
April 16-19, 2020. A online training course on Fuzzy Logic and its applications for Climate Smart Agriculture was organized by the Centre for Advanced Agricultural Science and Technology (CAAST) on Climate Smart Agriculture and Water Management (CSAWM), MPKV, Rahuri. Dr. T. Venkatesh, Director, Mathematical Science Institute, Belgavi, Karnataka, Dr. D.G. Regulwar, Professor, Dept. of Civil



Engineering, Govt. Engg. College, Avasari, Dist. Pune, Mr. Suraj Gawande, Sr. Application Engineer, Design Tech Pvt. Ltd. Pune, and Mr. Akhilesh Kumar, Assistant Manager Technical Support, Design Tech Pvt. Ltd. Pune were the resource persons for this training course. The CAAST-CSAWM has selected 104 eligible candidates for the training from 1208 registered candidates from MPKV, Rahuri and other agricultural universities. The training course included five sessions viz., Introduction to Fuzzy Logic, Mathematics for Fuzzy logic, Fuzzy Logic with Mat lab, Implementation of Fuzzy logic using Mat Lab and Simulink and Fuzzy Mathematical Programming for optimal Multipurpose Multireservoir operation. The training was started with the preamble by Dr. S. D. Gorantiwar, Head, Department of Agricultural Engineering and Principal Investigator, CAAST-CSAWM, MPKV, Rahuri.

Dr. Manikrao Salunkhe, Vice Chancellor, Bharati Vidhyapeeth (Deemed to be University), Pune was the Chief Guest for valedictory function. Vice Chancellor Dr. K. P. Viswanatha presided over the online function. Dr. Salunkhe enlightened the applicability of fuzzy in agriculture, whereas, Dr. Viswanatha shared his views on use of fuzzy in agriculture. Dr. A. L. Pharande, Dean, Faculty of Agriculture welcomed all the dignitaries. Dr. M. G. Shinde, Co-Principal Investigator, CAAST-CSAWM extended vote of thanks. Er. K. S. Borse, Research Associate (WREM), Dr. V.S. Malunjar, Research Associate (SWCE) and Er. M. A. Tamboli, Research Associate (Comp. Appl.) CAAST-CSAWM were the training coordinators.

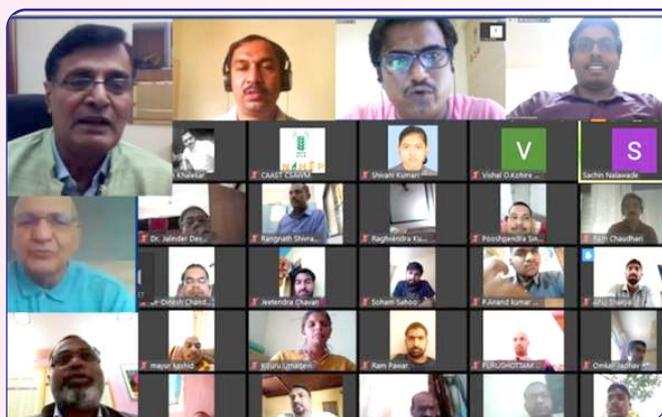
Online training programme on Digital Marketing organized



April 20-24, 2020. A online training programme on Fundamentals of Digital Marketing was organized by the Centre for Advanced Agricultural Science and Technology (CAAST) on Climate Smart Agriculture and Water Management (CSAWM), MPKV, Rahuri. The training program aimed to develop an overall understanding of digital marketing in particular, social media tools, search engine marketing, mobile marketing, email marketing, digital display marketing etc. for agriculturebased organizations. The training

course was organised in an online mode through Zoom video conferencing application. The participants included PG students, scholars and faculties from various parts of the country as well as one faculty from the USA. Mr. Swapnil Kharde, Consultant (Digital Marketing), and Assistant Professor, IMERT, Pune, Dr. Jitendra Bhandari, Director, Institute of Management, Education, Research and Training (IMERT), Pune, Dr. Vinod Mohite, DLF Marketing, IMERT, Pune, Mr. Purvish Diwanji, Director, Sahyadri Agro (Retail), Nashik, Mr. Gaurav Vats, Head, Indian Society of Agribusiness Professionals, New Delhi, Mr. Vijaykumar Pharande, Regional Manager, Yes Bank, Pune and Mr. Vijay Kadam, Srarks Electronics Mfg Pvt Ltd., Rahata, Ahmednagar were the resource persons invited for this training course. The CAAST-CSAWM had selected 71 eligible candidates for the training from 200 registered candidates from MPKV, Rahuri and other Agricultural Universities. The training course included nine sessions viz., Introduction of Digital Marketing, Role of Digital Marketing in Agribusiness, Facebook Marketplace, Role of Digital Marketing in Sahyadri Agro (Retail), Whatsapp Business, Digital Marketing technology in banking sector, Email Marketing, Use of Digital Technology in the development of Rural Entrepreneurship with special reference to Import and Export and Social Media Marketing. The training course was started with the preamble by Dr. S. D. Gorantiwar, Head, Department of Agricultural Engineering and PI, CAAST-CSAWM, MPKV, Rahuri. Vice Chancellor Dr. K. P. Viswanatha chaired the valedictory online programme. Er. Vilas Shinde, Chairman, Sahyadri Farmers Producer Company Ltd., Nashik was the chief guest. Dr. M. G. Shinde, Co-PI, CAAST-CSAWM extended the vote of thanks. Dr. V.S. Malunekar, Er. K.S. Borse and Er. M.A. Tamboli, Research Associate (Comp. App.) were the Programme Coordinators.

e Training programme on Fundamentals of Drone Technology for Precision Agriculture



April 25-30, 2020. A one week online e-training programme on Fundamentals of Drone Technology for Precision Agriculture was organized by the Centre for Advanced Agricultural Science and Technology (CAAST) on Climate Smart Agriculture and Water Management (CSAWM), MPKV, Rahuri. Mr. Swanand Ghudhate, Deputy General Manager, Precision farming, Mahindra and Mahindra Pvt. Ltd., Mumbai, Mr. Tushar Bidave, Manager, Industrial Automation,

Idea Forge, Mumbai, Mr. Ajit Kharjul, Director, ASAP Agritech Pvt. Ltd., Nashik, Ms. Sindhu Ramesh, Product Incharge, Sinsil International Pvt. Ltd., Mumbai, Mr. Krishnamoorthy Ramesh, Application Support, Sinsil International Pvt. Ltd., Mumbai and Mr. Sasanka Madawalagama, Geo Informatics Center, AIT, Bangkok were the resource persons for this e-training course. Total 620 participants participated in the programme. The training course included nine sessions, out of which series of five sessions were conducted by Mr. Swanand Ghudhate on different topics like introduction to drones, dynamics of aerial system, different types of drone mountable sensors for precision agriculture, application of drones in precision agriculture and drone regulation in India. This series of session covered basics of drone technology and its application in agriculture. Mr. Tushar Bidave delivered an informative session on status of drone industry in India with application of drones in different industries. Mr. Ajit Kharjul conducted practical session on introduction to different components and assembly of drones. The practical application of airborne sensors and advanced

sensors for agriculture was covered by Ms. Sindhu Ramesh and Mr. Krishnamoorthy Ramesh. Mr. Sasanka Madawalagma elaborated the UAV (drone) remote sensing for agriculture and how to make the technology affordable by presenting the case study of AIT, Bangkok.

During the online valedictory programme Dr. S. D. Gorantiwar, Head, Department of Agricultural Engineering and PI, CAAST-CSAWM gave the preamble of the training programme. Dr. V. M. Mayande, former Vice Chancellor, DrPKV, Akola was the Chief Guest, while, the university Vice Chancellor Dr. K. P. Viswanatha presided over the programme. Dr. V. M. Mayande said that drone can be part of custom hiring centre in the next coming few years working on the farmers field. Dr. Viswanatha enlightened the use of drone



technology to increase mechanization in Indian agriculture. Dr. S. R. Gadakh, Director of Research and Extension Education noted that drones can be used for accurately assessing crop losses in various disasters so that farmers can benefit from insurance. Dr S. M. Nalawade gave the background and review of one week online training programme. Dr. M. G. Shinde, Co-PI, CAAST-CSAWM extended the vote of thanks. Dr. Girishkumar Bhanage, Research Associate (FMPE) and Er. Yogesh Dighe,

Research Associate (Mech. Engg.) and Er. Mohasin Tamboli, Research Associate (Computer Application) CAAST-CSAWM were the Programme Coordinators.

Online training course on Introduction to MATLAB and its applications in Climate Smart Agriculture organized



April 25-30, 2020. A one week online training programme on Introduction to MATLAB and its Applications in Climate Smart Agriculture was organized by the Centre for Advanced Agricultural Science and Technology (CAAST) on Climate Smart Agriculture and Water Management (CSAWM), MPKV, Rahuri. The training session was started after preamble by Prof. V. P. Patil, Associate Professor of Mathematics, PGI, MPKV, Rahuri and Organizing Secretary of e-training programme. Dr. S. D.

Gorantiwar, PI, CAAST-CSAWM was the Convener and Dr. M. G. Shinde, Co-PI, CAAST-CSAWM was the Co-Convener of the e-training programme. Dr. R. G. Regulwar, Professor, Dept. of Civil Engineering, Govt. Engineering College, Avasari, Dist. Pune, Er. Praveen Rathod, Consultant, Dream Constructions Pvt. Ltd., Ahmednagar, Mr. Suraj Gawande, Senior Application Engineer, Design Tech, Pune and Prof. V. P Patil were the resource persons for this online e-training programme. This course has helped to learn about to introduction to MATLAB along with the introduction of fuzzy logic and genetic algorithm toolboxes for their applications for climate smart agriculture. Prof. Patil delivered a lecture on Introduction to MATLAB programming: creating Row and Column vectors and creating Multidimensional arrays. Er. Praveen Rathod guided on use of different windows in MATLAB, different loops and interaction with them and also making simple models using polynomials, curve fitting and Interpolation and use of MATLAB software tool for Data analysis and Visualizations and also representing the data in MATLAB using Apps or code itself with hands-

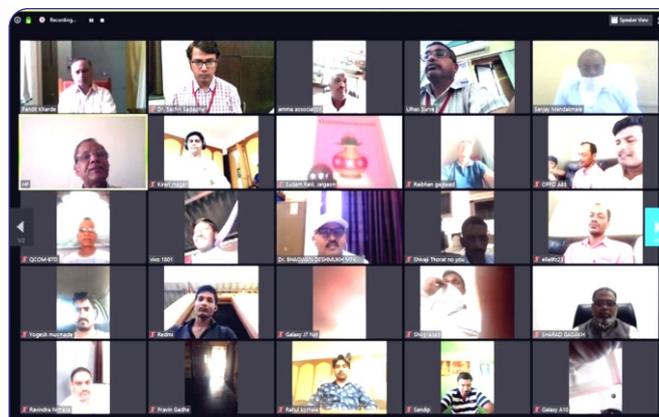
on practice. The session on Simulink and different browsers used in it with hands-on practice on simulation and creating a channel on thing speak environment was conducted by Mr. Gawande. Dr. Regulwar guided on Introduction to Fuzzy logic toolbox and Genetic Algorithm toolbox with simple examples.

Dr. Manikrao Salunkhe, Vice Chancellor, Bharati Vidyapeeth, Pune was the chief guest for the online valedictory function. Vice Chancellor Dr. K. P. Viswanatha chaired the programme. University Directors Dr. A. L. Pharande and Dr. S. R. Gadakh were also present on this occasion. Dr. S. D. Gorantiwar, PI briefed about CAAST-CSAWM project. Prof. V. P. Patil gave review on the e-training programme. Dr. Pharande welcomed the guest and gave preamble of the session. Dr. Gadakh gave his valuable remarks. The participants expressed their feedback. The on-line certificates were distributed to the participants. In his address Dr. Salunkhe highlighted the Climate Smart Agriculture as important factor to inform farmers on climate change and its measures using different mathematical tools and technologies like fuzzy logic, MATLAB and Python. Dr. Viswanatha focused on today's agriculture as complex system with physical and chemical properties. The vote of thanks was expressed by Dr. M. G. Shinde, Co-PI. This online training programme was coordinated by Er. Shraddha Warale, RA (E&TC) CAAST-CSAWM, Er. Kalpesh Borse, RA (WREM) and Er. Mohasin Tamboli, RA (Computer).

MPKV advisory on cropwise, marketing, transport, storage, post harvest technology in view of Corona situation

April 1, 2020. MPKV, Rahuri developed and issued an agro advisory on cropwise cultivation practices, marketing of agricultural produce, its transportation, storage and post harvest technology in view of Coronavirus disease (COVID-19) pandemic situation for the farmers. The advisory was circulated to the farmers groups through State Department of Agriculture via email and social media. It comprised of measures to be taken by farmers like social distancing, use of masks, washing of hands by use of soap, personal hygiene etc. while performing agricultural operations. The advisory was sent to the State Government. This advisory was prepared under the guidance of Vice Chancellor Dr. K. P. Viswanatha by Dr. S. R. Gadakh, Director of Research and Extension Education and scientists of MPKV, Rahuri.

Online training programme organized under ICAR Farmer FIRST programme



April 29, 2020. An Online training programme on “Awareness about agricultural interventions to be implemented in Coronavirus disease (COVID-19) pandemic situation by farmers and kharif planning” was organized by the Mahatma Phule Krishi Vidyapeeth, Rahuri under the ICAR Farmer FIRST programme in coordination with the State Department of Agriculture, M. S. Vice Chancellor Dr. K. P. Viswanatha presided over the programme. Dr. Lakhan Singh, Director, ICAR-ATARI, Zone-VIII, Pune, Dr. S. R. Gadakh, Director of Research and Extension Education, MPKV, Rahuri participated in the

programme. Vice Chancellor Dr. Viswanatha in his presidential address complemented the organizers for organizing this online training programme for the farmers in view of Coronavirus disease (COVID-19) pandemic situation. The farmers particularly those growing horticultural crops have been affected due to lockdown. But inspite of this situation, some of the farmers have overcome the crisis through direct marketing of farm produce through online mode. Thus, the effective use of social media could be made for meeting the marketing challenges, he said. He further called upon the farmers for maintaining social distancing, personal hygiene for combating the spread of the disease. Dr. Lakhan Singh in his inaugural address hoped that this type of online training programme in the present situation would benefit the farmers. He took an overview of the ICAR Farmer FIRST programmes being implemented in Zone-VIII and congratulated MPKV, Rahuri for this initiative. He also expected that the programme also need to concentrate on employment opportunities of rural youth who have been affected due to COVID-19 situation. Dr. Gadakh in his remarks said that the integrated farming system model is being effectively implemented through the ICAR Farmer FIRST programme. The online training programme would boost the confidence of the farmers in the present situation, he added. The university scientists Dr. U. S. Surve guided on kharif planning, Dr. S. D. Mandakmale on dairy management in COVID-19 situation and innovative young farmers Shri. Hemant Suryavanshi, Shri. Pravin Patil and Shri. Dnyaneshwar Wakchaure shared their marketing experiences (Farm to Consumer) regarding sale of grapes, poultry birds and tomato processing, respectively. At the outset Dr. P. B. Kharde, PI, ICAR FFP gave the welcome and introductory remarks. Dr. B. A. Deshmukh, CO-PI anchored the programme, while, Dr. S. S. Sadaphal, Co-PI expressed thanks. Around 50 farmers took advantage of this online training programme. Shri. V. R. Shedge, SRF and Field Assistants Shri. Kiran Magar and Shri. Rahul Korhale took efforts in organizing the programme.

One year extension to ICAR FFP from ICAR

**Farmer
FIRST**



April 1, 2020. The ICAR, New Delhi through ICAR-ATARI, Zone-VIII, Pune has communicated a one year extension to the university's ICAR Farmer FIRST programme for the year 2020-21. This programme is being implemented since 2016-17 in Chinchvihire and Kangar villages of Ahmednagar district. The university is implementing the Integrated Farming System (IFS) model for enhancing the farmers income. This comprises of cropbased module, horticulturebased module,

livestockbased module and other activities like dal mill processing for SHGs and farm pond fishery. Vice Chancellor Dr. K. P. Viswanatha, Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. S. R. Gadakh, Director of Research and Extension Education and Dr. Lakhan Singh, Director, ICAR-ATARI, Pune congratulated Dr. P. B. Kharde, PI, ICAR FFP, MPKV, Rahuri, Co-PIs and the support staff for this achievement.

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