

# Annual Report

2019-2020



**Mahatma Phule Krishi Vidyapeeth**

Rahuri - 413722, Dist. Ahmednagar (Maharashtra)

[www.mpkv.ac.in](http://www.mpkv.ac.in)



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# ANNUAL REPORT 2019 - 2020



**MAHATMA PHULE KRISHI VIDYAPEETH**

Rahuri - 413 722, Dist. Ahmednagar (Maharashtra)

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**Dr. K. P. Viswanatha**  
Vice Chancellor,  
Mahatma Phule Krishi Vidyapeeth,  
Rahuri-413 722, Dist.Ahmednagar



## FOREWORD

It is an immense pleasure to present an account of the progress of Mahatma Phule Krishi Vidyapeeth, Rahuri in all aspects viz., education, research, extension, administration, civil works, accounts, sports and games and the superb achievements of students in various competitive examinations and the accomplishments of the faculty, scientists and employees. We duly acknowledge with thanks the guidance and help of His Excellency Hon'ble Governor of Maharashtra and the Chancellor of the university, Hon'ble Minister for Agriculture and Pro-Chancellor of the university, the Director General of Indian Council of Agricultural Research, New Delhi and the Executive Council Members of the University .

During the year 5067 students have successfully completed the Undergraduate, Post-Graduate and Ph.D. degree programmes. . In all, 25 students qualified the ICAR-NET examination. Total 29 students succeeded in JRF and four students succeeded in SRF exams in year 2019. A majority of the students have secured scholarship from various agencies. Besides their academic excellence, students achieved distinction in the extra and co-curricular activities. Many students of the University have joined the Government Services through MPSC and a good number of students have joined the Private Sector. A few of them have opted for self-employment.

Out of the research work through various departments, research projects and schemes several new varieties of crops, farm implements, and technology recommendations are in process for release. Seeds and Grafts of various field crops and plantation crops were produced and distributed to the farmers. Students of the university too participated in the research activities of the university.

Mahatma Phule Krishi Vidyapeeth, Rahuri has been the most credible source of information and farm advisory for the farmers of the region. Therefore, lakhs of farmers visit the Central Campus and other Colleges and Research Stations. The faculty and the scientists of the university guide them through the laboratories and demonstrate the technologies generated by the university for their socio-economic benefit. University is implementing innovative extension programmes like Farmers FIRST of RKVY and ICAR, *Kisan Aadhar Sammelan*, Technology week etc. in MPKV jurisdiction for effective transfer of technology. Under the concept of clean and green university, a massive tree plantation programme *Vanmohotsav -2019* and *Krishidin* was organized on 8<sup>nd</sup> July, 2019. More than 50 thousand trees saplings were planted in the jurisdiction of the university in this financial year.

The Annual Report and all the efforts of the entire Mahatma Phule Krishi Vidyapeeth, Rahuri are dedicated to the farmers and the rural community.

(K.P. Viswanatha)





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## 1. Salient Achievements

Mahatma Phule Krishi Vidyapeeth, Rahuri established on 29<sup>th</sup> March, 1968 has been a center of human resource development to meet the growing demands of the state as well as the nation for trained man power specialized in Agriculture. This is one of the four Agricultural universities in the state with its jurisdiction spread over Western Maharashtra covering 10 districts, viz., Kolhapur, Sangli, Satara, Solapur, Pune, Ahmednagar, Nasik, Dhule, Jalgaon and Nandurabar.

The unique feature of this University's jurisdiction is that, it has extreme agro-climatic conditions of farming. Four out of the nine agro-climatic zones of Maharashtra fall in this region. These are Western Ghat Zone, Sub-Mountain Zone, Western Maharashtra Plain Zone and Scarcity Zone. The total geographical area distributed among the ten districts of this University is 116.12 lakh ha (37.5 percent of total geographical area of the state). Out of this, 72.45 lakh ha area is under cultivation. The total irrigated area is 13.17 lakh ha (18.17 percent). However, a large area of this University comes under drought prone zone (approx. 80.00 percent of the state). The main objective of MPKV is to co-ordinate Agril. Education, Research and Extension activities.

### 1.1 Education

Mahatma Phule Krishi Vidyapeeth is imparting education from diploma to doctoral level in the field of Agriculture and allied faculties through its constituent and affiliated schools and colleges. Some of the salient educational activities and achievements are as given below-

#### • Major Events Celebrated

- 1. Mahatma Phule Jayanti** was celebrated on April 11, 2019 at Central Campus, MPKV, Rahuri. Noted author Prof. Devidas Phulari from Nanded was the Chief Guest on this occasion. Hon'ble Vice Chancellor Dr. K. P. Viswanatha presided over the programme.
- 2. Bharatratna Dr. Babasaheb Ambedkar Jayanti** was celebrated on April 14, 2019 at Central Campus, MPKV, Rahuri. Prof. Prakash Pawar of Fergusson College, Pune was the Chief Guest for the programme. Hon'ble Vice Chancellor Dr. K. P. Viswanatha presided over the programme.
- 3. The International Day of Yoga** was observed on June 21, 2019 at various constituent and affiliated colleges under the jurisdiction of MPKV, Rahuri. At Central Campus, **Yoga Camp** was organized at university ground. More than 2500 staff, students & NSS volunteers participated. Dr. Pravin Rajaram Deshpande, Director, Arogaydham, Nisargopchar Yoga Kendra, Nashik delivered lecture on "Yoga".
- 4. Massive Tree Plantation Programme** was conducted on July 01, 2019 as **Krishidin** at all constituent colleges under the ambit of university. At Central Campus, **Vanmahotsav** was organized on July 08, 2019 under Chairmanship Hon'ble Vice Chancellor, Dr. K. P. Viswanatha.
- 5. The Blood Donation Camp** was organized with the help of Civil Surgeon, Ahmednagar on August 15, 2019 at Central Campus, Rahuri. Dr. K.P.Viswanatha, Hon'ble Vice Chancellor, MPKV, Rahuri inaugurated the Blood Donation Camp. Total 120 blood bottles donated by the students and staff of MPKV, Rahuri.
- 6. Teachers Day** was celebrated on September 05, 2019 at various constituent and affiliated colleges under the jurisdiction of MPKV, Rahuri. The event was celebrated at Central Campus. Dr. Sarjerao Nimse, Former Vice Chancellor,





Lucknow University and Swami Ramanand Teerth Vidyapeeth, Nanded University delivered the Chief Guest address.

7. **The Constitution Day** was celebrated at Central Campus MPKV, Rahuri and all the constituent colleges on November 26, 2019.
8. **Mahatma Jotiba Phule Punyatithi** was celebrated on November 22, 2019 at Central Campus MPKV, Rahuri and all the constituent colleges. At Central Campus, the Chief Guest Dr. Prahlad Lulekar, Head, Department of Marathi, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad delivered a lecture on the life of Mahatma Phule.
9. **The Birth Anniversary of Chatrapati Shivaji Maharaj** was enthusiastically celebrated on February 19, 2020 in the university. On this occasion Prof. Pradip Kadam, History Researcher and Vice Principal, Conquest College, Pimpri Chinchwad delivered a lecture on the life of King Shivaji. Hon'ble Vice Chancellor Dr. K.P. Viswanatha presided over the function.
10. Other activities *viz.*, **Republic Day, Maharashtra Din** and **International Labour Day** and **Independence Day** were celebrated.

### • Major Events Organized

1. **Soil Health Cards** prepared by the students of Experiential Learning Module of Soil and Water Clinic in the last semester of B.Sc. (Agri.) degree programme of College of Agriculture, Pune were distributed at the hands of Hon'ble Vice Chancellor Dr. Viswanatha on April 07, 2019.
2. **'Agro-Industry Meet-2019'** was organized at College of Agriculture, Pune on September 29, 2019. About 150 Agri-preneures, Businessmen and Service sector personnel have participated

in the meet.

3. **The Kharif Technology Day** was organized on October 15, 2019 at College of Agriculture, Pune. Dr. Vijay Bhatkar, Hon'ble Chancellor, Nalanda University and Inventor of Param Computer inaugurated the event. Hon'ble Vice Chancellor Dr. K. P. Viswanatha presided over the programme.
4. College of Agriculture, Regional Extension Centre and Krishi Vigyan Kendra, Dhule jointly organized the **Agriculture Technology Day** on October 31, 2019 in coordination with Department of Agriculture and ATMA, Dhule.
5. **34<sup>th</sup> Convocation** of University was held on December 05, 2019 at Central Campus, MPKV, Rahuri. **His Excellency Shri. Bhagat Singh Koshyari, Governor of Maharashtra** and Chancellor, MPKV, Rahuri presided the function.
  - **Total 5067 degrees were conferred upon students.**
  - 06 Ph.D. students and 10 M.Sc. students awarded Gold Medal in various Departments.
  - Up till the year 2019, since inception, University has produced **1, 15,349** skilled human resources.
6. The **Alumni Meet** of students passed from College of Agriculture, Dhule was organized on December 08, 2019. Hon'ble Vice Chancellor Dr. K. P. Viswanatha inaugurated the meet.
7. The **Inter Agriculture Schools Sports Competition** was organized on January 17-18, 2020 at MPKV, Rahuri.
8. The **Intercollegiate AVISHKAR Competition**



for 2019-20 was organized on January 19, 2020 at MPKV, Rahuri.

9. Alumina Association College of Agriculture, Kolhapur has organized “**Krishi Sangam-2020**” held on February 24-25, 2020 at RSCM College of Agriculture, Kolhapur Campus.

### ● **Capacity Building**

1. Under capacity building programme, **362 faculty members** and **22 students** proceeded for Winter School / Summer School / Refresher Courses, National / International Conference / Seminars / Conclave / Symposia during the year 2019-20.
2. In addition, 20 students of PG and Ph.D. programme of Faculty of Agriculture and Agril. Engineering attended International Training entitled “Drones, AI and Geo-informatics for Climate Smart Agriculture and Water Management” during October 14 to November 13, 2019 at Asian Institute of Technology, Bangkok, Thailand.

### ● **Workshops / Seminar / Trainings Organized**

1. An International Symposium on Strategizing Education and Innovations in Robotics, Drones and IoTs for Climate Smart Agriculture was organized during July 23-25, 2019 by CAAST-CSAWM Project, MPKV, Rahuri. Dr. Gajendra Singh, Former Deputy Director General (Engg.), ICAR, New Delhi inaugurated the symposium. The function was presided over by Hon’ble Vice Chancellor Dr. K. P. Viswanatha.
2. The Department of Agricultural Meteorology, Centre of Advanced Faculty Training in Agricultural Meteorology (CAFT), College of Agriculture, Pune had organized a National

Training Programme on Recent Advances in Crop Micrometeorology during September 17 to October 7, 2019 which was sponsored by ICAR, New Delhi.

3. A Consultative Workshop on Academia-Industry-Government Linkages for Quality Agricultural Higher Education was organized during September 23-24, 2019 at MPKV, Rahuri in collaboration with NAARM, Hyderabad.
4. The Department of Horticulture conducted CAFT Training on “National Problems and Prospects in Fruit Crops” from November 14 to December 04, 2019 at Central Campus, MPKV, Rahuri. Total 23 Participants (19 male 4 female) were present.
5. The Department of Food Science & Technology conducted Training on “Processing and Value Addition Technology in Fruits & Vegetables” from November 18-25, 2019 at Central Campus, MPKV, Rahuri. Total 22 trainees (14 Male & 08 Female) participated in the training.
6. National Seminar on “Pluralistic Extension for Enhancing Farmers Income through Reaching the Unreached” was jointly organized by MPKV, Rahuri and Maharashtra Society of Extension Education, Akola during December 06-07, 2019 at Central Campus, MPKV, Rahuri. Dr. Ashok Dalwai, Director, Doubling of Farmers Income, New Delhi was the Chief Guest of the function. Total 214 Faculty members & 98 students participated in the National Seminar.
7. An International Symposium on Artificial Intelligence based Future Technologies in Agriculture and 54<sup>th</sup> Annual Convention of Indian Society of Agricultural Engineers (ISAE) was organized during January 07-09,



2020 by the CAAST-CSAWM project and Dr. ASCAE&T, MPKV, Rahuri and ISAE, New Delhi at Hyatt Regency, Pune.

### • International Exposure

- Mr. Wankhade Ankush Purushottam (Genetic and Plant Breeding), PG student of Department of Agril. Botany, Post Graduate Institute, Rahuri conducted his research work at the University of Georgia, USA from August 24 to November 15, 2019 in collaboration with ICRISAT, Hyderabad.
- Hon'ble Vice Chancellor, Dr. K. P. Viswanatha and Dr. A. L. Pharande Dean, Faculty of Agriculture visited Washington State University (WSU), Pullman, USA during March 06-14, 2020 to sign the Memorandum of Understand (MoU) with Washington State University (WSU) and MPKV, to discuss exchange program of faculties and students of MPKV, and to explore the opportunities for collaborative and sandwich program with WSU, USA under CAAST-CSAWM.

### • Students Achievements in JRF/SRF/NET/Competitive Exams/Sports

- 29 and 4 students qualified ICAR's PGS-2019 Exam as JRF and SRF, respectively.
- Mr. Mahesh Jadhav and Mr. Siddhartha Kale students of College of Agriculture, Pune secured First Rank at All India Level in ICAR PGS SRF- 2019 Exam in Entomology and Soil Science & Agril. Chemistry discipline respectively.
- Twenty-five students qualified ICAR-NET in the disciplines of agriculture and allied sciences.
- More than hundred and forty students secured success in Maharashtra Public Service Commission Agricultural Exam.
- The XX All India Inter Agril-Universities Sports & Games Meet 2019-20 was held at Venkateswara Veterinary University, Tirupati during March 01-05, 2020. The MPKV team was the Runners up in this competition. Mahatma Phule KrishiVidyapeeth, Rahuri secured the following prizes

Sr. No.	Event	Name of the Students	Achivement
01	Kho Kho(Women)	Team Event	Gold Medal
02	Volley Ball (Men)	Team Event	Gold Medal
03	Basket Ball (Men)	Team Event	Silver Medal
04	Kabaddi (Men)	Team Event	Bronze Medal
05	Table Tennis (Women)	Team Event	Bronze Medal
<b>Atheletics</b>			
06	400 M. Run Long Jump	Miss. Sangale Shilpa	Gold Medal
07	4 x 100 Relay (Women)	Team Event	Silver Medal
08	100 M. Run	Miss. Naik Shivani	Silver Medal
09	200 M.Run	Miss. Naik Shivani	Bronze Medal
10	400 M. Run	Mr. Yashraj Savant	Bronze Medal

- Staff Achievements in Sports**

- The MPKV staff sports team ended runners up in the second All Maharashtra Inter State Agricultural University Staff Sports

Competition- 2020 held during January 24-26, 2020 at Vasanttrao Naik Marathwada Krishi Vidyapeeth, Parbhani.

- Inter Collegiate Sport Activities**

- Various Inter Collegiate Sport Tournaments-2019-2020 were arranged in University as detailed below-

Sr. No.	Event	Date	Organizing College	Winner	Runner	Third
01	Chess (M)	10 <sup>th</sup> & 11 <sup>th</sup> July 2019	College of Horticulture, Malegaon	CoA, Baramati	CoA, Jalgaon	ABM, Narayangaon
	Chess (W)			CoA, Pune	CoA, Akhuj	Dr. ASCAE&T, MPKV, Rahuri
	Mallkhamb			CoH, Malegaon	CoA, Kolhapur	CoA, Baramati
02	Table Tennis (M)	23 <sup>th</sup> & 24 <sup>th</sup> July, 2019	College of Agriculture, Vilad Ghat, Ahmednagar	CoA, Dhule	CoA, Pune	CoA, Talsande
	Table Tennis (W)			CoA, Pune	CoA, Kolhapur	CoA, Dhule
	Badminton (M)			CoA, Pune	KKW CoA Nashik	CoA, Phaltan
	Badminton (W)			CoA, Pune	CoA, Baramati	CoA, Dhule
03	Foot ball (M)	02 <sup>nd</sup> & 03 <sup>rd</sup> August, 2019	KKW College of Agriculture, Nashik	KKW CoA, Nashik	D.Y. Patil CoA, Talsande	CoA, Dhule
04	Basket Ball (M)	12 <sup>th</sup> & 13 <sup>th</sup> September, 2019	KKW College of ABM, Nashik	CoA, Baramati	CoA, Dhule	CoA, Talsande
	Basket ball (W)			RCSM CoA, Kolhapur	Dr. ASCAE&T, MPKV, Rahuri	CoA, Akhuj
05	Kabaddi (M)	30 <sup>th</sup> & 31 <sup>st</sup> August, 2019	College of Agriculture, Madadgaon	CoA, Sonai	CoA, Paniv	ABM Narayangaon
	Kabaddi (W)			CoA, Baramati	CoA, Mirajgaon	S.S. CoH, Phaltan
06	Volley ball (M)	11 <sup>th</sup> & 12 <sup>th</sup> September, 2019	Students' Welfare Officer, MPKV, Rahuri	CoA, Baramati	Dr. ASCAE&T, MPKV, Rahuri	KKW CoA, Nashik
	Volley ball (W)			CoA, Wadala	CoA, Rajmachi	CoA, Ambi



07	Hockey (M)	25 <sup>th</sup> to 27 <sup>th</sup> September 2019	College of Agriculture, Baramati	CoA, Rajmachi	CoA, Baramati	CoA, Dondicha
08	Wrestling 57 Kg	29 <sup>th</sup> & 30 <sup>th</sup> September, 2019	College of Horticulture, Phaltan	COA, Mirjgaon	COA, Pune	COA, Jainapur
	Wrestling 61 Kg			COA, Rajmachi	COA, Mirajgaon	COA, Jainapur
	Wrestling 65 Kg			COA, Sonai	COA, Pune	COA, Nesari
	Weight Lifting 55 Kg			COA, Wadala	RCSM CoA, Kolhapur	RCSM COA,Kolhapur
	Weight Lifting 61 Kg			CoA,Jainapur	RCSM CoA, Kolhapur	CoA, Akluj
	Weight Lifting 67 Kg.			RCSM CoA, Kolhapur	CoA, Akluj	CoA, Talsande
	Weight Lifting 73 Kg			CoA, Kolhapur	RCSM CoA, Kolhapur	-
	Weight Lifting 81 Kg			CoA, Akluj	CoA Paniv	RCSM CoA, Kolhapur
	Weight Lifting 89 Kg			CoA, Talsande	CoA, Paniv	CoA, Akluj
	Weight Lifting 96 Kg			CoA, Talsande	CoA, Paniv	CoA, Paniv
	Weight Lifting 102 Kg.			RCSM CoA, Kolhapur	RCSM CoA, Kolhapur	CoA, Wadala
	Weight Lifting 109 Kg.			CoA, Wadala	CoA, Pune	CoA,Phaltan
	Best Physique			CoA, Rajmachi	CoA, Baramati	CoA Ambi
	Best Physique 75 Kg.			CoA, Jainapur	CoA, Baramati	RCSM CoA, Kolhapur
Best Physique 65- 75 Kg.	CoA, Jainapur	CoA, Rajmachi	RCSM CoA, Kolhapur			
09	Kho Kho (M)	02 <sup>nd</sup> & 03 <sup>rd</sup> October, 2019	College of Horticulture, Paniv	CoA, Paniv	CoA,Wadala	CoA,Baramati
	Kho Kho (W)			CoA, Baramati	CoA,Pune	CoA,Talsande



10	800 Mtr. Run Men	07 <sup>th</sup> & 08 <sup>th</sup> December, 2019	College of Agriculture, Baramati	COA, Loni	COA, Pune	ABM Narayangaon
	800 Mtr. Run Women			CoA, Pune	CoA, Pune	CoA, Baramati
	5000 Mtr. Run Men			ABM Narayangaon	CoA, Rethare	CoA, Phaltan
	Javelin Throw Men			CoA, Talsande	CoA, Phaltan	CoA, Ambi
	Javelin Throw Women			CoA, Dhule	CoA, Baramati	CoA, Phaltan
	Long Jump Men			CoA, Maldad	CoA, Dhule	CoA, Pune
	Long Jump Women			CoA, Pune	CoA, Karad	CoA, Baramati
	100 Mtr Run Men			CoA, Pune	CoA, Ambi	CoA, Dhule
	100Mtr Run Women			CoA, Pune	CoA, Baramati	-
	200 Mtr Run Men			CoA, Shahada	CoA, Ambi	CoA, Pune
	400 Mtr. Run Men			CoA, Pune	CoA, Shahada	ABM Narayangaon
	400 Mtr Run Women			CoA, Pune	CoA, Maldad	CoA, Pune
	1500 Mtr Run Men			ABM Loni	CoA, Vilad Ghat	CoA, Dhule
	1500 Mtr. Run Women			CoA, Pune	ABM Baramati	RCSM CoA, Kolhaur
	4x400 Mtr. Releay Men			CoA, Pune	CoA, Dhule	-
	High Jump Men			CoA, Maldad	CoA, Pune	RCSM CoA, Kolhaur
	Discuss Throw Men			ABM Nashik	CoA, Talsande	CoA, Ambi
	Discuss Throw Women			CoA, Karad	CoA,, Karad	CoA, Pune
	Tripple Jump Men			CoA,, Mladad	KKW CoA, Nashik	CoA, Sonai
Shot Put Men	CoA, Pune	CoA, Phaltan	CoA, Dhule			
Shot Put Women	CoA, Karad	CoA, Baramati	CoA, Dhule			
11	Cricket (M)	College of ABM, Loni	13 <sup>th</sup> & 16 <sup>th</sup> December, 2019	CoA, Ambi	KKW CoA, Nashik	PGI, MPKV, Rahuri



**CoA- College of Agriculture, ABM- Agril. Business Management**

- The Inter Collegiate Debating and Elocution Competitions was organized on 21<sup>st</sup> September, 2019 at Dr. Annasaheb Shinde College of Agricultural Engineering & Technology, MPKV, Rahuri.

The Result of the competition are as below:

1) **Debating competition:**

- Co - operative Training - English**

Sr. No.	Name of Student	For/Against	College	Runner/Winner
1	Gontapally Sai. S.	For	DY Patil, ABM, Akurdi	Winner
2	Dhanwade Darshan		CoA, Phaltan	Runner
3	Miss Kedar Snehal A.	Against	Dr. AS CAE&T Rahuri	Winner
4	Ghodake Ranjeet		CoA Kolhapur	Runner

- Co - operative Training - Hindi**

Sr. No.	Name of Student	For/Against	College	Runner/Winner
1	Vimal Prajapati	For	Dr. AS CAE & T, Rahuri	Winner
2	Miss. Jadhav Pranali		CoA, Phaltan	Runner
3	Miss Mali Komal	Against	ABM, Narayangaon	Winner
4	Miss Landage Rutuja		CoA, Dhule	Runner

2) **Population and Environment - English**

Sr. No.	Name of Student	For/Against	College	Runner/Winner
1	Chavan Vikram	For	RCSM CoA, Kolhapur	Winner
2	Mane Dattatraya	Against	CoA, Talsande	Runner

2) **Population and Environment - Hindi**

Sr. No.	Name of Student	For/Against	College	Runner/Winner
1	Miss Navale Sonali	For	CoA, Dhule	Winner
2	Miss Gunjal Snehal	Against	CoA, Dhule	Runner

3) **Agriunifest 2019 – English**

Sr. No.	Name of Student	For/Against	College	Runner/Winner
1	Sonawane Bhakti S.	For	CoA, Pune	Winner
2	Thamke Sushant	Against	CoA, Pune	Runner

3) **Agriunifest 2019 – Hindi**

Sr. No.	Name of Student	For/Against	College	Runner/Winner
1	Cholke Hsishikesh N.	For	CoA, Loni	Winner
2	Jadhav Sagar Vilas	Against	CoA, Talsande	Runner



## 4) National Inter University Debate Competition – Pantnagar - English

Sr. No.	Name of Student	For/Against	College	Runner/Winner
1	Pranit Fatangare	For	Dr. AS CAE & T, Rahuri	Winner
2	Ajay Shinde		CoA, Pune	Runner
3	Raj Gawande	Against	Dr. AS CAE & T, Rahuri	Winner
4	Saurabh Thube		CoA, Kolhapur	Runner

## 4) National Inter University Debate Competition – Pantnagar - Hindi

Sr. No.	Name of Student	For/Against	College	Runner/Winner
1	Ms. Vasuprada Nirali	For	Dr. AS CAE T, Rahuri	Winner
2	Rupam Ghule		CoA, Dhule	Runner
3	Rushikesh Pawar	Against	CoA, Baramati	Winner
4	Pritam Chavan		Dr. AS CAE & T, Rahuri	Runner

## 2) Elocution Competition Result

## A) Shiksha Mandal Wardha

Sr. No.	Name of Student	College	Runner/Winner
01	Miss Deshmukh Mayuri Hiraji	Dr. AS CAE & T, Rahuri	Winner
02	Shri Sonawane Harshal Rajendra	CoA, Dhule	Runner

## B) Ex- Chancellor, P.C. Alexander Elocution Competition in Marathi

Sr. No.	Name of Student	College	Runner/Winner
01	Jadhav Jayesh N.	CoA, Dhule	Winner
02	Shivale Bhaskar	ABM, Narayangaon	Runner

## B) Ex- Chancellor, P.C. Alexander Elocution Competition in English

Sr. No.	Name of Student	College	Runner/Winner
01	Mehetre Tejas B.	CoA, Dhule	Winner
02	Shinde Varad S.	Dr. AS CAE&T, Rahuri	Runner

## D) Anti Dowry Movement, Mumbai

Sr. No.	Name of Student	College	Runner/Winner
01	Shri Pawar Rushikesh Bharat	CoA, Baramati	Winner
02	Devgude Neha Rajendra	CoA,, Phaltan	Runner




\*CoA- College of Agriculture, ABM- Agril. Business Management



- Students of Mahatma Phule Krishi Vidyapeeth, Rahuri participated in various Inter University Tournaments during year 2019-20 as given below-

Sr. No.	Event	Date	Name of Winner University
1	Hockey (M)	October 23-29, 2019	Lakshmibai National Institute of Physical Education, Gwalior (MP)
2	Badminton (Women)	November 25-29, 2019	University of Kota, Kota(Rajasthan)
3	Weight Lifting & B. Phy	December 15-19, 2019	Chandigarh University Gharuan, Mohali (Punjab)
4	Cricket (Men)	December 23, 2019 to January 07, 2020	ITM University, Gwalior (MP)
5	Badminton (Men)	January 02-05, 2020	Swami Ramnand Teerth Marathwada University Nanded, Late Sow. Kamaltai Jamkar Mahila Mahavidyalaya, Parbhani
6	Mallkhamb	March 14-16, 2020	Guru Nanak Dev University, Amritsar (Punjab)

- Memorandum of Understandings

S. N.	Name of the Organization	Year of Signing	Purpose
1	Central Institute for Research on Cattle, Meerut	April 15, 2019	Education, Research and Extension collaboration 
2	Nehru Science Centre, Mumbai	April 16, 2019	Setting up an Agricultural Science Museum at the historical building of College of Agriculture, Pune 
3	Mukul Madhav Foundation CSR Partner of Finolex Industries Ltd., Pune	April 22, 2019	Award of fellowship for UG, PG and Ph. D. students of all constituent colleges under the ambit of university 
4	Bayer Crop Science Limited, Mumbai	December 14, 2019	Award fellowship to Ph.D. & PG students of Post Graduate Institute, MPKV, Rahuri



## Awards and recognition

### A) Faculty

- Dr. A.A. Atre, Professor, Soil and Water Conservation Engineering, Dr. AS College of Agril. Engineering and Technology, Rahuri has been nominated as Member of Sub committee to oversee and study the organization of AVISHKAR-2019 to be held at University of Mumbai by the Advisory Board.
- Dr. Bapusaheb Bhakare, Head, Department of Soil Science and Agri. Chemistry has been elected as Counselor in Indian Society of soil science by securing highest votes of members in the month of November 2019.
- Dr. Milind Ahire, Head, Department of Agricultural Extension, MPKV, Rahuri was awarded Best Extension Scientist Award by Maharashtra Society of Extension Education during National Seminar on “Pluralistic Extension for Enhancing Farmers Income through Reaching the Unreached” organized on 6- 7 December, 2019.

### B) Institute

- MBA (Agri.) Programme at College of Agriculture, Pune achieved ISO: 9001: 2015 Certification for its Quality Management System for the period of three years (September 13, 2019 to September 12, 2022).
- Agricultural Technical School, Solapur achieved ISO: 9001: 2015 Certification for its Quality Management System for the period of three years (2019 to 2022).
- College of Agricultural, Pune Dispensary was honoured with ISO: 9001:2015 Certification for its Good Health Practices for the period of three years (November 01, 2019 to October 31, 2022).



### • New Projects/Proposals Sanctioned

- Department of Biotechnology, Government of India, New Delhi sanctioned a “Referral Laboratory” for Testing Quality Parameters of Bio-pesticides at College of Agriculture, Pune.
- ICAR has sanctioned project proposal for establishment of Educational Museum amounting to Rs. 40.00 lakhs at College of Agriculture, Pune.
- ICAR has sanctioned three project proposals under Experiential Learning Module amounting to Rs. 111.51 lakhs.

- ICAR has sanctioned project proposal of construction of boys hostel and girls hostel at College of Agriculture, Pune and Central Campus, respectively amounting to Rs. 90.00 lakhs each.

### New Academic Programme

- Center for Advanced Agricultural Science and Technology (CAAST) for Climate Smart Agriculture and Water Management (CSAWM) under NAHEP-ICAR has started the Post-Doctoral programme.

## 1.2 Research

- 1 The University has released 9 new crop varieties i.e. Chickpea (Phule Vishwaraj) , Safflower (Phule Bhivara and Phule Nira), Cowpea (Phule Sonali) , Mothbean (Phule Sarita), Mungbean (Phule Chetak), Wheat (Phule Satwik ) and Grape (Manjari Medika and Manjari Shyama).
2. The University has released three Agri. Farm Implement viz., Tractor operated Phule Shredder, Tractor operated Phule Hydro-Mechanically controlled offset orchard manager and Tractor drawn automatic “Phule Basin Lister”
3. The University has passed 69 recommendations on various aspects for the benefit of the farming community.
4. The University has produced 25811 quintals of seed.
5. A total of 9.38 lakh planting material of fruit crops and ornamental plants was produced by University.
6. A total of 300 litre and 45 MT of biopesticides and 44.6 MT and 7001 litres of biofertilizers were produced by various centers of the University.

## 1.3 Extension Education

1. About 633 training programmes for farmers, farm youth, farm women, staff of development

departments and inter action training programme between farmers and scientists were organized by the Regional Extension Centres, District Extension Centres, Agri. Research Stations and Krishi Vigyan Kendras.

2. A total of 61 monthly district workshops were organized and 1758 were the beneficiaries.
3. A total of 238 method demonstrations, 285 Result demonstrations, 1371 Front line demonstrations and 60 assessment trials were conducted and 6222 farmers were benefitted from these demonstrations.
4. During the year different 1888 group discussions, meetings, field visits / shivar pheries, field days, Farm and Home visits, Farmers rallies, Agril. Exhibition, Study tours were organized for promoting agricultural technologies to the end users.
5. Diagnostic and surveillance team has visited 336 places to guide the farming community.
6. Different publications viz., Krishi darshani (13000), Shri Sugi (3000), Folders (15000), booklets, MPKV Happenings were released by the University and made available to the end users.
7. Nearly 1,20,674 VIP's, students, farmers, trainees and officers visited central campus, MPKV, Rahuri and 50000 visited other centers to acquire recent knowledge of agriculture and allied enterprises.
8. The University scientists attended 18260 Help line calls and guided the farmers on major issues.
9. In the annual year 319 water samples, 205 pests samples, 404 diseases samples were tested and 3599 soil samples tested and health cards were issued by the University scientists along with necessary guidance.



## 2. Education

Mahatma Phule Krishi Vidyapeeth, Rahuri is the first State Agriculture University in Maharashtra established in 1969 having its jurisdiction in 10 districts of Western Maharashtra. Director of Instruction shoulders the responsibility of leading the education of the university. Director of Instruction is responsible for preparing the academic programme as regards to courses offered, curricula and co-ordinate and guide education, in all the constituent and affiliated colleges, technical schools of the university in close co-operation with the Deans of Faculties, Head of Departments and other officers.

The mandate is to provide Diploma, Graduate, Post-Graduate and Doctorate level quality education in agriculture and allied fields for skill development and producing the competent human resource.

### Quality Education for Competent Graduates

The University offers various educational programmes *viz.*, Bachelors Degree Programme in Agriculture, Horticulture, Agriculture Engineering, Food Technology, Agri-Business Management, Biotechnology, Diploma in Agriculture Technology and Masters degree programme in 21 disciplines of Agriculture and 04 disciplines of Agriculture Engineering and Doctoral degree programme in 18 disciplines of Agriculture and 04 disciplines of Agriculture Engineering.

There is a Post-Graduate Institute at the Central Campus, Rahuri for M.Sc. and Ph.D. programmes, seven Colleges of Agriculture at Pune, Kolhapur, Dhule, Nandurbar, Karad, Muktainagar and Halgaon for B.Sc. (Hons) Agriculture, one College of Horticulture at Pune for B.Sc. (Hons) Horticulture and one College of Agricultural Engineering at Rahuri for B.Tech. (Agril.

Engg.), M.Tech. (Agril. Engg.) and Ph.D. programmes. The Post-Graduate programme is also started at College of Agriculture, Pune, Dhule and Kolhapur leading to M.Sc.(Agri.) degree and Ph.D. programme in Agril. Meteorology at College of Agriculture, Pune. The new PG degree course in Agricultural Business Management i.e. M.B.A. (Agri.) is started at Colleges of Agriculture, Pune.

## Educational Programmes

### 2.1 Bachelor's Degree Programme

University has nine Under Graduate Constituent Agriculture and Allied Colleges with intake capacity of 844 students and 62 affiliated unaided Agriculture and Allied Colleges with intake capacity of 4700 students.

#### B. Sc. (Hons) Agriculture

B.Sc. (Hons) Agriculture is a four-year degree course spread over 8 semesters with 183 credit load. Total 143 course credit of B.Sc. (Hons) Agriculture degree is completed up to first six semesters. In seventh semester, Rural Agricultural Work Experience (RAWE) & Agro-Industrial Attachment programme of 20 credits is implemented, which exposes students to the rural life and farming situations and the constraints in adoption of modern technology by the farmers. In eighth semester Experiential Learning programme is implemented under which the students undergo Hand-on-Training (HoT) in any two modules of 10 (0+10) credits. Under this university, seven constituent colleges and twenty-seven affiliated agricultural colleges offer B.Sc. (Hons) Agriculture degree programme.

#### B. Sc. (Hons) Horticulture

B.Sc. (Hons) Horticulture is a four-year degree course spread over 8 semesters. The total credit requirement for the B.Sc. (Hons) Horticulture degree Course is 182. In seventh and eighth semester Students READY

(RHWE) programme is implemented in addition to placement in industry. One constituent college and five affiliated horticultural colleges of the university implements this program.

### **B. Tech. (Agril. Engg.)**

B. Tech. (Agril. Engg.) degree programme is a four year degree course spread over 8 semesters with 183 credits. Students READY (RHWE) programme is implemented with the components In- Plant Training (0+10 credits), Industrial Attachment (0+10 credits), Experiential Learning (0+10 credits), Project Planning & Report Writing (0+10 credits) and Seminar (0+1 credits). This programme is offered at one constituent and eight affiliated colleges of the university.

### **B. Sc. (Hons) Agril. Business Management**

B. Sc. (Hons) Agril. Business Management degree programme is a four year degree course spread over 8 semesters. The course is specially designed by considering all the best courses of various institutes and incorporating the requirements of agricultural sector in general and that of management aspects in particular, it is expected that pass outs will be able to deliver their expertise in financial marketing and management skills. Out of total 180 credits, 140 course credits are completed upto sixth semester. In seventh semester, 20 credits are recommended for any two module of 10 (0+10) credits Experiential Learning. In eighth semester, students are offered 20 credits for In-plant Training. The programme is implemented at nine affiliated colleges of the university.

### **B. Tech. (Food Technology)**

B. Tech. (Food Science and Technology) is a four year degree course spread over 8 semesters. Out of total 183 credits, 145 course credits are completed up to sixth semester. In seventh semester 18 (3+15) credits

are recommended for Students READY which includes Experiential Learning modules I & II of 7 (0+7) credits each and 4 (0+4) credits for Research Project & Seminar. In eighth semester, Students READY-In-plant training for 20 weeks in food industries / Institutes for 20 (0+20) credits is offered to the students.

The basic objective is to provide the skilled manpower for commercial food processing unit, R and D organizations, research and education institutes and quality control departments and to generate self employment opportunities to the youth in setting up of food processing units. The programme is implemented at seven affiliated colleges of the university.

### **B. Tech (Biotechnology)**

B. Tech (Biotechnology) is a 4 year degree course spread over 8 semesters having 186 credits. Since biotechnology is integrated science of various disciplines, this UG programme comprises four departments like Animal Biotechnology, Plant Biotechnology, Microbial & Environmental Biochemistry and Bioinformatics.

In VII semester Students READY- Experiential Learning Programme of 20 (0+20) credits if offered for specialized skill development. During VIII semester Student READY- Project Formulation & Entrepreneurial Development in Biotechnology (on/off campus) of 20 (0+20) credits is offered. There are six affiliated Biotechnology colleges under MPKV, Rahuri for developing human resource.

## **2.2 Master's Degree Programme**

The University offers Master Degree at Post Graduate Institute, Rahuri, College of Agriculture, Pune, Kolhapur and Dhule; and Dr. A. S. College of Agricultural Engineering & Technology at Rahuri with an intake capacity of 376 students per year.





### **M. Sc. (Agri.) / M. Sc. (Hort.) / M. Sc. (Agril. Biotechnology) / M.B.A. (Agri.) / M. Tech. (Agril. Engg.)**

The M.Sc (Agri) degree course is a two years residential programme spread over 4 semesters. The credit load for the course is 55. Out of this, 35 credits are allocated for course work in which a student has to learn different courses appropriate to his specialization. The course work is split in the Major subjects (20 credits), Minor subjects (09 credits), Supporting subject (05 credits), Seminar (01 credit), thus making the 35 credits. In addition, six non-credit compulsory courses are allotted. For dissertation, 20 credits are allocated for research project. Each student has an advisory committee, which assists the students in selection of courses and the research topic. The student has to undertake a field research experiment and submit the dissertation as partial requirement for the award of the degree. The intake capacity of students for M. Sc. (Agri.) Degree is 188 at Post Graduate Institute, MPKV, Rahuri, 90 at College of Agriculture, Pune, 54 at College of Agriculture, Kolhapur & 28 at College of Agriculture, Dhule. The intake capacity for M. Tech. (Agril. Engg.) at Dr. AS College of Agril. Engineering and Technology, Rahuri is 16.

### **2.3 Doctoral Degree Programme**

The Post Graduate Institute, Dr. A. S. College of Agricultural Engineering & Technology, Rahuri offers the Doctoral level programmes in agricultural science and engineering, respectively with an intake capacity of 84 students per year.

### **Ph. D. (Agriculture and Agricultural Engineering)**

The Ph.D. degree programme is of three years with residential requirement spread over six semesters.

The credit requirement for the course is 75; out of which 30 credits are for course work and 45 credits for research work. The course work is split in to Major subjects (15 credits), Minor subjects (08 credits), Supporting subjects (05 credits), Seminar (02 credits), thus making the 30 credits. In addition, six non-credit compulsory courses are allotted. Research is the main component of Ph.D. degree programme where in student undertake appropriate need based research by way of conducting field experiments or collection of data or both to fulfill his research objectives. Two experts from any of the SAUs in India independently evaluate the Ph.D. Dissertation. Each student has an advisory committee, which assists the student in the selection of courses and the research topic. The intake capacity of students for Ph.D Degree programme in Agriculture is 70 at Post Graduate Institute, MPKV, Rahuri & 02 at College of Agriculture, Pune. Further, the intake capacity of students for Ph.D Degree programme in Agricultural Engineering at Dr. AS College of Agril. Engineering and Technology, Rahuri is 12. In addition, in-service candidates are allotted admission for Ph.D. degree programme.

### **2.4 Diploma**

University offers Diploma in Agriculture Technology through its nine constituent and seventy-seven affiliated Agricultural Technical Schools with intake capacity of 60 students per year.

### **2.5 Certificate Course**

University also offers Gardeners (Mali) Training Course of one year duration through its two constituent and three affiliated centers with annual intake of 40 students. Further, certificate course on Polyhouse Technology of six months duration is offered at High-Tech Floriculture Project, College of Agriculture, Pune





## Faculty

There are two faculties to impart Agriculture education in this university namely

Faculty of Agricultural Science

Faculty of Agricultural Engineering

### Faculty of Agricultural Science

Faculty of Agricultural Science is one of the faculties of the University. This faculty comprises of various 14 departments *viz.*, Agricultural Botany, Agricultural Economics, Agricultural Entomology, Agricultural Extension & Communication, Agricultural Meteorology, Agronomy, Animal Husbandry and Dairy Science, Biochemistry, Food Science and Technology, Horticulture, Irrigation Water Management, Plant Pathology and Agricultural Microbiology, Soil Science and Agricultural Chemistry and Statistics.

This faculty is responsible for the various academic programmes *viz.*, Under graduate [B.Sc. (Hons) Agriculture, B.Sc. (Hons) Horticulture, B. Tech. (Agricultural Engineering), Post-Graduate (M.Sc. (Agri.) and Ph.D.), and Diploma in Agriculture (Agricultural Technology).

### Faculty of Agricultural Engineering

Faculty of Agricultural Engineering is one of the faculties of the University. This faculty comprises of various 5 departments *viz.*, Agricultural Process Engineering, Farm Machinery and Power Engineering, Farm Structure and Rural Electrification, Irrigation and Drainage Engineering and Soil and Water Conservation Engineering.

This faculty is responsible for the various academic programmes *viz.*, Under graduate [B.Sc. (Hons) Agriculture, B. Tech. (Agricultural Engineering)], Post-Graduate [M. Tech. (Agril. Engg.) and Ph.D.]. The faculty

of Agricultural Engineering meets the educational needs in various fields *viz.*, micro irrigation technologies, polyhouse, drainage engineering, groundwater, wells and pumps, soil and water conservation, watershed management, grain, fruit and vegetable storage and processing, unconventional energy sources, tractors, farm machinery and implements, computer applications, remote sensing and GIS.

## Constituent Colleges

The University has ten constituent colleges out of which seven colleges of agriculture sciences located at Pune, Kolhapur, Dhule, Nandurbar, Karad, Muktainagar and Halgaon; one agricultural engineering college at Rahuri; and one college for horticulture at Pune. The University has the Post Graduate Institute at its Central Campus of Rahuri.

### College of Agriculture, Pune



The historical College of Agriculture, Pune, is one of the first five agricultural colleges established in India, celebrated its centenary year in 2007. It has an annual intake capacity of 190 students for UG programme. Post-Graduate programme was started from the year 1984. The intake capacity of M.Sc. (Agri), M.Sc. (Horti.) and MBA (Agri.) is 54, 6 and 30 respectively. Ph.D is offered in Agriculture Meteorology with an intake capacity of two students per year.



It offers PG degree programme in various subjects along with the recently started MBM (Agri.) degree. The college has a Hi-tech Floriculture Project, All India Coordinated Bio-control Project, Centre for Advanced Studies in Agro-meteorology, Biological Nitrogen Fixation Scheme, Agri-clinic and Agri-business Training Centre, All India Coordinated Mushroom Improvement Project, Fish & Prawns Farming Unit, Medicinal & Aromatic Plants Project and a well equipped nursery.

### College of Agriculture, Dhule



Dhule is the northern district of Western Maharashtra region. The College of Agriculture was established in the year 1960 and has an annual intake capacity of 128 students for UG programme. Post-Graduate programme was started from the year 2009-10. The intake capacity of M.Sc. (Agri) and M.Sc. (Horti.) is 24 and 04 respectively.

The College has a beautiful campus with spacious buildings for each department. The college also serves as a regional research centre for the northern part of the Maharashtra, with a focus on research on dry farming, cotton and groundnut. The college has the units, Viz. Vermi compost, bio-fertilizers, bio-pesticides, Soil and Irrigation Water Analysis Lab, Organic Farming demonstration unit, Seed Production, Horticultural Nursery, Cattle, Sheep and Goat units, Watershed Field demonstration units, Irrigation Systems Demonstration plot etc.

### Rajarshi Chhatrapati Shahu Maharaj College of Agriculture, Kolhapur



Kolhapur, the southernmost district town of Maharashtra State is one of the agriculturally advanced districts of the country with an excellent network of agro based industries and co-operative organizations. The College of Agriculture is located on the Pune Bangalore National Highway. The college was established in the year 1963 and was initially affiliated to the Shivaji University, Kolhapur. Subsequently it became the constituent college of the University in 1969. The college has celebrated its Golden Jubilee in the year 2013. Later, in 2017 college is renamed as Rajarshi Chhatrapati Shahu Maharaj College of Agriculture. This college has annual intake capacity of 190 students for UG programme. It offers PG degree programme in various subjects. Post-Graduate programme was started from the year 2009-10. The intake capacity of M.Sc. (Agri) and M.Sc. (Horti.) is 48 and 06 respectively.

The college has projects such as vermicompost, bio-fertilizers, bio-pesticides, Phule soft drinks, Soil and Irrigation Water Analysis Lab, One time controlled land application of Spent Wash, Fruit Crop Nursery for supply of seedlings and crop seeds, Soil and Water Engineering Field Laboratory are setup to aid students for learning.



## College of Agriculture, Karad



College of Agriculture, Karad was established on the occasions of Birth centenary year (2013) of Hon. Ex-Chief Minister of Maharashtra Shri. Yashwantraoji Chavan. The College of Agriculture, Nandurbar started from the year 2013-14 with the intake capacity of 60 students. This college offers degree programme in B.Sc. (Hons) Agriculture. The College has newly established Administrative building, Library, Boys' and Girls' hostels, Students Amenity Complex, Playground and Instructional Farm.

## College of Agriculture, Nandurbar



As per the initiatives and decision to establish Government Agriculture College in Scheduled tribes populated districts (i.e. Nandurbar & Gadchiroli) under Tribal Sub Plan Scheme, Government of Maharashtra Resolution dated 19th June, 2013 and University Resolution dated 06/08/2013 Government College of Agriculture, Nandurbar started w.e.f. August 01, 2013. 80 % seats are reserved for Scheduled Tribe's students.

This college offers degree programme in B.Sc. (Hons) Agriculture with an annual intake capacity of 60 students per year. The College has newly established

Administrative building, Library, Boys' and Girls' hostels, Students Amenity Complex, Playground and Instructional Farm.

## Punyashlok Ahilyadevi Holkar College of Agriculture, Halgaon

The College of Agriculture, Halgaon started from the academic year 2018-19 with an annual intake capacity of 60 students per year. It offers under graduate B.Sc. (Honors) Agriculture degree programme.

## College of Horticulture, Pune



The college was established in the campus of College of Agriculture, Pune in 1984. The annual intake capacity is 32 students. The college has its own building with well-developed classrooms, laboratories, LAN, computer & internet facilities.

## Dr. Annasaheb Shinde College of Agricultural Engineering & Technology, Rahuri



The college was established in 1969 after realizing the need for agricultural engineers for soil conservation, irrigation management, farm mechanization and post-

harvest processing. In 1996, the college was named after the former Union Minister of State for Agriculture and the architect of green revolution in India, Late Dr. Annasaheb Shinde. The college offers the UG programme in Agril. Engg. with intake capacity of 64 and PG programme with intake capacity of 12 in three different disciplines which was initiated in 1982. Dr. A. S. College of Agril. Engg. has recently started the Ph.D. in Agril. Engineering by course work and research in the disciplines viz., Agril Process Engineering, Irrigation & Drainage Engineering and Soil Water Conservation Engineering.

In addition to the academic programmes, the faculty has the following ongoing projects. All India Coordinated Research Project on Utilization of Groundwater through Wells and Pumps; Precision Farming Development Centre, AICRP on Farm Implement and Machinery, Remote Sensing Laboratory, and the Tractor Training Laboratory. The programme is implemented at eight affiliated colleges of the university.

## Post Graduate Institute



The Post Graduate Institute was established in 1972 to meet the higher educational needs of agriculture in the State. At present the Post Graduate Institute offers Master and Doctoral degree Programme in 18 and 17 disciplines of Agriculture Faculty, respectively. The intake capacity of Master's and Doctoral programme is 188 and 70 respectively.

Each discipline of PG Institute is provided two

classrooms with interactive smart classroom solution for teaching to Master and Doctoral degree programme students. In addition to classrooms, almost each discipline has well equipped Seminar hall to conduct presentation of student's seminar, group discussions etc. The Post Graduate Institute has an instructional farm spread over 56.21 ha. and is exclusively used for research activities of students. The students also have access for research on horticultural farm, medicinal and aromatic plants farm and irrigation water management farm. Each department has well equipped laboratories. In addition to these, the ultra modern facilities of following centers are available to student's research: Biotechnology Research Centre, All India Network Project on Pesticide Residue, Micronutrient Research Scheme, Post-Harvest Technology Laboratory, Bio-fertilizer Laboratory, Frozen Semen Laboratory, Biological Control Laboratory, Bakery Unit.

## Affiliated Colleges

Mahatma Phule Krishi Vidyapeeth, Rahuri realized the need and demand for more trained human resource in agriculture and accordingly provided affiliation to 62 colleges in the faculty of agriculture and allied science. These colleges offer various undergraduate degree programs in the faculty of agriculture.

Sr. No.	Stream	Number of Colleges	Intake Capacity
1	Agriculture	27	2820
2	Horticulture	05	240
3	Agricultural Engineering	08	440
4	Food Technology	07	400
5	Biotechnology	06	360
6	Agril. Business Management	09	440
<b>Total</b>		<b>62</b>	<b>4700</b>

## University Library



The University Library, MPKV, Rahuri started functioning at Central Campus in the year 1971. Since its inception the library has developed tremendously under the Chairmanship of Library Advisory Committee and playing pivotal role in providing scientific and technological information to the students, teachers and scientists of both faculties i.e. Faculty of Agriculture and Faculty of Agricultural Engineering, as well as progressive farmers since last forty seven years. In this age of information technology, tremendous changes have taken place in library services.

Now a days University Library is rendering IT based services such as Internet, Retrieval of CD ROM Databases, e-mail, e-journals, online consortia (CeRA) etc along with conventional ones. The library has been equipped with digitization, e-resources, e-journals, Library Management software etc.

### Library Budget

During the year University Library, Rahuri received the grants of Rs. 46.60 lakhs for salary and Rs. 3.71 lakh for Contingent expenditure and University fund of Rs. 5.27 lakh in addition to ICAR grants of 14.00 lakhs. This library received total grants of Rs. 69.28 lakh during the year under report.

## Acquisition of Books and Journals

During the year under report the library received 178 books, 306 theses back volume 103, thus making total collection of 1,12,878 as on 31.3.2020. The library is also receiving 14 journals against exchange of JMAU and 40 journals on gratis.

### Library Services

- Open access
- Lending of Books for home reading
- Inter Library Loan facility
- Photocopying services
- Reading Hall facility

### Internet services

- CD ROM Databases
- CeRA (Consortium of e-Resources in Agriculture)
- E-journals, On-line E-journals
- Statistical Database :
- Viewing Video Cassettes, DVDs through TV/VCR
- KrishiPrabha: Krishikosh, e-granth etc.
- OPAC (Online Public Access Catalog)





## Centre for Advanced Agricultural Science and Technology for Climate Smart Agriculture and Water Management

Mahatma Phule Krishi Vidyapeeth, Rahuri received the prestigious World Bank Project of Indian Council of Agricultural Research under National Agricultural Higher Education Project (NAHEP) entitled “Centre for Advanced Agricultural Science and Technology for Climate Smart Agriculture and Water Management” (CAAST-CSAWM) with the main objectives,

1. To develop the capacity amongst the faculties and scientists for the development and adoption of the precise Climate Smart Agriculture and Water Management technologies.
2. To start the one year Post Graduate Diploma in “Climate Smart Agriculture and Water Management” for developing the human resources enabling them to start entrepreneurship and employable in public sectors and private industries, strengthen the current M.Sc., M. Tech. and Ph. D. programme (for their research projects); and make provision for the perspective beginner/middle level faculties/researchers for Post Doctorate studies in precision water management, precise climate smart agriculture and Geo-informatics.
3. To develop an integrated system including RS/GIS and GPS tools, modeling and SDSS tools using unmanned aerial system (UAS drone) and sensor-based technologies; and mobile applications and their applications for climate smart and precision agriculture and water management.
4. To conduct end-to-end capacity building through on-the-job training and case study-based learning; enhance the employment and placement rate; and

business and entrepreneurship opportunities.

The project with a total budget of Rs.20.00 Cr. was submitted under the leadership of Dr. K. P. Vishwnatha, Vice-Chancellor, MPKV, Rahuri with contributions from Dr. A.L. Pharande, Dean (F/A) & Director of Instructions, MPKV, Rahuri, Dr. S. R. Gadakh, Director of Research & Director of Extension, MPKV, Rahuri and being implemented under administrative and technical control of Dr. A. L. Pharande, Dean (F/A) & Director of Instructions, MPKV, Rahuri by Dr. S. D. Gorantiwar, Principal Investigator and assisted by Dr. M. G. Shinde, Co-Principal Investigator and Dr. J. S. Pachpute, Co-Principal Investigator, CAAST-CSAWM, MPKV, Rahuri along with 22 faculty members and 22 Research Associate from different disciplines.

This project developed collaboration with different Universities from abroad namely, Washington State University, Pullman, WA, USA; Mississippi State University, Starkville, MS, USA; International Water Management Institutes (IWMI); Colombo, Sri Lanka (CGAIR Organization), Asian Institute of Technology, Bangkok, Thailand and Loughborough University, UK and National Institute and Organizations of repute namely, Indian Institute of Technology, Pawai, Mumbai; Indian Institute of Remote Sensing, Dehradun; National Institute of Abiotic Stress Management, Malegaon (Kh), Baramati, Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad and National Bureau of Soil Science and Land Use Planning, Nagpur for research, education and extension in climate smart agriculture and water management.

The thematic areas of the climate smart agriculture and water management are precision farm machineries for climate smart agriculture, application of robotics and drone in precision and climate smart agriculture,



precision water management, automated irrigation system for climate smart agriculture, remote sensing, GIS and GPS, Google Earth Engine and Artificial Intelligence applications in climate smart agriculture and water management, climate resilient agriculture and climate smart villages.

**Major achievements during 2019-20 are highlighted below**

### 1. Capacity Building

S.N.	Activities	Number
1	International Training	01
2	International Short visit	01
3	International Symposium	02
4	International scientists' students' interface/ International workshop:	03
5	Workshops/Student Industry Interface:	27
6	Trainings	28
7	Guest lectures	12
8	Exposure Visits	14
9	Demonstrations	05
	<b>Total activities</b>	<b>94</b>

The numbers of beneficiaries of the project were 5704 including faculties, students and farmers.

- Dr. Sunil Kadam, Assistant Professor IDE, One of the CAAST-CSAWM member of this University has been offered with the Post Doctorate Research Fellowship in Washington State University, Pullman, USA and he joined this assignment in USA in December, 2019.

### 2. Academic Programmes

- a) The framework of the PG Diploma along-with the courses to be offered in each module has been finalized during eight Workshops and Brain-

storming sessions conducted at MPKV, Rahuri and Pune campuses with 24 National and International partners. This Diploma is novel in the sense that it is module based. There are four modules spread over 52 weeks i.e. one year. Module -1 is of 10 weeks duration; consisting of 3 courses of 3 weeks and followed by "Industry and Farmers Day". Module-2 and 3 are of 13 weeks duration each; consisting of 3 courses of 3 weeks duration each followed by project of 3 weeks duration. Module-4 is of 16 weeks duration followed by Project of 6 weeks duration. 71 courses of three weeks duration were developed for climate smart agriculture and water management in context of Natural Resources Management, Precision Agricultural Machineries, Precision Irrigation Management and Protected Cultivation, Robotics, Drones and IoT, Geo-informatics and Social Science

- b) Started the Post Doctorate Research Programmes
- c) Finalized certificate courses
- d) Formulated the courses related to Climate Smart Agriculture and Water Management to be offered to the M.Sc/M. Tech and Ph. D. programmes as non-gradual or audit courses.
- e) Developed Drone/Robotics laboratories and up gradated RS & GIS and CAD-CAM laboratories.

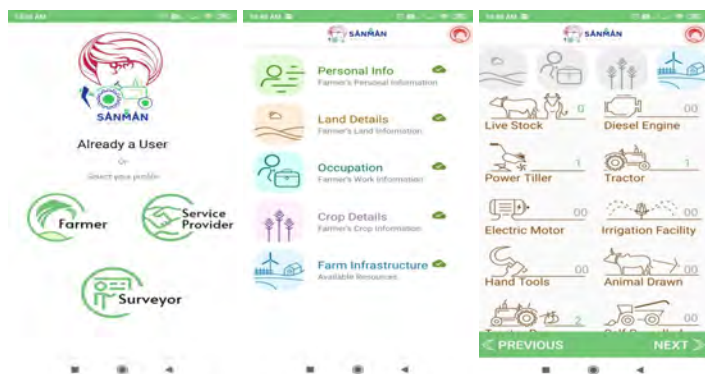
### 3. Out of box research initiatives

- a) An **Automatic Ring Infiltrometer** was designed, developed and tested to measure the rate of water infiltration into the soil or other porous media in the field in order to overcome the difficulties and limitations of a conventional double-ring infiltrometer for infiltration rate measurement. This instrument is accurate in measurement and time convenient as compared to existing infiltrometers.





b) **Phule SANMAN Software** and mobile app was developed to access the need of mechanization and available network solutions. This mobile application has been designed for data acquisition of current utilization agricultural machinery by farmers, finding the gap and to suggest optimum solution for mechanization with location and facilities of the service provider.



c) Web based and Mobile based **Spatial Evapo-Transpiration (ET)** calculator was developed to calculate Spatial Reference ETr (mm/day) required to estimate water requirement of crop by entering name of location or by clicking on the location on Google Map. This calculator provides ETr of desired location for current day and next four days based on the forecast weather using Penman Monteith method.



#### 4. Knowledge Destination

- Developed **Climate Smart Agriculture Blocks** for research, experimentation and demonstration related to climate smart agriculture and water management.
- Implementing **Climate Smart Village** approach in eight selected villages and intern investigating the possibility scaling-up of climate smart agriculture and water management technologies.
- Developed **Village Level Contingency Crop Plan** for seven adopted villages of Akole Block, Maharashtra.



**World Bank Officer, NAHEP and ICAR, New Delhi Officer Visited at CAAST-CSAWM, MPKV, Rahuri**





**CAAST-CSAWM, MPKV, Rahuri scientists visited to adopted village Buchkewadi**



**International Scientist-Students Interface on Drone, Robotics, Artificial Intelligence and Farm Machineries held on 12 Jan., 2020 at CAAST-CSAWM, MPKV, Rahuri**

**Innovation and Best Practices:**

- Initiated ICAR Best Teacher Award
- Identified 29 Adjunct Faculty in the discipline of agriculture and allied science.
- Established ten economically viable Experiential Learning Modules to enhance the confidence and competence of students for starting up-their own enterprises. University Resolution for Profit Sharing of Experiential Learning Module is issued for execution.
- Developed National/International linkages with academic institutes provide Fellowships and Scholarships to students for education, research and opportunity to study abroad.
- Placement Cell is established at each constituent college.
- Competitive Exam Forum has been activated at each constituent college to encourage the students' participation in ARS/JRF/SRF/NET/GATE examinations.
- UG/PG Merit award is provided to students in respective faculty.
- Students are motivated for participation in *Avhan*, *Ashwamedh*, *Indradhanushya* and *Avishkar* for development of the students in disaster management, sports, cultural activities and inculcation of research aptitude respectively
- Implementing a new concept of tree planting by involving all students with five tree plants by each student admitted to all degree programmes.



## Educational Institutes

Sr. No.	Name of College	Syllabus	Intake Capacity
<b>A) Constituent Colleges</b>			
1	Post Graduate Institute	Ph.D	70
		M.Sc. (Agri)	168
		M.Sc. (Hort.)	12
		M.Sc. (Bio-tech)	8
2	College of Agriculture, Pune	Ph.D. (Agril. Met.)	02
		M.Sc. (Agri)	54
		M.Sc. (Hort.)	6
		M.B.A. (Agri)	30
		B.Sc.(Agri)	190
3	Rajshri Shahu Maharaj College of Agriculture, Kolhapur	M.Sc. (Agri)	48
		M.Sc. (Hort.)	6
		B.Sc.(Agri)	190
4	College of Agriculture, Dhule	M.Sc. (Agri)	24
		M.Sc. (Hort.)	4
		B.Sc.(Agri)	128
5	College of Agriculture, Karad	B.Sc.(Agri)	60
6	College of Agriculture, Nandurbar	B.Sc.(Agri)	60
7	College of Agriculture, Muktainagar	B.Sc.(Agri)	60
8	Punyashlok Ahilyadevi Holkar College of Agriculture, Halgaon Tah. Jamkhed, Dist. Ahmednagar	B.Sc.(Agri)	60
9	College of Horticulture, Pune	B.Sc.(Horti)	32
10	Dr. Annasaheb Shinde College of Agril. Engineering and Technology, Rahuri	Ph.D.	12
		M.Tech. (Agril Engg.)	16
		B.Tech. (Agril Engg.)	64
<b>B) Affiliated Colleges</b>			
1	College of Agriculture, Akluj	B.Sc.(Agri)	120
2	Dr. Appasaheb Pawar College of Agriculture, Baramati	B.Sc.(Agri)	180
3	Loknete Mohanrao Kadam College of Agriculture, Sonsal Hingangaon, Tal.Kadegaon	B.Sc.(Agri)	120
4	Karmyogi Dulaji Sitaram Patil College of Agriculture, Gangapur road, Nashik	B.Sc.(Agri)	120
5	Jaywantrao Bhosale Krishna College of Agriculture, Rethare	B.Sc.(Agri)	120
6	College of Agriculture, Sonai	B.Sc.(Agri)	180
7	K.K.Wagh College of Agriculture, Nashik	B.Sc.(Agri)	120



Sr. No.	Name of College	Syllabus	Intake Capacity
8	Dadasaheb Mokashi College of Agriculture, Rajmachi	B.Sc.(Agri)	120
9	Dr.Ulhas Patil College of Agriculture, Jalgaon	B.Sc.(Agri)	120
10	Vasant dada Patil College of Agriculture, Ambi, Talgaon Dabhade	B.Sc.(Agri)	120
11	College of Agriculture, Shahada, Dist. Nandurbar	B.Sc.(Agri)	120
12	Lokmangal College of Agriculture, Wadala	B.Sc.(Agri)	120
13	Dr. D. Y. Patil College of Agriculture, Talsande	B.Sc.(Agri)	120
14	College of Agriculture, Phaltan	B.Sc.(Agri)	120
15	College of Agriculture, Amalner	B.Sc.(Agri)	60
16	Shramshakti College of Agriculture, Maldad, Tal.Sangamner	B.Sc.(Agri)	120
17	Sadguru College of Agriculture, Mirajgaon	B.Sc.(Agri)	120
18	College of Agriculture, Dondaicha, Tal.Sindkhed	B.Sc.(Agri)	180
19	College of Agriculture, Babhulgaon Tal. Yeola	B.Sc.(Agri)	60
20	College of Agriculture, Pravaranagar, Loni Tal. Rahata	B.Sc.(Agri)	60
21	College of Agriculture, Ghargaon, Tal., Shrigonda	B.Sc.(Agri)	60
22	Sharad College of Agriculture, Jainapur Tal. Shirol	B.Sc.(Agri)	60
23	College of Agriculture, Paniv, Tal. Malshiras	B.Sc.(Agri)	60
24	College of Agriculture, Viladghat, Ahmednagar	B.Sc.(Agri)	60
25	College of Agriculture, Nesari Tal. Gadhingalaj	B.Sc.(Agri)	60
26	College of Agriculture, Malegaon	B.Sc.(Agri)	60
27	College of Agriculture, Bhanashiwra, Newasa, Ahmednagar	B.Sc.(Agri)	60
28	Shrimant Shivajiraje College of Horticulture, Phaltan	B.Sc.( Horti)	80
29	College of Horticulture, Sonsal Hingangaon, Tal.Kadegaon	B.Sc.( Horti)	40
30	K.K.Wagh College of Horticulture, Saraswatinagar, Nashik	B.Sc.( Horti)	40
31	H.H.S.S.M.S. College of Horticulture, Malegaon, Dist.Nashik	B.Sc.( Horti)	40
32	Shriram College of Horticulture, Paniv	B.Sc.( Horti)	40
33	Dr. Ulhas Patil College of Agril. Engineering & Technology, Jalgaon	B. Tech (Agril. Engg)	80
34	Dr. D. Y. Patil College of Agril. Engineering & Technology, Talsande	B. Tech (Agril. Engg)	80
35	K.K.Wagh College of Agril. Engineering & Technology, Nashik	B. Tech (Agril. Engg)	80
36	Sahyadri College of Agril. Engineering & Technology, Yashwantnagar, Karad	B. Tech (Agril. Engg)	40
37	College of Agril. Engineering & Technology, Mirajgaon	B. Tech (Agril. Engg)	40
38	Shriram College of Agril. Engineering & Technology, Paniv	B. Tech (Agril. Engg)	40



Sr. No.	Name of College	Syllabus	Intake Capacity
39	Shramshakti College of Agril. Engineering & Technology, Maldad	B. Tech (Agril. Engg)	40
40	Dadasaheb Mokashi College of Agril. Engineering & Technology, Rajmachi	B. Tech (Agril. Engg)	40
41	Dadasaheb Mokashi College of Food Technology, Rajmachi	B.Tech(Food-Tech)	80
42	K.K.Wagh College of Food Technology, Nashik	B.Tech(Food-Tech)	80
43	Shramshakti College of Food Technology, Maldad	B.Tech(Food-Tech)	80
44	College of Food Technology, Jalgaon	B.Tech(Food-Tech)	40
45	College of Food Technology, Diwanmala	B.Tech(Food-Tech)	40
46	G.D.College of Food Technology, Wagholi	B.Tech(Food-Tech)	40
47	College of Food Technology, Ghargaon	B.Tech(Food-Tech)	40
48	College of Agril. Bio-Technology, Loni, Tal.Rahata	B.Sc.( Agril. Bio-tech)	80
49	K.K.Wagh College of Agril. Bio-Technology, Nashik	B.Sc.( Agril. Bio-tech)	80
50	Lokmangal College of Agril. Bio-Technology, Wadala	B.Sc.( Agril. Bio-tech)	40
51	Modern College of Agril. Bio-Technology, Paud, Tal.Mulshi	B.Sc.( Agril. Bio-tech)	40
52	College of Agril. Bio-Technology, Madadgaon, Tal.Nagar	B.Sc.( Agril. Bio-tech)	80
53	College of Agril. Bio-Technology, Baramati	B.Sc.( Agril. Bio-tech)	40
54	Dr. D. Y. Patil College of Agricultural Business Management, Akurdi	BBM (Agri.)	80
55	College of Agricultural Business Management, Narayangaon, Tal.Junner	BBM (Agri.)	80
56	College of Agricultural Business Management, Sangli	BBM (Agri.)	40
57	College of Agricultural Business Management, Gunjalwadi, Tal.Sangamner	BBM (Agri.)	40
58	College of Agricultural Business Management, Loni, Tal. Rahata	BBM (Agri.)	40
59	K.K.Wagh College of Agricultural Business Management, Nashik	BBM (Agri.)	40
60	College of Agricultural Business Management, Wadala	BBM (Agri.)	40





Sr. No.	Name of College	Syllabus	Intake Capacity
61	College of Agricultural Business Management, Sharadnagar, Baramati	BBM (Agri.)	40
62	College of Agricultural Business Management, Paniv	BBM (Agri.)	40
63	College of Animal Husbandary, Baramati	B.Sc.(Animal Husbandry)	30
<b>C) Agril. Tech. Schools &amp; Mali Training Centers</b>			
1	Ghatak Krishi Tantra Vidyalaya, Manjari Farm (Pune), Kolhapur, Dhule, Borgaon (Satara), Solapur, Digraj (Sangali), Puntamba (Ahmednagar), Jalgaon, Malegaon (Nashik)	Agril. Diploma	60 (each)
2	Private Agril. Tech. Schools (Total 74)	Agril. Poly. Diploma	60 (each)
3	Mali Training, Ganeshkhind, Pune	Certificate Course	40
4	Recognized Mali Training (Total - 04)	Certificate Course	40 (each)



<b>Passout Students of Graduate, Post Graduate, Agril. Diploma &amp; Agril. Polytechnic of MPKV, Rahuri (Academic year 2019-20)</b>		
<b>Sr.No.</b>	<b>Programme</b>	<b>Passout Students</b>
<b>Graduation</b>		
1.	B.Sc. (Agril.)	2982
2.	B.Sc. (Horti.)	244
3.	B.Tech. (Agril. Engg.)	424
4.	B.Tech. (Food Technology)	383
5.	BBM (Agril.)	02
6.	BBA (Agril.)	343
7.	B.Sc. (Agril. Bio.Tech.)	309
8.	B. Sc (Animal Hus.)	20
	<b>Total</b>	<b>4707</b>
<b>Ph.D. and Post Graduation</b>		
9.	Ph.D.	52
10.	M.Sc. (Agril.)	251
11.	M.Sc. (Horti.)	14
12.	M.Tech. (Agril. Engg.)	10
13.	MBA	30
14.	M.Sc. (Bio.Tech.)	03
	<b>Total</b>	<b>360</b>
<b>Agril. Diploma &amp; Agril. Polytechnic</b>		
15.	Agril. Diploma	1715
16.	Agril. Polytechnic	3242



### 3. Research



The jurisdiction of Mahatma Phule Krishi Vidyapeeth, Rahuri extends over the Western Maharashtra comprising of 10 districts divided into four agro climatic zones *viz.*, Western Ghat Zone, Sub-montane Zone, Plain Zone and Scarcity Zone extended from Solapur to Nandurbar. In addition, Jalgaon district with assured rainfall which falls in Central Plateau Zone in the jurisdiction of the university.

For conducting the research on soil, climate, cropping system, livestock and other aspects of farming business, the university has a network of research stations spread in different agro climatic zones. In all, 27 research stations are located in 4 agro climatic zones. The State level Crop Specialists are placed at Jalgaon (Oilseeds), Padegaon (Sugarcane), Niphad (Wheat) and Solapur (Soils). In addition to this, 4 Zonal Research Stations are located at Igatpuri, Pune, Kolhapur and Solapur. There are 18 Sub-Research Stations where mainly monitoring of research work is being done to test the technologies developed by the University as well as to take up the research programmes based on feedback received from the farmers.

At present, there are 82 non-plan schemes funded by State Govt., 45 AICRPs on different crops /plant sciences, 1 Network Projects funded by ICAR on 100% basis and one Centrally Sponsored Research Schemes funded by the Central Govt., Ministry of Agriculture in the jurisdiction of MPKV.

Taking into consideration the availability of land, weather conditions and resources, the university has

concentrated its efforts to develop suitable technologies for dryland agriculture, irrigated farming as well as for hi-tech agriculture. During the last 50 years, the university has released quite good number of high yielding varieties (more than 263) of cereals, pulses, oilseeds, vegetables, sugarcane, fruits, flowers and other cash crops. The appropriate agrotechniques for enhancing agricultural production and productivity of different crops have also been passed on to the farmers. The contribution of university in water management is quite significant. The research on micropropagation, farm machinery, dryland horticulture, integrated pest and nutrient management including biofertilizers, mushroom production etc. is worth mentioning. The university has focussed its attention on location specific and need based research activities in order to cater the needs of all types of farmers and farming groups. Biotechnology with its vast potential and challenges is important to agricultural development. This university is developing biotechnological competence in the areas of plant tissue culture, molecular biology, biocontrol, and biofertilizers.

During the period under report, university has recommended 8 crop varieties and 1 farm implement for release along with 47 recommendations, various aspects and registration of 1 biotic stress tolerant plant sources for benefit of the farmers.

Maharashtra has four geographic regions *viz.*, Konkan, Western Maharashtra, Vidarbha and Marathwada, which have different ecological and cropping patterns. On the basis of weather and land conditions, Maharashtra is divided into nine zones *viz.*, North Konkan, South Konkan, Montane Zone, Sub-montane zone, Plain Zone, Scarcity Zone, Central Plateau Zone, Western Vidarbha and Eastern Vidarbha. To cater the needs of these zones and improve the production and productivity of different crops, this university has planned various research and extension programmes. Emphasis is given on sustainable agriculture, including poultry, sheep and goat rearing, apiculture, fisheries, sericulture etc.



## Zonal, State Level, Lead and Verification Research Stations of the University

Research Station	Lead Function (s)	Verification Function (s)
<b>A. Western Ghat Zone</b>		
1. Igatpuri (Zonal Agril. Research Station)	Rice, Niger, Silviculture, Soil Water Conservation Engineering	Ragi, Beans, Rainfed fruits, Plantation crops, Turmeric
2. Lonavala	Rice (Screening for blast)	--
3. Mahabaleshwar	Wheat (Screening against rust)	Vegetables (cruciferous), Berries
4. Radhanagari	Paddy	Beans, Wheat, Wal
<b>B. Sub-Montane Zone</b>		
1. Kolhapur (Zonal Agril. Research Station)	Maize, Small Millets, Pandharpuri Buffaloe, Horticultural Systems, Sugarcane,	Grasses, Rainfed fruits & Vegetables, Soybean, Groundnut, Organic Farming in Vegetables
2. Regional Sugarcane and Jaggery Research Station, Kolhapur	Sugarcane, Jaggery	Sugarcane based Cropping System
3. Gadhinglaj	Organic farming, Basmati Rice	Sorghum (K), Pulses, Chilli, and Oilseeds
4. Karad	INM for Cropping Systems	Pulses, Maize, Kharif Jowar, Soybean, Sunflower, Groundnut,
5. Vadgaon Maval	Rice	Rice based Cropping System.
<b>C. Plain Zone</b>		
1. Ganeshkhind, Pune (Zonal Agril. Research Station)	Fruits, Vegetables, Flowers, Rajmah Bean, Spices, Plantation Crops, AICRP on Potato	Pulses, Oilseeds and Wheat
2. Digraj	Turmeric, Soybean, Groundnut Betelvine, Problematic Soils	Kharif Jowar, Pulses Sugarcane, Sugar beet,
3. Niphad (State Level)	Wheat, Wheat based Cropping Systems	Pearl millet, Pulses and Oilseeds
4. Pimpalgaon Baswant	Grapes, Onion and Garlic	Pomegranate and Vegetables
<b>D. Scarcity Zone</b>		
1. Solapur (State Level) (Zonal Agril. Research Station)	Soils, Dry farming, Safflower Agrometeorology, Sunflower	Pearl millet, Pulses, Sorghum (R)
2. Mohol	Sorghum (R)	Pulses and Oilseeds
3. Jeur	Organic Farming System	Rabi Jowar, Pulses
4. Pandharpur	Pulses, Oilseeds	Arid Zone Fruit Crops
5. Chas	--	Dry farming, Pearl millet, Pulses (K), Sorghum (R)
6. Padegaon (State Level)	Sugarcane, Sugarcane based Farming & Cropping System	Sugar beet
7. Rahuri	Sorghum, Pulses, Irrigated Cotton, Forages, Grasses, Groundnut (S), Fruits, Vegetables, Cropping System, Water Management, Organic Farming, IPM, Biotechnology, PHT, Farm Machinery, STCR, Cattle, Goat, Sheep, Seed technology, Jute and Under utilised crops	
8. Kopargaon	Sunflower	Pearl millet, Pulses, Soybean, Cotton and Wheat
9. Shirampur	Citrus	--
10. Dhule	Dry farming, Pearl millet, Grasses	Sorghum (K), Pulses, Oilseeds, Rainfed Cotton, Arid Zone Fruit Crops
11. Jadhavwadi (Pune)	Fig and Custard apple	Fig and custard apple
12. Lakhmapur	Pomegranate	Pomegranate
<b>E. Central Plateau Zone</b>		
1. Jalgaon (State Level)	Oilseeds, Banana and Betelvine, Rainfed Cotton	Pulses, Sorghum (K), Soybean, Sunflower



The areas have been identified for better adaptation of cropping patterns such as sugarcane in Kolhapur, Sangli, Pune and Ahmednagar, grapes in Nashik,

Sangli, Pune and Solapur, fruits in Pune, Ahmednagar, Sangli and Solapur district to harvest maximum yield and profit.

## Significant Research Achievements

### A Released Verities /Hybrids

#### I. Field Crops

- 1 **Chickpea : Phule Vishwaraj** - Chickpea genotype “Phule Vishwaraj ” is recommended for release in Maharashtra for rainfed cultivation.
2. **Safflower: Phule Bhivara** - Safflower variety “Phule Bhivara” is recommended for release for cultivation in safflower growing area of the Country (Maharashtra, Karnataka, Andhra and Telangana).
- 3 **Safflower: Phule Nira** - Safflower Nira variety is recommended for release for cultivation in safflower growing of the Country (Maharashtra, Karnataka, Andhra and Telangana).
- 4 **Cowpea: Phule Sonali** - Determinate and uniform maturing Cowpea genotype Phule Sonali (PCP-1123) is recommended for release in cowpea growing areas of western Maharashtra.
- 5 **Mothbean : Phule Sarita** - Mothbean genotype Phule Sarita (MBS-803) is recommended for release in Scarcity zone of Western Maharashtra.
- 6 **Mungbean : Phule Chetak** - Early (69 days) and bold seeded Mungbean variety Phule Chetak is recommended for *Kharif* cultivation in Maharashtra state.
- 7 **Wheat : Phule Satwik** - The bread wheat variety Phule Satwik (NIAW-3170) is recommended for Peninsular Zone and North Western Plains Zone of India under restricted irrigation condition..

#### II. Horticulture crops

- 1 **Grape : Manjari Medika ( Hy)** - The grape hybrid Manjari Medika is recommended for

release in Maharashtra state on the basis of higher juice recovery, uniform juice colour, juice quality and higher antioxidant content and moderately resistance to disease.

- 2 **Grape : Manjari Shyama** - Based on the performance of grape hybrid **Manjari Shyama** for uniform black colour, bold and crunchy berries, early harvest, higher yield and higher antioxidant properties, it is recommended for release in Maharashtra state.

#### B. Farm Implements

- 1 **Tractor operated Phule Shredder** - Tractor operated Phule Shredder is recommended to release for shredding of pruned material and depositing horizontally on both sides of the bed in the orchards.
- 2 **Phule Hydro-Mechanically Controlled Offset Orchard Manager** - Tractor operated Phule Hydro-Mechanically controlled offset orchard manager’ is recommended to release for old root cutting and bed breaking operations simultaneously in orchards.
- 3 **Phule Basin Lister** - Tractor drawn automatic “Phule Basin Lister” is recommended to release for basin formation of 6 x 2 m size for *in-situ* water conservation for rain fed crops.

#### C. Registration of Sources for biotic and abiotic stress

- 1 Based on the aphid infestation, foliage drying grades, yield capacity, outer-morphological plant characteristics and bio-chemical parameters, the two safflower genotypes *viz.*, **SSF-682 and SSF-**



695 are identified as resistant sources for safflower aphid.

## D. Recommendations

### I Natural Resource Management

#### Soil Science and Agriculture Chemistry

1. Application of FYM 25 t ha<sup>-1</sup> with nitrogen, phosphorus and potassium as per yield target equation is recommended for 300 and 350 q ha<sup>-1</sup> rhizome yield of turmeric, balance nutrition and maintaining the soil fertility in medium deep black soils of western Maharashtra.

#### Fertilizer prescription equation:

##### With FYM

$$FN = 0.92 \times T - 0.12 \times SN - 1.61 \times FYM$$

$$FP_2O_5 = 0.50 \times T - 1.75 \times SP - 0.52 \times FYM$$

$$FK_2O = 0.77 \times T - 0.12 \times SK - 2.17 \times FYM$$

##### Without FYM

$$FN = 1.39 \times T - 0.18 \times SN$$

$$FP_2O_5 = 0.84 \times T - 2.93 \times SP$$

$$FK_2O = 1.02 \times T - 0.16 \times SK$$

Where, FN, FP<sub>2</sub>O<sub>5</sub> and FK<sub>2</sub>O is fertilizer N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O in kg ha<sup>-1</sup>, T is yield target (q ha<sup>-1</sup>) and SN, SP and SK are soil available N, P and K in kg ha<sup>-1</sup> and FYM is farm yard manure in t ha<sup>-1</sup>

2. Application of nutrients as per yield target of 50 q ha<sup>-1</sup> for Bt. Cotton through fertigation with 10 t ha<sup>-1</sup> FYM is recommended for higher yield, monetary returns and improving soil fertility of medium deep black soils of western Maharashtra.

#### Fertilizer prescription equation:

##### With FYM

$$FN = 9.58 \times T - 1.15 \times SN - 1.42 \times FYM$$

$$FP_2O_5 = 3.62 \times T - 2.99 \times SP - 1.59 \times FYM$$

$$FK_2O = 8.32 \times T - 0.45 \times SK - 3.77 \times FYM$$

Where, FN, FP<sub>2</sub>O<sub>5</sub> and FK<sub>2</sub>O is fertilizer N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O in kg ha<sup>-1</sup>, T is yield target (q ha<sup>-1</sup>) and SN, SP and SK are soil available N, P and K in kg ha<sup>-1</sup> and FYM is farm yard manure in t ha<sup>-1</sup>

3. Seed treatment to soybean with FeSO<sub>4</sub> and ZnSO<sub>4</sub> @ 0.5% w/w (5 g kg<sup>-1</sup> seed) each at the time of sowing is recommended along with recommended dose of fertilizer (50:75:45 kg ha<sup>-1</sup> N:P<sub>2</sub>O<sub>5</sub>:K<sub>2</sub>O + 5 t ha<sup>-1</sup> FYM) for increase in micronutrient uptake, grain yield and monetary returns on iron and zinc deficient medium deep black soils of Western Maharashtra.
4. Soil application of silicon @ 100 kg ha<sup>-1</sup> through calcium silicate (278 kg ha<sup>-1</sup>) or Bagasse ash (357 kg ha<sup>-1</sup>) to *kharif* onion at the time of planting is recommended along with general recommended dose of fertilizer (100:50:50 kg ha<sup>-1</sup> N:P<sub>2</sub>O<sub>5</sub>:K<sub>2</sub>O + 20 t ha<sup>-1</sup> FYM) for higher availability and uptake of micronutrients, bulb yield and monetary returns of *kharif* onion grown on shallow soils.
5. Soil application of FeSO<sub>4</sub> @ 20 kg ha<sup>-1</sup> + ZnSO<sub>4</sub> @ 10 kg ha<sup>-1</sup> incubated with FYM 100 kg ha<sup>-1</sup> for 15 days along with fertilizer application (100:75:75 kg ha<sup>-1</sup> N:P<sub>2</sub>O<sub>5</sub>:K<sub>2</sub>O + 10 t ha<sup>-1</sup> FYM) for 100 q ha<sup>-1</sup> yield target at the time of transplanting of Aster is recommended for higher yield, monetary returns, maintaining iron and zinc status, in iron and zinc deficient medium deep black soils of western Maharashtra.
6. Soil application of GRDF (100:50:50 kg ha<sup>-1</sup> N:P<sub>2</sub>O<sub>5</sub>:K<sub>2</sub>O + 10 t ha<sup>-1</sup> FYM) along with 12% humic acid 30 kg ha<sup>-1</sup> at the time of planting is recommended in medium deep black soils of plain zone of western Maharashtra for higher yield, maintaining soil fertility and higher economic returns from hybrid brinjal.



7. Soil application of 20 kg ha<sup>-1</sup> K<sub>2</sub>O along with recommended dose of fertilizer (25:50 kg ha<sup>-1</sup> N:P<sub>2</sub>O<sub>5</sub>+ 10 t ha<sup>-1</sup> FYM) to *kharif* groundnut is recommended for low available potassium in shallow soils of sub-montane zone of Maharashtra for higher dry pod yield, monetary returns and improvement in potassium status of soils.
8. Soil application of 50 kg K<sub>2</sub>O ha<sup>-1</sup> along with recommended dose of fertiliser (50 N: 25 P<sub>2</sub>O<sub>5</sub> kg ha<sup>-1</sup>) with 2.5 t ha<sup>-1</sup> of FYM is recommended for *kharif* sunflower grown on medium deep black soils of scarcity zone of Maharashtra for higher yield and monetary returns.
9. In blackgram-sorghum cropping sequence grown on medium deep black soils in scarcity zone of Maharashtra, the practice of minimum tillage followed by sowing of black gram for grain with 75% of RDF (19.0:38.0 N:P<sub>2</sub>O<sub>5</sub> kg ha<sup>-1</sup>) and hoeing at 3<sup>rd</sup> week. After harvest of blackgram, sowing of *rabi* sorghum along with 75% of RDF (38.0 :19.0 :25.0 N:P<sub>2</sub>O<sub>5</sub>: K<sub>2</sub>O kg ha<sup>-1</sup>) and two hoeings at 3<sup>rd</sup> and 5<sup>th</sup> week is recommended for getting higher yield, monetary returns and moisture use efficiency with maintaining soil health.
10. Spraying of 1 % Potassium Nitrate (KNO<sub>3</sub>) at 35 and 55 days after sowing along with recommended dose of fertilizer (50:25:25 N:P<sub>2</sub>O<sub>5</sub>:K<sub>2</sub>O kg ha<sup>-1</sup>) is recommended for higher yield of *rabi* sorghum and mitigation of drought in medium deep black soils of scarcity zone of Maharashtra.
11. Practicing of medium tillage (one harrowing + sowing with seed drill and light harrowing + one hoeing) and nutrient management by application of 25 kg N ha<sup>-1</sup> through urea + 25 kg N ha<sup>-1</sup> through organics (50% crop residue + 50% green leucaenalooppings) + 12.5 kg P<sub>2</sub>O<sub>5</sub> ha<sup>-1</sup> through single super phosphate to *rabisorghum* for improving soil organic carbon stock (SOC) and carbon sequestration rate is recommended for deep black soils of scarcity zone of western Maharashtra.
12. Application of 75 % nutrients as per STCR equation through fertigation along with phosphate solubilizing bacteria @ 2.5 L ha<sup>-1</sup> at planting and foliar application of acetobactor@ 3.0 L ha<sup>-1</sup> at 60 days after planting is recommended for achieving cane yield target of 200 t ha<sup>-1</sup> for preseasonal sugarcane and 150 t ha<sup>-1</sup> for its ratoon grown on medium deep black soils of western Maharashtra.

### Irrigation Water Management

13. Application of irrigation water at 100% crop evapotranspiration on alternate day with 100% fertilization (100:50:50 N:P<sub>2</sub>O<sub>5</sub>:K<sub>2</sub>O kg/ha) in 10 equal weekly splits through drip irrigation system is recommended to obtain better yield, water use and economic benefits from *rabi* garlic cultivated in shallow to medium soils of Western Maharashtra.
14. The period of January to June is recommended as critical stage for irrigation in acid lime for Western Maharashtra.
15. The irrigation schedule through drip for acid lime during crop growth period (January – December) is recommended for better growth, yield and quality of fruits with efficient water use for Western Maharashtra as follows.

January – February	60 % evaporation
March - April	80 % evaporation
May – June	60 % evaporation
July – August	80 % evaporation
September – October	60 % evaporation
November - December	80 % evaporation



### Agronomy

16. In Western Maharashtra under irrigated condition growing of *Bt* cotton followed by *rabi* wheat with 100 per cent recommended dose of fertilizer to *Bt* Cotton (125:65:65 kg NPK ha<sup>-1</sup>) and wheat (120:60:40 kg NPK ha<sup>-1</sup>) is recommended instead of ratoon management in *Bt* cotton for obtaining higher productivity and monetary benefit.
17. In Western Maharashtra under irrigated condition for obtaining higher seed cotton yield and monetary returns of *Bt* cotton the following technologies are recommended in combination,
  - FYM 12 tonne ha<sup>-1</sup> at second harrowing before sowing with application of 75% recommended dose of nitrogen (93.75 kg ha<sup>-1</sup>) by placement (spot application in 4 splits (at basal, squaring, flowering and boll development stage) +100% phosphorus and potassium(65 kg ha<sup>-1</sup> each).
  - Three times foliar application of 1 % urea at squaring, flowering and boll development stage.
  - Raising of one row *Sunnhemp* immediately after cotton sowing between two rows and incorporated before *sunnhemp* flowering.
18. Application of FYM @ 5 ton/ha along with fertilizer dose of 40:40:40; N:P<sub>2</sub>O<sub>5</sub>: K<sub>2</sub>O kg/ha at sowing time and 40 kg N/ ha at 30 days after sowing is recommended for higher seed production of tossa jute (*Corchorus olitorius* L.) on medium deep soil in *kharif* season.
19. In medium deep soils of western Maharashtra to minimize lodging, maximum green forage yield, seed yield and net monetary returns of Oat cv., Phule Harita following technology is recommended.
  - Application of 3 t FYM ha<sup>-1</sup>.
  - The crop should be fertilized with 120:50:40kg N:P<sub>2</sub>O<sub>5</sub>:K<sub>2</sub>O ha<sup>-1</sup> out of which apply 40:50:40 kg N:P<sub>2</sub>O<sub>5</sub>:K<sub>2</sub>O ha<sup>-1</sup> along with 300 kg ha<sup>-1</sup> Silicon as basal dose.
    - Remaining 80 kg N ha<sup>-1</sup> should be given after 30 days after sowing and at first cut of green forage *i.e* at 45 days after sowing in equal splits.
    - After the cut of crop at 45 days after sowing for green forage, it should be left for seed.
20. Application of FYM @ 5 ton/ha along with fertilizer dose of 40:40:40; N:P<sub>2</sub>O<sub>5</sub>: K<sub>2</sub>O kg/ha at sowing time and 40 kg N/ ha at 30 days after sowing is recommended for higher seed production of tossa jute (*Corchorus olitorius* L.) on medium deep soil in *kharif* season.
21. Post emergence application of Metribuzine (70 % WP) @ 0.50 kg a.i. ha<sup>-1</sup> + 2, 4-D sodium salt (80 % WP) @ 1.00 kg a.i. ha<sup>-1</sup> in 500 liter water at 25 days after planting followed by interculturing at 60 and 90 days after planting is recommended for effective weed control and for higher remuneration in preseasonal sugarcane.

### II. Animal Husbandry and Dairy Science

22. Use of 10 ml intramammary injection of Ceftiofur HCL (125 mg/10 ml) per teat at the time of drying off cow (dry cow therapy) is recommended for control of “Mastitis” in crossbred dairy cows.

### III. Horticulture

23. It is recommended to de-hand the ‘hands’ from distal end by keeping ‘8’ hands per bunch after bunch emergence and carry two sprays of 0.5% KH<sub>2</sub>PO<sub>4</sub> + 1% Urea with first spray after de-handing and second spray 15 days after first spray on bunch for better export grade fruit production and higher returns in banana cv ‘Grand Naine’.
24. Planting of banana Cv.Grand Nain on the raised bed of 1 meter width and 1ft height at 1.75 x 1.75m spacing is recommended to reduce the crop losses due to lodging and for getting the higher yield.
25. Pruning of main stem at 45 cm height with

primary and secondary branches at 30 cm length is recommended for getting higher yield in drumstick.

#### IV Basic Sciences

26. Good quality osmotically dehydrated banana slices (8 mm thickness) can be prepared from ripped fruits (<sup>0</sup>Brix 20 to 22) by sulphuring @ 2 g/kg slices for 2 h followed by soaking in sugar syrup (60 <sup>0</sup>Brix, 1:2 w/v) containing 0.1% KMS + 0.1% citrate + 0.2% ascorbic acid at ambient condition upto 16 h followed by mechanical drying at 55 °C until 15% moisture. The product remains in good condition when stored in 200 gauge polyethylene bags upto 6 months.
27. Good quality nutritious, crispy, high fiber Foxtail millet *Chakli* can be prepared using 1000 g Foxtail millet flour, 20 g Salt, 30 g Chilli powder, 50 g Cumin, hot water and oil can be used as per requirement.
28. Good quality nutritious, crispy, high fiber Foxtail millet *Sev* can be prepared using 500 g Foxtail millet flour and 500 g Bengal gram flour, 20 g Salt, 30 g Chilli powder, 50 g Cumin and hot water and oil as per requirement.
29. Good quality cookies with high fiber content can be prepared with 800 g Barnyard millet flour and 200 g Wheat flour, 500 g Sugar, 500 g Fat, 5 g Ammonium bicarbonate and 5 g Sodium bicarbonate.
30. Flood affected sugarcane can be utilized for the preparation of acceptable quality jaggery with better recovery by pre cleaning the flood affected and normal cane by dipping in hot water at 60 °C for 10 minutes followed by crushing and mixing 50:50 proportion of juice.

#### V. Plant Protection

##### Agril Entomology

31. Two sprays of *Metarhizium (Nomuraea) rileyi* 1.15 WP or *Metarhizium anisopliae* 1.15 WP @ 50 g per 10 litre of water are recommended for the control of fall armyworm, *Spodoptera frugiperda* at an interval of 15 days as soon as the incidence is noticed on maize during *Kharif* season.
32. Two sprays of spinetoram 11.7 SC @ 5 ml or chlorantraniliprole 18.5 SC @ 4 ml per 10 litre of water at an interval of 15 days are recommended for the effective control of fall armyworm, *Spodoptera frugiperda* as soon as the incidence is noticed on maize for grain production.
33. Two sprays of cyantraniliprole 10.26 OD @ 9 ml per 10 litre of water at an interval of 15 days are recommended for the control of aphids and thrips in pomegranate as soon as incidence is noticed.
34. At Economic Threshold Level of onion thrips, the sequential strategy with lambda cyhalothrin 5 EC @ 6 ml or dimethoate 30 EC @ 13 ml followed by *Metarhizium anisopliae* 1.15 WP @ 50 g per 10 litre of water followed by 5% NSE along with 10 ml sticker at an interval of 15 days is recommended for the effective control of onion thrips.
35. Two sprays of *Beauveria bassiana* 1.15 WP @ 80 g or *Bacillus thuringiensis* (17600 IU/mg) @ 20 ml per 10 litre of water at an interval of 15 days are recommended for effective control of fruit borer on *Shatavari* as soon as the pest incidence is noticed.
36. Two sprays of *Bacillus thuringiensis* (17600 IU/mg) @ 20 ml or azadirachtin 10000 ppm 30 ml per 10 litre of water at an interval of 15 days are recommended for effective control of leaf eating caterpillar on *Bawchi* as the pest incidence is noticed.



37. Two sprays of *Lecanicillium lecanii* 1.15 WP or *Metarhizium anisopliae* 1.15 WP @ 80 g per 10 litre of water at an interval of 15 days are recommended for effective control of aphids on *Dawana* after the pest incidence is noticed.

38. Two sprays of *Bacillus thuringiensis* (17600 IU/mg) @ 20 ml per 10 litre of water at an interval of 15 days as soon as the pest incidence noticed are recommended for effective control of leaf eating caterpillar on Senna.

### Plant Pathology

39. Three sprays of hexaconazole (0.1 %) at an interval of fifteen days, starting from peanut stage followed by HWT at 52°C for 10 min after harvest are recommended for reducing post-harvest anthracnose incidence and highest marketable fruit yield in mango.

### Microbiology

40. Application of consortium of potash mobilizing bacterial liquid bioinoculant @ 2.5 lit ha<sup>-1</sup> in 500 ltrs water at the time of planting by drenching method with 75% of recommended potash source (87 kg ha<sup>-1</sup>) & 100% recommended dose of Nitrogen & Phosphorous (250 & 115 kg ha<sup>-1</sup>) is recommended for getting maximum cane & sugar yield in Suru sugarcane.

41. Seed treatment of wheat with MPKV consortium of *Azotobacter*, PSB and Potash mobilizing bacteria @ 25g / kg seed along with 75 per cent dose of recommended fertilizers i.e. 90 kg nitrogen, 45 kg phosphate and 30 kg potash per ha is recommended for obtaining higher yield, monetary returns and saving of 25% nitrogen, phosphate and potash fertilizers.

## VI Agril Engg

### Soil Water Conservation

42. It is recommended that ridges and furrows of 60 cm width should be prepared for rainfed Soybean crop cultivation for optimum crop yield and rainwater harvesting in scarcity region of Maharashtra.

### Irrigation and Drainage Engineering

43. The tabular information and maps developed in Geographical Information System (GIS) by Mahatma Phule Krishi Vidyapeeth for tahsils of western Maharashtra are recommended for estimating weekly water and irrigation requirement of cabbage crop by surface and drip methods and green pea crop by surface and sprinkler methods at specific locations.

44. It is recommended to use the following yield response factors for estimating the yield of *suru* sugarcane for different irrigation strategies.

a The estimated seasonal crop = 1.11 response factor (Ky)

b Stagewise yield response factors (Ky) are

i. Tillering stage, Ky1(45-135 days) = 0.32

ii. Grand growth stage, Ky2(136-300 days) = 0.79

iii. Maturity stage, Ky3(301 days up to harvest) = 0.08

45. It is recommended to irrigate tomato with 100% irrigation at vegetative (0-35 days) and fruit development (36-70 days) stages while with 20% less water than required during maturity stage (i.e. 71 days up to harvest) in water scarcity condition for obtaining optimum production of tomato.



46. The crop coefficients given in following table are recommended for the estimation of water requirement of tomato crop.

Week since planting	Kc values	Week since planting	Kc values
1	0.54	10	1.31
2	0.79	11	1.33
3	0.90	12	1.29
4	0.98	13	1.28
5	1.06	14	1.24
6	1.17	15	1.16
7	1.22	16	1.01
8	1.24	17	0.91
9	1.29		

Alternatively, following equation is recommended

$$Kc_t = 12.46 \left(\frac{t}{T}\right)^5 - 36.02 \left(\frac{t}{T}\right)^4 + 37.38 \left(\frac{t}{T}\right)^3 - 19.43 \left(\frac{t}{T}\right)^2 + 6.122 \left(\frac{t}{T}\right) + 0.269$$

Where,

$Kc_t$  = crop coefficient on  $t^{\text{th}}$  day

$t$  = number of days since planting

$T$  = total crop period

47. It is recommended to use the following yield response factors for estimating the yield of tomato for different irrigation strategies.

a. The seasonal yield response factor ( $K_y$ ) = 1.28

b. Stagewise yield response factors ( $K_y$ ) are

i. Vegetative stage,  $K_{y_1}$ (0-35 days) = 0.41

ii. Fruit development stage,  $K_{y_2}$ (36-70 days) = 0.47

iii. Maturity stage,  $K_{y_3}$ (71 days up to harvest) = 0.35

48. It is recommended to irrigate cotton with 100% irrigation at flowering (46-105 days) and boll formation (106 days up to harvest) stages while with 30% less water than required during square formation stage (0-45 days after sowing) in

water scarcity condition for obtaining optimum production of cotton.

49. The crop coefficients given in following table are recommended for the estimation of water requirement of cotton (Bt) crop.

Week since sowing	Kc values	Week since sowing	Kc values
1	0.42	12	1.18
2	0.35	13	1.20
3	0.35	14	1.18
4	0.40	15	1.14
5	0.49	16	1.08
6	0.61	17	0.99
7	0.74	18	0.89
8	0.86	19	0.77
9	0.97	20	0.65
10	1.06	21	0.55
11	1.13	22	0.46

Alternatively, following equation is recommended

$$Kc_t = -3.943 \left(\frac{t}{T}\right)^5 + 30.76 \left(\frac{t}{T}\right)^4 - 54.8 \left(\frac{t}{T}\right)^3 + 32.94 \left(\frac{t}{T}\right)^2 - 5.163 \left(\frac{t}{T}\right) + 0.572$$

Where,

$Kc_t$  = crop coefficient on  $t^{\text{th}}$  day

$t$  = number of days since sowing

$T$  = total crop period

50. It is recommended to use the following yield response factors for estimating the yield of cotton (Bt) for different irrigation strategies.

a. The seasonal yield response factor ( $K_y$ ) = 1.13

b. Stagewise yield response factors ( $K_y$ ) are

i. Square formation stage,  $K_{y_1}$ (0-45 days) = 0.47

ii. Flowering stage,  $K_{y_2}$ (46-105 days) = 0.41

iii. Boll formation stage,  $K_{y_3}$ (106 days up to harvest) = 0.27



51. It is recommended to irrigate wheat with 100% irrigation at crown root initiation (0-25 days) and late jointing (26-65 days) stages while with 30% less water than required during milking stage (i.e. 66 days up to harvest) in water scarcity condition for obtaining optimum production of wheat.
52. The crop coefficients given in following table are recommended for the estimation of water requirement of wheat crop.

Week since sowing	Kc values
1	0.35
2	0.42
3	0.61
4	0.86
5	0.97
6	1.11
7	1.19
8	1.15
9	1.14
10	1.03
11	0.80
12	0.62

Alternatively following equation is recommended

$$Kc_t = -31.138 \left(\frac{t}{T}\right)^5 + 83.51 \left(\frac{t}{T}\right)^4 - 86.198 \left(\frac{t}{T}\right)^3 + 35.96 \left(\frac{t}{T}\right)^2 - 3.4254 \left(\frac{t}{T}\right) + 0.4362$$

Where,

$Kc_t$  = crop coefficient on  $t^{\text{th}}$  day

$t$  = number of days since sowing

$T$  = total crop period

- 53 It is recommended to use the following yield response factors for estimating the yield of wheat for different irrigation strategies.

a The seasonal yield response factor ( $K_y$ ) = 1.30

b Stagewise yield response factors ( $K_y$ ) are

- Crown root initiation,  $K_{y_1}$ (0-25 days) = 0.49
- Late jointing,  $K_{y_2}$ (26-65 days) = 0.47
- Milking stage,  $K_{y_3}$ (i.e. 66 days up to harvest) = 0.36

54. The developed equation is recommended for yield prediction of drip irrigated cucumber crop under shading nets with silver- black plastic mulch and non mulch conditions.

Crop under silver black plastic mulch

$$Y = -0.02107 X_1 - 47.9953 X_2 + 0.702623 X_3 - 2.81051 X_4 + 245.31$$

Crop without mulch

$$Y = -0.01861 X_1 - 32.3151 X_2 - 0.05762 X_3 - 1.66886 X_4 + 174.3166$$

Where,

$Y$  = Cucumber yield ( $\text{Kg ha}^{-1}$ )

$X_1$  = Seasonal water required (mm)

$X_2$  = B-FR ratio

$X_3$  = Mean temperature ( $^{\circ}\text{C}$ )

$X_4$  = Mean relative humidity (per cent)

## VII Social Sciences

### Agril. Extension

55. From the study on Awareness of Fall Armyworm pest amongst Maize growers it is concluded that, there is a huge gap between expected and actual knowledge and awareness of the maize growers regarding the fall armyworm besides this majority of the respondents faced constraints regarding training on FAW.

*Therefore, State Agriculture Department should give recent information about knowledge of FAW and imparts skill through trainings and method demonstration amongst the Maize growers.*

**Hence it is strongly recommended that State Agril. Dept. should promote and start Farmers Field School (FFS) regarding FAW on Maize for imparting knowledge and skill amongst the Maize growers.**

56. From the study on, Mitigation practices followed by cotton growers to control Pink Bollworm in



Dhule District it is concluded that, majority of the respondents were educated, had medium level of scientific orientation, risk orientation, used sources of information to medium level. But still, very few number of cotton growers installed and used trichocard and light trap for mass trapping of adult moths and other bio-agents. Besides this majority of the respondents use mitigation practices up to medium level only.

**Therefore, from the study it is strongly recommended that State Agricultural Universities and State Agril. Dept. should jointly develop Suitable Mobile App and provide to cotton growers.**

**In this context, organize awareness campaign and give wide publicity to recommended mitigation practices for control of pink bollworm. Also pheromone traps, tricho-cards and bio-pesticides should be made available on large scale at reasonable cost at grass root level.**

57. It is observed that, modified ventilated double row onion storage structure with chain linked side walls and asbestos roof has lowest quantitative losses compared to other onion storage structures. However, it is observed that only about 28 per cent of the farmers are using this structure. **Therefore, it is recommended that the Agriculture and Line department of agriculture shall popularize and increase awareness about this structure among onion growers.**

58. By considering the physical characteristics of selected recommended varieties under study, there is need to popularize the variety CoM 09057 among jaggery producers. Therefore, efforts should be made through various extension programmes (viz. Group discussion, Farmers rally etc.) with the collaboration of Maharashtra State Agril. Department and Krishi Vigyan Kendras.

59. **1.** In the study entitled “Documentation of IFS models in Pune Region” it was observed that in Pune district among different models Agriculture+Horticulture+Dairy+Value addition (fruit processing) (2.41) followed by Agriculture+Horticulture+Poultry+Fisheries (2.38) and Agriculture + horticulture+ Dairy+ goat farming + poultry (2.18) resulted in higher average B:C ratio. Similarly from rainfed area like Solapur district average B:C ratios for the combination of Agriculture+Sericulture (2.09), Horticulture + Sericulture +Goat farming (1.90) and Agriculture+Horticulture+Dairy (1.74) were observed as higher compared to other combinations. **Hence, it is recommended that the farmers from Pune and Solapur district should adopt these suggested respective IFS models for sustainable agriculture and to augment their income.**

**2.** The study on IFS also indicated that adoption of IFS is the right approach for enhancing the income of the farmers. **Therefore, it is recommended that non-adopters of IFS, especially small and marginal farmers, should be promoted for adoption of IFS through the integrated efforts and co-ordination of State Department of Agriculture and allied development departments.**

60. Low cost mole drain technology is found economically feasible for reclamation of saline-waterlogged and ill drained deep black soils on small and marginal farmers field. Hence, efforts should be made to increase awareness among farmers through extension activities viz; Group discussions, Farmers rallies etc. to popularize this technology by Department of Agriculture, Maharashtra and Krishi Vigyan Kendra in collaboration with Agril. Universities. To reinforce the technology dissemination, High power tractor



(> 65 HP) with mole plough should be provided on custom hire basis by Department of Agriculture, Maharashtra or bank loan facility may be availed on 4% interest rate as of crop loan. Also for effective implementation of this technology, sugar factories should made outlet drains in their command area.

61. It was observed from the results of the study that the maize growers from Ahmednagar district had mostly utilized (39.17 %) internet facility on mobile for acquiring agricultural information. It is, therefore, recommended that the university scientists may develop the audio-video clips and mobile applications for management of Fall Army Worm of maize and give wide publicity through State Department of Agriculture for the benefit of farmers on large scale.

#### **Agril Economics**

62. The nutrient management, variety and seed application aspects, interculturing, preparatory tillage and protective irrigation contributes around 31, 26, 17, 12 and 12 per cent to the yield of green gram. Therefore, it is recommended that green gram farmers shall adopt these technologies to a greater extent to get higher productivity.

63. The farmers in Maharashtra earned gross economic returns of Rs. 29120 Crores and net economic benefit of Rs. 6189 Crores from university released gram varieties (Vijay, Vishal, Digvijay, Virat, Vihar, Phule G-12, Vishwas, Rajas, Kripa) during 28 years (1990-91 to 2017-18). It reveals that an investment of one rupee in gram research and extension generated income of Rs. 27 with 31 percent Internal Rate of Return (IRR). Therefore, it is recommended that the substantial funds be provided for research and extension activities for gram.

64. The increase in Minimum Support Price (MSP)

indices of Groundnut, Soybean and Sunflower at constant prices was less than increase in the inputs price indices during 1996-97 to 2016-17 by 114, 66 and 33 per cent, respectively. Therefore, it is recommended that there is need to maintain the parity between Minimum Support Prices (MSP) and Input Prices.

65. Price received for grapes by members of Abhinav Farmers Group was higher (Rs. 62/kg) than the other farmers (Rs. 39/kg) with the high internal rate of returns (32%). Therefore fruit farmers shall formulate Farmer Producer's Groups.

66. The indices of arrivals and prices of red gram and gram during the last 10 years (2009-10 to 2017-18) in the Ahmednagar APMC, indicated higher prices in the months of January, July, August, October to December and July to December, respectively. Therefore, farmers shall sell red gram and gram during the period of high prices to get better income.

67. Based on the last 10 years data (2009-10 to 2018-19) in unirrigated area of Dhule district, the loan disbursement and loan recovery has been decreased by 26 and 52 per cent, respectively. In order to improve the performance of these PACS, it is recommended that the funds from National Agricultural Credit (Stabilization) Fund and National Agricultural Credit (Long Term Operations) Fund as recommended by All India Rural Credit Survey Committee (AIRCSC) be provided for smooth running of these PACS.

#### **Agril Statistics**

68. The fertilizer use for crop production in Nashik, Dhule, Nandurbar, Ahmednagar and Pune districts of Western Maharashtra are in extreme imbalanced proportion and moderately balanced in Jalgaon, Solapur, Satara and Kolhapur.

Imbalance use of fertilizers affected the soil health.

Therefore, it is recommended to use fertilizers in the ratio of 2 N: 1 P<sub>2</sub>O<sub>5</sub> : 1 K<sub>2</sub>O for maintaining soil health in Western Maharashtra.

69. ARIMA and Brown's Exponential Smoothing model reveals increasing trend in quantity and prices of sheep and goat meat in future. Indian sheep and goat meat exporters retain UAE, Saudi Arab and Oman.

Hence it is recommended that the state and central government should provide the training and financial assistance at par with international standard to the Indian exporters to boost the export of sheep and goat meat from the country.

## Seed production Programme

<b>Seed Production</b>	University Farm	- 8071 q
	Farmers Participatory	- 14000 q
	Pulses Seed Hub	- 3740 q
	<b>Total</b>	<b>- 25811 q</b>
<b>Planting Material (No. of grafts)</b>	9.38 Lakhs	
<b>Biopesticides</b>	45 MT & 300 Lit.	
<b>Biofertilizers</b>	44.6 MT & 7001 Lit	
<b>Micronutrient formulation</b>	5400 L	



## 4. Extension Education

Extension education is one of the important mandates of the university. The Directorate of Extension Education (DEE) was set up in 1981 with objectives to conduct extension education activities *viz.*, capacity development of all stakeholders including farmers in different agro-ecosituations, to assess and refine the latest agricultural technologies through on farm trials for location specific applications, to demonstrate the improved technology on the farmer's fields, to show the advantages and benefits of improved technology i.e. result demonstration and to solve local problems in the light of research findings and getting feedback for strengthening research and to provide farm information services through various extension activities. The Directorate of Extension Education was set up in 1981 with following objectives:-

- To initiate, plan, organize and implement all extension education programmes and activities under University jurisdiction.
- To provide farm information services through various extension activities
- To solve local problems in the light of research findings and getting feedback for strengthening research.
- To conduct short and long duration trainings for the benefit of farming community in different agro-eco-situations.
- To assess and refine the latest agricultural technology through front line demonstration for its wider adoption through different extension agencies.
- To co-ordinate the extension education activities in the jurisdiction of University.
- To establish co-ordination between Communication Center, Regional Extension Centers, District

Extension Centers and Agricultural Technology Information Center functioning.

- To organize the Farmers Rallies & Exhibitions for technology dissemination.

In addition to this, Directorate performs activities like co-ordination of extension education activities in the jurisdiction of University through its various units *viz.*, Agricultural Technology Information Centre (01), Regional Extension Centres (04), District Extension Centres (05), KrishiVigyanKendras (17) and College Extension Blocks (03) performs this pivotal activity by organizing on campus and off campus extension programmes *viz.*, Training programmes, FLDs, Farmers Rallies, Field Visits, Diagnostic Team Visits, On Farm Trials, Exhibitions, Field days etc. for transfer of technologies and collecting feedback.

### 1. Regional Extension Centres (REC) / District Extension Centres (DEC)

The Regional Extension Centres (2000) and District Extension Centres (2006) have been established in the University jurisdiction to test and transfer the improved technology from time to time in adjoining areas of respective research and educational Institutes. Four RECs are started at the constituent college's *viz.*, Pune, Dhule, Kolhapur and one at Central Campus, Rahuri. Five District Extension Centres (DECs) have been started at different research stations *viz.*, Jalgaon, Padegaon (Satara), Solapur, Digraj (Sangli) and Niphad (Nashik). The RECs consists of four SMS in the subject of Agronomy, Animal Husbandry, Horticulture and Plant protection. These Regional Extension Centres are headed by Associate Professor of Agronomy designated as a Extension Agronomist. The activities of each REC are governed by Extension Agronomist at regional level which is technically controlled by Director of Extension Education. In each Regional Extension Centres Extension, Agronomist, one Steno



and one Driver are working under the T and V Scheme are merged with Extension Education Scheme which is having four Subject Matter Specialists in the discipline of Agronomy, Horticulture, Plant Protection and Animal Science and Dairy Science.

These Regional Extension Centres and District Extension Centres does not have separate funding hence University is providing funds from revenue receipts for organization of Extension Activities in their Operational areas. These RECs and DECs are having coordination with Agriculture Technology Management Agency (ATMA) and District Superintending Agriculture Officer (DSAO) for implementation of various Agriculture Programmes for district and also organizing Monthly District Workshop in every month.

The staff under the RECs and DECs usually undertakes activities relating to transfer of technology in the adjacent areas. The activities like monthly district workshops, fortnightly trainings, and demonstrations on farmer's fields, farmers' rallies and technical guidance to farmers are also organized by the centre. Every Regional Extension Center and District Extension Centre are provided with Mobile Crop Dispensary Van with the facilities to undertake soil and water analysis, diagnosis of diseases, insect, pest instantly on the spot in different villages.

## 2. Krishi Vigyan Kendras (KVKs)

There are seventeen KVKs in the jurisdiction of the University. Out of the total KVKs 13 KVKs are operated by the NGOs, one of *Yashwantrao Chavan Maharashtra Open University (YCMOU)* while, 4 KVKs viz., KVK-Dhule, KVK-Mohol (Solapur), KVK-Borgaon (Satara) and KVK-Mamurabad Farm (Jalgaon) are directly under the control of the University. These KVKs have been established with the mandates to organize need-based training in

agriculture and allied enterprises to practicing farmers, farm women, rural youth and extension functionaries; to conduct front line demonstrations on farmers' fields on various crop production technologies; to conduct on farm trials/adaptive trials in agriculture and allied enterprises based on location specific problems and to organize different extension activities to disseminate the technologies.

## 3. Agricultural College Development Block

Practical training in extension education is being given to the students in College Development Blocks. There are about 60 to 100 villages attached to constituent colleges' viz., Pune, Dhule and Kolhapur. The College Development block also serves as a laboratory to transfer the improved technology developed by the university. The viability and usefulness of technology developed by the university is tested under different field conditions and farming situations. The field staff working at different blocks provides guidance and help to the farming community. The extension staff also extends the efforts to evaluate and record the expected social and economical changes among farmers. The planning and implementation of extension programmes is carried out by the Department of Extension Education at different colleges

## 4. Agricultural Technology Information Centre (ATIC)

The National Agricultural Technology Project (NATP) provided funds to establish Agricultural Technology Information Centre (ATIC), single window delivery dissemination and supporting system in 2001 at MPKV, Rahuri. The extension activities like field visits, replying the queries of the farmers and other stakeholders, diagnostic services in coordination with the other departments of University are being performed by the ATIC. Besides, the seed and seedlings, processed





products and publications are also sold through ATIC to the end users. Helpline, Kisan Call Centre, separate website and Video Conferencing Unit have started its functioning in this centre for solving the problems of the farmers. The ATIC provides diagnostic services, organizing and participating in Monthly District Workshops and giving advisory services.

## Objectives

The center is functioning with the following objectives

- To provide greater coordination and intensive interaction between the researchers and technology users beyond individual units of research institutions in contributing towards the dissemination of information.
- To serve as a "Single Window System" with an objective to help Farmers and other stake holders such as Farmer-Entrepreneurs, Extension workers, Development agencies, Non-Government Agencies (NGOs) and private sector organizations to providing solutions to their location- specific problems in agriculture and make available all the technological information along with technology inputs and products for testing and use by them.
- To build up required confidence among farmers and to strengthen linkage between the University and the farmers.
- To provide diagnostic and advisory services such as soil and water testing, plant and livestock health diagnosis and advisory services accordingly.
- To sale and distribute improved products emerging as a result of research being done at SAU's like seeds, planting materials, livestock breeds, fish seed, poultry trains and processed products etc.
- To provide an overview of improved technology through published literatures and other communication materials.

- To overcome technology dissemination loss by providing direct access of farmers to improved expertise as well as technological products.
- To provide an opportunity to University to have resource generation through sale of their technologies.
- Participation in state festivals & exhibitions.

## Diagnostic and Advisory service

- Diagnosis of plants/crops problem
- Management of field problems
- Analysis of soil samples
- First hand information to approaching farmers

## 5. Press, Publicity and Publications

The Communication Centre of Mahatma PhuleKrishiVidyapeeth, Rahuri was established in May 1982 for effective use of mass media in transfer of technology. The unit produces different type of farm literature, publicity of news items and involved in organization of exhibitions, facilitating broadcasting of Agril. Programmes for transfer of technology through All India Radio, Doordarshan and Private Channels. The centre publishes *KrishiDarshani*, an annual farm diary which is very popular among the farmers. Besides *ShriSugi*, a periodical is published before every season of the year. Also an e news-MPKV Happenings, and MPKV News Letter are published regularly. Besides DVDs of various crops are prepared by this centre. A Printing Press is also operated by the centre for printing work.

## Mechanisms for Research-Extension Linkage

- Joint Agresco
- Zonal Agricultural Research & Extension Advisory Committee (ZAREAC)
- Monthly District Workshops
- Training Programmes
- Diagnostic Team Visits

## Extension Outreach Programmes

### • Farmer FIRST Schemes

**Farmer FIRST project under *Rashtriya Krishi Vikas Yojana (RKVY)* :** The project entitled Farmer FIRST with budget outlay of Rs 5.91 crore is an MPKV initiative to move beyond the production and productivity and to privilege the complex, diverse and risk prone realities of majority of the farmers through enhancing farmers-scientists contact with multi stakeholder's participation. The various technology components include Sugarcane+ Vegetable Intercrops (1500), Cotton based production technology (900), Groundnut based production technology (300), Gram based production technology (300), Bacterial Blight disease management in pomegranate (600), Cigatoka disease management in Banana (300), Onion set planting (*Chingali Kanda-900*), Mole Plough technology for ill drained soil (450) and Animal Component (Feed support, Health care and mineral supplement, Artificial insemination in cows for upgrading, Supply of fodder grasses sets, Backyard Poultry-Supply of chicks and feeding (300). Thus, through this project University will reach 5550 farmer participants and there will be horizontal expansion of the farmers in the region.

### • ICAR Farmer FIRST programme:

The ICAR Farmer FIRST programme entitled "Socio-Economic Empowerment of Farmers through Farming System Interventions for Sustainable Agriculture Development in Ahmednagar District" has been sanctioned to MPKV, Rahuri from 2016-17. The project is being implemented in *Chinchvihire* and *Kangar* villages on the theme Integrated Farming Systems. Various extension programmes are being undertaken through

this project for the socio-economic development of farmers.

### Major extension activities(April – June, 2019)

- **Retrospection – 2019:** A Magova (Retrospection) programme to review the various activities of the University during the year 2019 and a Rabi Farmers Rally in coordination with State Department of Agriculture was organized in the university on January 11, 2020. Shri. Dadaji Bhuse, Hon'ble Minister of Agriculture, M. S. and Pro-Chancellor, MPKV, Rahuri was the Chief Guest, while, Shri. Balasaheb Thorat, Hon'ble Minister of Revenue, M. S. was the guest of honour for the function. Vice Chancellor Dr. K.P. Viswanatha presided over the function. Shri. Lahu Kanade, MLA, Shri. Vishwajit Mane, Director General, MCAER, Pune, Executive Council member and MLC Shri. Prakash Gajbhiye, Prof. Nathaji Chougule, Mrs. Sunita Patil, Shri. Prataprao Shelke, Vice President, Zilla Parishad, Ahmednagar, Directors, Associate Deans, Officers of the university were present. Dr. S. R. Gadakh presented the research and extension activities of the past year. Dr. A. L. Pharande, Dean, Faculty of Agriculture and Shri. Sopan Kasar, Registrar presented the reports on education and administration, respectively. The popular University publication *Krishi Darshani-2020*, *Accomplishments-2019* and *MPKV: At a Glance* were released during the function. *MPKV Calendar-2020*, depicting monthwise agricultural information was released on the occasion of Magova programme. The university website was also launched.
- **Action Plan Workshop of KVK:** Mahatma Phule Krishi Vidyapeeth, Rahuri and ICAR-ATARI, Zone VIII, Pune jointly organized an Action Plan



Workshop of KVKs for western Maharashtra during 9<sup>th</sup> March, 2020 at MPKV, Rahuri. The workshop was inaugurated by Dr. S.R. Gadakh, Director of Research and Extension Education, MPKV, Rahuri. The university scientists guided the participants. During the workshop the Programme Co-ordinators and Subject Matter Specialists of respective KVKs presented their action plan and it was finalized in consultation with university experts. In all 165 Programme Co-ordinators, SMSs and other staff of KVKs participated in the programme.

### **Zonal Agricultural Research and Extension Interface**

- The Zonal Agricultural Research and Extension Advisory Committee (ZAREAC) meeting for kharif-2019 was organized by MPKV, Rahuri in co-ordination with the State Department of Agriculture, MS at *Kamdhenu* Auditorium Commissionerate of Animal Husbandry, Pune the on 19<sup>th</sup> June, 2019 for Nashik, Pune and Kolhapur divisions. Vice Chancellor Dr. K. P. Viswanatha presided over the meeting. Shri. Suhash Diwase, Commissioner (Agriculture), M. S., Directors Dr. S. R. Gadakh, Shri. P.N. Pokale, Dr. Lakhan Singh were present on the dais. Dr. S. R. Gadakh, Director of Extension Education, MPKV, Rahuri made brief presentation on extension, various recommendations and released varieties during 2019 and guided the participants, While, Heads of Departments, Joint Directors of Agriculture Shri. Zhende, Shri. Bhatane Mr. Sapre, District Supt. Agril. Officers, PD, ATMA, Associate Directors of Research, Crop Specialists, Heads of KVKs, Incharge, RECs and DECS, scientists and officers of Agriculture Department participated in the discussion. In all 160 participants including SDAOs, TAOs and Programme Co-ordinators from KVKs and Scientists from university attended the
- said meeting.
- The Zonal Agricultural Research and Extension Advisory Committee meeting for Rabi and Summer 2019-20 was organized on October 25, 2019 at the Mahatma Phule Krishi Vidyapeeth, Rahuri in collaboration with Department of Agriculture, M.S. Vice Chancellor Dr. K. P. Viswanatha presided over the meeting. Dr. S. R. Gadakh, Director of Research and Director, Extension Education, Dr. P. N. Pokle, Director, Horticulture, M.S., Joint Directors of Agriculture Shri. Dilip Zhende, Shri. Dashrath Tambale, Shri. Ramesh Bhadane, Associate Deans Dr. S. B. Kharbade, Dr. G. G. Khot, Dr. R. R. Suryavanshi and Associate Director of Research Dr. V. D. Shende were present on the dais. . Dr. S. R. Gadakh, Director, Extension Education gave the introductory remarks and made a presentation on extension activities. Associate Directors of Research, Crop Specialists, scientists, KVKs, Regional and District Extension Centres and officers of Department of Agriculture participated in the discussions.
- A massive tree plantation programme *Vanmohotsav* -2019 and *Krishidin* was organized on July 08, 2019 at the Mahatma Phule Krishi Vidyapeeth, Rahuri to celebrate the birth anniversary of former Chief Minister of Maharashtra late Vasant Rao Naik. Dr. K. P. Viswanatha, Vice Chancellor, MPKV, Rahuri presided over the function. Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. S. R. Gadakh, Director of Research and Extension Education, Shri. Fasiuddin Shaikh, Tahsildar, Rahuri, Shri. Milind Dhoke, University Engineer, Associate Deans Dr. P. A. Turbatmath, Dr. S. A. Ranpise, Dr. V. D. Shende, Nodal Officer, Punyashlok Ahilyadevi Holkar College of Agriculture, Halgaon and Shri. Devkhile, Deputy Conservator of Forest,



Ahmednagar were present. After the inaugural programme tree plantation was done at various sites in presence of Shri. Rahul Dviwedi, District Collector, Ahmednagar, Shri. Adarsha Reddy, District Conservator of Forests, Ahmednagar and Mrs. KirtiJamdhade, District Forest Officer, Ahmednagar. The university staff and students planted trees at the central campus. These include neem, jamun, mango, bamboo, karanj, aonla, hirda, behada, kagzi lime and various medicinal and forest plants.

- The Diploma in Agricultural Extension Services for Input Dealers (DAESI) programme sponsored by ATMA, Dhule and Solapur is running at KVK, Dhule and Mohol. The batch of 40 input dealers are undergone this training programme at the respective campuses. The KVKs are acting as a facilitating organization for the same.
- Farming system for Nutrition Project (FSN): KrishiVigyan Kendra, Mohol, Dist. Solapur and KrishiVigyan Kendra, Dhule is implementing UNICEF Funded Farming System for Nutrition (FSN) project in collaboration with ATARI, Zone-VIII, Pune, MCAER, Pune and Technical support from M.S. Swaminathan Research Foundation, Chennai. In this context, KVK, Mohol organized Training cum workshop on FSN (Farming system for Nutrition Project) at Pokrapur, Tal- Mohol on 20<sup>th</sup> June, 2019 under FSN project.
- An Awareness programme of Jalshakti Abhiyan was launched at MPKV, Rahuri in coordination with the Department of Agriculture and KrishiVigyan Kendra on August 5, 2019. Dr. S. R. Gadakh, Director of Research and Extension Education presided over the programme. Shri. Vilas Nalage, DSAO, Ahmednagar, Dr. M.M. Desai, Manager, ATIC, Shri. Mahendra Thokle, TAO, Rahuri, Dr.

SambhajiNalkar, Head, KVK, Babhaleshwar, Dr. Kaushik, Head, KVK, Dahigaonne, Dr. P. B. Kharde, Officer Incharge, Communication Centre and scientists, staff of Agriculture Department were present on this occasion.

#### Activities under ICAR Farmer FIRST Programme

- A training programme on Bajra and Red Gram Production Technology under ICAR Farmer FIRST programme was organized on June 17, 2019 at the central campus. Dr. N.S. Kute, Principal Scientist, AICRP on Pulses and other experts from university guided the participants pertaining to bajra and red gram production technology. During this occasion Bajara seed (*Dhanshakti and Adishakati*) were distributed to the farmer participants. About 60 farmers participated in the training programme.
- A Training Programme on Vermicompost production and Silage making was organized at the Integrated Farming System project of MPKV, Rahuri under the ICAR Farmer FIRST programme on July 9, 2019. Dr. S. R. Gadakh, Director of Research and Extension Education inaugurated the programme. Dr. PrahladPokle, Director, Horticulture, M. S., Dr. A. V. Solanke, Head, Department of Agronomy, Shri. Hasanabade, PD, NHM, Dr. P. B. Kharde, PI, ICAR FFP, Dr. U. S. Surve, Principle Scientist, IFS project were present. University scientists Dr. UlhasSurve, Dr. Mahendra Mote and Dr. Sunil Adangale guided on IFS model, vermicompost production and silage making along with demonstrations during the one day training programme. Vermicompost and silage bags were distributed to the trainees. Fifty participant farmers and farm women of Chinchvihire and Kangar villages participated in this training programme.
- Dr. S. R. Gadakh, Director of Research and Extension Education, MPKV, Rahuri visited the ICAR Farmer





- FIRST villages viz., Chinchvihire and Kangar on July 19, 2019. He visited the PKV Mini Dal Mill unit run by a women Self Help Group, Integrated Farming System model of participant farmer Shri. DilipNalkar, bajra-Adishakti variety and red gram-PhuleRajeshwari variety crop demonstration plots and also the dairy unit, goat rearing and backyard poultry, pomegranate orchard (Bhagwa variety) of participant farmer Shri. Sunil Walke in Chinchvihire village. Further, he visited the loose housing system of cattle of Shri. BhaskarShete, goat rearing unit of Shri. RajendraWarghude, bajra demonstration and backyard poultry unit of Shri. RaosahebGade in Kangar village and guided the participant farmers.
- A one day exposure visit of ICAR Farmer FIRST programme participant farmers and farm women was organized to KVK, Babhaleshwar and various vermicomposting, goat rearing units at Kolhar, Khandala villages of Rahatataluka and Devgad, Punatgaon villages of Newasataluka on July 25, 2019. Dr. P. B. Kharde, PI and Co-PIs Dr. A. G. Durgude, Dr. B. A. Deshmukh, Dr. S. S. Sadaphal and Dr. R. G. Nimse participated in the visit and guided the participants. In all total 37 farmers were participated in the exposure visit.
  - Dr. S. R. Gadakh, Director of Research and Extension Education visited Ajnale village of Sangolatahasil of Solapur district on August 2, 2019. He visited the orchards of farmers Shri. Mahadev Lade, Shri. Pandurang Lade and Shri. NitinYelapalle. Mr. RajaramPatil, the first innovator of pomegranate orchard of the village briefed about the history of pomegranate and present status of the village. Mr. Ajay Dighe, SMS (Agril. Extn.) explained about the success of Ajnale. Mr. PrabhakarChandane, Chairman, *AkhilBhartiyaDalimbSangh* mentioned about the technical interventions provided by MPKV to the pomegranate growers of the state.
  - Dr. Lakhan Singh, Director, ATARI, Pune visited KrishiVigyan Kendra, Mohol. He was accompanied by Dr. DVS Reddy, Pr. Scientist, ATARI, Bengaluru. Dr. Singh inaugurated the display board of the plan layout of KVK instructional farm. Trees were planted at the hands of the dignitaries. Dr. T. R. Walkunde, I/C Head of KVK welcomed the dignitaries. Mr. K. A. Jadhav, SMS (Hort.) briefed about the fruit crop cafeteria, mother orchard block, dragon fruit demo plot, lawn and ornamental plants for beautification. Dr. L. R. Tambade, Head, KVK, Solapur-I, Mr. A. G. Dighe, SMS (Agril. Extn.) and staff of KVK, Mohol were present during the visit.
  - A training programme on Sugarcane intercropping, Dairy and Poultry management was organized at MPKV, Rahuri for officers of Agriculture Department under the RashtriyaKrishiVikasYojana (RKVY) Farmer FIRST project February 19, 2020. Dr. S. R. Gadakh, Director of Research and Extension Education inaugurated the programme. Dr. A. V. Solanke, Head, Department of Agronomy, Prof. M. N. Desai, PI, RKVY FFP, Shri. R. K. Gaikwad, SDAO, Karjat, Shri. Sanjay Kachole, TAO, Shrirampur, Shri. MahendraThokle, TAO, Rahuri and Dr. Sunil Adangale, Co-PI, RKVY FFP were present. Around 70 officers and staff of Agriculture Department participated in this training programme. Dr. G. K. Waman, PRO, Dr. DeepikaAglawae, R.A. and Field Assistants Shri. RohitUghade, Shri. Saddam Shaikh took efforts in organizing the programme.
  - Dr. Lakhan Singh, Director, ICAR-ATARI, Zone-VIII, Pune along with Dr. R. K. Singh, Former Head, Department of Agril. Economics, CSAAUT, Kanpur, KVKs of Maharashtra and Gujarat and ICAR FFPs from NAU, Navsari and JAU, Junagadh





visited the MPKVs ICAR FFP village Chinchvhire on January 3, 2020. The team visited various demonstration plots vermicompost unit and other activities of under the project.

- An off campus Training Programme on Pomegranate Production Technology was organized at Kangar village under the ICAR Farmer FIRST programme on January 20, 2020. The university scientists guided the farmers on production techniques, integrated nutrient management, plant protection in pomegranate production. More than fifty farmers were present for the training programme. In the afternoon session the scientists visited the pomegranate orchards of Shri. Babasaheb Warghude (Kangar). Shri. Dilip Nalkar (Chinchvhire) and Shri. Maruti Gite (Chinchvhire) and guided them.

#### **Model Training programme on Processing and Value Addition**

- A Model Training Programme on Processing and Value Addition Technology in Fruits and Vegetables sponsored by Ministry of Agriculture and Farmers Welfare, GoI was organized during November 18-25, 2019 by the Department of Food Science and Technology at MPKV, Rahuri. Dr. Y. G. Fulpagare, Associate Dean, Post Graduate Institute inaugurated the training programme. In all twenty two trainees from SAUs and Department of Agriculture from the country participated in this training programme.

#### **Training programme on Soft Skills for Personality Development**

- A training programme on Soft Skills for Personality Development organized by the Department of Agriculture Extension and Communication in coordination with the Extension Education Institute, Anand (Gujarat) at MPKV, Rahuri during November 18-19, 2019. Dr. Y. G. Fulpagare, Associate Dean, PGI inaugurated the programme. The valedictory

programme was conducted in presence of Dr. S. R. Gadakh, Director of Research and Extension Education. More than fifty trainees participated in this training programme.

#### **Skill Development Training programmes**

- Krishi Vigyan Kendra, Dhule organized Skill Development Training Programme on “Production and Utilization of Bioagents for Sustainable Agriculture” in collaboration with ATMA, Dhule for rural youths of Dhule jurisdiction at KVK, Dhule during 16-19 January, 2019. At this event Technical Sessions on Control of Shoot & fruit borer of Okra and Brinjal through Bioagent, Importance of Vermicompost, Trichogrammatids various species, Role of biocontrol agents in cotton ecosystem, Biological control of insect pests in Fruit Crops, Strategies for controlling fruit sucking moth of pomegranate orchard were organized. At this event practical sessions on Mass Production of Chrysopid predator, Trichogrammatids, Cryptolemus montrolezicry predator, Corcyra cephalonica, Zygomorpha beetles for parthenium weed control were held and Exposure visit was organized at Biocontrol laboratory, College of Agriculture, Shahada. Dr. P. P. Patil, SMS (Plant Protection) was course In-charge for this Training.
- KVK, Dhule organized Skill Development Training Programme on “Procedure and Standards for Export of Fresh Vegetables” in collaboration with ATMA, Dhule for farmers and rural youths of Dhule jurisdiction at KVK, Dhule during 22-25 January, 2019. At this event Technical Sessions on Current scenario of vegetables for Export & cultivation practices of major vegetables for export, Introduction & implementation of VEG-NET for export, Introduction & Procedure for important certificates for export (GLOBAL Gap, HACCP,



AGMARK), Importance of bulky organic manure, bio-fertilizers in INM, Use of water soluble fertilizer for quality maintenance of vegetable for export, Importance of IPM for keeping down pesticides residual limits in export of vegetable, Govt. Schemes & Offices engaged in promoting export of vegetable from India (APEDA, MSAMB, RKVY), were organized. Exposure visit was organized at Sahyadri Farms, Mohadi, Nashik. Shri. R. V. Kadu, SMS (Horticulture) was course In-charge for this Training.

### **KisanAadhar Sammelan-2019**

- The event of KisanAadhar Sammelan-2019 was organized at the Mahatma Phule Krishi Vidyapeeth, Rahuri during October 25-26, 2019 in collaboration with Department of Agriculture, M.S. and Agriculture Technology Management Agency (ATMA), Ahmednagar. The event comprised of Live Crop Demonstrations, Agriculture and Animal Exhibition and Expert lectures. The KisanAadhar Sammelan-2019 was inaugurated at the auspicious hands of Dr. Ashok Dalwai, Chief Executive Officer, National Rainfed Area Authority and Chairman, Committee on Doubling of Farmers' Income, Ministry of Agriculture, Cooperation and Farmers Welfare, New Delhi. Vice Chancellor Dr. K. P. Viswanatha presided over the function. Mr. Vishwajit Mane, Director General, MCAER, Pune, Dr. Raviprakash Dani, Former Vice Chancellor, Dr. PDKV, Akola, Mr. Prataprao Bhosale, Member, Executive Council, Kamdhenu University, Gandhinagar, Gujarat, Shri. Nathaji Chougule, Member, Executive Council, MPKV, Rahuri, Mrs. Sunita Patil, Member, Executive Council, MPKV, Rahuri, Dr. Ravshan Ismoliv of Uzbekistan, Shri. Shivajirao Jagtap, District Supd. Agril. Officer, Ahmednagar, Dr. V. S. Shirke, Director,

Extension and HRD, MCAER, Pune, University Directors Dr. A. L. Pharande and Dr. S. R. Gadakh, Shri. Sopan Kasar, Registrar, Shri. Vijay Kote, Comptroller and Shri. Milind Dhoke, University Engineer were present for the programme.

### **Live Crop Demonstrations**

- Crop demonstrations on over 100 acres were organized for the benefit of farmers during the KisanAadhar Sammelan-2019. It included demonstrations on cereals, pulses, oilseeds, forage, vegetables, flowers and cash crops. In all demonstrations of 56 crops and 145 varieties were planted in the cafeteria. In addition demonstrations on advanced irrigation methods, mole plough, soil testing, vermiculture, cultivation of dragon fruit, vegetable and flower cultivation in shadenet, apiculture, integrated pest management, biocontrol were also organized on this occasion. Major attraction of this event was the Integrated Farming System model on farmers field of Shri. Adsure brothers.

### **Agriculture and Animal Exhibition**

- An Agriculture and Animal Exhibition was organized during the KisanAadhar Sammelan-2019. The university technologies were showcased in this exhibition. This included agriculture inputs, improved agriculture implements, processing, subsidiary occupations, medicinal and aromatic plants, publications etc. The animal component included indigenous and improved breeds of cattle, goat, sheep, poultry and dogs. The Government schemes of Department of Agriculture, ATMA, Zilla Parishad, ICAR Farmers FIRST programme were exhibited in the event. Many farmers and farm women visited the KisanAadhar Sammelan-2019.

### **Kharif Technology Day at AC, Pune**

- The Kharif Technology Day was organized at



College of Agriculture, Pune on October 15, 2019. Dr. Vijay Bhatkar, Chancellor, Nalanda University and Inventor of Param Computer inaugurated the event. Vice Chancellor Dr. K. P. Viswanatha presided over the programme. Shri. SuhasDivse, Commissioner, Agriculture, M. S., Shri. PratapraoBhosale, Member, Executive Council, Kamdhenu University, Gandhinagar, Dr. K. V. Prasad, Member, Executive Council, MPKV, Rahuri and Director, Directorate of Floriculture, Pune, Dr. S. R. Gadakh, Director of Research and Extension Education, Dr. V. S. Shirke, Director of Extension and HRD, MCAER, Pune, Associate Deans Dr. P. M. Rasal and Dr. D. D. Pawar, Dr. S. D. Masalkar, Principal, CoH, Pune, Dr. V. S. Supe, Associate Director of Research, Ganeshkhind and Dr. ShivajiGurav, Deputy Registrar, PPV & FRA, Pune division were present on the dais. Various crop demonstrations were organized on the college farm for the farmers.

#### **Agriculture Technology Day at AC, Dhule**

- The Agriculture Technology Day was jointly organized by College of Agriculture, Regional Extension Centre and KrishiVigyan Kendra, Dhule on October 31, 2019 in coordination with Department of Agriculture and ATMA, Dhule. Dr. S. R. Gadakh, Director of Research and Extension Education presided over the programme. Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. PankajMahale, Member, Executive Council, Dr. A. M. Musmade, Associate Dean, Shri. MilindDhoke, University Engineer, Shri. VivekSonawane, District Suptd. Agril. Officer, Dhule were present for the programme. An Agriculture Exhibition was organized on this occasion. University scientists guided the farmers.

#### **MOU signed between MPKV and Reliance Foundation**

- A Memorandum of Understanding (MoU) was signed between MPKV, Rahuri and Reliance Foundation on December 18, 2019. Dr. S. R. Gadakh, Director of Research and Extension Education presided over the programme. Dr. K. D. Kokate, Former Director of Extension Education, Shri. SopanKasar, Registrar, Shri. Vijay Kote, Comptroller, Shri. SachinMardikar, Chief Finance Officer, Reliance Foundation were present on this occasion. At the outset, Shri. Deepak Kekan, Head, Information Services, Reliance Foundation gave a presentation on the information services of the company. The MoU would help to transfer the university developed technologies to the farmers through mobile advisory. Dr. Gadakh and Shri. Mardikar signed the MOU.
- Farm Mechanization Day was celebrated at the Zonal Agricultural Research Station, Solapur in co-ordination with the ICAR's AICRP on Farm Implements and Machinery Research Project, MPKV, Rahuri, Department of Agriculture, M. S., ATMA, Solapur, KVK, Mohol and KVK, Solapur on February 14, 2020. Vice Chancellor Dr. K.P. Viswanatha inaugurated the event. IDr. V. M. Mayande, former Vice Chancellor, Dr. PDKV, Akola was the Chief Guest. Dr. S. R. Gadakh, Director of Research and Extension Education, Dr. D. D. Pawar, Associate Dean, Dr. ASCAE&T also guided the farmers on this occasion. Various demonstrations of farm implements were organized at Mulegaon farm. Booklets on farm mechanization were released during the programme.
- A Farmers-Scientists Interface cum Workshop was organized by CAAST-CSAWM, MPKV, Rahuri in association with Indian Society of Agricultural



- Engineering (ISAE) at Sub-Campus, College of Agriculture, Pune. The programme was inaugurated by Dr. Indra Mani, President, ISAE. Dr. Ushamani P., Deputy General Manager, NABARD, Mr. Ajay Dhalpawar, Assistant General Manager, Technical Training, NETAFIM Irrigation Pvt. Ltd, Pune, Mr. Venkatesh Shete, Project Manager, Lupin Foundation, Pune in presence of Er. Sachin Kamble, Assistant General Manager, NABARD, Dr. R. D. Bansod, Head, Agril. Engg., Dr. S. D. Gorantiwar, Head, Agril. Engg., MPKV, Rahuri, Organizing Secretary ISAE Convention and PI, CAAST-CSAWM, MPKV, Rahuri. This programme included field visits to Hi-Tech Agricultural Park, mushroom production project, horticulture and Watershed Park during morning session and training cum interactive sessions by various dignitaries on water management, improved farm machineries, Digital irrigation, Plant Protection, mobile marketing, Irrigation mobile apps and Watershed Management. This programme was attended by about 100 farmers from 6 villages.
- The Agricultural Mechanization Day was observed on February 17, 2018 by KVK, Dhule, Borgaon, Satara and Mamurabad Farm, Jalgaon. On this occasion experts guided the farmer participants on various aspects of agricultural mechanization. The large number of farmers participated in the programme.
  - A training programme on Medicinal and Aromatic plants was organized by the Medicinal and Aromatic Plants Research Project, MPKV, Rahuri in coordination with the Directorate of Arecanut and Spices Development Board, Calicut (Kerala) on February 20, 2020. Dr. S. R. Gadakh, Director of Research and Extension Education inaugurated the programme. More than 70 farmers and farm women participated in the training programme.
  - The National Mushroom Day and a training programme on Mushroom Production was organized on January 4, 2020 by All India Coordinated Mushroom Research Project, AC, Pune. Associate Dean Dr. P. N. Rasal inaugurated the event. Dr. S. D. Masalkar, Principal, College of Horticulture, Pune, Dr. V. S. Supe, Associate Director of Research, NARP, Ganeshkhind, Dr. Anil Gaikwad, Incharge, AICRP on Mushroom were present for the programme. An exhibition of mushroom products was also organized. About 127 trainees were participated in the programme.
- Parthenium Awareness Week Celebrated at Krishi Vigyan Kendras (16/08/2019 to 22/08/2019)**
- As per the directives from Directorate of Weed Science Research, Jabalpur (M.P.), Krishi Vigyan Kendras under jurisdiction of MPKV, Rahuri organized Parthenium Awareness Programme at different Villages during August 16-22, 2019. The object of celebrating the programme was to create awareness among the farmers and general public about parthenium which is responsible for causing health related problems like pernicious, allergies, poisonous, greatest source of dermatitis, asthma, nasal-dermal and nasal-bronchial types of diseases. Parthenium is also harmful to farm animals as far as their health is concerned.
- Fertilizer Application Awareness Programme at Krishi Vigyan Kendras**
- The Fertilizer Application Awareness Programme was organized during October, 2019 by Krishi Vigyan Kendras under jurisdiction of MPKV, Rahuri. The main focus of this programme was to make farmers more aware regarding soil testing and use of appropriate fertilizers as per soil health



card. To give information regarding new types of fertilizers present in market, and use of Integrated Nutrient Management in order to keep soil healthy and productive.

- The World Soil Day was observed in the jurisdiction of MPKV, Rahuri on December 05, 2019. The KVK,s, RECs and DECs were conducted various programmes and distributed soil health cards to the farmer participants. The University authority participated and guided the participants.
- The Mahila was observed in the jurisdiction of MPKV, Rahuri on December 05, 2019. The KVK,s, RECs and DECs were conducted various programmes and distributed soil health cards to the farmer participants. The University authority participated and guided the participants.
- The Regional Extension Centres, District Extension Centers and KrishiVigyan Kendra had participated in the 'Swachh Bharat Abhiyan' and organized cleaning campaign in their respective areas during 2<sup>nd</sup> October 2019.
- The Monthly District Workshops were jointly organized by the MPKV, Rahuri and Dept. of Agriculture M.S. in the jurisdiction of MPKV, Rahuri during 2019-20. The university scientists guided the officials from the line department. The field visits were also organized on the demonstration farms.
- The diagnostic and surveillance team visits were organized by scientists from Regional and District Extension Centers and KrishiVigyanKendras on farmer's field. These visits were jointly organized in collaboration with the Department of Agriculture (M.S.).





## Extension Education Activities ( 2019-20 )

Sr. No.	Activity	(2019-20 )	
		No. of activities	Participant
<b>1</b>	<b>Training Programmes organized</b>		
i.	For farmers, farm women and youth	346	18791
ii.	For staff of development department (State AgrilDept and others)	136	8804
iii.	Interaction training programme between farmers and scientists	151	5129
<b>2</b>	<b>Workshop, seminars participated</b>		
i.	Monthly district workshops	61	1758
ii	Seminars/Conference	19	996
iii	Zonal workshops (ZAREAC) Kharif, <i>Rabi</i> and Summer	02	340
iv.	Farmer Scientists Forum meetings organized	39	1285
<b>3</b>	<b>Demonstrations and farm trials</b>		
i.	Method demonstrations	238	4506
ii.	Result demonstrations / Assessment Trials (OFTs)	285	285
iii.	Assessment Trials	60	60
iv.	Front line demonstrations & Adaptive trials	1371	1371
<b>4</b>	<b>Other extension education programmes</b>		
i.	Meeting and group discussion (KisanGoshti etc.)	306	9631
ii.	Field visit/shivarpheries	364	5449
iii.	Field days	23	1044
iv.	Farm and home visits	1045	3280
v.	Farmers rallies organized	85	mass
vi.	Agril. Exhibition organized/ participated	62	mass
	Kisan Aadhar Sammelan - 2019	01	mass
	Agro Technology Day and Exhibition at AC, Dhule	01	mass
	Kharif Technology Day at AC, Pune	01	mass
vii	Diagnostic team visit	237	2224



vii.	Surveillance team visit	99	1009
viii.	Lecture by univ. Scientists in diff. Extn. Programme organized by Agril. Dept. NGOs.	413	25852
<b>5</b>	<b>No. of persons visited</b>		
i.	Farmers		83431
ii.	Students		26176
iii.	Trainees		8621
iv.	Officers		2446
<b>6</b>	<b>Media Coverage</b>		<b>Mass</b>
i	Programme News	1379	Mass
ii	AIR Programmes	304	Mass
iii	TV Programmes	54	Mass
iv	University Programmes	150	Mass
<b>7</b>	<b>Other Extension Activities</b>		
i.	Agro Advisories (Telephone, SMS etc.)	1311	244139
ii.	No. of water samples tested	319	319
iii.	No. of soil samples tested & Soil Health Card Issued	3599	3599
iv.	No. of pests samples tested	205	205
v.	No. of diseases samples tested	404	404
vi.	Help line/Telephone Calls attended	18260	18260



## 5. Major Events

April, 2019

### 1. Brainstorming Workshop organized on Bamboo Plantation



April 30, 2019. A brainstorming workshop on Bamboo Plantation was organized at MPKV, Rahuri. Vice Chancellor Dr. K.P. Viswanatha presided over the programme. Dr. N. Barathi, Director, Growmore Biotech Ltd., Hosur, Tamilnadu was the Chief Guest for the workshop. Dr. A. C. Lakshmana, IFS (Retd.), Former Secretary, Govt. of Karnataka, Dr. Harihar Kausadikar, Director of Research, MCAER, Pune, Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. S. R. Gadakh, Director of Research, MPKV, Rahuri, Dr. D. D. Pawar, Associate Dean, DrASCAE&T, Heads of Department Dr. D. B. Yadav, Dr. R. W. Bhaud and Dr. A. V. Solanke, Dr. V. M. Illorkar, Scientist, AICRP on Agroforestry, College of Agriculture, Nagpur, Dr. A. D. Rane, Asso. Prof., DBSKKV, Dapoli, Dr. Hemant Bedekar, Bamboo Society of India, Pune, Shri. Saied Salim Ahmed, Forester, Mrs. Kirti Jamdhade, Deputy Conservator of Forest, Ahmednagar were present on this occasion. Vice Chancellor Dr. Viswanatha in his presidential address informed that the Govt. of Maharashtra has sanctioned a Bamboo start up to MPKV for research and training. Bamboo could be the most utilized plant both for energy and electricity. It has great potential and need to be promoted commercially.

MPKV would standardize the agro techniques and train the youth for bamboo art and handicrafts. The waste land utilization could be achieved through bamboo cultivation, he hoped. Dr. N. Barathi in his chief guest address said that bamboo is grown on 13.9 mill. ha. in the country. Bamboo is the fastest growing plant with 1.5 ft/day growth. Many products are been prepared from bamboo. The Beema bamboo is commercially viable for the farmers. SAUs need to undertake research on bamboo, he said. Dr. Barathi briefed about the uses of bamboo in electricity, ethanol production, oil, bio CNG gas, hydrogen, furniture and its environmental impact. He said that the bamboo due to carbon sequestration is the best solution for global warming. Dr. Lakshmana in his keynote address said that India has the largest area under bamboo in the world. It is a high potential plant and best suited for Silvi-Hort. cropping system. This plant can minimize the challenges of environment, ecology, soil erosion and eco restoration, he remarked. Dr. Bedekar, Shri. Ahmed, progressive farmers Shri. Rajshekhar Patil and Shri. Sanjeev Karpe shared their experiences on bamboo. Dr. Gadakh gave the introductory remarks. Dr. Bharud welcomed the dignitaries and participants. Dr. P. S. Bodke anchored the programme, while, Dr. Solanke expressed thanks. Scientists and staff, students participated in the workshop.

### 2. Bharat Ratna Dr. B. R. Ambedkar Jayanti celebrated

April 14, 2019. The Birth Anniversary of Bharat Ratna Dr. B. R. Ambedkar was celebrated in the university. Prof. Prakash Pawar of Fergusson College, Pune was the Chief Guest for the programme. Vice Chancellor Dr. K. P. Viswanatha presided over the programme. In his speech Prof. Pawar said that Dr. Ambedkar valued humanity amongst all aspects. He fought for social



equality. Dr. Ambedkar was of the opinion that India would prosper when social and economic democracy will come together. He took strenuous efforts for the cause of social equality. He contributed for formulating the Indian constitution. Dr. Ambedkar's thoughts on agriculture especially that of group farming is of immense importance today, he asserted. Dr. Viswanatha in his presidential address said that Dr. Ambedkar has preached the lessons of humanity through his life and efforts. His teaching is most needed in today's world for love and brotherhood of all religions. Dr. S. R. Gadakh, Director of Research gave the introductory remarks and introduced the Chief Guest. Student Mr. Jaysing Solanke anchored the programme, while, Dr. Mahaveer Chauhan, Student Welfare Officer proposed thanks. Dr. S. A. Ranpise, Associate Dean, LAE, Prof. D. M. Gaikwad, Sports Officer, Heads of Departments, staff and students were present on this occasion.

### 3. Mahatma Phule Jayanti celebrated



April 11, 2019. The Mahatma Phule Jayanti was celebrated in the university. Noted author Prof. Devidas Phulari from Nanded was the chief guest on this occasion. Vice Chancellor Dr. K. P. Viswanatha presided over the programme. Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. S. R. Gadakh, Director of Research, Registrar Shri. Sopan Kasar, Associate Deans Dr. D. D. Pawar, Dr. S. A. Ranpise, Dr. V. D. Shende, Nodal Officer, Halgaon college, Dr. Mahaveer Chauhan, Student Welfare Officer, Prof. D. M. Gaikwad, Sports Officer were present on the dais. In his address Prof. Phulari brought to light the significant events of Mahatma's life. Humanity is the religion was Jyotiba's teaching, he said. Mahatma Phule fought for women's education and wrote various books. He also focused on widow's problems. In his presidential address Vice Chancellor Dr. Viswanatha said that we are celebrating the 192<sup>nd</sup> birth anniversary of Mahatma Phule. He along with Savitribai Phule revolutionalized the social system and class differences in the society. Both fought for social equality. This great reformer wrote several books. We are proud to have his name for this university, he said. MPKV is working for the farmers cause and we need to go on Mahatma Phule's path. The Heads of Departments, staff and students were present on this occasion. Dr. Mahaveer Chauhan, Student Welfare Officer expressed thanks.

### 4. MPKV and Central Institute for Research on Cattle signed MOU

April 15, 2019. The Mahatma Phule Krishi Vidyapeeth, Rahuri and Central Institute for Research on Cattle, Meerut signed the Memorandum of Understanding for Education, Research and Extension at College of Agriculture, Pune. Vice Chancellor Dr. K.P. Viswanatha, Dr. Nitin Patil, Director, Central Institute for Research on Cattle, Meerut, Dr. A. L. Pharande,





Dean, Faculty of Agriculture, Dr. S. R. Gadakh, Director of Research, Dr. P. N. Rasal, Associate Dean, College of Agriculture, Pune, Dr. S. D. Masalkar, Principal, College of Horticulture, Pune, Dr. Y. G. Fulpagare, Head, Department of Animal Science and Dairy Science, MPKV, Rahuri, Dr. Shivaji Pachpute, Professor of Animal Science and Dairy Science were present on this occasion. Dr. Viswanatha elaborated the significant contribution of MPKV in the field of dairy development and milk production in the state of Maharashtra. He further stated that the development of indigenous cattle breeds remained neglected and it is very necessary to pay attention towards conservation of indigenous species in the changing environment. Dr. Nitin Patil expressed that this MOU will help in quality research for the students as well as researchers. He expressed the need for revolution in the field of animal husbandry in India. On this occasion, Dr. Rasal informed that the Agriculture College has made special efforts in conservation of *Sahiwal*, the indigenous cattle breed and added that it is proposed to undertake the conservation of *Red Sindhi*, *Gir* and *Rathi* breeds in the near future. On this occasion Dr. Fulpagare gave information about history and various activities of the Department of Animal Science and Dairy Science. This agreement will be helpful in development of education, research and extension activities related to indigenous cattle breed conservation and transfer of cattle research to the dairy owners.

## 5. MOU signed between MPKV and Mukul Madhav Foundation



April 22, 2019. A Memorandum of Understanding was signed between Mahatma Phule Krishi Vidyapeeth, Rahuri and Mukul Madhav Foundation at College of Agriculture, Pune to encourage agricultural education and to provide financial support to the students from economically weaker farmers' families for undertaking agricultural education. Under this agreement, total 59 students doing their graduation, post graduation and Ph. D. in Agriculture in the colleges affiliated with Mahatma Phule Krishi Vidyapeeth will be provided Shrimati Mohini Prahlad Chhabria scholarship of Rs. 50,000/- per student per year by Mukul Madhav Foundation and Finolex Industries Limited. Vice Chancellor Dr. K.P. Viswanatha, Dr. A. L. Pharande, Dean, Faculty of Agriculture, Smt. Ritu Chhabria, Director, Finolex Industries Limited and Managing Trustee of Mukul Madhav Foundation, Shri. Devang Trivedi, Secretary, Finolex Industries Limited, Shri. Bablu Mokale, CSR Executive Member, Dr. P. N. Rasal, Associate Dean, College of Agriculture, Pune, Dr. S. D. Masalkar, Principal, College of Horticulture, Pune were present on this occasion. Dr. Viswanatha explained the educational, research and extension activities of the University. Smt. Ritu Chhabria briefed about the contribution made by the Mukul Madhav Foundation in various areas and its vision. She informed



that under this agreement, scholarships shall be given from the academic year 2019-20 itself. In addition financial assistance in the form of agricultural inputs and agricultural technology will be provided to conduct farmers' need based demonstrations in the villages selected under Rural Agricultural Work Experience (RAWE) Programme by the foundation.

## 6. MOU signed between AC, Pune and Nehru Science Centre, Mumbai



April 12, 2019. A Memorandum of Understanding (MOU) was signed between the College of Agriculture, Pune and Nehru Science Centre, Mumbai for setting up an Agricultural Science Museum at the historical building of Agriculture College. Shri. S. M. Khened, Director, Nehru Science Centre, Mumbai, Shri. Umeshkumar Rustogi, Museum Incharge, Shri. Mohan Sahu, Exhibition Officer, Dr. P. N. Rasal, Associate Dean, College of Agriculture, Pune, Dr. S. D. Masalkar, Principal, College of Horticulture, Pune, Dr. Vedshree Patil, Nodal Officer, Agriculture Science Museum and Heads of Sections were present on this occasion. Dr. Rasal briefed the history of Agriculture College and presented the various activities conducted in the college. He informed that funds for setting up this museum shall be provided by the Indian Council of Agricultural Research, New Delhi and it will be completed within two years. Under this agreement, the plan for setting up the museum will be prepared by the Nehru Science Centre, Mumbai.

## 7. Software guiding 100 t/acre ratoon sugarcane production launched



April 10, 2019. A software system for providing guidance on production of 100 tonne ratoon sugarcane per acre based on soil analysis was inaugurated at the hands of Vice Chancellor Dr. K.P. Viswanatha at College of Agriculture, Pune. On this occasion Dr. Viswanatha in his guidance said that the life originates and ends in the soil. Conservation of the biological properties of the soil is a vital aspect for soil health. The steep decline of the earlier rich soil organic content in the post green revolution era is a matter of concern. He further added that presence of organic carbon should be in the soil and not in the environment and it is the responsibility of farmers, agricultural scientists and agricultural graduates to maintain soil fertility through soil organic content. Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. P. N. Rasal, Associate Dean, College of Agriculture, Pune, Dr. Ramchandra Nazirkar, Professor of Soil Science and Agricultural Chemistry were present for the programme. Computer experts Shri. Ajay Bharde and Shri. Anand Ingale have developed this software.



## 8. Annual Prize Distribution programme of PGI held



April 12, 2019. The Annual Prize Distribution programme of Post Graduate Institute, MPKV, Rahuri was organized under the chairmanship of Dr. A. L. Pharande, Dean, Faculty of Agriculture. Noted comedy poet Shri. Mirza Beg was the Chief Guest for the programme. Dr. S. R. Gadakh, Director of Research, Shri. Sopan Kasar, Registrar, Dr. P. A. Turbatmath, Associate Dean, PGI, Dr. S. A. Ranpise, Associate Dean, LAE, Dr. R. M. Naik, Vice President, Student Council, Dr. Mahaveer Chauhan, Student Welfare Officer, Dr. R. J. Desale, Student Welfare Officer, PGI, Shri. Rajendra Bhujbal, Assistant Registrar, PGI, Dr. Abhijit Nalawade, PTI, Miss. Aarti Boraste, Sabhapati, Student Council, Miss. Rutuja Shinde, Secretary, Sports Committee and Miss. Priyanka Jagtap, Secretary, Prize distribution were present on the dais. In his Chief Guest address Shri. Mirza Beg appreciated the success of girl students. He said that Savitribai Phule through the motivation of Mahatma Phule started girl/women education which is a great boon to the society. Shri. Beg through his comedy address guided the students. Dr. Pharande in his presidential speech said that happiness and laughter are truly needed in our life to overcome stress. The students need to strive to become a good citizen and also conveyed his wishes to the successful students. Dr. Turbatmath gave the welcome

and introductory remarks. The publication Krishigandh was released during the programme. Miss. Rutuja Shinde and Mr. Padmakumar Patil were adjudged and felicitated with the Best M. Sc. (Agri.) and Ph. D. students, respectively. Various prizes were awarded to the students. The staff and students were present for the programme.

## 9. Stakeholder Workshop on Agro climatic networking organized



April 9, 2019. A Stakeholder Workshop on Agro climatic networking was organized by CAAST-CSAWM, MPKV, Rahuri in co-ordination with NABARD and BAIF at Shenit village of Akole taluka of Ahmednagar district. Dr. S. R. Gadakh, Director of Research and Director of Extension Education, MPKV, Rahuri presided over the programme. In his address Dr. Gadakh briefed about the role of MPKV in agriculture development and informed about the research contribution of the university. He also addressed on protective irrigation, integrated farming, poultry farming, processing, women self help groups etc. Dr. K. D. Kokate, Former Director of Extension Education gave a valuable guidance on successful agriculture production related to climate, soil, marketing and significance of water in crop production. Shri. Sachin Kamble, AGM, NABARD, Pune narrated about NABARD initiatives viz., watershed development



project, soil and water conservation and women self help groups. Shri. B. N. Musamade, SDAO, Sangamner, Ahmednagar briefed about various government schemes like farm ponds, traditional farming, protected cultivation, Vermicompost, National Horticulture Mission, role of agro advisory in national food security and minimum support price for food grain crops. Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM explained about climate change and its impact on crop production along with green house gases which result in global warming, characteristics of Indian monsoon and combat measures against this situation. Dr. R. P. Andhale, Associate Professor of Agronomy gave information regarding role of agro advisory and dissemination of agro advisory services for farmers at district level through *Gramin Krishi Mausam Sewa*. Dr. S. A. Dhenge, Research Associate, CAAST-CSAWM project explained the objectives of this project. Shri. V. B. Dyasa, CPE, BISLD, Nashik, Dr. M. B. Dhadwad, Asstt. Professor, Shri. P.B. Gosavi, TAO, Akole, Shri. S.M. Wagle, ACPE, BISLD, Nashik, Shri. P.S. Khose, Jt. ACPE, BISLD, Nashik, Shri. Somnath Chaudhary, Programme Manager, BISLD, Nashik, Shri. Ramnath Navale, Project leader, Climate proofing, BISLD, Nashik and villagers were present for the programme. Mrs. Ashlesha Dev anchored the programme, while, Shri. Jitin Sathe, Regional Incharge, Akole proposed the vote of thanks.

### 10. NCC cadets of AC, Pune achieved grand success in Annual Training Camp

April 9, 2019. Annual training camp of National Cadet Corps was organized at Pune Battalion headquarter. Cadets of Pune Agriculture College won the first prize with grand success in different competitions held during the camp which included platoon drill, best cadet, best senior under officer, volleyball, tug



of war, essay competition, communication skills, cultural programmes and pilot drama. The successful cadets were felicitated at the hands of Col. Bilawaria. Different military trainings and lectures were organized for the cadets. Dr. P. N. Rasal, Associate Dean of Agriculture College and Dr. S. D. Masalkar, Principal of Horticulture College congratulated the cadets for their grand success. The cadets received guidance from Major Prof. Ram Choudhary.

### May, 2019

### 11. Joint AGRESCO - 2019 meeting organized



May 29-31, 2019. The 47<sup>th</sup> Joint AGRESCO-2019 meeting of four State Agricultural Universities of Maharashtra was organized at MPKV, Rahuri in coordination with the Maharashtra Council of Agriculture Education and Research (MCAER), Pune. Shri. Chandrakant (Dada) Patil, Hon'ble Minister of Agriculture, Revenue, M.S. and Pro Chancellor of

SAUs was the Chief Guest for the concluding session. Dr. K. P. Viswanatha Vice Chancellor, MPKV, Rahuri, Vice Chancellors of SAUs Dr. V. M. Bhale (Akola), Dr. A. S. Dhawan (Parbhani), Dr. S. D. Sawant (Dapoli), Shri. Eknath Davale, Principle Secretary, Agriculture, M.S., Shri. Mahendra Warbhuvan, DG, MCAER, Pune, Directors of MCAER Dr. Kausadikar and Dr. Shirke, Directors of SAUs Dr. Pharande, Dr. Gadakh, Dr. Waskar, Dr. Kharche, Dr. Haldankar, Dr. Ingole, Dr. Bhave, Dr. Patil, Dr. Narkhede, Dr. Mankar, Shri. Sopan Kasar, Registrar and Shri. Vijay Kote, Comptroller were present on the dais. In his address to the scientists, Shri. Chandrakant Patil appreciated the research contribution of SAUs for the farmers. He hoped that extension personnel need to take the transfer of technology to the farmers in mission mode approach. This approach would make the farmers smile, happy and would benefit them, he said. Vice Chancellor Dr. Viswanatha in his introductory remarks assured that the SAUs are in forefront for solving the farmers problems. He briefed about the contribution of SAUs for agricultural development. Doubling of farmers income by 2022 is a major challenge before us, he stated. Shri. Davale expressed the need for preparation of road map for future research by the SAUs. Also development of small tools and machinery for farm mechanization are needed, he said. Shri. Warbhuvan expected the need for participatory research by the SAUs. Dr. Gadakh gave the welcome remarks. The programme started by garlanding the portrait of late Minister of Agriculture Pandurang Fundkar. The rapporteurs of thirteen groups presented the proceedings. Dr. B. D. Bhakre anchored the programme, while, Dr. Kausadikar expressed thanks. Several varieties and recommendations were released in the Joint AGRESCO through the group deliberations. Shri. Patil inaugurated the agriculture exhibition organized on this occasion. Directors,

Associate Deans, Heads of Departments, Associate Directors of Research, Crop Specialists, Breeders, scientists, staff and farmers attended the programme.



Earlier the Joint AGRESCO-2019 meeting was inaugurated in presence of all Vice Chancellors of SAUs, Directors of MCAER, NRCs and SAUs and scientists. Vice Chancellor Dr. K. P. Viswanatha presided over the programme. A Souvenir was released on this occasion.

In this Joint AGRESCO MPKV, Rahuri released eight varieties, forty seven recommendations, one agricultural implement and five plant biotic and abiotic stress regitant sources.

## 12. Maharashtra Day celebrated

May 1, 2019. The university celebrated the 59<sup>th</sup> Maharashtra Day and International Labour Day at Central Campus, MPKV, Rahuri. The flag hoisting was done at the auspicious hands of Vice Chancellor Dr. K.P. Viswanatha. On this occasion Dr. Viswanatha said that the Maharashtra state has a rich history, tradition and leaders like Yeshwantrao Chavan contributed to its development in the earlier phase. The state has significantly contributed to the nation's development. We are also celebrating the International Labour Day. MPKV has completed its fifty years of successful journey. During these years the university has made





significant contribution to education, research and extension education. The university developed varieties and technologies have resulted in higher crop production and higher income to the farming community, he said. Dr. N. Barathi, Director, Growmore Biotech Ltd., Hosur, Tamilnadu, Dr. A. C. Lakshmana, IFS (Retd.), Former Secretary, Govt. of Karnataka, Dr. K. V. Laxmanmurthy, Retd. IFS, Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. S. R. Gadakh, Director of Research and Extension Education, Shri. Sopan Kasar, Registrar, Shri. Vijay Kote, Comptroller, Shri. Milind Dhoke, University Engineer, Associate Deans Dr. P. A. Turbatmath, Dr. D. D. Pawar, Dr. S. A. Ranpise, Heads of Department, university scientists, staff and students were present in large number. The programme was anchored by university Security Officer Shri. Goraksha Shete.

### 13. Regional prekharif training programme organized



May 2, 2019. A Regional prekharif training programme for Pune division was organized in the university in coordination with the State Department of Agriculture, M.S. Vice Chancellor Dr. K. P. Viswanatha presided over the programme. Shri. Suhas Divse, Commissioner, Agriculture, M. S. was the chief guest. Dr. S. R. Gadakh, Director of Research and Extension Education, Shri. Vijaykumar Ghawate, Director, extension and Training, Shri. Vijaykumar Ingle, Director, Quality Control and Inputs, Dr. P. N. Pokle, Director, Horticulture, Shri. Kailas Mote, Director, ATMA, Shri. Dilip Zhende, JDA, Pune and Shri. Vilas Nalage, DSAO, Ahmednagar were present on the dais. Vice Chancellor Dr. Viswanatha in his address stressed the need for preparedness of monsoon. The Department of Agriculture is a bridge between the farmers and SAUs. We are encountering new problems like pink bollworm of cotton, fall army worm of maize and white grub of sugarcane. Hence, wide spread awareness on its control measures is needed to be taken. The integrated farming system components are required for avoiding dependency on monocropping and assurity of income to the farmers, he said. He further concluded that an Agriculture Officer need to be a Family Doctor for the farmers in understanding their problems and giving solutions and also reaching the unreachable.



Shri. Divse in his address emphasized the role and responsibilities of officers of Agriculture Department and expected for more dedicated work from them. He said that since training is an integral part of Extension agencies, it need to be taken seriously. He briefed on the preparedness, mitigation, response, evaluation and monitoring aspects. Our plan should be based on facts, figures and evidence, he said. Dr. Gadakh briefed about the research work of the university. Shri. Zhende gave the introductory remarks. Shri. Nalage anchored the programme. University scientists guided the officers of Agriculture Department during the one day training programme.

#### **14. DG, MCAER, Pune visited MPKV, Rahuri and ICAR Farmer FIRST prog.**



May 13-14, 2019. Shri. Mahendra Warbhuvan (IAS), Director General, Maharashtra Council of Agriculture Education and Research (MCAER), Pune visited MPKV, Rahuri. Vice Chancellor Dr. K. P. Viswanatha briefed him about the educational, research and extension education activities of the university. Dr. S. R. Gadakh, Director of Research and Extension Education presented the significant research accomplishments. Shri. Sopan Kasar, Registrar presented the administrative status, Shri. Vijay Kote, Comptroller presented the financial status, Shri. Milind Dhoke, University Engineer presented the development works and Dr. P. A. Turbatmath, Associate Dean, PGI

presented the education activities. Shri. Warbhuvan expressed satisfaction about the progress of activities and assured to fill the vacant positions. Dr. Harihar Kausadikar, Director, Education and Research and Dr. V. S. Shirke, Director, Extension of MCAER, Pune participated in the discussion. They visited the various research projects at CC, Rahuri.



**7 May 14, 2019.** Shri. Warbhuvan, DG, MCAER, Pune along with Dr. S. R. Gadakh, Director of Research, MPKV, Rahuri, Registrar Shri. Sopan Kasar and Directors of MCAER Dr. Kausadikar and Dr. Shirke visited the Chinchvihire village where the integrated farming system model is being implemented under the ICAR Farmer FIRST programme. Dr. P. B. Kharde, PI, ICAR FFP briefed them about the project and activities implemented. They visited the Dal mill operated by the women Self Help Group. Further, they visited the bajra, tur crop demonstrations, backyard poultry, goat and cattle farm of participant farmer Shri. Anil Nalkar and pomegranate orchard of participant farmer Shri. Machindra Shete. Finally they had interactions with the ICAR FFP participant farmers.

#### **15. Training on Python programming in Climate Smart Agriculture organized**

May 4-5, 2019. A two day training program on Python programming in climate smart agriculture was



organized by the Centre for Advanced Agricultural Science and Technology (CAAST) for Climate Smart Agriculture and Water Management (CSAWM) project, MPKV, Rahuri. The training programme was inaugurated by Dr. D. D. Pawar, Associate Dean, Dr. ASCAE&T, MPKV, Rahuri. Dr. S. D. Gorantiwar, PI, CAAST, CoPIs Dr. M. G. Shinde, Dr. A. A. Atre, Dr. Sachin Nalawade, Dr. B. K. Gavit and Er. Gajanan Kothawade, Data Scientist, Quantela Inc., Bangalore (India) were present. Dr. S. A. Kadam anchored the programme and also proposed vote of thanks. Trainees participated in this programme.

## 16. Exposure visit to Vaishnavdham (Buchkewadi) village organized under CAAST project



May 6, 2019. The CAAST-CSAWM, MPKV, Rahuri had organized a visit on Agro climatic networking at Vaishnavdham (Buchkewadi) village, Tal. Junner, Dist. Pune. On this occasion NABARD's Deputy

Manager Dr. Ushamani, Assistant Manager Mr. Sachin Kamble, Mr. Nilesh Jondhale, Shri. Venkatesh Shete, Lupin Foundation, Mr. Chakradhar Borkute, Director of e-innovation technologies Pvt. Ltd, Dr. S. D. Gorantiwar, Principal Investigator, CAAST project, Co-PIs Dr. M.G. Shinde, Dr. A. A. Atre, Dr. S. A. Kadam, *Sarpanch, Upsarapanch*, all the Grampanchayat members, villagers, farmers and ten Research Associates from CAAST-CSAWM project were present. During the exposure visit officers of NABARD and Lupine, progressive farmers and scientists from MPKV, Rahuri visited the farm pond, cropping system, crop varieties, horticulture field, poultry, dairy, fisheries, organic fertilizer project and vermi composting project at Buchkewadi village.

## June 2019

**17. June 26, 2019.** Dr. K. P. Viswanatha, Vice Chancellor of MPKV, Rahuri submitted QRT Report of Soybean Research in the country as Chairman of QRT to Dr. Trilochan Mohapatra, Secretary, DARE and DG, ICAR and DDG(Crop Science), ICAR, New Delhi. Dr. Viswanatha handed over the copy of MPKV Golden Jubilee Souvenir to DG, ICAR.

## 18. Zonal Agricultural Interface for kharif organized



June 19, 2019. The Zonal Agricultural Research



and Extension Advisory Committee (ZAREAC) meeting for kharif-2019 was organized by MPKV, Rahuri in co-ordination with the State Department of Agriculture at the meeting hall of Commissionerate of Animal Husbandary, Pune. Vice Chancellor Dr. K. P. Viswanatha presided over the meeting, while, Shri. Suhas Divse, Commissioner (Agriculture), M. S. was the Chief Guest. Dr. S. R. Gadakh, Director of Research and Extension Education, MPKV, Rahuri, Shri. Vijaykumar Ghawate, Director, Inputs and Quality Control, M.S., Dr. Shisode, Director, Extension and Training, M.S., Dr. Prahlad Pokle, Director, Horticulture, M.S., Dr. Lakhan Singh, Director, ICAR-ATARI, Pune, Shri. Dilip Zhende, JDA, Pune and Dr. V. S. Supe, Associate Director of Research, NARP, Pune were present on the dais. Vice Chancellor Dr. Viswanatha in his presidential address stressed the importance of relevancy of research, its planning and evaluation. The joint effort of SAU and Agriculture Department in addressing farmers problems will benefit the society. Preparedness for the kharif season with alternate crop plan in case of delayed monsoon is essential, he remarked. Commissioner Shri. Divse in his speech reiterated that the interactions in this zonal meeting are important for understanding the university research and getting the feedback. The coordinated efforts of scientists and extension personnel would certainly benefit the farmers. The CROPSAP and FFS have resulted in curtailing the problem of pink bollworm in cotton. Dr. Lakhan Singh underlined the role of KVKs for technology transfer. He briefed about the efforts for income enhancement of small and marginal farmers through ICAR Farmer FIRST prog. Dr. Gadakh gave the introductory remarks and made a presentation on the latest research, new varieties, improved implements and recommendations released during the Joint AGRESCO and also presented the

extension activities. The university publication Shri Sugi, Kharif-2019 was released on this occasion. Dr. V. S. Supe, Associate Director of Research, NARP, Pune welcomed the dignitaries and the participants. University scientists Dr. Nandkumar Bhute and Dr. Pandurang Mohite presented the control measures of fall army worm of maize and white grub of sugarcane, respectively. Dr. Chandrashekhar Kshirsagar anchored the programme, while, Dr. Dattatraya Lad expressed thanks. Heads of Departments, Joint Directors of Agriculture, District Supt. Agril. Officers, PD, ATMA, Associate Directors of Research, Crop Specialists, Heads of KVKs, Incharge, RECs and DECS, scientists and officers of Agriculture Department participated in the discussion.

## 19. International Yoga Day celebrated



June 21, 2019. The International Yoga Day was celebrated at MPKV, Rahuri and all campuses of university jurisdiction. Dr. Pravin Deshpande, Director, *Arogyadham Nisargaupchar* and Yoga Centre, Nasik was the chief guest for the programme organized in the university. Vice Chancellor Dr. K.P. Viswanatha presided over the programme. Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. S. R. Gadakh, Director of Research and Extension Education, Heads of Departments Dr. D. B. Yadav, Dr. M. C. Ahire, Dr. T. K. Narute, Dr. C. S. Patil, Dr. Mahaveersing Chauhan, Student Welfare Officer, Prof. D. M. Gaikwad, Sports



Officer and Prof. Jitendra Metkar, Administrative Officer, Savitribai Phule School were present on the dais. Dr. Deshpande in his speech spoke on the importance of yoga and how it needs to be the part and parcel of our routine life. The body and mind can come together due to yoga only. The human mind, mental strength, concentration, memory can be enhanced by practicing yoga, he asserted. Yoga helps us to relieve of stress and we need to practice it regularly, he added. Vice Chancellor Dr. Viswanatha in his address narrated the importance of yoga and its benefits to our health. Yoga helps to increase the confidence and leads to a happy, healthy life. Dr. Gadakh gave the introductory and welcome remarks. Prof. Gaikwad anchored the programme, while, Dr. Chauhan expressed vote of thanks. Certificates were awarded to the staff and students who completed the yoga class. In the morning hours yoga was practiced by the staff and students organized on university sports ground.

## **20. Training on ICT for Effective Knowledge and Extension delivery for Climate Smart Agriculture and Water Management Technologies organized under CAAST project**

June 11-12, 2019. A training programme on ICT for effective knowledge and extension delivery for climate smart agriculture and water management



technologies was organized by CAAST-CSAWM project, MPKV, Rahuri. In his inaugural address Dr. A. L. Pharande, Dean, Faculty of Agriculture briefed about the importance of the ICT in agriculture sector and rural development with its instantaneous use to reach the unreached. Dr. S. D. Goarantiwar, Principal Investigator, CAAST-CSAWM project explained the various ongoing activities of the project. Dr. M. C. Ahire, Head, Dept. of Extension Education and Training Organizing secretary, CAAST-CSAWM in his introductory remarks briefed about the objectives of training. Dr. Shridhar Patil, Assistant Professor cum Junior Scientist, BAU, Sabour, Dr. M. B. Dhadwad, Assistant Professor, MPKV, Rahuri, Shri. Bhushan Kulkarni, Knowledge Bridge, Ahmednagar and trainees were present for the programme as Guest Lecturers. Dr. S. N. Ghadge, Research Associate anchored the programme, while, Dr. S. A. Dhenge, Research Associate expressed vote of thanks.

## **21. Training on Hyperspectral Remote Sensing and Spectroradiometry Instruments role in Climate Smart Agriculture Development organized**

June 14-15, 2019. A training programme on Hyperspectral remote sensing and spectroradiometry instruments role in climate smart agriculture development was organized by CAAST-CSAWM



project at MPKV, Rahuri. In his inaugural address Dr. A. L. Pharande, Dean, Faculty of Agriculture explained the importance of the hyperspectral remote sensing and spectroradiometer instruments role in climate smart agriculture development. Dr. S. D. Goarantiwar, Principal Investigator, CAAST-CSAWM project expressed the need of the training programme and also emphasized the benefits of the hyperspectral remote sensing application in precision agriculture. Dr. S. A. Kadam, Assistant Professor and Training Organizing Secretary in his introductory remarks introduced the dignitaries and delegates of the training programme. Dr. D. D. Pawar, Associate Dean, Dr.ASCAE&T, MPKV, Rahuri, Dr. Vijay Bhagat, Associate Professor, Department of Geography, Agasti Arts, Commerce and Dadasaheb Rupwate Science College, Akole, District. Ahmednagar, Dr. Amol Vibhute, Assistant Professor, School of Computational Sciences, Punyashlok Ahilyadevi Holkar Solapur University, Solapur guided the participants. Dr. J. Rajesh, Research Associate anchored the programme, while, Dr. M. G. Shinde, Co-Principal Investigator, CAAST-CSAWM project proposed vote of thanks.

## **22. Workshop on Developing Village Level contingency Crop Plans for Akole Block organized**

June 20-21, 2019. A two day workshop on developing



village level contingency crop plans for Akole block was organized by CAAST-CSAWM project at MPKV, Rahuri. Dr. S. R. Gadakh, Director of Research and Extension Education inaugurated the workshop and briefed the importance of the village level contingency crop plans at micro level for farmers. Dr. K. A. Gopinath, Principal Scientist(Agronomy), CRIDA , Hyderabad explained about the role of CRIDA in development of District level and Block level contingency crop plans and need of development of village level contingency crop plans. Dr. R. P. Andhale, Associate Professor of Agronomy and workshop Organizing Secretary introduced the dignitaries and delegates of the workshop. Dr. Sachin Kamble, AGM, NABARD, Pune, Dr. M. G. Shinde, Co-PI, Dr. P. S. Bodake, Chief Scientist and Account and Finance Officer, CAAST-CSAWM project, Dr. N. V. Kashid, Officer Incharge, ARS, Vadgaon Maval, Dr. S. S. Kaushik, Head, KVK, Dahigaone, Dr. J. R. Kulkarni, Ex. Advisor, IITM, Pune, Dr. J. D. Jadhav, HOD, Agril. Met. COA, Pune, Dr. K. K. Dakhore, Agrometeorologist, VNMKV, Parbhani, Dr. B. V. Asewar, Chief Scientist, AICRP on Dry Land Agriculture, VNMKV, Parbhani, Dr. Rajeshree Joshi, CTPE, BAIF, Pune, farmers and students were present on this occasion. Dr. Andhale anchored the programme, while, Dr. Shinde proposed the vote of thanks. The workshop was coordinated by Dr. S. G. Kanade, Research Associate (Agromet) and Dr. S. S. Misal, Research Associate (Agromet).



### 23. Training programme on bajra and red gram production technology organized under ICAR Farmer FIRST prog.



June 15, 2019. A training programme on bajra and red gram production technology was organized under ICAR Farmer FIRST prog. at Chinchvihire village. At the outset Dr. P. B. Kharde, PI, ICAR FFP welcomed the scientists and participant farmers for the training programme. He briefed about the activities of the programme and planning for the ensuing kharif season. Dr. N. S. Kute, Senior Scientist, Pulses Improvement Project, MPKV, Rahuri in his guidance emphasized on the technologies for red gram crop including the varietal features. Prof. Changdev Wayal, Entomologist guided on the integrated pest management of bajra and red gram crops. Dr. Nitin Ugale, Junior Scientist briefed on the bajra production technology. Seed of bajra and red gram were distributed to the farmers. More than forty farmers and women participated in the one day training programme. Visit of scientists was also organized to ICAR FFP participant farmers field. Dr. S. S. Sadaphal, Co-PI of the project anchored the programme. Shri. Vijay Shedge, SRF proposed thanks. Field Asstt. Shri. Kiran Magar and Shri. Amol Gaikwad took efforts in organizing the programme.

### July 2019

### 24. Vanmahotsav and Krishi Din celebrated



July 8, 2019. Vanmahotsav and Krishi Din programme was organized at the Mahatma Phule Krishi Vidyapeeth, Rahuri to celebrate the birth anniversary of former Chief Minister of Maharashtra late Vasant Naik. Dr. K. P. Viswanatha, Vice Chancellor, MPKV, Rahuri presided over the function. Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. S. R. Gadakh, Director of Research and Extension Education, Shri. Fasiuddin Shaikh, Tahsildar, Rahuri, Shri. Milind Dhoke, University Engineer, Associate Deans Dr. P. A. Turbatmath, Dr. S. A. Ranpise, Dr. V. D. Shende, Nodal Officer, Punyashlok Ahilyadevi Holkar College of Agriculture, Halgaon and Shri. Devkhile, Deputy Conservator of Forest, Ahmednagar were present on the dais. Vice Chancellor Dr. Viswanatha in his presidential address recollected the contribution of late Vasant Naik, former Chief Minister of Maharashtra in the agricultural development of the state. He said that today we are also celebrating the festival of forests. The Government is taking efforts for planting trees and we all must give our share for the planting and survival of trees. Trees are needed for good environment, reducing carbon dioxide and carbon sequestration. MPKV is taking a lead in clean and green campus and also plastic free campus, he said. Dr. Gadakh in his welcome and introductory remarks briefed

about the tree plantation programme. Shri. Shaikh appreciated the tree plantation drive of the university. Shri. Devkhile informed about the Government's tree plantation programme in Ahmednagar district. Dr. R. S. Wagh gave a presentation on how to plant the saplings in a scientific way. The new version of updated and informative website of MPKV was launched at the hands of Vice Chancellor Dr. K. P. Viswanatha during the programme. Dr. S. D. Gorantiwar briefed about the new website. Dr. B. D. Bhakre anchored the programme, while, Dr. A. V. Solanke expressed vote of thanks. Later after this programme tree plantation was done at various sites in presence of Shri. Rahul Dviwedi, District Collector, Ahmednagar, Shri. Adarsha Reddy, District Conservator of Forests, Ahmednagar and Mrs. Kirti Jamdhade, District Forest Officer, Ahmednagar. The university staff and students planted trees at the central campus. These include neem, jamun, mango, bamboo, karanj, aonla, hirda, behada, kagzi lime and various medicinal and forest plants.

### **25. Ranking of SAUs: MPKV ranked 24<sup>th</sup> in the country and 1<sup>st</sup> in Maharashtra**

July 18, 2019. The Mahatma Phule Krishi Vidyapeeth, Rahuri has been ranked at the 24<sup>th</sup> position in the country and ranked first position in Maharashtra as per the rankings of sixty SAUs declared by the ICAR, New Delhi for the year 2018. Earlier in 2017, MPKV, Rahuri was ranked at 34<sup>th</sup> position in the country. The university's efforts in quality education, research and extension education activities for the past year under the leadership of Vice Chancellor Dr. K. P. Viswanatha ably supported by Dr. A. L. Pharande, Dean, Faculty of Agriculture and Dr. S. R. Gadakh, Director of Research and Extension Education resulted in elevating this ranking ladder by ten positions. There was valuable contribution from the Registrar Shri. Sopan Kasar,

Comptroller Shri. Vijay Kote, University Engineer Shri. Milind Dhoke and Nodal Officer for ICAR Dr. Milind Ahire in preparation of the Ranking Report of the university. The other SAUs of the state include DrBSKKV, Dapoli ranked at 32<sup>nd</sup> position, VNMAU, Parbhani at 45<sup>th</sup> position and DrPDKV, Akola ranked at 48<sup>th</sup> position in the country. Vice Chancellor Dr. K. P. Viswanatha acknowledged the efforts of all officers, scientists, staff and students for this achievement and hoped for future improvement in the ranking.

### **26. Statelevel meeting on Zero Budget Agriculture organized at Pune**



July 13, 2019. A one day statelevel meeting on the concept of Zero Budget Agriculture as proposed by the Central Government was organized at College of Horticulture, Pune. Vice Chancellor Dr. K. P. Viswanatha presided over the meeting. Vice Chancellors of SAUs Dr. V. M. Bhale (DrPDKV, Akola), Dr. A. S. Dhavan (VNMAU, Parbhani) and Dr. S. D. Sawant (DrBSKKV, Dapoli) alongwith Dr. M. C. Varshney, Former Vice Chancellor, AAU, Anand and Kamdhenu University, Gandhinagar, Prof. Nathaji Chaugule, Member, Executive Council, Directors of all SAUs, Dr. P. N. Rasal, Associate Dean, College of Agriculture, Pune, Dr. S. D. Masalkar, Principal, College of Horticulture, Pune and progressive farmers of the state were present for the meeting. In his presidential address Vice Chancellor Dr. Viswanatha said that already the organic farming was practiced by



the farmers before independence and green revolution. But owing to the increased population and more demand farmers have gone for inorganic farming. The SAUs have recommended a balance between organic and chemical inputs for farming. The SAUs have already been conducting research on organic farming which we need to expedite, he said. The Vice Chancellors of SAUs, Directors and progressive farmers took part in the discussion. Dr. S. R. Gadakh, Director of Research gave the introductory remarks. Dr. A. L. Pharande, Dean, Faculty of Agriculture proposed thanks. Dr. S. B. Shinde, Professor of Agril. Extension anchored the programme.

## 27. Vice Chancellor's Live Programme on DD, Sahyadri



July 25, 2019. Vice Chancellor Dr. K. P. Viswanatha participated in a *Krishi Darshan* live phone in programme telecasted on Sahyadri channel of Mumbai Doordarshan. In this programme he answered the farmers queries. He also briefed on the educational, research and extension education achievements of MPKV. Dr. Viswanatha informed about the university's impact of selected crop varieties on the economy of farmers. He narrated the contribution of MPKV in the agricultural development of the state. Shri. Vinaykumar Awate, DSAO, Pune anchored the programme.

## 28. Workshop on Soil Health and Land Use Planning for Climate Smart Agriculture



K. Chaudhary, Assistant Director General (S&WM), ICAR, New Delhi, Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. S. R. Gadakh, Director of Research and Extension Education, Dr. P. A. Turbatmath, Associate Dean, PGI, Dr. S. A. Ranpise, Associate Dean, LAE, Dr. S. D. Gorantiwar, PI, CAAST-CSAWM, Dr. M. G. Shinde, Co-PI, CAAST-CSAWM were present on this occasion. Vice Chancellor Dr. K. P. Viswanatha while speaking on this occasion emphasized on the soil organic carbon. He also mentioned that people should be aware about compost making from biodegradable waste and plastic waste should be used for biofuel production. Dr. Tomar spoke on recent technologies for soil health improvement under climate smart agriculture. He addressed the soil health for climate smart resilient agriculture. Dr. Chaudhary laid emphasis on soil and water quality management for climate smart agriculture. Dr. S. D. Gorantiwar, PI, CAAST-CSAWM explained the preamble of project. Dr. B. D. Bhakre, Senior Scientist, IWM welcomed the participants. Dr. S. D. Thorat and Dr. Mangal Patil anchored the programme, while, Dr. M. G. Shinde proposed the vote of thanks. Heads of Departments, scientists, staff and students were present on this occasion.

## 29. International Symposium on Strategizing Education and Innovations in Robotics, Drones and IoTs for Climate Smart Agriculture organized



July 23-25, 2019. An International Symposium on Strategizing Education and Innovations in Robotics, Drones and IoTs for Climate Smart Agriculture was organized by CAAST-CSAWM project, MPKV, Rahuri. Dr. Gajendra Singh, Former Deputy Director General (Engg.), ICAR, New Delhi inaugurated the symposium. The function was presided over by Vice Chancellor Dr. K. P. Viswanatha. Dr. Singh in his address mentioned the advanced technologies like drone, robotics, IoT for increasing agricultural production. Dr. Agrawal emphasized on technology exposure especially to the students for attaining research of international level. Dr. Ghosh highlighted the use of protected cultivation. Dr. Rastogi hoped for creating awareness of these technologies among the farmers. Dr. Viswanatha called for utilization of mobile apps for advanced agriculture. Dr. S. M. Nalawade, Organizing Secretary and Head, Dept. of FMPE, MPKV, Rahuri, introduced all the delegates and participants and provided an overview of the International Symposium. Dr. S. D. Goarantiwar, Principal Investigator, CAAST-CSAWM, MPKV, Rahuri gave a preamble on CAAST mentioning importance of Robotics, UAVs, IoTs in CSAWM with special emphasis on capacity building of the faculty,

students and farmers. For this symposium distinguished delegates from industry and academic were present. Special guest was Dr. R.C. Agrawal, National Director, NAHEP, ICAR, New Delhi and guest of honor Dr. P.K. Ghosh, National Coordinator, CAAST, NAHEP, New Delhi, Shri. V. C. Rastogi, IAS, Project Director, POCRA, Dr. Prabhat Kumar, convener and Coordinator, CAAST, 2A Component-NAHEP, New Delhi, Dr. V.K. Tewari, Professor, IIT, Kharagpur, Dr. S. R. Gadakh, Director of Research, MPKV, Rahuri, Dr. A. L. Pharande, Dean, Faculty of Agriculture, MPKV, Rahuri were present.

## 30. Training on Linux Programming organized under CAAST project



July 1-3, 2019. A training programme on Linux programming was organized by CAAST-CSAWM, MPKV, Rahuri. The programme started with the inaugural function chaired by Dr. A.L. Pharande, Dean, Faculty of Agriculture. Dr. S. D. Gorantiwar, PI, Dr. M.G. Shinde, Co-PI, Dr. S. M. Nalawade, CAAST-CSAWM member, Dr. B. K. Gavit, Assistant Professor, Department of Soil and Water Conservation Engineering and experts were present for the function. Dr. Pharande in his presidential address briefed about the importance of technologies and their applications in developing the climate smart agriculture. Dr. Gorantiwar gave the introductory remarks. Dr. S. K. Dingre, Organizing secretary welcomed and



introduced the guest. Er. Prasad Kalane, Er. Suraj Gayke and Er. Nikhil Dhamdhare, Application Engineer, Anubhuti Research and Development Centre, Pune, Er. Tushar Kute, Researcher, MITU Skillologies, Pune and students trainees were present. Er. Mangal Patil, Research Associate (IDE) anchored the programme, while, Dr. Shinde expressed vote of thanks.

### 31. Training Programme on Vermicompost production and Silage making organized under ICAR Farmer FIRST prog.



July 9, 2019. A Training Programme on Vermicompost production and Silage making was organized at the Integrated Farming System project of MPKV, Rahuri under the ICAR Farmer FIRST programme. Dr. S. R. Gadakh, Director of Research and Extension Education inaugurated the programme. Dr. Prahlad Pokle, Director, Horticulture, M. S., Dr. A. V. Solanke, Head, Department of Agronomy, Shri. Hasanabade, PD, NHM, Dr. P. B. Kharde, PI, ICAR FFP, Dr. U. S. Surve, Principle Scientist, IFS project were present on the dais. Dr. Gadakh in his presidential address highlighted the importance of integrated farming system for sustainable income to the farmers. He hoped that the vermicompost production and silage making are new opportunities for the rural youth to enrich the soil and also earn from these enterprises. Use of vermicompost is essential for organic farming,

he added. Dr. Gadakh further hoped for expanding the IFS model developed by the university to the end users. Dr. Pokle while addressing the trainees called for adoption of IFS model for minimizing the risk in monocropping. The IFS components would certainly strengthen the farmers economic condition, he hoped. Dr. Kharde in his welcome and introductory remarks briefed about the outcomes and activities of the ICAR FF project. University scientists Dr. Ulhas Surve, Dr. Mahendra Mote and Dr. Sunil Adangale guided on IFS model, vermicompost production and silage making along with demonstrations during the one day training programme. Dr. B. A. Deshmukh, Co-PI anchored the programme, while, Dr. S. S. Sadaphal, Co-PI expressed vote of thanks. Vermicompost and silage bags were distributed to the trainees. Fifty participant farmers and farm women of Chinchvihire and Kangar villages participated in this training programme. Shri. Vijay Shedge, SRF, Shri. Kiran Magar, Field Asstt. and Shri. Amol Gaikwad, Field Asstt. took efforts in organizing the programme.

### 32. Visit of Director of Research and Extension Education to ICAR Farmer FIRST villages



July 19, 2019. Dr. S. R. Gadakh, Director of Research and Extension Education, MPKV, Rahuri visited the ICAR Farmer FIRST villages viz., Chinchvihire and



Kangar. He visited the PKV Mini Dal Mill unit run by a women Self Help Group in Chinchvihire village. This SHG is engaged in processing of dal. Later on he visited the Integrated Farming System model of participant farmer Shri. Dilip Nalkar. He visited the bajra-*Adishakti* variety and red gram-*Phule Rajeshwari* variety crop demonstration plots and also the dairy unit, goat rearing and backyard poultry. Dr. Gadakh then visited the red gram demonstration of Shri. Bapusaheb Shete and pomegranate orchard (*Bhagwa* variety) of participant farmer Shri. Sunil Walke of Chinchvihire village. Thereafter, he visited the loose housing system of cattle of Shri. Bhaskar Shete, goat rearing unit of Shri. Rajendra Warghude, bajra demonstration and backyard poultry unit of Shri. Raosaheb Gade in Kangar village. Dr. Gadakh interacted with the farmers and gave valuable suggestions. Dr. P. B. Kharde, PI briefed about the project activities. Dr. Y. G. Fulpagare, Head, Department of Animal Science and Dairy Science also accompanied Dr. Gadakh during the visit. Dr. S. S. Sadaphal, Co-PI proposed thanks.

### 33. Workshop on Village Level Crop Contingency Plan organized at village Shenit



July 9, 2019. A workshop on village level crop contingency plan was organized at village Shenit, Tal. Akole by CAAST-CSAWM project, MPKV, Rahuri. Dr. R. P. Andhale, Associate Professor presented the

MPKV developed crop contingency plan. Dr. N. V. Kashid, Officer Incharge, ARS, Vadgaon Maval guided the farmers about rice crop and its management, Dr. R. D. Nigade guided on finger millet crop management with new varieties, pest management in finger millet, Dr. M. G. Shinde, Co-PI discussed with farmers about water harvesting and water storage, farmpond construction, water management techniques, Dr. V. E. Narwade briefed the livestock diseases management, vaccination schedule, fodder management, silage preparation, milk production, sheep and goat production, poultry management etc. Dr. S. D. Mandakmale informed to the participants about livestock management, artificial insemination, care and maintenance of local breeds. Dr. A. A. Atre Head, Department of Soil Water and Conservation guided farmers on different soil and water conservation practices, CCT, watershed management, farmponds and importance of tree plantation, Dr. S. S. Kaushik, Senior Scientist, KVK, Dahegaone suggested different contingency measures like seed treatment before sowing, weed control, soil solarization, mulching, nursery management, pest and disease management in major crops in Akole village cluster. The overall workshop was coordinated by Dr. S. G. Kanade, Research Associate (Agromet) and Dr. S. S. Misal, Research Associate (Agromet), CAAST-CSAWM project, MPKV, Rahuri.

### 34. Exposure visit of ICAR Farmer FIRST prog. organized



July 25, 2019. A one day exposure visit of ICAR Farmer FIRST prog. participant farmers and farm women was organized to KVK, Babhaleshwar and various vermicompost, goat rearing units at Kolhar, Khandala villages of Rahata taluka and Devgad, Punatgaon villages of Newasa taluka. Dr. P. B. Kharde, PI and Co-PIs Dr. A. G. Durgude, Dr. B. A. Deshmukh, Dr. S. S. Sadaphal and Dr. R. G. Nimse participated in the visit and guided the participants. At the outset Dr. Kharde briefed about the objectives of the activity. Dr. Durgude flagged the visit. The farmers and scientists first visited the vermicompost unit of young entrepreneur farmer Shri. Sanjay Raut of Kolhar village. Shri. Raut narrated his experiences on vermicompost production and its marketing. The farmers were informed of his low cost vermicompost technology and learnt its scientific hints of production and packaging. Later on they visited the Krishi Vigyan Kendra, Babhaleshwar. The farmers visited the Egg Incubator unit. The Head of KVK Dr. Sambhaji Nalkar and his associates Shri. Sunil Borude and Dr. Vitthal Vikhe interacted with the farmers. Thereafter, the team visited a successful goat rearing unit of Shri. Chandrakant Mundhe of Khandala village. They were abreast of goat breeds, feeding management, vaccination and marketing. The farmers later on visited the silage making unit of Shri. Bapusaheb Pawar of Punatgaon village. A demonstration was organized on silage packing on his farm. Finally the farmers visited a dairy unit and vermicompost unit of Dr. Bhaskar at Devgad village. He explained the importance of loose housing system of dairy animals and vermicompost production as an enterprise for rural youth. Thirty participant farmers and farm women from ICAR FFP villages of Chinchvihire and Kangar participated in the exposure visit. The visit was organized with the efforts of ICAR FFP team Shri. Vijay Shedge, Shri. Kiran Magar and Shri. Amol Gaikwad.

### 35. Workshop on Protected cultivation technology organized under CAAST project



July 15-19, 2019. A five days Training programme on Protected cultivation technology was organized by CAAST-CSAWM project, MPKV, Rahuri at Sub Campus, College of Agriculture, Pune. The programme was inaugurated by the organizing secretary Dr. J. S. Pachpute, Co-PI, Sub Campus, CAAST-CSAWM, COA, Pune, Dr. S. B. Shinde, Professor of Agril. Extension presided over the inaugural session, while, Dr. R. K. Agrawal, Dy. Director (NHB), Ministry of Agriculture, New Delhi was the Chief Guest. Dr. J. S. Pachpute gave a preamble on CAAST mentioning importance of Protected cultivation technology with special emphasis on capacity building of the faculty, students and farmers. Total forty participants including students and faculty participated in the programme.

### August 2019

### 36. Visit of Shri. Sharadchandraji Pawar to MPKV

August 29, 2019. Shri. Sharadchandraji Pawar, Hon'ble Member of Parliament and Former Union Minister of Agriculture, GoI visited the Mahatma Phule Krishi Vidyapeeth, Rahuri. Dr. K. P. Viswanatha, Vice Chancellor, MPKV, Rahuri presided over the function organized on this occasion. Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. S. R. Gadakh, Director of





Research and Extension Education, Shri. Sopan Kasar, Registrar, Shri. Milind Dhoke, University Engineer and Associate Deans were present on the dais. In his address, Shri. Pawar expressed his happiness to visit MPKV after a long period and expressed satisfaction on the various activities of the university in education, research and extension education. He recollected the work and contribution of Mahatma Phule for the farmers and women education and further said that we are fortunate to have his great name to this university. We need to give more emphasis on allied sector like fishery for more economic gains to farmers. It is good that the youth are taking interest in farming but the dependence on agriculture need to be minimized, he added. Vice Chancellor Dr. Viswanatha said that this is a long awaited and most memorable occasion. Shri. Pawar's contribution to agriculture is immense and we seek his further guidance. Dr. Viswanatha put forth the noteworthy contribution of MPKV and the economic impact analysis of eight crops. Dr. Pharande gave the introductory remarks and presented the education report. Dr. Gadakh presented the research and extension education report and expressed thanks. The ICAR Farmer FIRST programme woman farmer Mrs. Savita Nalkar of Chinchvihire village was felicitated at the hands of Shri. Pawar during the function. Dr. B. D. Bhakre, Head, Dept. of SS&AC anchored the programme. Earlier Shri. Pawar visited the exhibition

organized at Agriculture Technology Information Centre, horticulture farm, Centre of National Dairy Development Board, Dairy farm, Integrated Farming System model of farmers Shri. Chandrakant and Shri. Uttam Adsure and Bamboo training centre.

### 37. Independence Day celebrated



August 15, 2019. The 73<sup>rd</sup> Independence Day of the nation was enthusiastically celebrated in the university. Vice Chancellor Dr. K. P. Viswanatha hoisted the national flag. In his address Dr. Viswanatha said that the independence of our nation was sought through the sacrifices of our freedom fighters. We need to remember their efforts and put our best for the progress of the country. The university has contributed to education, research and extension education. Students of our university have made spectacular achievements. MPKV has released eight new varieties, one implement and forty seven recommendations this year for the farmers. Significant impact of the university released varieties has been recorded in the income of farmers, he said. He further highlighted the role of extension of the university and outreach programmes like RKVY and ICAR Farmer FIRST programmes. He hoped that the integrated farming system model developed by MPKV would help in raising the farmers income. Shri. Sopan Kasar, Registrar gave an oath of tobacco ban on this occasion. The NCC students led by Prof. Sunil Fulsawange gave a salute on this occasion.

Security Officer Shri. Gorakshanath Shete anchored the programme. Dr. S. R. Gadakh, Director of Research and Extension Education, Comptroller Er. Vijay Kote, University Engg. Er. Milind Dhoke, Associate Deans Dr. P. A. Turbatmath, Dr. D. D. Pawar, Dr. S. A. Ranpise, Heads of Departments, Chief Scientist (Seed) Dr. A. V. Solanke, staff and students were present for the programme. A blood donation camp was organized at Dr ASCAE & T by NSS, NCC and District Hospital, Ahmednagar. Various units like Micronutrient laboratory, Sale counter, Pipeline, Office shade of Bamboo project and Vermicompost production unit of Cattle project were inaugurated at the hands of Vice Chancellor Dr. K. P. Viswanatha on this occasion.

### 38. Phule Vikram chickpea variety released for Central Zone of India for Mechanical Harvesting purpose



August 27-29, 2019. The MPKV released chickpea variety *Phule Vikram* has been released for Central Zone of India (Maharashtra, Madhya Pradesh and Gujarat States) during the twenty fourth Chickpea Annual Group Meet held at Birsa Agricultural University, Ranchi. This variety has been evolved from a cross of ICCV 10 x ICCL 87322, the breeding material received from ICRISAT, Patancheru (Telangana). *Phule Vikram* is suitable for mechanical harvesting because of tall growth habit and pods starting above 27.7 cm from ground level. Similarly, there are no any losses during

mechanical harvesting and it also reduces the cost of production. It is resistant to major disease i.e. Fusarium wilt, it has potential upto 45.93 q/ha, whereas, it gives 22.65 q/ha. average yield. The seed size of this variety is medium (21.6 g / 100 seeds) and it matures within 110 to 115 days. The release of this variety will definitely boost the chickpea production in the state as well as of the country. Vice Chancellor Dr. K. P. Viswanatha and Dr. S. R. Gadakh, Director of Research congratulated Dr. N. S. Kute, Chief Scientist, AICRP on Pulses Improvement Project and his colleague scientists for this achievement.

### 39. Students success in ICAR SRF exams

August 5, 2019. The students of College of Agriculture, Pune achieved a remarkable success in the ICAR's Senior Research Fellowship exams-2019 conducted at the national level. The students Mahesh Jadhav and Siddharth Kale ranked first in Agril. Entomology and Soil Science and Agril. Chemistry subjects, respectively. Mohammad Shamnaz stood second in Biotechnology, while, Parth Jadhav ranked 55<sup>th</sup> in Soil Science and Agril. Chemistry subject. The students Vivek Raut (Agronomy), Rajkumar Meena (SS7AC), Kavi Bharati (Agril. Economics), Ramanna Vannkatti (Horticulture), Pawan Nakhate (SS&AC), Snehal Chaudhary (Genetics and Plant Breeding) also excelled in the ICAR SRF national exams. Vice Chancellor Dr. K. P. Viswanatha, Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. P. N. Rasal, Associate Dean, College of Agriculture, Pune and Dr. S. D. Masalkar, Principal, College of Horticulture, Pune congratulated the students.



#### 40. University Sale Counter inaugurated



August 15, 2019. The University Sale Counter was inaugurated at the hands of Vice Chancellor Dr. K. P. Viswanatha on the occasion of Independence Day. Dr. Viswanatha said that the university is spread over ten districts of Maharashtra and comprising of twenty seven research stations. MPKV has released prominent varieties/hybrids, improved implements and recommendations for the farmers since its establishment. The university branded Phule Seed along with bio pesticides, bio fertilizers, seedlings, grafts, bakery and processed products have a huge demand by the farmers. Thus, this Sale Counter would cater to the needs of farmers, he hoped. Dr. S. R. Gadakh, Director of Research said that the university has planned for twenty seven such centres in its jurisdiction. All the university products including the publications, tools, bamboo handicrafts would be made available at the Sale Counters. Dr. A. V. Solanke, Chief Scientist, Seed hoped that the Sale Counter would benefit the farmers because it would save their time and energy. Dr. P. S. Behelekar would act as a Marketing Officer of the university. A marketing chain would be developed in which Sales representatives would be nominated for each district. Discount would be given to Farmers Groups and Private Agencies for purchasing these products in bulk. Associate Deans Dr. P. A. Turbatmath, Dr. D. D. Pawar, Heads of Departments, Officers, scientists and staff were present on this occasion.

#### 41. University Bakery unit strengthened



August 27, 2019. Dr. K. P. Viswanatha, Vice Chancellor, MPKV, Rahuri inaugurated the advanced machinery at the Bakery Unit of MPKV, Rahuri. Dr. S. R. Gadakh, Director of Research and Extension Education, Dr. S. A. Ranpise, Associate Dean, LAE and Heads of Department were present on this occasion. Dr. U. D. Chavan, Head, Department of Food Science and Technology (FST) briefed about the new machinery installed at the Bakery unit. He appraised of the various training programmes conducted by the Dept. of FST and technical assistance to the young entrepreneurs to start their bakery units. Vice Chancellor Dr. K. P. Viswanatha assured support for running the bakery and hoped for expanding the sale of these bakery products. Dr. Gadakh also congratulated the FST team for taking efforts in rejuvenation of the unit. Dr. Sudhir Lande proposed vote of thanks.

#### 42. Awareness programme of *Jalshakti Abhiyan* launched



August 5, 2019. An Awareness programme of *Jalshakti Abhiyan* was launched at MPKV, Rahuri in coordination with the Department of Agriculture and Krishi Vigyan Kendra. Dr. S. R. Gadakh, Director of Research and Extension Education presided over the programme. Dr. Gadakh in his presidential address hoped for activities like roof water harvesting, renovation of water bodies and adoption of insitu soil moisture techniques. He emphasized on more crop per drop of water and called for water budgeting. Prof. M. N. Desai, Manager, Agriculture Technology Information Centre welcomed the dignitaries. Shri. Vilas Nalage, DSAO, Ahmednagar in his introductory remarks said that the *Jalshakti Abhiyan* is an ambitious programme of the Central Government and eight districts of Maharashtra state have been selected for this purpose. Awareness on importance of water, its conservation, efficient utilization need to be done in this *abhiyan*. Shri. Mahendra Thokle, TAO, Rahuri, Dr. Sambhaji Nalkar, Head, KVK, Babhaleshwar, Dr. Kaushik, Head, KVK, Dahigaon-ne, Dr. P. B. Kharde, Officer Incharge, Communication Centre and scientists, staff of Agriculture Department were present on this occasion. Dr. Desai anchored the programme, while, Dr. B. A. Deshmukh proposed thanks.

### 43. Dr. Gadakh visited KVK, Mohol and Ajnale pomegranate village



August 2, 2019. Dr. S. R. Gadakh, Director of Research

and Extension Education visited Krishi Vigyan Kendra, Mohol. He was accompanied by Dr. Vijay Amrutsagar, Chief Scientist and ADR, NARP, Solapur. Dr. T.R. Walkunde, Incharge, Head, KVK, Mohol briefed about the KVK activities. Dr. Gadakh instructed to initiate active demonstration units of fruit crops, poultry and goat rearing unit, dal mill and jowar processed products, fruit beverages etc. He also visited the village Ajnale, a pomegranate village of Sangola tahasil of Solapur district. He visited the orchards of farmers Shri. Mahadev Lade, Shri. Pandurang Lade and Shri. Nitin Yelapalle. Mr. Rajaram Patil, the first innovator of pomegranate orchard of the village briefed about the history of pomegranate and present status of the village. Mr. Ajay Dighe, SMS (Agril. Extn.) explained about the success of Ajnale. Mr. Prabhakar Chandane, Chairman, *Akhil Bhartiya Dalimb Sangh* welcomed Dr. Gadakh and acknowledged the technical interventions provided by MPKV to the pomegranate growers of the state. Dr. Gadakh briefed about the research in new crops and their production practices. Shri. Arjun Kollole, *Sarpanch* of the village expressed thanks.

### 44. Dr. Lakhan Singh, Director, ATARI, Pune visited KVK, Mohol



August 19, 2019. Dr. Lakhan Singh, Director, ATARI, Pune visited Krishi Vigyan Kendra, Mohol. He was accompanied by Dr. DVS Reddy, Pr. Scientist, ATARI, Bengaluru. Dr. Singh inaugurated the display board





of the plan layout of KVK instructional farm. Trees were planted at the hands of the dignitaries. Dr. T. R. Walkunde, I/C Head of KVK welcomed the dignitaries. Mr. K. A. Jadhav, SMS (Hort.) briefed about the fruit crop cafeteria, mother orchard block, dragon fruit demo plot, lawn and ornamental plants for beautification. Mr. N. B. Jadhav, Farm Manager explained about the fruit and forest species at the KVK instructional farm. Dr. Lakhan Singh appreciated the initiatives of the KVK and gave suggestions for demonstration units. Dr. Reddy hoped that these activities will benefit the farmers. Dr. L. R. Tambade, Head, KVK, Solapur-I, Mr. A. G. Dighe, SMS (Agril. Extn.) and staff of KVK, Mohol were present during the visit.

#### 45. Participation in the first Annual Review Workshop of NAHEP



August 5-6, 2019. The first Annual Review workshop of NAHEP was organized at NAAS Complex, New Delhi. Vice Chancellor Dr. K. P. Viswanatha participated in the review workshop. Dr. S. D. Gorantiwar, Principle Investigator, CAAST-CSAWM, MPKV Rahuri and Dr. A. A. Atre, Procurement Officer, CAAST-CSAWM project participated as the project representatives. Two Research Associates of the project viz., Dr. P.B. Kale and Dr. M.N. Baviskar demonstrated the innovative outcomes of the project. Shri. Kailash Choudhary, Hon'ble Minister of State for Agriculture, Cooperation and Farmers Welfare, New Delhi and Dr. Trilochan

Mohapatra, Secretary, DARE and Director General, ICAR, New Delhi addressed the participants. The innovative activities of CAAST-CSAWM project viz., Auto Phule Irrigation Scheduler, Phule Pest and Disease Management Application and Soil Moisture Sensors were demonstrated to the dignitaries. Dr. Gorantiwar presented the annual progress of the project. Vice Chancellor Dr. Viswanatha assured full support to the project. Experts of NAHEP appreciated the progress of project and conveyed best wishes.

#### 46. National Workshop on Protected Cultivation: Opportunities and Challenges organized



August 27, 2019. A one day National Workshop on Protected Cultivation: Opportunities and Challenges was organized by the Centre for Advanced Agricultural Science and Technology (CAAST) for Climate Smart Agriculture and Water Management (CSAWM), MPKV, Rahuri. Vice Chancellor Dr. K. P. Viswanatha presided over the function. Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. S. R. Gadakh, Director of Research were present for the programme. In his presidential address Vice Chancellor Dr. Viswanatha highlighted the benefits associated with protected cultivation and its role in meeting the global food demand. Dr. Pharande delivered the welcome speech. Dr. Gadakh also expressed his remarks. Dr. S. D.

Gorantiwar, Principal Investigator, CAAST-CSAWM project gave the introductory remarks and briefed about the objectives of the workshop. Dr. M. G. Shinde, Co-PI expressed thanks. Er. Mangal Patil, Research Associate (IDE) anchored the programme. The experts Dr. Sanjay Narute guided on cultivation practices for protected cultivation, Dr. Mukesh Shukla on safe and residue free plant protection for protected cultivation, Mr. Chetan Dedhia on protected cultivation structures and selecting right cladding material and Er. Sandeep Dere on opportunities and marketing of agricultural produce from protected cultivation. The Heads of the Departments, scientists, staff, farmers and students were present on this occasion.

#### 47. Training programme on Applications of Advanced Python Computations in Climate Smart Agriculture organized



August 1-3, 2019. A three day training programme on Applications of Advanced Python Computations in Climate Smart Agriculture was organized by CAAST-CSAWM, MPKV, Rahuri. In the inaugural address Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM project briefed the importance of the advanced python computations for agriculture domain. Dr. S. A. Kadam, IT Officer and Organizing Secretary, CAAST-CSAWM explained the various problem statements of Python programming in irrigation and water

requirement with introduction of expert. Er. Gajanan Kothawade, Data Scientist, Quantela Inc, Bangalore, Dr. Pramod Popale, Asst. Prof., Dept. of IDE, all the Research Associates of CAAST-CSAWM, RKVY-IWRAS and twenty five students were present. Er. Kalpesh Borase Research Associate (WRE) anchored the programme, while, Er. M. A. Tamboli, Research Associate (Computer Apps.) expressed vote of thanks.

#### 48. Training programme on IoT applications and advanced technologies for CSAWM



August 19, 2019. A one day training programme was conducted by CAAST- CSAWM project on IoT applications and advanced technologies for CSA and WM at Dr. ASCAE&T, MPKV, Rahuri. Dr. S. M. Nalawade, Organizing Secretary gave a brief introduction about the training programme. The Guest faculty Er. Hare Krishna Singh from Qualden Technologies Pvt. Ltd., Dr. S. B. Nandgude, Professor of SWC and Dr. M. S. Mane, Professor of IWM were present for this programme. The first half of the day followed with detailed presentation on various aspects of IoT applications. Students were understood the concept of IoT, advanced technologies and its applications in agriculture sector. They were engaged with the demonstration of IoT based phule soil moisture and automatic pump controller application. Er. Nawale T.L, Research Associate (E&TC) anchored the programme, while, Dr. G. B. Bhanage , Research Associate (FMP) expressed vote of thanks.



#### 49. Training programme on Precision Irrigation Water Management organized at Pune



August 20-21, 2019. A two day training programme on Precision Irrigation Water Management was organized by CAAST-CSAWM project by Sub-Campus, College of Agriculture, Pune. The programme was inaugurated by Dr. S. B. Shinde, Professor of Agril. Extension. Dr. Jayashree Pachpute, Organizing Secretary and Co-PI gave a brief introduction on different topics of precision irrigation water management to be presented during the training programme. Mr. Pankaj Godake anchored the programme, while, Miss. Sonali Ubale proposed thanks.

#### 50. Training program on Data loggers and sensors in CSA and WM organized

August 20-22, 2019. A three day training programme on Data loggers and sensors in CSA and WM was organized by the CAAST-CSAWM project at MPKV, Rahuri. The training program started with the welcome address and the introduction of Guest faculty by Dr. S. M. Nalawade, Organizing secretary. Er. Nawale T. L., Dr. G.B Bhanage, Er. Sujata Jawale, Er. Prasad Jawale guided the trainees. The programme was attended by 20 participants.

#### 51. Participants trained on Climate Resilient Agriculture and Smart Technologies



August 26-30, 2019. A training programme on Climate Resilient Agriculture and Smart Technologies was organized by CAAST-CSAWM project at CC, Rahuri. The programme was inaugurated by Dr. M. G. Shinde, Co-convenor and Co-PI who briefed about the different topics of Climate Resilient Agriculture and Smart Technologies to be covered during the training programme. Dr. R. P. Andhale, Organizing Secretary guided the participants about importance of climate smart technologies and its applications in the field of agriculture. During this training programme different topics were covered such as Remote sensing and GIS, Irrigation scheduling of important field crops, Protected cultivation, Organic farming, Integrated farming system models, Abiotic stress research facilities and Livestock management in context of climate change. Dr. Vaibhav Malunjkar and Dr. Prashant Kale, Research Associates anchored the programme, while, Dr. Snehal Kanade and Dr. Suraj Misal, Research Associate gave vote of thanks.

## September 2019

### 52. Vice Chancellor greets new Hon'ble Governor of Maharashtra and Chancellor at Rajbhavan, Mumbai



September 11, 2019. Vice Chancellor Dr. K. P. Viswanatha met Shri. Bhagat Singh Koshyari, the new Hon'ble Governor of Maharashtra and Chancellor at Rajbhavan, Mumbai. Dr. Viswanatha greeted him on behalf of the university. He briefed him about MPKV's achievements in agricultural education, research and extension education. The contribution of university's impact on farmers' income was also highlighted. He presented the Hon'ble Governor with a copy of the university's Golden Jubilee Souvenir.

53. September 30, 2019. Vice Chancellor Dr. K. P. Viswanatha met Chief Secretary Shri. Ajoy Mehta at Mantaralaya, Mumbai and handed over the cheque of Rs 40,40,888/- one day salary of staff of MPKV, Rahuri for flood victims of Kolhapur and Sangli to Chief Minister fund.



54. September 30, 2019. Vice Chancellor Dr. K. P. Viswanatha, Dr. S. R. Gadakh, Director of Research and scientists had a meeting with Dr. Anil Kakodkar at Rajiv Gandhi Science and Technology Commission, Govt. of Maharashtra and got sanctioned Rs 2.85 crore for jaggery research in Kolhapur.



### 55. Consultative Workshop organized for quality agricultural higher education



September 23-24, 2019. A Consultative Workshop was organized on Academia-Industry-Government linkages for quality agricultural higher education at MPKV, Rahuri in collaboration with NAARM, Hyderabad. Vice Chancellor Dr. K. P. Viswanatha presided over the inaugural programme. Dr. Narayan Shisode, Director, Extension and Training, M. S. was the Chief Guest for this programme. Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. S. R. Gadakh, Director of Research and Extension education, Dr. Surya Rathore, Principal Scientist, NAARM, Hyderabad, Associate



Deans Dr. D. D. Pawar, Dr. S. A. Ranpise, Dr. Y. G. Fulpagare, Dr. V. D. Shende, Nodal Officer, PAHCOA, Halgaon, Dr. M. C. Ahire, Programme Director and Head, Department of Agricultural Extension and Communication and Dr. V. V. Sumanthkumar, Senior Scientist, NAARM, Hyderabad were present on this occasion. Vice Chancellor Dr. Viswanatha in his address said that the main objective of NAHEP is to strengthen education at post graduate and above level. Here the role of industry is vital. Each one need to discuss their needs and expectations. Accordingly the syllabus needs to be modified, he said. Preparedness of SAUs for academia is needed. This workshop will help to bridge the gap between industry and SAUs, he hoped. He further stressed the need for upgrading the capability of staff and human resource. Dr. Shisode in his address expressed the need for change in syllabus. Joint venture of educational institutes and industry is required for future agriculture, he remarked. He hoped that the outcome of this workshop would strengthen higher education. Dr. Ahire gave the welcome remarks. Dr. Sumanthkumar briefed about the workshop. Dr. Rathore proposed thanks. Representatives of industry, entrepreneurs, scientists and students participated in the technical sessions of the workshop.

## 56. Teachers Day celebrated



September 5, 2019. The Teachers Day was celebrated in the university. Dr. Sarjerao Nimse, Former

Vice Chancellor, Lucknow University and Swami Ramanand Teerth Nanded University delivered the Chief Guest address. Dr. K. P. Viswanatha, Vice Chancellor, MPKV, Rahuri presided over the function organized on this occasion. In his speech Dr. Nimse said that Late Dr. Sarvapalli Radhakrishnan was a great scholar, philosopher, Professor and an expert in *Vedas* and *Bhagwat Gita*. Teaching is the most precious and a valuable profession. Education needs to be on par with the global standard, he remarked. Here the role of a teacher is important because it is he who can encourage the students, create passion and inspire them for greater achievements, he said. Vice Chancellor Dr. Viswanatha in his presidential address said that Late Dr. Radhakrishnan was a great philosopher of the 20<sup>th</sup> century. He said that education is a continuous process and teachers are the building block of the society. The aim of education is not only acquiring of knowledge and skill but also the development of mind and becoming a responsible citizen in the society. At the outset Dr. S. R. Gadakh, Director of Research and Extension Education gave the welcome and introductory remarks. Student Miss. Akankshya Dhapte also expressed her views. Student Kishor Pansare anchored the programme, while, Dr. M. R. Chouhan, Student Welfare Officer proposed thanks. Associate Deans Dr. Y. G. Fulpagare, Dr. S. A. Ranpise, Dr. D. B. Yadav, Dr. V. D. Shende, Prof. Dilip Gaikwad were present on the dais. Staff and students were present for the programme.

## 57. National Training Programme organized in Pune

September 17 to October 7, 2019. The Department of Agricultural Meteorology, Centre of Advanced Faculty Training in Agricultural Meteorology (CAFT), College of Agriculture, Pune had organized a National Training Programme on Recent Advances in Crop



Micrometeorology which was sponsored by ICAR, New Delhi. The Chairman of the inaugural function was Dr. P. N. Rasal, Associate Dean, College of Agriculture, Pune. The Chief Guest of this inaugural function was Prof. Dr. M. C. Varshneya, Former Vice Chancellor, Kamdhenu Veterinary University, Gandhinagar, Gujarat. The Guest of Honour was Dr. Kripan Ghosh, Head, Agrimet Division, IMD, Pune. About 25 participants of the rank of Assistant Professor and above from SAUs/Colleges/ICAR Institutes attended the programme. Eight participants were from other states viz., Punjab, Karnataka, Gujarat, Madhya Pradesh, Chattisgarh and five participants from other SAUs of Maharashtra. The resource persons from different states also delivered lectures for this training programme such as Dr. R.H. Patil, Head, Dept. of Agril. Met., UAS, Dharwad, Dr. V.U.M. Rao, Former P.C.(Agromet),CRIDA, Hyderabad, Dr. S.R.Patel, IGKV, Raipur, Chattisgarh, Dr. V. B.Vaidya, Asstt. Prof of Agril. Met., AAU, Anand, Dr. B. I. Karande, AAU, Anand, Gujrat etc. Dr. Prabhjyot Kaur Sidhu, Head, Climate Change and Agril. Meteorology, PAU, Ludhiana, Punjab was nominated as Observer by ICAR, New Delhi for this National Training Programme. She visited and interacted with the trainee participants. The observer evaluated the training and highly appreciated the lectures, course content, lodging and boarding facilities etc. of the training programme. The valedictory

function of the National Training Programme was held under the chairmanship of Dr. K. P. Viswanatha, Vice Chancellor, Mahatma Phule Krishi Vidyapeeth, Rahuri in presence of Dr. P. N. Rasal, Associate Dean, College of Agriculture, Pune and Dr. S. D. Masalkar, Associate Dean, College of Horticulture, Pune. Dr. J. D. Jadhav, Director, CAFT and Head, Department of Agricultural Meteorology, College of Agriculture, Pune and his colleagues took efforts in successful organization of the programme.

### 58. Training programme on Backyard Poultry organized under ICAR Farmer FIRST programme



September 20, 2019. An offcampus Training Programme on Backyard Poultry was organized at Chinchvihire village under the ICAR Farmer FIRST programme. Dr. S. R. Gadakh, Director of Research and Extension Education presided over the programme. In his address to the farmers and women, Dr. Gadakh highlighted the significance of backyard poultry as a sustainable enterprise which can give a regular source of income. The poultry owners need to adopt the technologies which can maximize their business. He called for efficient feed management of poultry birds and further hoped for good marketing strategy which can yield good income to the farmers. At the outset Dr. P. B. Kharde, Officer Incharge, Communication Centre and



PI, ICAR FFP gave an overview of the success story of backyard poultry during the last two years through this programme. University experts Dr. Ravindra Nimse and Dr. Sunil Adangle guided the poultry farmers on vaccination, diseases and their control measures, water and feed management. One of the successful backyard poultry practicing farmer from Kangar village Shri. Gorakshanath Gade shared his experiences during the training programme. Dr. B. A. Deshmukh, Co-PI anchored the programme, while, Dr. S. S. Sadaphal, Co-PI expressed thanks. Prof. M. M. Desai, Manager, ATIC, farmers and women were present for the training programme. Dr. Gadakh also visited one of the backyard poultry unit on this occasion. ICAR FFP staff Shri. Vijay Shedge, Shri. Kiran Magar and Shri. Amol Gaikwad took efforts in organizing the programme.

### 59. Training programme on Chickpea seed production technology organized under ICAR FFP at Kangar



September 26, 2019. A Training Programme on Chickpea seed production technology was organized at Kangar village under the ICAR Farmer FIRST programme in coordination with the State Department of Agriculture. Dr. M. C. Ahire, Head, Department of Agricultural Extension and Communication presided over the programme. Dr. V. D. Shende, Associate Director of Research, Dr. P. B. Kharde, Officer Incharge,

Communication Centre and PI, ICAR FFP, Dr. N. S. Kute, Senior Scientist, Pulses Improvement Project and scientists were present on this occasion. Dr. Ahire in his address hoped that the participant farmers would be benefitted through seed production programme. Farmers would be getting at least 20 per cent more price as compared to market price for seed production. The ICAR Farmer FIRST programme has resulted in enhancing crop production and farmers income, he said. Dr. Shende in his address briefed about the significant research achievements of the university. He said that MPKV has released high yielding varieties of chickpea which are popular all over the country. Dr. Kharde in his introductory remarks explained about the various activities being implemented under the ICAR FFP in Chinchvihire and Kangar villages. Dr. Kute guided on seed production aspects. The university scientists Prof. L. B. Mhase guided on chickpea production technology, Dr. C. S. Chaudhary on pest control and Dr. S. B. Latke on diseases of chickpea and their control. Shri. Vijay Shedge anchored the programme, while, Shri. Kiran Magar proposed thanks. Farmers in large number participated in the training programme. Visits to various activities of ICAR FFP were organized on this occasion.

### 60. Farmers trained on Rabi Sorghum Seed Production Technology under ICAR Farmer FIRST programe



September 6, 2019. A Training Programme on Rabi Sorghum Seed Production Technology was organized at Chinchvihire village under the ICAR Farmer FIRST programme in coordination with the State Department of Agriculture and MAHABEEJ. At the outset Dr. P. B. Kharde, Officer Incharge, Communication Centre and PI, ICAR FFP in his welcome and introductory remarks briefed about the activities of the ICAR FF project. He hoped that the training programme would update the knowledge of farmers on rabi sorghum technologies and help to enhance their production and income. The University scientists Dr. U.K. Kadam guided on the plant protection aspects of rabi sorghum. Dr. Manaji Shinde briefed about the various varieties developed by MPKV as per the soil type and measures for seed production. Prof. Sudam Nirmal explained the five point technology (*Panchasutri*) of rabi sorghum. Shri. Rajjak Shaikh of MAHABEEJ briefed on aspects related to seed production and role of MAHABEEJ. Shri. Vijay Shedge, SRF anchored the programme, while, Shri. Raibhan Gaikwad, Agril. Asstt. proposed thanks. Farmers and farm women of Chinchvihire and Kangar villages participated in this training programme. Field Asstt. Shri. Kiran Magar and Shri. Amol Gaikwad took efforts in organizing the programme.

### **61. Training programme on Integrated Farming System for climate smart agriculture and water management organized at Pune**



September 18-19, 2019. A two days training programme on Integrated Farming System for climate smart agriculture and water management was organized by CAAST-CSAWM project at College of Agriculture, Pune. The programme was inaugurated by Vice Chancellor Dr K. P. Viswanatha. Dr. P .N. Rasal, Associate Dean, College of Agriculture, Pune and Dr. S. D. Masalkar, Principal, College of Horticulture, Pune were present on this occasion. Dr. J. S. Pachpute, Co-PI and Training Organizing Secretary gave the introductory remarks and briefed about the training. During this two days training programme different topics were discussed such as Integrated cultivation practices in problematic soil and rectification through cultivation of essential oil bearing crops, Success story of Integrated Farming System model being implemented under the ICAR Farmer FIRST programme, Climate smart farming system and Climate Smart integrated farming system models recommended by the university. The resource persons for this training programme were Mrs. Vasanti Purohit, Director IMT Tech. Ltd, Pune, Mr. Dnyaneshwar Bodke, Agri. Entrepreneur, Dr. P .B. Kharde, Office In-charge, Communication Center, MPKV, Rahuri, Dr. Santosh Sahane, CEO, Forecast Agrotech, Pune, Mr. Somnath Choudhary, Program Manager, BAIF, Nasik and Dr. U. S. Surve, Chief Agronomist and I/C, IFS Scheme, MPKV, Rahuri. Dr. P. N. Dalavi, Research Associate anchored the programme and Mr. Lingayat Akshay expressed thanks.

### **62. Training programme on Climate Resilient Agriculture organized**

September 6-7, 2019. A two day training programme on Climate Resilient Agriculture and Smart Village approach was organized by CAAST-CSAWM project at College of Agriculture, Pune. The programme





was inaugurated by Dr. A. L. Pharande, Dean, Faculty of Agriculture. He guided the participants about importance of climate resilient agricultural technologies and its applications in the villages. Dr. P. N. Rasal, Associate Dean, College of Agriculture, Pune addressed about use of smart technologies in the PG Field experimentation. Dr. J. S. Pachpute, Co-PI, CAAST-CSAWM, Sub- campus, Pune welcomed and introduced the dignitaries. Dr. R. P. Andhale, Organizing Secretary and Member, CAAST-CSAWM gave brief introduction on different topics of Climate Resilient Agriculture and Smart Village approach to be covered during the training programme. Topics like Village Development systems, Watershed Management, Digital technologies used in Agriculture, Climate change and crop modeling, contingency crop planning and Agro advisory services in respect to farming systems were discussed. The resource persons for training programme were Dr. Sachin Kamble, AGM, NABARD, Maharashtra Regional Office, Pune, Dr. Sanjay More, Sr. Manager, Skymet, Pune, Dr. Dhananjay Pandit, Director, WRM, RT International, Pune, Dr. J. D. Jadhav, Head, Dept. of Agril. Meterology and Dr. Kripan Ghosh, Head, Agrimet Division, IMD, Pune. Dr. S. A. Ranpise, Associate Dean, LAE, MPKV, Rahuri, Dr. S. D. Masalkar, Principal, College of Horticulture, Pune and participants were present during this programme. Dr. Andhale proposed thanks.

Dr. Snehal Kanade, Dr. Suraj Misal, Dr. Pradeep Dalvi, Dr. Mahesh Khamkar, Research Associate, CAAST-CSAWM project co-ordinated the programme.

### 63. Training programme on Fostering Employment and Empowerment through Agriprenureship Development organized



September 12-13, 2019. A two day training programme on Fostering Employment and Empowerment through Agriprenureship Development was organized by CAAST-CSAWM project at MPKV, Rahuri. The programme was inaugurated by Dr .Y. G. Fulpagare, Associate Dean, PGI, MPKV, Rahuri. Dr. M. C. Ahire, Head, Department of Agricultural Extension and Communication and Training Organizing Secretary in his introductory remarks briefed about the training. Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM project and Dr. M. G. Shinde, Co-PI, CAAST-CSAWM project were presented on dais. During these two day training programme different topics were discussed such as poultry growth in India, Agri-economy, Agribusiness opportunities for good career, Establishment of primary and secondary agro processing enterprises, Government support schemes and subsidies for establishing Agriprenureship development, Market survey research, methodology, effective market survey plan for agri-enterprises and ring toss exercise. The resource persons for



training programme Mr. Shrikrushna Gangurde, Avee Broilers, Nashik, Mrs. Swati Shingade, Woman entrepreneur, Baramati, Mr. U. U. Bhale, Director, Udyam Info Solutions Pvt. Ltd., Aurangabad and Dr. S. B. Sapkal, Department of Agriculture Economics, MPKV, Rahuri guided the trainees. Dr. Sevak Dhenge and Dr. Shubhangi Ghadge, Research Associates coordinated the programme. Mr. Padmakumar Patil anchored the programme and vote of thanks was given by Miss. N. B. Yelmule.

#### 64. Inauguration of IoT based project at Mantralaya, Mumbai



September 17, 2019. CAAST-CSAWM, MPKV, Rahuri in collaboration with Lupin Foundation, NABARD, Incubation Centre, Pune University, Innovation Technology Pvt. Ltd. and Buchkewadi village has implemented the project on IoT to monitor soil moisture and automated irrigation system at Buchkewadi village, Block. Junnar, District. Pune. Buchkewadi village was selected under CAAST-CSAWM, MPKV, Rahuri for diffusion of climate smart agriculture and water management technologies. This IoT based project was inaugurated at the auspicious hands of Dr. Anil Bonde, Hon'ble Minister of Agriculture, Maharashtra state at Mantralaya, Mumbai. On this occasion Dr. M. G. Shinde, Co-PI, CAAST-CSAWM and Dr. S. A. Dhenge, Research Associate presented the report.

#### 65. Pre-training programme organized



September 26 to October 10, 2019. A two week Pre-training programme was organized on "Basics of Drones, AI and Geo-informatics for Climate Smart Agriculture and Water Management" by the CAAST-CSAWM project at CC, Rahuri. The training programme was inaugurated by Dr. D. D. Pawar, Associate Dean, Dr. ASCAE&T, MPKV, Rahuri. During this two week training programme different topics were discussed such as Basics of Remote Sensing and GIS, Introduction to crop mapping using RS and GIS techniques, LULC and Water Management, drones, UAVs and UASs, Map product from drones, Flight planning software/apps-DJI GS Pro, Pix4D Capture, UAV rules and regulations, Basic Concepts, Principles and applications of Remote Sensing, Global Positioning System (GPS), Principles, Concepts and Applications, ArcGIS: How to go for Geo referencing, create Shape files for creation of thematic data types, Built-in data structures in Python, Control program flow in Python, Basics, Process and Application of Geographical Information Systems etc. The resource persons for training programme were Mr. Ajit Kharjul, Director, Ashtacon Technologies Pvt. Ltd, Nashik, Mrs. Sapna Hosmath, Mr. Bipin Charles, Director, KMS-Group, RS and GIS and AFOLU services, Dr. S. M. Nalawade Head, FMPE and Dr. S. A. Kadam, Asstt. Prof. IDE. Dr. M. G. Shinde, Co-PI, CAAST-CSAWM project, Dr. P. G. Popale, Asstt.



Prof., Research Associates and trainees were present for the programme. Research Associates Dr. Rajesh, Dr. Pande, Er. Tamboli, Er. Patil Er. Borse and Er. Dighe co-ordinated the training programme. Research Associates Er. Mangal Patil anchored the programme, while, Er. Mohasin Tamboli proposed vote of thanks.

## 66. Expert lecture on personality development organized



September 26, 2019. An Expert Lecture on You are the Author of Your Own Destiny was organized at MPKV, Rahuri for PG students under the CAAST-CSAWM project. Er. Rajiv Roy, Founder and Director of Agriplast Protected Cultivation Pvt. Ltd., Bangalore delivered the lecture for students on personality development. The expert lecture was started with an informal opening-cum-welcome ceremony in the presence of Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM project and other CAAST members. Er. Mangal Patil, Research Associate anchored the programme.

## 67. Industry-Government-Academicians-Students Interface organized

September 26-27, 2019. A two day Industry-Government-Academicians-Students Interface on Quality, technical and financial aspects of Protected Cultivation Structures was organized by CAAST-CSAWM project at MPKV, Rahuri. The interface was inaugurated by



Dr. Prahlad Pokale, Director (Agriculture), Pune. The technical experts Dr. S. D. Gorantiwar, PI, CAAST-CSAWM, Dr. N. N. Firake, Head, Dept. of IDE, Er. Sandip Dere, Dere Agro-industries, Ahmednagar, Mr. Chetan Dedhia, J. J. Overseas, Mumbai, Er. Rajiv Roy, Founder and Director of Agriplast Protected Cultivation Pvt. Ltd., Bangalore took part in the interactions. Dr. Gorantiwar gave the preamble of this interface and its importance for commercial growth of protected cultivation technologies, employment generation and entrepreneurship development. Mr. H. D. Jagtap anchored the programme and vote of thanks was expressed by Er. Sachin More.

## 68. Student-Industry interface organized



September 11, 2019. A one day Student-Industry interface programme on Role of application UAV in precision farming was organized by CAAST-CSAWM project at sub campus College of Agriculture, Pune. The programme was inaugurated by Dr. S. D.

Gorantiwar, Principal Investigator, CAAST-CSAWM, MPKV, Rahuri. He briefed about the various ongoing activities of the project. Dr. S. M. Nalawade, Head, Farm Machinery and Power Engineering and Organizing Secretary in his introductory remarks briefed about the training. Dr. Ramesh Krishnamurthy, Sinsil International Pvt. Ltd, Mumbai, Mr. Aditya Lingolu, Celestrone Technologies Pvt. Ltd., Mumbai and Mr. Swanand Gudhate, Technical Head, Idea Forge Technology Pvt. Ltd., Mumbai guided the trainees. Dr. G. B. Bhanage, Research Associate anchored the programme, while, Dr. Nalawade expressed vote of thanks.

### 69. Training cum Workshop programme on Water Budgeting organized



September 20-21, 2019. A training cum workshop on Water Budgeting for Efficient Water Resources Management in Watershed was organized by CAAST-CSAWM project at MPKV, Rahuri. The programme was inaugurated by Dr. S. B. Nandgude, Head, SWCE, MPKV, Rahuri. Dr. M. G. Shinde, Co-PI, CAAST-CSAWM and organizing secretary of programme welcomed and introduced the dignitaries. He gave a brief introduction on different topics of Water Budgeting for Efficient Water Resources Management in Watersheds to be covered during the training cum workshop. The participants were guided on the importance of water, its social, economic, political meanings, importance

of water budgeting and implementation of water budgeting programme at ground level. During this two days training cum workshop different topics were discussed such as Promoting water budgeting through water stewardship, Integrating climate change concerns in water resources planning and management, Importance and challenges in water budgeting in watershed projects, Participatory methods and tools of water budgeting. The resource persons for training programme were Mr. Eshwar Kale, Sr. Scientist, (WOTR), Pune Dr. Sachin Kamble, AGM, NABARD, Maharashtra Regional Office, Pune, Mr. Umesh Lagad, Managing Trustee, SEVA, Ahmednagar, Maharashtra and Mr. Yugandhar Mandavkar, Chief Executive, Yugman Associates, Pune. Dr. A. A. Atre, Prof. SWCE and Co-Convener, CAAST-CSAWM project, Dr. S. M. Nalawade, Head, Dept. of FMPE, Dr. S. A. Kadam, Asstt. Prof. of IDE, Dr. P. G. Popale, Asstt. Prof. of IDE were present during this programme. Research Associates Dr. Vaibhav Malunekar and Dr. Snehal Kanade co-ordinated the programme and vote of thanks were proposed by Dr. M. G. Shinde.

### 70. Exposure visit to village Chandakapur



September 17, 2019. The CAAST-CSAWM project, MPKV, Rahuri had organized a visit on Agroclimatic networking at Chandakapur village, Tal. Rahuri, Dist. Ahmednagar. On this occasion the CEO of Krushi Vikas va Gramin Prashikashan Sanstha Mr. Amit



Naphade, Regional Manager, HDFC, Mr. Gajendra Dixit, scientists Dr. A. D. Kadlag, Dr. G. S. Shelke, State Department of Agriculture officers, farmers and Dr. S. N. Ghadge, Research Associate were present. They visited the farm pond, cropping system, crop demonstrations, horticulture field, poultry unit, dairy unit, organic fertilizer project, vermi composting project and fishery unit in the village and guided the farmers.

## October 2019

### 71. Inauguration of Kisan Aadhar Sammelan-2019



October 25, 2019. The event of Kisan Aadhar Sammelan-2019 was organized at the Mahatma Phule Krishi Vidyapeeth, Rahuri during October 25-26, 2019 in collaboration with Department of Agriculture, M.S. and Agriculture Technology Management Agency (ATMA), Ahmednagar. The event comprised of Live Crop Demonstrations, Agriculture and Animal Exhibition and Expert lectures.

The Kisan Aadhar Sammelan-2019 was inaugurated at the auspicious hands of Dr. Ashok Dalwai, Chief Executive Officer, National Rainfed Area Authority and Chairman, Committee on Doubling of Farmers' Income, Ministry of Agriculture, Cooperation and Farmers Welfare, New Delhi. Vice Chancellor Dr. K. P. Viswanatha presided over the

function. Mr. Vishwajit Mane, Director General, MCAER, Pune, Dr. Raviprakash Dani, Former Vice Chancellor, DrPDKV, Akola, Mr. Prataprao Bhosale, Member, Executive Council, Kamdhenu University, Gandhinagar, Gujarat, Shri. Nathaji Chougule, Member, Executive Council, MPKV, Rahuri, Mrs. Sunita Patil, Member, Executive Council, MPKV, Rahuri, Dr. Ravshan Ismoliv of Uzbekistan, Shri. Shivajirao Jagtap, District Supd. Agril. Officer, Ahmednagar, Dr. V. S. Shirke, Director, Extension and HRD, MCAER, Pune, University Directors Dr. A. L. Pharande and Dr. S. R. Gadakh, Shri. Sopan Kasar, Registrar, Shri. Vijay Kote, Comptroller and Shri. Milind Dhoke, University Engineer were present on the dias.

In his inaugural address Dr. Ashok Dalwai highlighted the significant moments in India agriculture. He also put forth the challenges in agriculture particularly that of climate change and depleting resources. Efforts are needed for developing a new economic model in renewable form, he said. There is a need to utilize the bioenergy and solar energy in agriculture. He also stressed the need for exploring new markets which would benefit the farmers. Regarding doubling of farmers income, he said that there has been a transformation in the production system, resource use efficiency and market during the last four years. New schemes for the farmers have been implemented. He appreciated the innovative activities of MPKV and expressed his best wishes for the event. In his presidential address Vice Chancellor Dr. K. P. Viswanatha said the the university is making all round efforts for reaching the farmers. Kisan Aadhar Sammelan is one such event which is being regularly organized since last three years for the benefit of farmers. Each district of Maharashtra has its own speciality in agriculture and particularly horticulture. Diversification in agriculture

is very much needed and hence the MPKV model of Integrated Farming System is being promoted among farmers for sustainable income. Shri. Prataprao Bhosale in his address thanked the university for this initiative and said that quality agricultural graduates are needed for future agriculture. Shri. Vishwajit Mane said that this event is a good activity where the farmers can interact with the scientists and felt the need for developing climate resilient crop varieties. Dr. Dani said that farmer is a backbone of our country and he needs the support of SAUs for agricultural technologies. Dr. Ravshan said that this is a great opportunity for the farmers for enriching knowledge. Shri. Jagtap said that collaborative efforts of SAUs and Agriculture Department will benefit the farmers. Dr. S. R. Gadakh, Director of Research and Extension Education gave the welcome and introductory remarks. Dr. A. L. Pharande, Dean, Faculty of Agriculture expressed thanks. Dr. B. A. Deshmukh anchored the programme. The MPKV documentary (English version) was released on this occasion. Associate Deans, Heads of Departments, scientists, students and farmers were present on this occasion. The Agriculture and Animal exhibition was also inaugurated at the hands of the dignitaries.

## 72. Concluding programme of Kisan Aadhar Sammelan-2019



October 26, 2019. The Kisan Aadhar Sammelan-2019 concluded on October 26, 2019. Vice Chancellor Dr. K.

P. Viswanatha presided over the function. The Expert Lectures of Shri. Vilas Shinde, Chief Executive Officer, Sahyadri Agro Farms, Nasik and Ex Alumini of MPKV and Mrs. Swati Shingade, Chief Executive Officer, Pure Organic and Ex Alumini of MPKV was organized on this occasion. Dr. S. D. Sawant, Vice Chancellor, DrBSKKV, Dapoli, Dr. V. M. Mayande, Former Vice Chancellor, DrPDKV, Akola, Dr. M. C. Varshneya, Former Vice Chancellor, Kamdhenu University, Gandhinagar, Dr. Vijay Mahajan, Director, NRC for Onion and Garlic, Rajgurunagar, Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. S. R. Gadakh, Director of Research and Extension Education and Shri. Shivajirao Jagtap, District Supd. Agril. Officer, Ahmednagar were present on the dias.



Shri. Vilas Shinde spoke on the topic Farmer Producer Company and Fruit and Vegetable Processing. He appealed to the farmers to have a practical and professional approach towards farming. The reducing land holding per farmer is a cause of concern. This reducing land holding along with traditional farming will not earn sufficient income for farmers. Hence, farmers should come forward and establish Farmer Producer Companies which will ensure group farming, supply of agricultural inputs at competitive prices and organized marketing for their farm produce, he said. Many youths are now harvesting good yield of grapes, pomegranate, mango, banana and other horticultural



crops. These youths should be guided and retained in agriculture. Thus, the role of agricultural graduates is vital, he asserted. Mrs. Swati Shingade while guiding the farmers on Agricultural Entrepreneurship and Opportunities said that the agricultural graduated need to be job providers and not job seekers. Agriculture is a vast sector where farmers and youth have ample opportunities for successful entrepreneurship. For this purpose their entrepreneurial capacities need to be strengthened, she said. She narrated her experiences on farming and marketing. In his presidential address Vice Chancellor Dr. Viswanatha thanked the staff for organizing the event and hoped that the farmers, students would be benefitted through it. He appealed to the farmers to take appropriate technologies on their farm. Dr. Sawant, Dr. Mayande and Dr. Varshneya also addressed on this occasion. Dr. Gadakh expressed thanks. Dr. S. D. Gorantiwar, Head, Department of Agril. Engineering anchored the programme. Farmers, students and university staff were present on this occasion.

### 73. Live Crop Demonstrations



Crop demonstrations on over 100 acres were organized for the benefit of farmers during the Kisan Aadhar Sammelan-2019. It included demonstrations on cereals, pulses, oilseeds, forage, vegetables, flowers and cash crops. In all demonstrations of 56 crops and 145 varieties were planted in the cafeteria. In addition

demonstrations on advanced irrigation methods, mole plough, soil testing, vermiculture, cultivation of dragon fruit, vegetable and flower cultivation in shadenet, apiculture, integrated pest management, biocontrol were also organized on this occasion. Major attraction of this event was the Integrated Farming System model on farmers field of Shri. Chandrakant Adsure and Shri. Uttam Adsure.

### 74. Agriculture and Animal Exhibition



An Agriculture and Animal Exhibition was organized during the Kisan Aadhar Sammelan-2019. The university technologies were showcased in this exhibition. This included agriculture inputs, improved agriculture implements, processing, subsidiary occupations, medicinal and aromatic plants, publications etc. The animal component included indigenous and improved breeds of cattle, goat, sheep, poultry and dogs. The Government schemes of Department of Agriculture, ATMA, Zilla Parishad, ICAR Farmers FIRST programme were exhibited in the event. Many farmers and farm women visited the Kisan Aadhar Sammelan-2019.

### 75. Kharif Technology Day organized at AC, Pune

October 15, 2019. The Kharif Technology Day was organized at College of Agriculture, Pune. Dr. Vijay Bhatkar, Chancellor, Nalanda University and



Inventor of Param Computer inaugurated the event. Vice Chancellor Dr. K. P. Viswanatha presided over the programme. Shri. Suhas Divse, Commissioner, Agriculture, M. S., Shri. Prataprao Bhosale, Member, Executive Council, Kamdhenu University, Gandhinagar, Dr. K. V. Prasad, Member, Executive Council, MPKV, Rahuri and Director, Directorate of Floriculture, Pune, Dr. S. R. Gadakh, Director of Research and Extension Education, Dr. V. S. Shirke, Director of Extension and HRD, MCAER, Pune, Associate Deans Dr. P. M. Rasal and Dr. D. D. Pawar, Dr. S. D. Masalkar, Principal, CoH, Pune, Dr. V. S. Supe, Associate Director of Research, Ganeshkhind and Dr. Shivaji Gurav, Deputy Registrar, PPV & FRA, Pune division were present on the dais. Dr. Bhatkar in his address said that the agricultural economy needs to be strengthened for the benefit of rural masses. Ample opportunities are available for the agricultural graduates in agriculture sector. This would reduce the flow of graduates from rural to urban areas, he said. Dr. Viswanatha underlined the importance of vermicompost and organic matter for enriching the soil and reducing the dependence on chemical fertilizers. Shri. Bhosale emphasized on proper marketing of farm produce. Dr. Gadakh highlighted the contribution of university research for the farmers. Dr. Rasal gave the introductory remarks. Dr. S. B. Shinde expressed thanks. Dr. Pallavi Suryavanshi anchored the programme.

Scientists, students and farmers were present for the programme. Various crop demonstrations were organized on the college farm for the farmers.

## 76. Agriculture Technology Day organized at AC, Dhule



October 31, 2019. The Agriculture Technology Day was jointly organized by College of Agriculture, Regional Extension Centre and Krishi Vigyan Kendra, Dhule in coordination with Department of Agriculture and ATMA, Dhule. Dr. S. R. Gadakh, Director of Research and Extension Education presided over the programme. Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. Pankaj Mahale, Member, Executive Council, Dr. A. M. Musmade, Associate Dean, Shri. Milind Dhoke, University Engineer, Shri. Vivek Sonawane, District Suptd. Agril. Officer, Dhule, Dr. M. S. Mahajan, Extension Agronomist, Regional Extension Centre, Dr. D. N. Nandre, Head and Programme Coordinator, KVK, Dhule and Prof. Dr. C. D. Deokar were present on the dais. In his presidential address Dr. Gadakh appealed to the farmers for maximum

adoption of university technologies for getting maximum crop production and ultimately more income. He highlighted the significant research contribution of MPKV in agricultural production. Dr. Pharande in his address said that in view of the high rainfall and increasing soil erosion, appropriate measures are



required to be adopted by the farmers. Dr. Musmade briefed about the college activities. An Agriculture Exhibition was organized on this occasion. University scientists guided the farmers. Shri. Jagdish Kathepuri anchored the programme, while, Dr. Mahajan proposed thanks. Thousands of farmers and farm women were benefited through this event.

### 77. Expert Lecture on Developing Village Level Contingency Crop Plan for Akole Block of Ahmednagar District organized



October 4, 2019. An Expert Lecture on Developing Village Level Contingency Crop Plan for Akole Block of Ahmednagar District was organized by CAASTCSAWM, MPKV, Rahuri. The expert lecture started with an informal opening-cum-welcome ceremony in the presence of Dr. D. D. Pawar, Associate Dean Dr. ASCAET, Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM and other CAASTCSAWM members. Dr. K. Sammi Reddy, Head, Division of NRM, CRIDA, Hyderabad delivered a lecture for students and faculty on the aspect of importance of contingency crop plan, improved crop varieties with minimum water requirement, crop rotation, water conservation techniques, livestock management, irrigation management, seed bank, fodder bank and implementation of contingency crop plan. Dr. S. G. Kanade, Research Associate, Agro

meteorology, CAAST-CSAWM presented developed village level contingency crop plan for Akole block. Dr. R. P. Andhale, Associate Professor, Agronomy and Member, CAAST-CSAWM anchored the programme, while, Dr. M. G. Shinde, Professor, SWCE and Co-PI, CAAST-CSAWM expressed vote of thanks

### 78. Expert lecture on Seriousness of Hazardous Waste and its Disposal organized



October 11, 2019. An Expert Lecture on Seriousness of Hazardous Waste and its Disposal was organized by CAAST-CSAWM, MPKV, Rahuri for students and faculty. The expert lecture started with an informal opening-cum-welcome ceremony in the presence Dr. A. L. Pharande, Dean (F/A) and Director of Instructions, MPKV, Rahuri, Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM, Heads of Departments and CAAST-CSAWM members. Mr. Rakesh Mishra, Marketing Head, Maharashtra, Environment Power LTD, Ranjangaon (MIDC), Pune delivered a lecture on creating awareness and execution of good laboratory practices with respect to hazardous chemical waste generated in various laboratories at MPKV, Rahuri. Dr. P. L. Kulwal, Member, CAAST-CSAWM anchored the programme.



## 79. Field demonstration under Kharif Mahotsav-2019 through drone-mounted sprayer organized



October 15, 2019. Field Demonstration under Kharif Mahotsav -2019 on Horticultural and cereal crops through drone-mounted sprayer was organized under the CAAST-CSAWM at Sub-campus College of Agriculture, Pune. Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM emphasized the precise spraying which improves the crop productivity and saves the time and human intervention in the field. Dr. K. P. Viswanatha, Vice Chancellor, MPKV, Rahuri, Dr. Vijay Bhatkar, Chancellor, Nalanda University, Dr. S. R. Gadakh, Director of Research and Extension Education, Dr. K. V. Prasad, Director, ICAR-Directorate of Floricultural Research, Pune, Dr. P. N. Rasal, Associate Dean College of Agriculture, Pune, Dr. J. S. Pachpute, Co-Principal Investigator CAAST subcampus, Pune, faculty, farmers and students were present on this occasion.

## 80. Meeting with Dr. Vijay Bhatkar, Chancellor, Nalanda University, Bihar organized

October 15, 2019. A meeting on the concept of artificial intelligence for sustainable agriculture was organized at College of Agriculture, Pune. Dr. Vijay Bhatkar, Chancellor of the Nalanda University presided over



the meeting. Dr. K. P. Viswanatha, Vice Chancellor, MPKV, Rahuri, Dr. S. R. Gadakh, Director of Research and Director of Extension, MPKV, Rahuri, Dr. P. N. Rasal, Associate Dean, College of Agriculture, Pune, Dr. S. D. Masalkar, Principal, College of Horticulture, Pune, Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM, MPKV, Rahuri, Dr. J. S. Pachpute, Co-Principal Investigator CAAST-CSAWM sub-campus, COA, Pune, Members of CAAST-CSAWM, MPKV, Rahuri and Research Associates were present for the meeting. Dr. Vijay Bhatkar said that the Artificial Intelligence and Machine Learning would definitely help agriculture students and scientists to scale up new heights in their field work. He also focused on the present Indian Agro-based economy, Agro knowledge-based economy, use of Robots in Agricultural for Crop and Soil Monitoring and Predictive analysis. Dr. Gorantiwar gave the introductory remarks. Dr. B. D. Bhakre, Head, Dept. of Soil Science and Agricultural Chemistry proposed vote of thanks.

## 81. Expert lecture on Water Resources Management: Sharing the Experience of Bramhaputra - Meghana River Basin organized

October 18, 2019. An Expert Lecture on Water Resources Management: Sharing the Experience of Bramhaputra - Meghana River Basin was organized by CAAST-CSAWM, MPKV, Rahuri for students and



faculty. The expert lecture was started with an informal opening-cum-welcome ceremony in the presence Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM, Rahuri and members of CAAST-CSAWM, Rahuri. Mr. Pradipta Changleakati, Member, Assam Administrative Tribunal, Assam shared his experience of Bramhaputra - Meghana River Basin management to PG students and faculty. Dr. A. D. Bhagat, Research Associate anchored the programme.

## 82. Visit of delegation of Republic of Uzbekistan to MPKV, Rahuri



MPKV, Rahuri presented the significant educational and research achievements. Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM explained the preamble of CAAST-CSAWM, MPKV project. The Heads of Department, members and Research Associates participated in the discussion. The purpose of visit was to discuss about possible collaborative research and initiation of MoUs between MPKV, Rahuri and Namangan Institute of Engineering and

Technology, Namangan, Uzbekistan. They visited the various research projects, demonstration plots of PGI instructional farm, Integrated Farming system model, Underground drainage system, Horticulture nursery and Dairy unit. Dr. M. C. Ahire, Head, Department of Agricultural Extension and Communication expressed vote of thanks.

## November 2019

### 83 See-off function for first batch of PG students for International Training at Asian Institute of Technology, Bangkok, Thailand under CAAST - CSAWM Project



November 9, 2019. A See-off function for the first batch of International Training was organized by CAAST-CSAWM project at College of Agriculture, Pune. The programme was inaugurated by Vice Chancellor Dr K. P. Viswanatha. Shri. Sopan Kasar, Registrar MPKV, Rahuri, Dr. D. D. Pawar, Associate Dean, Dr.ASCAE&T, MPKV, Rahuri, Dr. P. N. Rasal, Associate Dean, College of Agriculture, Pune, Dr. S. D. Masalkar, Principal, College of Horticulture, Pune, Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM project, Dr. M. G. Shinde, Co-PI, CAAST-CSAWM, MPKV, Rahuri, Dr. P .B. Kharde, Office In-charge, Communication Centre, MPKV, Rahuri, Co-PIs Dr. R. P. Andhale and Dr. A. A. Atre, Shri.



Surayakant Shejwal, PAO, MPKV, Rahuri were present on this occasion. Vice Chancellor Dr. K.P. Viswanatha congratulated students and gave best wishes to students for international training. Under CAAST-CSAWM project 20 PG (M.Sc./M.Tech./Ph.D.) students from different disciplines and Dr. A.A. Atre, Professor of Agril. Engg. were selected for this training. The 1st batch of 20 PG students along with one faculty departed for one month International Training entitled Drones and It's applications Google Earth Engine to be held during 11th November, 2019 to 10th December, 2019 at Asian Institute of Technology, Bangkok, Thailand. Dr. S. D. Gorantiwar, Principal Investigator, Dr. M. G. Shinde, Co-PI, CAAST-CSAWM project, Dr. Mangal Patil and Er. Kalpesh Borse took efforts for organizing this international training. Dr. Mangal Patil anchored the programme, while, Dr. R. P. Andhale proposed vote of thanks

#### 84. National Training Programme organized



November 14 to December 4, 2019. A twenty one day National Training Programme on National Problems and Constraints in Fruit Crops sponsored by ICAR, New Delhi was organized by the Centre of Advanced Faculty Training in Horticulture (Fruits), Department of Horticulture at MPKV, Rahuri. Vice Chancellor Dr. K. P. Viswanatha inaugurated the programme. Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. S.

R. Gadakh, Director of Research, Shri. Sopan Kasar, Registrar, Dr. Y. G. Fulpagare, Associate Dean, PGI, Dr. S. A. Ranpise, Head, Department of Horticulture and Dr. B. B. Dhakre, Professor of Horticulture and Convener were present for the programme. Dr. Viswanatha in his inaugural address hoped that the training programme would update the faculty knowledge on problems and constraints in fruit crops. MPKV has a great contribution in fruit crops and horticulture is very important component under the integrated farming system for doubling farmers income, he said. Dr. Pharande said that the scenario of horticulture is encouraging but at the same time we have several challenges. Dr. Gadakh cited the success story of Ajnale village where farmers are incurring huge returns from pomegranate crop. Dr. Ranpise in his welcome and introductory address informed that 488 faculty have been trained through 28 training programmes under CAFT. Dr. Sumati Dighe anchored the programme, while, Dr. Dhakre proposed thanks. Twenty five faculty from nine states of the country participated in this training programme.

#### 85. Training programme on Bee keeping, climate change and sustainability organized



November 22-23, 2019. A two day training programme on Bee keeping, climate change and sustainability was organized in the university. The programme was sponsored by National Agriculture Higher Education Project under the Centre for Advanced Agricultural



Science and Technology for Climate Smart Agriculture and Water Management (CAAST-CSAWM). Vice Chancellor Dr. K. P. Viswanatha presided over the inaugural programme. Dr. S. R. Gadakh, Director of Research and Extension Education, Mr. B. V. Apoorva and Mr. P. R. Badriprasad, Apiculture experts from Karnataka, Dr. Y. G. Fulpagare, Associate Dean, PGI, Dr. S. D. Gorantiwar, Head, Department of Agril. Engg. and PI, CAAST-CSAWM project and Dr. C. S. Patil, Head, Department of Entomology were present for the programme. Vice Chancellor Dr. K. P. Viswanatha in his inaugural address felt the need for increasing the awareness of honey bee and its benefits among the farmers. Bees are the best friends of farmers and we need to learn the work culture and discipline of honey bees, he said. Apiculture helps in enhancing crop production, he said. Dr. Gadakh said that around 30 per cent increase in yield have been observed through cross pollination by honey bees. Dr. C. S. Patil in his introductory and welcome remarks said that bees are essential pollinators for crops. Dr. Gorantiwar appraised of the CAAST-CSAWM programme. Dr. B. A. Deshmukh anchored the programme, while, Dr. M. G. Shinde proposed thanks. Staff and PG students participated in the training programme.

### 86. Model Training programme on Processing and Value Addition organized



November 18-25, 2019. A Model Training Programme on Processing and Value Addition Technology in Fruits and Vegetables sponsored by Ministry of Agriculture and Farmers Welfare, GoI was organized by the Department of Food Science and Technology at MPKV, Rahuri. Dr. Y. G. Fulpagare, Associate Dean, Post Graduate Institute inaugurated the training programme. In his address to the trainees Dr. Fulpagare emphasized on the importance of processing and value addition of fruits and vegetables. He said that this is a good platform for refreshing our knowledge on this important aspect. Youths in rural areas can be trained on processing of farm produce and their entrepreneurial capabilities need to be enhanced. This would add to employment of rural youth, he said. Dr. U. D. Chavan, Head, Department of Food Science and Technology in his introductory and welcome address briefed about the importance of the topic. Dr. G. K. Waman anchored the programme, while, Dr. P. M. Kotecha expressed thanks. Twenty two trainees from SAUs and Department of Agriculture from the country participated in this training programme. The concluding programme was organized in presence of Associate Dean Dr. S. A. Ranpise and certificates were distributed to the trainees.

### 87. Training programme on Soft Skills for Personality Development organized



November 18-19, 2019. Dr. Y. G. Fulpagare, Associate Dean, PGI inaugurated the training programme on

Soft Skills for Personality Development organized by the Department of Agriculture Extension and Communication in coordination with the Extension Education Institute, Anand (Gujarat) at MPKV, Rahuri. In his address Dr. Fulpagare narrated the importance of soft skills particularly in effective communication and development of one's personality. Personality development is a lifelong process but proper training is required at student age. Dr. Mahesh Patel, Director of the course, EEI, Anand gave a preamble of the programme. Dr. G. K. Sasane, I/C, Head, Department of Agriculture Extension and Communication gave the introductory and welcome remarks. Dr. S. B. Shinde, Professor of Agril. Extension, College of Agriculture, Pune also addressed the trainees. Dr. M. B. Dhadwad anchored the programme, while, Dr. P. B. Kharde proposed thanks. More than fifty trainees participated in this training programme. The valedictory programme was conducted in presence of Dr. S. R. Gadakh, Director of Research and Extension Education and Dr. Y. G. Fulpagare, Associate Dean, PGI. Dr. Gadakh hoped that the training would help the staff and students in handling difficult situations and managing stress. Certificates were distributed to the trainees.

### 88. Mahatma Phule Punyatithi celebrated



November 22, 2019. The death anniversary of great social reformer Mahatma Jyotiba Phule was celebrated

in the university. The Chief Guest Dr. Prahlad Lulekar, Head, Department of Marathi, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad delivered a lecture on the life of Mahatma Phule. Dr. A. L. Pharande, Dean, Faculty of Agriculture presided over the programme. Dr. S. R. Gadakh, Director of Research and Extension Education, Shri. Sopan Kasar, Registrar, Dr. D. D. Pawar, Associate Dean, DrASCAE&T, Heads of Department Dr. M. C. Ahire, Dr. S. D. Gorantiwar, Dr. R. M. Naik, Dr. B. D. Bhakare, Dr. Mahaveer Chouhan, Student Welfare Officer and Shri. Dilip Gaikwad, Sports Officer were present on the dais. Dr. Lulekar in his speech narrated the contribution of Mahatma Phule towards agriculture. He had a great vision towards agriculture and farmers. He put forward revolutionary ideas and made efforts to implement them. Dr. Pharande in his presidential address said that we are proud that the university is named after this great social reformer. Shri. Kasar gave the welcome and introductory remarks. Dr. Gadakh introduced the Chief Guest. Student Mr. Suraj Kulkarni anchored the programme, while, Dr. Chouhan expressed thanks. Staff and students attended the programme.

### 89. Workshop on Agriculture drone for spraying applications organized



November 22, 2019. A one day workshop on Agriculture drone for spraying applications was organized by



CAAST-CSAWM at Dr. ASCAE&T, MPKV, Rahuri. Dr. S. M. Nalawade, Organizing secretary, CAAST-CSAWM gave a brief introduction about training session and guest faculty Mr. Ajit Kharjul from ASAP Agritech LLP, Eklahare, Nashik and Dr. S. A. Kadam, IDE guided the trainees. The first half of the day was followed with detailed presentation on various aspects of UAV applications. The participants were understood the concept of UAV, advanced technologies and its applications in agriculture sectors. In the second half of the day, participants were engaged with the demonstration of spraying UAV at IWM Farm. The session was followed by interaction with the participants and discussions on new technologies of UAV which can be deployed in the agriculture sector. The programme was attended by 23 participants who found it to be very useful and knowledgeable to add value to their designs. Dr. G. B. Bhanage, Research Associate anchored the programme.

## 90. Workshop on Smart Irrigation and Water Productivity organized



November 27, 2019. A one day workshop on Smart Irrigation and Water Productivity was organized at CAAST-CSAWM, MPKV, Rahuri for PG students. Dr. D. D. Pawar, Associate Dean, Dr. ASCAE&T inaugurated the workshop and briefed the importance of smart irrigation and water productivity. Dr. S. D.

Gorantiwar, Principal Investigator, CAAST-CSAWM project gave the introductory remarks and briefed about the objectives of the workshop. The resource persons in experts talk for the one day workshop were Dr. R. K. Nema, Dean, Faculty of Agricultural Engineering, JNKVV, Jabalpur who spoke on status of agricultural water productivity and strategy to improve and Er. Ravindra Jadhav, Assistant Manager, Netafim Irrigation India Pvt. Ltd presented irrigation system with a brain. Dr. Mangal Patil, Research Associate anchored the programme.

## December 2020

### 91. 34<sup>th</sup> University Convocation celebrated



December 5, 2019. MPKV, Rahuri celebrated its 34th Convocation. Honourable Governor of Maharashtra and Chancellor of the university Shri. Bhagat Singh Koshyari presided over the function. Vice Chancellor Dr. K. P. Viswanatha, Dr. A. L. Pharande, Dean, Faculty of Agriculture, Shri. Sopan Kasar, Registrar, Dr. D. D. Pawar, Associate Dean, Dr. ASCAE&T, Shri. Haribhau Jawale, Vice President, MCAER, Pune, Members of Executive Council Shri. Narendra Darade, MLC, Shri. Tushar Pawar, Shri. Nathaji Chougule, Mrs. Sunita Patil, Dr. Pankajkumar Mahale, Dr. Vijayprakash Thombre, Shri. Dattatraya Pansare, Dr. S. R. Gadakh, Director of Research and Extension Education and



Shri. P. T. Suryavanshi, Deputy Registrar, Academic were present on the dais.

In his convocation address Honourable Governor Shri. Bhagat Singh Koshyari said that agriculture is the main occupation of farmers of our country. Agricultural graduates have an important role in agriculture. The agricultural graduates need to take efforts for becoming successful entrepreneurs who can be job providers and not job seekers, he said. They need to be sincere, work hard and follow discipline. These are the three principles for achieving success. He further said that India has a rich history and heritage. Great warrior like Chhatrapati Shivaji Maharaj, Social worker Mahatma Phule, Philosopher Swami Vivekanad, Scientist Abdul Kalam were born in this nation which have made us proud. Our country has given Yoga to the world. The youth are the ones who can take the nation ahead. Finally he extended his best wishes to the successful medal winners and students who took their degrees during the convocation.

Vice Chancellor Dr. Viswanatha presented the report on significant achievements of the university in the field of education, research and extension education. He said students of this University have achieved good success at the national level exams. Twenty four students have achieved success in SRF, 31 in JRF, 56 in NET and 4 in GATE exams during the year 2018-19. An utmost effort has been made to improve and maintain high technology standards in education. The university has contributed significantly in the area of research by developing 263 varieties of crop plants, 36 farm implements and 1518 recommendations since inception for the benefit of farmers, he said. The university is reaching to the unreached through the Farmer FIRST of RKVY and ICAR in all the 10 districts of MPKV jurisdiction, he added.

Degrees to 52 Ph. D. holders, 308 Post Graduate holders and 4707 Graduates and medals to successful students were conferred to the graduates at the hands of Honourable Governor and Chancellor of the university. Former Vice Chancellors Dr. V. M. Mayande, Dr. K. E. Lawande, Dr. Kailas Mote, Director General, MCAER, Pune, Shri. Vijay Kote, Comptroller, Shri. Milind Dhoke, University Engineer, Members of Academic Council, staff, students and parents were present for the function. Earlier Honourable Governor visited the agriculture exhibition organized at the Agriculture Technology Information Centre. Dr. B. D. Bhakare and Dr. A. V. Solanke anchored the programme.

## 92. National Seminar on Pluralistic Extension organized



December 6-7, 2019. A National Seminar on Pluralistic Extension for enhancing farmers income through reaching the unreached was organized by the Department of Agriculture Extension and Communication, MPKV, Rahuri in coordination with the Maharashtra Society of Extension Education (MSEE), Akola at central campus, Rahuri. Dr. Ashok Dalwai, Chief Executive Officer, National Rainfed Area Authority and Chairman, Committee on Doubling of Farmers' Income, Ministry of Agriculture, Cooperation and Farmers Welfare, New Delhi was the Chief Guest for the inaugural function. Vice Chancellor Dr. K. P. Viswanatha presided over the function. Dr. K. Narayan Gowda, Former Vice



Chancellor, UAS, Bangalore, Dr. R. R. Sinha, Founder, MSEE and Former DEE, DrPKV, Akola, Dr. Lakhan Singh, Director, ICAR-ATARI,

Pune, Captain Dr. L. B. Kalantri, President, MSEE, Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. S. R. Gadakh, Director of Research and Extension Education and Dr. M. C. Ahire, Head, Department of Agriculture Extension and Communication and Organizing Secretary were present on the dias.

In his inaugural address Dr. Dalwai took an overview of the past and present extension system of the country. Along with agricultural technologies, the role of extension personnel is important, he said. He said that innovative extension strategies and approaches are required for reaching the unreached.

Vice Chancellor Dr. K. P. Viswanatha in his presidential address said that the Green Revolution was the result of efforts of scientists, farmers and policy makers. But challenges in agriculture are increasing. Farmers need to reduce the cost of production for getting higher returns. The integrated farming system model developed by MPKV needs to be upscaled where the animal component has a vital role.

Vice Chancellor Dr. K. P. Viswanatha and Dr. R. R. Sinha were felicitated with the Lifetime Achievement Awards of the society during the function. Dr. Maradi, Professor of Agril. Extension, UAS, Raichur was felicitated with the Late Yamunabai Sawant Award. The Souvenir Abstracts was released at the hands of the dignitaries. Shri. Sopan Kasar, Registrar, Associate Deans, Heads of Departments, former Extension stalwarts and more than 200 participants, students were present for the function. Dr. Pallavi Suryavanshi anchored the programme, while, Dr. G. K. Sasane expressed vote of thanks.

On December 7, 2019 the valedictory programme of the National Seminar was organized in presence of Dr. Ashok Dalwai, Chief Executive Officer, National Rainfed Area Authority and Shri. Popatrao Pawar, Executive President, *Adarsha Gaon Yojana*. Vice Chancellor Dr. K. P. Viswanatha presided over the function. Dr. R. R. Sinha, Dr. S. R. Gadakh, Captain Dr. L. B. Kalantri and Dr. M. C. Ahire were present on the dais.



In his address Shri. Pawar said that today there are two problems in agriculture, one is scarcity of water and other is that of excess irrigation water. We have been producing more farm produce but at the cost of depleting soil fertility and saline, alkaline water. Thus, these aspects need attention of scientists, he said. Dr. M. C. Ahire was felicitated with the Best Extension Scientist Award. Mr. S. V. Karanje and Dr. Rekha Tiwari received the awards for Best Research Papers in the Asian Journal of Extension Education of 2017 and 2018 issues, respectively. Dr. P. B. Kharde, Dr. S. G. Puri and Dr. P. S. Kapse were awarded the Best Paper Presentation Awards for first, second and third positions, respectively. In student category Mr. P. U. Rathod, Dr. Anand and Mr. Santosh Pathade received the Best Paper Presentation Awards for first, second and third positions, respectively. The Best Poster Presentation Awards were awarded to Mr. R. G. Nayar (first) and Miss. Veena Jadhav (second). Awards for Best Use of

A-V Aids were awarded to Mr. G. P. Chavan (first) and Mr. Saishri (second). Dr. B. A. Deshmukh anchored the programme, while, Dr. P. B. Kharde proposed thanks.

### 93. Alumni Meet organized at AC, Dhule



December 8, 2019. The Alumni Meet of students passed from College of Agriculture, Dhule was organized. Vice Chancellor Dr. K. P. Viswanatha inaugurated the meet. Ex Alumni Shri. Sarkarsaheb Rawal, Chairman and Director, Universal Starch Chem, Allied Ltd. Doindacha was the Chief Guest for the function. Dr. Pankajkumar Mahale, Member, Executive Council, MPKV, Rahuri, Dr. S. R. Gadakh, Director of Research and Extension Education, Prof. R. T. Marathe, Former Associate Dean of AC, Dhule, Dr. A. M. Musmade, Associate Dean, AC, Dhule and Dr. Laxmimurthy, Former Chief Conservator of Forests, Uttaranchal were present on the dais. Vice Chancellor Dr. Viswanatha appreciated the activity of the college in making efforts to call the alumni on one platform. The alumni can play an important role in developing and guiding young agricultural entrepreneurs, he hoped. They can also shoulder the responsibility of transfer of university developed agril. technologies to the farmers of their region. He also put forth the valuable contribution of MPKV in education, research and extension education. Dr. Musmade in his introductory remarks briefed about the achievements of the college. Many alumni also expressed their views. Prominent alumni Dr. T. T. Patil, Dr. B. B. Pawar, Dr. J. C. Rajput, Shri. Tushar Randhe,

Dr. Swapnil Bachhaw, Mrs. Vaishali Patil, Associate Deans Dr. P. N. Rasal, Dr. S. B. Kharbade and Dr. Y. G. Fulpagare were present for the function. Mr. Mayur Patil anchored the programme, while, Dr. P. N. Rasal expressed thanks.

### 94. MOU signed between MPKV and Reliance Foundation



December 18, 2019. A Memorandum of Understanding (MoU) was signed between MPKV, Rahuri and Reliance Foundation. Dr. S. R. Gadakh, Director of Research and Extension Education presided over the programme. Dr. K. D. Kokate, Former Director of Extension Education, Shri. Sopan Kasar, Registrar, Shri. Vijay Kote, Comptroller, Shri. Sachin Mardikar, Chief Finance Officer, Reliance Foundation were present on this occasion. At the outset, Shri. Deepak Kekan, Head, Information Services, Reliance Foundation gave a presentation on the information services of the company. Shri. Mardikar briefed about the various activities of the company in agriculture, education and health. Dr. Gadakh gave an account of the contribution of the university and hoped that the MoU would benefit the farmers. The MoU would help to transfer the university developed technologies to the farmers through mobile advisory. Dr. Kokate also gave important suggestions. Dr. Gadakh and Shri. Mardikar signed the MOU. Dr. B. A. Deshmukh anchored the programme, while, Shri. Sandip Gunjate proposed thanks.



## 95. Two day's workshop on Planning and Design of micro irrigation systems at Pune



December 2-3, 2019. A two days workshop on Planning and Design of micro irrigation systems was organized by the Centre for Advanced Agricultural Science and Technology for Climate Smart Agriculture and Water Management, MPKV, Rahuri at National Water Academy ,Pune . The workshop was inaugurated by Shri. Yogesh Paithankar, Chief Engineer and Head, National Water Academy, Khadakwasla, Pune. Dr. S. D. Gorantiwar, PI, CAAST-CSAWM project guided faculty about crop water requirement and its estimation, concept and design principles of drip and sprinkler irrigation systems. During this one days programme different topics were discussed such as design of sprinkler irrigation system of drip/ sprinkler for 1ha. land with wheat, irrigation scheduling of irrigation systems, demonstrations of efficiency of drip and sprinkler + hands on and cost economics of micro irrigation. The resource persons for workshop were Dr. S.D. Gorantiwar, Principal Investigator (CAAST-CSAWM) and Head (Agril. Engg.), MPKV, Rahuri, Dr. P.G.Popale Assistant Professor and Dr. A.D. Bhagat, Research Associate (IDE), MPKV, Rahuri. Dr. P.G.Popale anchored the programme. Dr. A.D. Bhagat proposed thanks.

## 96. National Workshop on Disaster Risk Reduction organized



December 6, 2019. A one day national workshop on Disaster Risk Reduction was organized by CAASTCSAWM, MPKV, Rahuri at Central campus, Rahuri. The programme was inaugurated by Dr. D. D. Pawar, Associate Dean, Dr. ASCAET, MPKV, Rahuri and guided the participants about importance of disaster risk reduction in agriculture. Dr. S. D. Gorantiwar, Principle Investigator, CAAST-CSAWM gave a preamble of CAAST project and guided students about use of disaster risk reduction technologies like Agro-Advisory Services for precision farming. Dr. S. G. Kanade, Research Associate, Agro Meteorology, CAAST-CSAWM welcomed and introduced all dignitaries presented for workshop. Dr. R. P. Andhale, Organizing Secretary and member, CAASTCSAWM gave a brief introduction on different topics of disaster risk reduction to be covered during the workshop. During this one days programme different topics were discussed such as climate change and downscaling, Contingency crop planning and Agro advisory services in respect to farming systems, IMD operational weather and climate forecasting products and services to agriculture and irrigation mapping.

## 97. Training programme on Carbon and Water Foot printing for Climate Smart Agriculture organized



December 23-24, 2019. A two days training programme on Carbon and Water Foot printing for Climate Smart Agriculture was organized by CAAST-CSAWM project at Central campus, MPKV, Rahuri. The programme was inaugurated by Dr. H.G. More, former Director of Extension, MPKV, Rahuri, Dr. S.D. Gorantiwar, Principal Investigator (CAAST-CSAWM) and Head (Agril. Engg.), MPKV, Rahuri gave a preamble of the programme. Dr. M. G. Shinde, Co-Principal Investigator, CAAST-CSAWM and Organizing Secretary welcomed and introduced all dignitaries presented for training and gave brief introduction on different topics of Carbon and Water foot printing for CSA to be covered during the training. During this training programme different topics such as basics of sustainable development, introduction and objectives of ISO 14064: 2006 and GHG protocol, conversion of GHG emissions to CO equivalent, 2 GHG inventory quality management, quantification of GHG emissions, climate change and its impacts on water resource management, water footprint methodology by WFNTerms, definitions, principals of water foot-printing (ISO 14064-1: 2006) and introduction to alliance for water stewardship standards were covered.

## January 2020

## 98. MAGOVA - 2019 and Rabi Farmers Rally organized



January 11, 2020. *Magova-2019* (Retrospection), a programme to review the various activities of the University during the year 2019 and a Rabi Farmers Rally in coordination with State Department of Agriculture was organized in the university. Shri. Dadaji Bhuse, Hon'ble Minister of Agriculture, M. S. and Pro-Chancellor, MPKV, Rahuri was the Chief Guest, while, Shri. Balasaheb Thorat, Hon'ble Minister of Revenue, M. S. was the guest of honour for the function. Vice Chancellor Dr. K.P. Viswanatha presided over the function. Shri. Lahu Kanade, MLA, Shri. Vishwajit Mane, Director General, MCAER, Pune, Executive Council member and MLC Shri. Prakash Gajbhiye, Prof. Nathaji Chougule, Mrs. Sunita Patil, Shri. Prataprao Shelke, Vice President, Zilla Parishad, Ahmednagar, Directors, Associate Deans, Officers of the university were present on the dais.





The Chief Guest Shri. Dadaji Bhuse in his address complimented the University for its contribution to agricultural development. He said that the Government is focusing on farmers' issues and how we can increase the livelihood of farmers. The SAUs have an important role in this regard, he said. He further stated that the technology should reach at the farmers' door. Feedback of farmers is very much needed for refinement of technologies. The farmer's scientific efforts also need to be appreciated, he said. Shri. Balasaheb Thorat in his address asserted that the Government would take positive decisions for implementing appropriate policies for the farmers. He reminded that MPKV has implemented innovative programmes like Agriculture Technology Week for showcasing of farm technologies. The MPKV released varieties and technologies have brought good income to the farmers, he said.

Vice Chancellor Dr. K.P. Viswanatha in his welcome and introductory remarks highlighted the significant contributions of MPKV in education, research and extension education. He also focused on the economic impact of MPKV released crops, fruit and vegetable varieties. Shri. Gajbhiye and progressive farmer *Krishibhushan* Shri. Vishnu Jare also spoke on this occasion. Dr. S. R. Gadakh presented the research and extension activities of the past year. Dr. A. L. Pharande, Dean, Faculty of Agriculture and Shri. Sopan Kasar, Registrar presented the reports on education and administration, respectively.

The popular University publication *Krishi Darshani-2020*, *Accomplishments-2019* and *MPKV: At a Glance* were released during the function. *MPKV Calendar-2020*, depicting monthwise agricultural information was released on the occasion of *Magova* programme. The university website was also launched. Dr. V. V. Sadamate, Former Member of Planning

Commission, Dr. K. D. Kokate, Former Director of Extension Education, Shri. Vijay Ghawate, Director, Planning, M.S., Dr. V. S. Shirke, Director, Extension and HRD, MCAER, Pune, Comptroller Er. Vijay Kote, University Engineer Er. M. P. Dhoke, Associate Deans Dr. D. D. Pawar, Dr. P. N. Rasal, Dr. S. B. Kharbade, Dr. S. R. Ranpise, Dr. G. G. Khot, Dr. Y. G. Fulpagare, Nodal Officer of PAHCoA, Halgaon Dr. V. D. Shende, Shri. Shivajirao Jagtap, DSAO, Ahmednagar, Heads of Departments, staff, farmers and students were present on this occasion. A photographic exhibition was also organized on this occasion. Dr. A. V. Solanke anchored the programme, while, Dr. S. R. Gadakh proposed vote of thanks. In the morning session the Hon'ble Ministers including Shri. Shankarrao Gadakh, Hon'ble Minister of Water Conservation, M. S. visited the rabi crop demonstrations organized at Sorghum Improvement Project of the university.

## 99. International Symposium on Artificial Intelligence based Future Technologies in Agriculture and 54<sup>th</sup> Annual Convention of ISAE organized



January 7-9, 2020. An International Symposium on Artificial Intelligence based Future Technologies in Agriculture and 54<sup>th</sup> Annual Convention of Indian Society of Agricultural Engineers (ISAE) was organized by the CAAST-CSAWM project and



DrASCAE&T, MPKV, Rahuri and ISAE, New Delhi at Hyatt Regency, Pune. Mr. John Reid, Director, Product Technology and Innovation, John Deere, Shri. S. K. Diwase, IAS, Commissioner of Agriculture, Govt. of Maharashtra and Dr. V. K. Tewari, Director, IIT, Kharagpur, India inaugurated the symposium. The function was presided by Vice Chancellor Dr. K. P. Viswanatha. Dr. Tewari, in his address mentioned the advanced technologies like artificial intelligence and IoT for increasing agricultural production. Dr. K. Alagusundaram emphasized on technology exposure especially to the students for attaining research of international level. Shri. Diwase highlighted the use of protected cultivation. Dr. Viswanatha hoped for creating awareness of these technologies among the farmers. Dr. S. D. Gorantiwar, Head, Dept. of Agril. Engg., MPKV, Rahuri and Organizing Secretary, ISAE Convention and PI, CAAST-CSAWM introduced the delegates and participants; and provided an overview of the International Symposium. For this symposium, distinguished delegates from industry and academia were present. Special guests were Dr. V. K. Tewari, Professor, IIT, Kharagpur, Dr. Gajendra Singh, Foreign Fellow, NAAS, New Delhi, Dr. A. L. Pharande, Dean Faculty of Agriculture, Dr. S. R. Gadakh, Director of Research, Dr. Manzul Kumar Hazarika, Director, Geoinformatics Centre, AIT, Bangkok, Thailand, Dr. Lav Khot, Dr. Sindhuja Sankaran, Dr. David Brown from WSU, USA, Dr. Ganesh Bora from MSU, USA. Dr. M. G. Shinde, Co-Principal Investigator, CAAST-CSAWM project was session coordinator for the programme. Entire session of symposium had total five different sessions on five different themes: Theme I- Big data driven Artificial Intelligence and Future Agriculture; Theme II- Ground and Aerial Robotic Solutions in AI Era; Theme III- Internet-of-Things (IoT) and Farm Connectivity; Theme IV- Precision

to Digital Agriculture Technological Transition; and Theme V- Application of AI in agriculture and water resources. Dr. Gorantiwar anchored the programme, while, Dr. Shinde expressed vote of thanks.

## 100. Republic Day celebrated



January 26, 2020. The country's 71<sup>st</sup> Republic Day was celebrated in the university. Vice Chancellor Dr. K. P. Viswanatha hoisted the national flag. While addressing the staff and students Dr. Viswanatha highlighted the contribution of MPKV in the field of education, research and extension education. He said that the university students have achieved remarkable success in JRF, SRF and NET exams. The university is also successfully implementing the CAAST project under NAHEP, ICAR, New Delhi. The university has released various crop varieties, improved implements and technology recommendations for the farmers last year. He further said that farmers are being benefitted through various extension programmes and projects. Dr. A. L. Pharande, Dean, Faculty of Agriculture, Registrar Shri. Sopan Kasar, Comptroller Er. Vijay Kote, University Engineer Er. M. P. Dhoke, Associate Deans Dr. D. D. Pawar, Dr. Y. G. Fulpagare, Nodal Officer of PAHCoA, Halgaon Dr. V. D. Shende, staff, students and employees were present in large number. Mr. Goraksha Shete, Security Officer anchored the programme. The NCC cadets under the guidance of Prof. Sunil Fulsawange gave the salute. A Blood



Donation Camp was also organized at DrASCAE & T on this occasion.

### 101. Intercollegiate AVISHKAR competition organized



January 19, 2020. The Intercollegiate AVISHKAR competition for 2019-20 was organized at MPKV, Rahuri. It was inaugurated at the hands of Dr. Y. G. Fulpagare, Associate Dean, Post Graduate Institute, MPKV, Rahuri. In his address Dr. Fulpagare called for developing research oriented ideas which would be useful to the society. He said that AVISHKAR is a good platform for the students to show their inbuilt capacities of research. This event has contributed a lot for research and innovations, he remarked. A total of 13 colleges comprising of 119 students participated in this event. Two top winners from six subject categories each of UG, PG and Ph. D. degrees will be selected and they would be representing the university in the statelevel event scheduled in Mumbai University. Dr. M. R. Chouhan, Students Welfare Officer gave the introductory remarks. Prof. D. M. Gaikwad anchored the programme, while, Dr. R. J. Desale expressed thanks. Dr. R. M. Naik, Vice President, Student Council, PGI, Heads of Departments, Supervision officer Dr. Atul Atre and students were present on this occasion.

### 102. Visit of dignitaries to ICAR Farmer FIRST programme village



January 3, 2020. Dr. Lakhan Singh, Director, ICAR-ATARI, Zone-VIII, Pune along with Dr. R. K. Singh, Former Head, Department of Agril. Economics, CSAAUT, Kanpur, KVKs of Maharashtra and Gujarat and ICAR FFPs from NAU, Navsari and JAU, Junagadh visited the MPKV's ICAR FFP village Chinchvihire. At the outset Dr. P. B. Kharde, PI of ICAR FFP welcomed the dignitaries and scientists. He briefed about the various activities that are being implemented under this programme. The participant farmer Shri. Abhijit Gite gave information of his red gram demonstration plot of Phule Rajeshwari. Shri. Vishal Gite showed his backyard poultry and shared his experiences. The team then visited the chickpea demonstration field of Phule Vikram variety of Shri. Gorakshanath Shinde. He explained about his vermicompost unit. The team was satisfied to visit the six acre Phule Bhagwa pomegranate orchard of participant farmer Shri. Macchindra Shete. Further, they visited the mini dal mill processing unit of Self Help Group. Finally, the team visited the integrated farming system components of farmer Shri. Anil Nalkar and Mrs. Savita Nalkar. Dr. Lakhan Singh guided the farmers on this occasion. Shri. Mahendra Thokle, Taluka Agriculture Officer, Rahuri, farmers



and farm women participated in the visit. Dr. S. S. Sadaphal, Co-PI anchored the programme. Shri. Vijay Shedde, SRF and Shri. Kiran Magar, Field Assistant took efforts for organizing the visit.

### 103. Inter Agriculture Schools sports organized



January 17-18, 2020. The Inter Agriculture Schools Sports Competition was organized at MPKV, Rahuri. Dr. Y. G. Fulpagare, Associate Dean, Post Graduate Institute, MPKV, Rahuri inaugurated the event. Dr. Fulpagare said that the importance of sports in one's life is well known. Regularity in playing games is important. Sports are an essential part of our life since our health depends on it. Team spirit is aroused due to sports and hence students need to play sports regularly, he said. Dr. S. A. Ranpise, Associate Dean, Lower Agriculture Education in his introductory remarks highlighted the importance of sports and briefed about the events. Shri. Vijay Kote, Comptroller, Dr. D. D. Pawar, Associate Dean, DrASCAE&T and Dr. M. R. Chouhan, Students Welfare Officer also addressed the players. Yogita Darekar gave oath to all the participants. Mrs. Suvarna Bachkar anchored the programme, while, Dr. J. H. Gaikwad proposed thanks. A total of 360 players of boys and girls from university jurisdiction participated in the competition. Dr. R. M. Naik, Vice President, Student Council, PGI, Heads of Departments, Prof. D. M. Gaikwad and Principles of Agriculture Schools were present on this occasion.

### 104. National Mushroom Day celebrated



January 4, 2020. The National Mushroom Day was celebrated at College of Agriculture, Pune. It was organized by All India Coordinated Mushroom Research Project. A training programme was organized on this occasion. Associate Dean Dr. P. N. Rasal inaugurated the event. Dr. S. D. Masalkar, Principal, College of Horticulture, Pune, Dr. V. S. Supe, Associate Director of Research, NARP, Ganeshkhind, Dr. Anil Gaikwad, Incharge, AICRP on Mushroom were present for the programme. Dr. Rasal in his address highlighted the importance of mushroom in our diet. The young entrepreneurs need to study the marketing aspects along with the production of mushroom. This business has a great scope and the trainees need to study the detailed aspects. The mushroom entrepreneurs Shri. Rameshwar Shewale, Shri. Anil Bhokre and Shri. Ramesh Randive shared their experiences. An exhibition of mushroom products was also organized. Dr. Gaikwad gave the introductory remarks. Dr. Ashok Jadhav anchored the programme. About 127 trainees were present on this occasion.

### 105. Training programme organized under ICAR Farmer FIRST programme

January 20, 2020. An offcampus Training Programme on Pomegranate Production Technology was organized at Kangar village under the ICAR Farmer FIRST







programme. Dr. P. B. Kharde, Officer Incharge, Communication Centre and PI, ICAR FFP at the outset presented the success stories of pomegranate farmers through ICAR FFP during the last two years. Dr. Ashok Walunj, Entomologist guided the farmers on plant protection in pomegranate production. He underlined the need for maximum use of bioagents and proper identification of pests and diseases. Prof. Manjabapu Gawade, Assistant Professor of Horticulture guided on scientific cultivation of pomegranate along with water and nutrient management. Prof. M. M. Desai, Manager, ATIC also guided the farmers. Dr. S. S. Sadaphal, Co-PI anchored the programme, while, Shri. Vijay Shedge, SRF expressed thanks. More than fifty farmers were present for the training programme. In the afternoon session the scientists visited the pomegranate orchards of Shri. Babasaheb Warghude (Kangar). Shri. Dilip Nalkar (Chinchvihire) and Shri. Maruti Gite (Chinchvihire) and guided them. Shri. Kiran Magar, FA took efforts in organizing the programme.

### 106. MPKV Staff Sports Team Runners up in Statelevel Inter SAU Staff Sports Competition

January 24-26, 2020. The MPKV staff sports team ended runners up in the second All Maharashtra Inter State Agricultural University Staff Sports Competition-2020 held at Vasanttrao Naik Marathwada Krishi Vidyapeeth,



Parbhani. The State Agriculture University staff teams from Maharashtra viz., MPKV, Rahuri, Dr PDKV, Akola, Dr. BSKKV, Dapoli, VNMKV, Parbhani and MAHABEEJ, Akola participated in this competition. The event was inaugurated at the hands of Dr. Ashok Dhawan, Vice Chancellor, VNMKV, Parbhani, Dr. Vilas Bhale, Vice Chancellor, Dr.PDKV, Akola and other dignitaries. More than 200 staff sportsmen and women participated in this three day event. VNMKV, Parbhani won the General Championship. The MPKV staff sports team won the Table Tennis (Men) and Table Tennis (Women) games. They were runners up in Basketball, Cricket, Volley ball, Badminton (Women), Chess (Women) and *Rassikhech* (Men and Women). Dr. Ravindra Bansod won the 400 m race in athletics, while, Shri. Sharad Shirsath was ranked third in 800 m run. Mrs. Seema Mistri stood second in *rangoli* competition. Dr. J. H. Gaikwad won the third prize in *geetgayan* competition. The teams were guided by Dr. M. R. Chouhan, Student Welfare Officer, Prof. Dilip Gaikwad, Sports Officer, Physical Training Instructors Dr. Abhijit Nalawade and Shri. Borse. MPKV received the Runners up Trophy at the hands of Shri. Ranjit Patil, Registrar, VNMKV, Parbhani. Vice Chancellor Dr. K. P. Viswanatha and Directors Dr. A. L. Pharande, Dr. S. R. Gadakh and Registrar Shri. Sopan Kasar congratulated the teams for this success.

### 107. International Workshop on Course Curricula Development for Post Graduate Diploma in Climate Smart Agriculture organized



January 11-12, 2020. The Centre for Advanced Agricultural Science and Technology for Climate Smart Agriculture and Water Management organized an International workshop on Course Curricula Development for Post Graduate Diploma in Climate Smart Agriculture at central campus, MPKV, Rahuri. The function was presided over by Vice Chancellor Dr. K. P. Viswanatha. In his inaugural address Dr. M. C. Varshneya, Former Vice Chancellor, Kamdhenu University, Gujarat briefed about the role of Climate Smart Agriculture and Water Management in Socio-Economic development, Dr. V. Sadamate, Advisor, Indian Society of Agribusiness Professionals explained the importance of teaching, research and extension in Climate Smart Agriculture and Water Management. He narrated the role of extension system for socio-economic development of the country. Dr. K.D. Kokate, Former Deputy Director General (Agril. Extension), ICAR, New Delhi and Former Director of Extension Education, MPKV Rahuri summarized the role, importance of Climate Smart Agriculture and Water Management in sustainable agriculture and socio-economic development. Special guest was Prof. David Brown, Washington State University, Pullman,

USA in presence of Dr. A. L. Pharande, Dean, F/A, Dr. S. R. Gadakh, Director of Research, Dr. D. D. Pawar, Associate Dean, Dr. ASCAE&T, Dr. Y. G. Fulpagare, Associate Dean, PGI, Dr. S. D. Gorantiwar, Convener and Principal Investigator, CAAST-CSAWM, MPKV, Rahuri and Dr. M. G. Shinde, Co-Convener and CO-PI, CAAST-CSAWM, MPKV Rahuri. Dr. V. P. Kad, Organizing Secretary and Member, CAAST-CSAWM welcomed and introduced all dignitaries presented for workshop and gave a brief introduction. After inauguration participants and experts were divided into six groups as per the modules and courses. The groupwise draft of different courses was presented by rapporteurs, suggestions were made and finalized the draft of courses. Invitees from international experts, representatives from Academic Institutes/National Institutes/Research Organizations/NGOs/International and National Industries along with scientists and faculty of university participated as resource persons for this two days International Workshop. Vote of thanks was given by Dr. B. D. Bhakare, Organizing Secretary and Member, CAAST-CSAWM.

### 108. Visit of World Bank and ICAR, NAHEP Team to CAAST-CSAWM project



January 23, 2020. Visit of World Bank and ICAR, NAHEP Team, New Delhi for evaluation of NAHEP project of CAAST-CSAWM, MPKV, Rahuri was organized at CC, Rahuri. The visit was started with



informal opening-cum-welcome ceremony by Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM, MPKV, Rahuri. Mr. Edward W. Bresnyan, Senior, Agriculture Economist, World Bank, Mr. David Nielson, Lead Agricultural Services Specialist, World Bank, Mr. Mansur Ahmed, Economist at the Agriculture Global Practice, World Bank, Dr. Prabhat Kumar, National Coordinator (M&E), NAHEP, ICAR, New Delhi were present during this visit. Vice Chancellor Dr. K. P. Viswanatha welcomed the team. Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. S. R. Gadakh, Director of Research and Extension Education, Shri. Vijay Kote, Comptroller, Shri. Milind Dhoke, University Engineer, Dr. Y. G. Fulpagare, Associate Dean, PGI, Dr. D. D. Pawar, Associate Dean, Dr. ASCAET, Dr. M. C. Ahire, Associate Dean, COA, Dhule, Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM, Dr. M. G. Shinde, Co-Principal Investigator, CAAST-CSAWM, Dr. Jayshree S. Pachpute, Co-Principal Investigator, CAAST-CSAWM, Dr. S. B. Nandgude, I/C, PME Cell and Head, Deptt, of SWCE, Dr. P. L. Kulwal, Nodal Officer, ESP were present on this occasion. Dr. Gorantiwar presented the objectivewise progress of different activities, research and extension which were conducted under this project. The students who had successfully completed one month international level training at AIT, Bangkok, Thailand shared their experiences with World Bank officers. After that the World Bank officers evaluated the progress by visiting the different research fields of the CAAST-CSWAM project. Interaction session was organized with students of MPKV, Rahuri with World Bank, ICAR and NAHEP project Team, New Delhi.

## 109. International Scientists-Students Interface programme organized at Pune



January 10 & 12, 2020. An International Scientists-Students Interface programme was organized by CAAST-CSAWM, MPKV, Rahuri at Sub-Campus, College of Agriculture, Pune. This programme was inaugurated by Dr. P. N. Rasal, Associate Dean, College of Agriculture, Pune in presence of Dr. S. M. Masalkar, Principal, College of Horticulture, Pune. Dr. Manzul Kumar Hazarika from AIT, Bangkok, Dr. Lav Khot, Dr. Sindhuja Sankaranand, Dr. David Brown from WSU, USA, Dr. Ganesh Bora from MSU, USA, Dr. Ravanan from Androit College, Malaysia, Dr. Siva K. Balasundram, UPM, Malaysia, Dr. S. D. Gorantiwar, Head, Agril. Engg., MPKV, Rahuri and PI, CAAST-CSAWM, MPKV, Rahuri, Dr. J. S. Pachpute Co-PI, CAAST-CSAWM, Pune and Organizing Secretary were present on this occasion. Dr. Goarantiwar gave a preamble on CAAST mentioning importance of Robotics, UAVs, IoTs and artificial intelligence in climate smart agriculture and water management with special emphasis on capacity building of the faculty and students. Total seven lectures were organized on different topics by eminent experts from Universities all over the world. This programme was attended by over 300 students and 30 faculties. Dr. Pachpute anchored the programme, while, Dr. Pradip Dalavi expressed vote of thanks. Similar programme was organized at



MPKV, Rahuri on January 12, 2020. It was inaugurated by Vice Chancellor Dr. K. P. Viswanatha.

### 110. Farmers-Scientists Interface cum Workshop organized at Pune



January 9, 2020. A Farmers-Scientists Interface cum Workshop was organized by CAAST-CSAWM, MPKV, Rahuri in association with Indian Society of Agricultural Engineering (ISAE) at Sub-Campus, College of Agriculture, Pune. The programme was inaugurated by Dr. Indra Mani, President, ISAE. Dr. Ushamani P., Deputy General Manager, NABARD, Mr. Ajay Dhalpawar, Assistant General Manager, Technical Training, NETAFIM Irrigation Pvt. Ltd, Pune, Mr. Venkatesh Shete, Project Manager, Lupin Foundation, Pune in presence of Er. Sachin Kamble, Assistant General Manager, NABARD, Dr. R. D. Bansod, Head, Agril. Engg., COA, Pune, Dr. S. D. Gorantiwar, Head, Agril. Engg., MPKV, Rahuri, Organizing Secretary ISAE Convention and PI, CAAST-CSAWM, MPKV, Rahuri. This programme was attended by about 100 farmers from 6 villages. This programme included field visits to Hi-Tech Agricultural Park, mushroom production project, horticulture and Watershed Park during morning session and training cum interactive sessions by Dr. S. S. Magar, Former Vice Chancellor, DBSKKV, Dapoli on water management, Dr. V.M. Mayande, Former Vice Chancellor, Dr. PDKV, Akola on improved farm machineries, Digital irrigation

by Netafim, Plant Protection by Dr. Bhute, mobile marketing by Mrs. Pragati Gokhale, Irrigation mobile apps by Dr. Gorantiwar and Watershed Management by Dr. Bansod. Dr. Gajendra Singh and Dr. Indramani addressed during afternoon session. Dr. Pradip Dalavi anchored the programme, while, Dr. M. B. Khamkar proposed thanks.

### 111. Expert lecture on Water Resource Management in Command Area organized



January, 4, 2020. An Expert lecture on Water Resource Management in Command Area was organized by CAAST-CSAWM, MPKV, Rahuri for students and faculty. The expert lecture started with an informal opening-cum-welcome ceremony in the presence of Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM, Heads of Departments and CAAST-CSAWM members. Shri. Yogesh Paithankar, Chief Engineer and Head, National Water Academy, Khadakwasla, Pune delivered a lecture on Water Resource Management in command area and interaction of newly appointed officers of Central Water Engineering, (Group-A) services with students and staff. About 75 students and faculty were present. Dr. S. N. Ghadge, Research Associate anchored the programme, while, Dr. S. A. Dhenge, Research Associate expressed vote of thanks.



## 112. Demonstration at 107<sup>th</sup> Indian Science Congress (ISC 2020), UAS, Bangalore



January 3-7, 2020. The Indian Science Congress Association (ISCA) had organized the 107<sup>th</sup> Indian Science Congress with a theme of Science and Technology for Rural Development at University of Agricultural Sciences, Bangalore (Karnataka). Dr. A. D. Bhagat and Dr. V. S. Malunjkar, Research Associates from CAAST-CSAWM participated in this event and presented the technologies developed under CAAST project. Also, in this event participants across the country presented the technologies developed for agriculture and rural development which is helpful for the CAAST-CSAWM project for the research and development of technologies for climate smart agriculture and water management. As per the mandate, technologies developed by the project team was presented and demonstrated. The response to the exhibits of CAAST-CSAWM from the students/farmers/ researches/ participants was very good and appreciable. Some farmers requested the demo units of Auto PIS for trials on their farms. Overall the event was very interactive and informative.

## 113. Training programmes organized at Pune

January 2 & 3, 2020. Two training programmes on Communication Skills and Personality Development



and Stress Management were organized by CAAST-CSAWM, MPKV, Rahuri at Sub-Campus, College of Agriculture, Pune. The programmes were inaugurated by Dr. P. N. Rasal, Associate Dean, College of Agriculture, Pune. Dr. S. D. Masalkar, Principal, College of Horticulture, Pune, Dr. A. B. Kamble, Head, Agronomy section were present for this programme. Dr. Vaibhav Lunkad and Mr. Subhash Randive were invited as guest speakers for training programme. Dr. Pradip Dalavi anchored the programme and vote of thanks given by Dr. M. B. Khamkar, RA (Horti.) CAAST-CSAWM, Sub-Campus, COA, Pune.

## February 2020

## 114. Farm Mechanization Day celebrated at ZARS, Solapur



February 14, 2020. Farm Mechanization Day was celebrated at the Zonal Agricultural Research Station, Solapur in co-ordination with the ICAR's AICRP on Farm Implements and Machinery Research Project,



MPKV, Rahuri, Department of Agriculture, M. S., ATMA, Solapur, KVK, Mohol and KVK, Solapur. Vice Chancellor Dr. K.P. Viswanatha inaugurated the event. In his address Dr. Viswanatha said that majority of farmers in the country are small and medium farmers with less land holdings. Hence, we need to develop maximum improved implements which would suit them for farm operations, he opined. Custom hiring of these implements through group approach is a good option which needs to be implemented at village level, he said. Dr. V. M. Mayande, the Chief Guest and former Vice Chancellor, Dr. PDKV, Akola while addressing the farmers called for organizing training programmes on use of improved machinery. Farm mechanization is very much needed today, he reiterated. Dr. S. R. Gadakh, Director of Research and Extension Education, Dr. D. D. Pawar, Associate Dean, Dr. ASCAE&T and Dr. P. A. Turbatmath, former Associate Dean, PGI also guided the farmers on this occasion. Shri. Basavraj Biradar, DSAO, Solapur, Dr. Ajitkumar Deshpande, Former HoD, SS&AC, Dr. V. R. Shende, ADR, MPKV, Rahuri, Dr. V. M. Amrutsagar, ADR, ZARS, Solapur, Dr. B. D. Bhakre, HOD, SS&AC, Dr. Tulsidas Bastewad, PI, AICRP on FIM, Dr. V. A. Shinde, Principal, ATS, Solapur, Dr. Tanaji Walkunde, Head, KVK, Mohol and Dr. Lalasaheb Tambade, Head, KVK, Solapur were present for the programme. Various demonstrations of farm implements were organized at Mulegaon farm. Booklets on farm mechanization were released during the programme. Progressive farmers adopting farm mechanization were felicitated on this occasion. Prof. Mahesh Pacharne anchored the programme, while, Dr. Suhas Upadhye expressed thanks. Farmers, students, staff attended the programme.

## 115. Chattrapati Shivaji Maharaj Jayanti celebrated



February 19, 2020. The Birth Anniversary of Chattrapati Shivaji Maharaj was enthusiastically celebrated in the university. On this occasion Prof. Pradip Kadam, History Researcher and Vice Principal, Conquest College, Pimpri Chinchwad delivered a lecture on the life of King Shivaji. Vice Chancellor Dr. K.P. Viswanatha presided over the function. Dr. A. L. Pharande, Dean, Faculty of Agriculture, Dr. S. R. Gadakh, Director of Research and Extension Education, Shri. Sopan Kasar, Registrar, Dr. D. D. Pawar, Associate Dean, Dr. ASCAE&T, Dr. V. R. Shende, Associate Dean, PAHCOA, Halgaon and Prof. D. M. Gaikwad, Sports Officer were present on the dais. In his address Prof. Kadam said that King Shivaji was an ideal King and a great warrior. He looked after his *praja* with great affection. King Shivaji was an able administrator and took care of farmers. He implemented policies which helped the peasants at that time. In his presidential address Vice Chancellor Dr. K.P. Viswanatha said that Shivaji was the king of the *rayat*. We need to follow his principles and lead an ideal life. The integrated farming system model recommended by MPKV is supporting the farmers for sustainable income, he said. Shri. Kasar gave the welcome remarks. Dr. Pharande delivered the introductory remarks. Dr. Gadakh introduced the



Chief Guest. Fifty students of Dr.ASCAE&T brought *shivjyot* from Shivneri fort at a distance of 130 km. Staff and students were present for the function. Mr. Shakanand Lomte anchored the programme. Dr. R. J. Desale, Student Welfare Officer, PGI proposed thanks.

### 116. World Pulses Day celebrated



February 10, 2020. The World Pulses day was organized at the AICRP's Pulses Improvement Project, MPKV, Rahuri. Dr. S. R. Gadakh, Director of Research and Extension Education while addressing the farmers on this occasion cited the nutritional importance of pulses in our diet which are rich in proteins. As per the recommendation, we need to take 80 gm of pulses daily, but we are consuming only 43 gm of them, which need to be looked upon. He further said that farmers would be more benefitted through value addition and processing of pulses. MPKV has developed and released 13 varieties of chickpea which has covered 37 per cent of total chickpea area of the state. Shri. Vilas Nalge, Deputy Director of Agriculture, Ahmednagar district presided over the programme. In his address Shri. Nalge called for grading, packing and value addition of pulses which would fetch good returns to the farmers. Farm mechanization is also important, he stated. Dr. Anil Padhye, Head, Department of Botany, Dr. K. J. Kamble, Head, Department of Agril. Processing Engg., Mr. Laxman Mhase, Scientist, Pulses Improvement Project, Mr. Mahendra Thokle, Taluka Agril. Officer,

Rahuri were present for the programme. Shri. Raibhan Gaikwad, Agril. Officer anchored the programme. MPKV farm calendars were distributed to the farmers. A field visit to the pulses project was organized on this occasion.

### 117. Training programme on Medicinal and Aromatic plants organized



February 20, 2020. A training programme on Medicinal and Aromatic plants was organized by the Medicinal and Aromatic Plants Research Project, MPKV, Rahuri in coordination with the Directorate of Arecanut and Spices Development Board, Calicut (Kerala). Dr. S. R. Gadakh, Director of Research and Extension Education inaugurated the programme. Dr. Jeevan Murkute, Director, Nevi Techno Pvt. Ltd., Pune, Shri. Rushikesh Shinde, Director, Petricore Elaxrin Pvt. Ltd., Satara, Dr. Sharad Padhye, I/c HoD, Botany, Dr. Suresh Dodke, Wheat Specialist, Niphad and Prof. Prasanna Surana, I/O, Medicinal and Aromatic Plants Research Project were present on this occasion. In his address to the trainee farmers, Dr. Gadakh said that exploring of market avenues for medicinal and aromatic plants is required by the farmers before its commercial plantation. These plants are being cultivated since old age but now people are recognizing its importance for health and cure of various human diseases. The demand for ayurvedic medicine is on the rise and we need to exploit the market, he said. Dr. Murkute

and Shri. Shinde guided on geranium cultivation and marketing of medicinal and aromatic plants. Dr. Dodke, Dr. Vikram Kad and Dr. Manoj Mali also guided the trainees. Dr. Vikram Jambhale anchored the programme and proposed thanks. Shri. Ganesh Dhonde organized the field visit of trainees. More than 70 farmers and farm women participated in the training programme.

### 118. Training programme organized under RKVY Farmer FIRST project



February 19, 2020. A training programme on Sugarcane intercropping, Dairy and Poultry management was organized at MPKV, Rahuri for officers of Agriculture Department under the Rashtriya Krishi Vikas Yojana (RKVY) Farmer FIRST project. Dr. S. R. Gadakh, Director of Research and Extension Education inaugurated the programme. Dr. A. V. Solanke, Head, Department of Agronomy, Prof. M. N. Desai, PI, RKVY FFP, Shri. R. K. Gaikwad, SDAO, Karjat, Shri. Sanjay Kachole, TAO, Shrirampur, Shri. Mahendra Thokle, TAO, Rahuri and Dr. Sunil Adangale, Co-PI, RKVY FFP were present on this occasion. In his address to the trainees, Dr. Gadakh highlighted the integrated farming system model recommended by the university. He called for implementation of this model on farmers' field for their assured income. He said that farmers need to cultivate intercrops in sugarcane for minimizing the cost of production. The dairy and poultry rearing would also add to farmers' income. Scientists Dr.

A. V. Solanke, Dr. B. S. Raskar, Sugarcane Breeder, Dr. Kalpana Dahatonde, Dr. D. P. Pacharne and Dr. Adangale guided the trainees on various topics. Prof. Desai gave the introductory and welcome remarks. Dr. Adangale anchored the programme and proposed thanks. Around 70 officers and staff of Agriculture Department participated in this training programme. Dr. G. K. Waman, PRO, Dr. Deepika Aglawae, R.A. and Field Assistants Shri. Rohit Ughade, Shri. Saddam Shaikh took efforts in organizing the programme.

### 119. Climate Smart Agriculture Workshop organized



February 7, 2020. A workshop on Climate Smart Agriculture was organized by CAAST-CSAWM, MPKV, Rahuri at Dr. A.S. College of Agri. Engg. & Tech., MPKV Rahuri. The programme was inaugurated by Vice Chancellor Dr K. P. Viswanatha. Dr. S. D. Gorantiwar, Head (Agri.Engg.) and Principal Investigator, CAAST-CSAWM, MPKV, Rahuri and Convener of workshop briefed about the importance of this workshop. Dr. M. G. Shinde, Co-Principal Investigator, CAAST-CSAWM and Co-Convener welcomed and introduced all dignitaries presented for workshop and gave brief introduction on different topics of Climate Smart Agriculture to be covered during the workshop. Shri. Rajendra Poddar, Director, WALMI, Dharwad, Karnataka guided the students about climate change, interstate water conflicts, unequal distribution





of water over time and space, increasing multi-sectoral demands-increasing gaps, problem of supply and storage, water pollution, declining groundwater levels, inefficiencies in water management, salinity and water logging, floods and droughts, participatory irrigation management and functioning of Water User Cooperative Societies. Shri. Vijay Kolekar, Chief Agronomist, PoCRA, Mumbai discussed on different important aspects like renovation and rejuvenation of existing water resources, regular and qualitative trainings for all farmers. They suggested that KVKs should train farmers regarding cropping systems, crop selection and crop-water management. The participants learned about present status of water resources, various challenges in water management and the solutions to overcome these challenges. The workshop was coordinated by Dr. V. S. Malunekar, Research Associate (SWCE), Dr. S. G. Kanade Research Associate (Agromet) and vote of thanks was given by Dr. R. P. Andhale, Asso. Prof. Agronomy and organizing secretary of the programme.

## 120. Workshop on Advances in Micro Irrigation System organized



February 15, 2020. A one day workshop on Advances in Micro Irrigation System was organized by CAAST-CSAWM, MPKV, Rahuri. Dr. S.D. Gorantiwar, Principal Investigator, CAAST-CSAWM was the Convener of the workshop. Dr. M. G. Shinde, Co-Principal Investigator, CAAST-CSAWM was Co-

Convener of the workshop. The Organizing Secretary of the workshop was Dr. M. S. Mane, Head, Dept. of IFD-IWM, PGI, MPKV, Rahuri. Er. Ajay Dhalpawar, AGM, Technical Training, Netafim Irrigation India Pvt. Ltd., Pune and Er. Arun Deshmukh, AGM, Sugarcane Development and Project Head, Agronomy, SBU Centre, Netafim Irrigation India Pvt. Ltd., Pune were invited as experts for the workshop. Er. Dhalpawar delivered expert talk on micro irrigation system-basic concepts, advantages and limitations, design considerations and commissioning of micro irrigation with concepts and adaptation of filtration. Er. Deshmukh guided on soil plant air relationships, fertigation concepts and adaptation and automation-digital farming solutions (DFS) in micro irrigation. The workshop was coordinated by Dr. Pradnya Jadhav and Dr. Mangal Patil, R.A. (IDE), CAAST-CSAWM, MPKV, Rahuri. All the staff of department of IDE and IFD-IWM were present for the workshop. The presidential address was given by Dr. S. R. Gadakh, Director of Research and Director of Extension Education, MPKV, Rahuri. Dr. Gadakh mentioned the importance of the training and interacted with the students. Dr. Mangal Patil anchored the programme and Dr. Mane proposed vote of thanks.

## 121. Scientific and technical visit to Vaishnavdham (Buchkewadi) village organized





February 20, 2019. The CAAST-CSAWM, MPKV, Rahuri had organized a visit on Agro climatic networking at Vaishnavdham (Buchkewadi) village, Tal. Junnar, Dist. Pune. On this occasion Dr. M. C. Ahire, Associate Dean, College of Agriculture, Dhule, Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM project, Mr. Chakradhar Borkute, Director of e-innovation technologies Pvt. Ltd, Mr. Nilesh Jondhale, Lupin Foundation, *Sarpanch, Upsarapanch*, all the Grampanchayat members, villagers, farmers and Research Associates from CAAST-CSAWM project were present. During the exposure visit Dr. Gorantiwar briefed about the various activities that are being implemented under this project. Dr. Ahire also guided the farmers. The team visited the automatic weather station, IoT project, farm pond, cropping system, crop varieties, horticulture field, poultry, dairy, fisheries, organic fertilizer project and vermi composting project at Buchkewadi village. Dr. Shubhangi Ghadge and Dr. Sevak Dhenge took efforts for organizing the visit.

## 122. Training programme on Subsurface Drainage and Reclamation of Soil organized



February 24, 2020. A one-day training programme on Subsurface Drainage and Reclamation of Soil was organized by CAAST-CSAWM, MPKV, Rahuri. Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM was the Convener of training programme, while, Dr. N. N. Firake, Head, Dept. of IDE, MPKV,

Rahuri was the Co-Convener. Organizing Secretary of the training programme was Dr. P. G. Popale, Assistant Professor of IDE. Dr. M. J. Kaledhonkar, Project Coordinator, ICAR, Central Soil Salinity Research Institute, Zarifa Farm, Karnal (Haryana) and Dr. S. D. Rathod, Assistant Professor of IDE, Agriculture Research Station, K'Digras were the experts for training programme. Dr. Kaledhonkar delivered expert talk on principle and concept of subsurface drainage and design procedure of subsurface drainage. Dr. Rathod guided on installation of subsurface drainage system and shared the farmers success stories who has adopted the system. The presidential address was given by Dr. D. D. Pawar, Associate Dean, Dr. Annasaheb Shinde College of Agricultural Engineering and Technology, MPKV, Rahuri. Dr. Pawar in his address stated the importance of proper drainage and its impact on crop production. Dr. M. S. Mane, Head, Dept. of IFD-IWM, PGI, MPKV, Rahuri was present for this programme. Dr. Pradnya Jadhav, R.A. (IDE) anchored the programme, while, Dr. Nilam Kondvilkar, R.A. (Soil Science) expressed thanks.

## 123. Expert lecture on Career counseling for agriculture sector organized



February 4, 2020. An Expert Lecture on Career counseling for agriculture sector was organized by CAAST-CSAWM, MPKV, Rahuri for students and faculty. The expert lecture started with an informal

opening-cum-welcome ceremony in the presence of Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM. He guided on Irrigation Water Management: An International Perspective and interacted with students and staff of MPKV, Rahuri. Agricultural consultant Mrs. Madhuri Dixit Ghugari, Director-Agri next consultancy, Pune delivered a lecture on Career counseling for agriculture sector. The expert also discussed the career opportunities in agriculture and allied sectors in relation to extensive use of science and technology. Dr. Mangal Patil anchored the programme, while, Dr. Shubhangi Ghadge proposed thanks.

#### 124. Consultative workshop on Precision Water Management Technologies: Current Prospective and Opportunities



February 7, 2020. A one day consultative workshop on Precision Water Management Technologies: Current Prospective and Opportunities was organized by the Centre for Advanced Agricultural Science and Technology (CAAST) for Climate Smart Agriculture and Water Management (CSAWM), MPKV, Rahuri at central campus, Rahuri. This particular workshop contained two major events viz., brainstorming and meeting. During the brainstorming Dr. A. A. Atre, Principal Investigator, Lysimetric Project and Procurement Officer, CAAST-CSAWM and Professor of SWCE, Dr. M. G. Shinde, Co-Principal Investigator,

Lysimetric Project; Co-PI, CAAST-CSAWM and Professor of SWCE were present. Dr. S. B. Wadatkar, Principal Investigator, Lysimetric Project and Head, Dept. of IDE, Dr. PDKV, Akola, Dr. M. M. Deshmukh, Co-Principal Investigator, Lysimetric Project and Associate Professor of IDE, Dr. PDKV, Akola, Dr. A. N. Mankar, Co-Principal Investigator, Lysimetric Project and Associate Professor of IDE, Dr. PDKV, Akola and Dr. U. M. Khodke, Principal Investigator, Lysimetric Project and Associate Dean, College of Agril. Engg. & Technology, VNMKV, Parbhani, Dr. Harish Aware, Co-Principal Investigator, Lysimetric Project and Associate Professor of IDE, VNMKV, Parbhani and Dr. Vishal Ingale, Co-Principal Investigator, Lysimetric Project and Assistant Professor of IDE, VNMKV, Parbhani were present. Dr. S. D. Gorantiwar, Head, Dept. of Agril. Engg., MPKV, Rahuri; PI, CAAST-CSAWM, MPKV, Rahuri and Project Co-ordinator of Lysimetric project welcomed all the dignitaries and experts. Dr. R. T. Thokal, Chief Scientist, AICRP on Irrigation Water Management, Dr. BSKKV, Dapoli and Dr. D. S. Wane, Progressive farmer, Manori, Dist. Ahmednagar were present for the programme. Shri. Vijay Kolekar, Chief Agronomist, PoCRA, Mumbai and Shri. Rafiq Naikwadi, Agribusiness Specialist from State Department of Agriculture, PoCRA, Mumbai led both the events during the consultative workshop. During brainstorming Dr. Atre and Dr. Wadatkar presented the plans of the lysimetric project of their respective universities. Dr. N. N. Firake, I/C, Head, Deptt. of IDE and Recruitment Officer, CAAST-CSAWM, MPKV, Rahuri, Dr. S. B. Nandgude, Head, Dept. of SWCE, Dr. ASCAE&T, Dr. A. A. Atre, Professor of SWCE and Procurement Officer, CAAST-CSAWM, Dr. M. G. Shinde, Professor of SWCE and Co-Principal Investigator, CAAST-CSAWM, Dr. M. S. Mane, Head, Inter Faculty Department of Irrigation



Water Management, Dr. V. N. Barai, Professor of SWCE, Dr. ASCAE&T, Dr. S. D. Dahiwalkar, Associate Professor of IDE, AICRP on IWM, Dr. S. B. Gadge, Associate Professor of IDE, Dr. ASCAE&T, Dr. D. D. Khedkar, Assistant Professor of IDE, IFD-IWM, Dr. B. K. Gavit, Assistant Professor of SWCE and Team Member, CAAST-CSAWM and Dr. P. G. Popale, Assistant Professor of IDE, CAAST-CSAWM were also present. During meeting, the plans for the installation of lysimeters, plans for the experimentation for crop coefficients of the specified crops with the lysimeters and methodology for the determination of crop coefficients and irrigation water requirement based on developed crop coefficients were discussed, whereas, the current scenario and use of newest technology in precision irrigation water management also discussed. Dr. M. G. Shinde summarized both the sessions and delivered vote of thanks. Dr. Mangal Patil and Dr. Pradnya Jadhav, Research Associates (IDE), CAAST-CSAWM coordinated the workshop.

### 125. One day Training Programme on Application of Drones in Agriculture



February 11, 2020. A one-day training programme on Application of Drones in Agriculture was organized by CAAST-CSAWM at MPKV, Rahuri. Dr. M. G. Shinde, Co-PI, CAAST-CSAWM, MPKV, Rahuri explained the various ongoing activities of the CAAST-CSAWM project as well as importance of drone technology

in climate smart agriculture. Dr. S. M. Nalawade, Head, Farm Machinery and Power Engineering and Organizing secretary in his introductory remarks briefed about the training and applications of drone technology in agriculture in detail and the challenges to use this technology in farming. Mr. Ajit Jharjul from ASAP technology, LLP, Nasik and trainees from agriculture university of Coimbatore, Tamilnadu were present. Dr. G. B. Bhanage, Research Associate anchored the programme, while, Dr. Nalawade expressed vote of thanks.

### 126. Lecture on Irrigation Water Management: An International Perspective organized



February 14, 2020. An Expert lecture on Irrigation Water Management: An International Perspective was organized by CAAST-CSAWM, MPKV, Rahuri for students and faculty. The expert lecture started with an informal opening-cum-welcome ceremony in the presence of Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM. Dr. K. Yella Reddy, Vice-President, ICID and Dean, Faculty of Agril. Engg. and Technology, ANGR Agricultural University, Andhra Pradesh delivered a lecture on Irrigation Water Management: An International Perspective and interacted with students and staff. The expert also guided on the components of water use efficiency



(WUE) and the reasons of low WUE. He also discussed about water saving crop production technologies as well as micro irrigation in canal command area. He gave a brief idea about ICID (International Commission on Irrigation and Drainage) and also introduced the ICID young professional fellowships. The introduction of guest has given by Dr. Gorantiwar. Dr. M. S. Mane, Head, Dept. of IFD-IWM, Er. Arun Deshmukh, AGM, Sugarcane Development and Project Head, Agronomy, SBU Centre and North India, Netafim Irrigation India Pvt. Ltd., Pune and Dr. Durga Reddy were present. Er. Deshmukh guided the students to take advantage of the ICID young professional fellowships. Dr. P. B. Jadhav, R.A. (IDE) coordinated the lecture. Dr. M. A. Patil, R.A. (IDE) anchored the programme, while, Dr. M. G. Shinde, Co-PI, CAAST-CSAWM, MPKV, Rahuri expressed vote of thanks.

## March 2020

### 127. Hon'ble Vice Chancellor and Dean, Faculty of Agriculture visited Washington State University (WSU), Pullman, USA



March 6-14, 2020. The Centre for Advanced Agricultural Sciences and Technology on Climate Smart Agriculture and Water Management is functioning at Mahatma Phule Krishi Vidyapeeth (MPKV), Rahuri under World Bank funded Indian Council of Agricultural Research (ICAR)–National Agricultural

Higher Education Project (NAHEP), New Delhi. As per the Detailed Project Report (DPR) of the project, there is a provision of the international short visit and assistance for faculty members for presenting a research paper (oral) or chairing a session or delivering a keynote address in an international scientific event such as conference/seminar/symposium/workshop etc. at different international collaborators of the CAAST-CSAWM project.

The Washington State University (WSU), Pullman, USA is serving as one of the key international collaborating institutes for CAAST-CSAWM, MPKV, Rahuri and is helping in developing the capacity amongst the faculties, scientists and students of MPKV, Rahuri for the development and adoption of 'Climate Smart Agriculture and Water Management' technologies and for development of framework of various programs of CAAST-CSAWM (e.g. short-courses to be offered at Postgraduate level and Post-doctoral program). Furthermore, Dr. K. P. Viswanatha, Hon'ble Vice-Chancellor and Dr. A. L. Pharande, Dean (F/A) were selected by the AU and approved by the NAHEP to undertake short visit to WSU, USA. The main objectives of the short visit were to sign the Memorandum of Understand (MoU) with Washington State University (WSU) and MPKV, to discuss exchange program of faculties and students of MPKV, and to explore the opportunities for collaborative and sandwich program with WSU, USA and also to deliver the seminars on the topics "Climate Smart and Precision Agriculture" and "Agriculture Start-ups" at Pullman and Prosser Campuses at WSU with a view to brainstorm on the approaches to be adopted in the field of climate smart agriculture and water management and for international collaboration.

## 128. Action Plan Workshop of KVKs



March 9, 2020. The Annual Action Plan Workshop of 17 KVKs (western region) working under area jurisdiction of MPKV Rahuri was organized at MPKV, Rahuri. Dr. S. R. Gadakh, Director, Research and Extension Education, MPKV, Rahuri presided over the inaugural function. Dr. Y. G. Fulpagare, Associate Dean, PGI, Dr. S. A. Ranpise, Associate Dean, LAE, Dr. D. B. Yadav, Head, Department of Agril. Economics and Dr. V. R. Shende, Nodal Officer, PAHCoA, Halgaon were present on the dais. In his presidential address Dr. Gadakh said that at present 717 Krishi Vigyan Kendras are working in various districts of the country. The KVKs are a great source of dissemination of agricultural technologies through frontline demonstrations and on farm trials on farmers fields. Many agricultural technologies have reached the farmers through KVKs, he said. Dr. Gadakh in his remarks said that the KVKs have to play a big role in confronting the challenges before agriculture. Dr. P. B. Kharde, Officer Incharge, Communication Centre welcomed the dignitaries and the participants for the workshop. Dr. B. A. Deshmukh anchored the programme, while, Dr. G. K. Waman expressed vote of thanks. More than 150 SMS and staff of 17 KVKs participated in the workshop. Heads of Departments and scientists were present for the function. Publications of KVK, Dhule and KVK, Dahigaon-ne were released

during the inaugural programme. The Action Plan of KVKs was finalized in this workshop through sessionwise technical discussions and suggestions made by university experts. The proceedings were finalized in the valedictory programme.

## 129. Farmers Rally organized under RKVY FFP at KVK, Dhule



March 13, 2020. A Farmers Rally was organized at KVK, Dhule under the Rashtriya Krishi Vikas Yojana (RKVY) Farmer FIRST project. Dr. S. R. Gadakh, Director, Research and Extension Education, MPKV, Rahuri inaugurated the event. Dr. M. C. Ahire, Associate Dean, College of Agriculture, Dhule presided over the programme. Dr. Y. G. Fulpagare, Associate Dean, PGI, MPKV, Rahuri, Dr. Suresh Dodke, Wheat Specialist, ARS, Niphad, Dr. M. S. Mahajan, Extension Agronomist, REC, Dhule, Dr. D. R. Nandre, Head and Programme Coordinator, KVK, Dhule, progressive farmer Adv. Prakash Patil were present on the dais. Dr. Gadakh in his address to the farmers called upon the rural youth to adopt advanced technologies in farming. He further highlighted the contribution of MPKV in research and said that the university is making efforts for increasing the livelihood of the farmers through this research output. Youth should come forward to adopt the advanced technologies in farming like use of drones, micro irrigation and farm mechanization. Dr. Ahire in his address put forth the various technologies





of university which would contribute to farmers income. He further said that farmers need to take the benefits of KVK activities. Dr. Fulpagare stated the importance of dairy business especially for small and marginal farmers. Dr. Mahajan also guided the farmers. Publications were released on this occasion. Farmers visited the crop demonstrations organized at KVK. Dr. Nandre gave the introductory and welcome remarks. Mr. Jagdish Kathepuri anchored the programme. Dr. Dhanraj Chaudhary proposed thanks. The KVK team Dr. Pankaj Patil, Mr. Rohit Kadu, Mrs. Amruta Raut, Dr. Aatish Patil, Mr. Jayram Gavit, Mr. Swapnil Mahajan, Mrs. Pachi Kale took efforts in organizing the event.

### 130. MPKV students success in AIAU sports at Tirupati



March 3, 2020. The MPKV students' team achieved a grand success in the All India Agricultural Universities (AIAU) sports competition organized at Sri Venkateswara Veterinary University, Tirupati. The MPKV team was the Runners up in this competition. The girls Kho-Kho team won the gold medal, while, the Table tennis team stood third winning the bronze medal. The boys team won the gold medal in volleyball, silver medal in basketball and bronze medal in kabbadi. In athletics, Miss. Shilpa Sangle won gold medals in 400 m run and long jump events. Miss. Shivani Naik won the silver medal in 100 m finals and bronze medal in 200 m finals. Yashraj Sawant won the bronze medal in 400

m event. The girls team won silver medal in 4 x 100 m relay event. Vice Chancellor Dr. K. P. Viswanatha and Dr. A. L. Pharande, Dean, Faculty of Agriculture and Director of Instructions congratulated the students for this achievement. Dr. M. R. Chauhan, Students Welfare Officer and Prof. D. M. Gaikwad, Sports Officer guided the students alongwith Prof. Pushpashil Shelke, PTI, Dhule, Dr. Abhijit Nalawade, PTI, AC, Pune and Prof. Ram Borse, PTI, AC, Kolhapur.

### 131. Shivar Pheri and Group Discussion organized under RKVY FFP



March 12, 2020. Shivar Pheri and Group Discussion was organized by MPKV, Rahuri at Manori village (Tal. Rahuri, Dist. Ahmednagar) under Rashtriya Krishi Vikas Yojana (RKVY) Farmer FIRST project. Dr. S. R. Gadakh, Director, Research and Extension Education, MPKV, Rahuri inaugurated the activity. Dr. Y. G. Fulpagare, Associate Dean, PGI, MPKV, Rahuri, Prof. M. N. Desai, Manager, Agriculture Technology Information Centre and PI, RKVY FFP, Krishi Bhushan Dr. Dattatraya Wane, Press Reporter Shri. Rajendra Wadekar, scientists and farmers were present on this occasion. Dr. Gadakh in his guidance to the farmers stated the importance of integrated farming system model developed by MPKV. The adoption of this model would help to assure a sustainable income to the farmers, he said. He further cited the importance of value addition of farm produce. Dr. Fulpagare stated



the importance of loose housing system in cattle. He also highlighted the scope and importance of poultry. Dr. Wane also guided on this occasion. Farm women Mrs. Rohini Shivaji Thorat narrated her experiences of backyard poultry. The dignitaries and farmers visited the cattle project of Shri. Shankar Sapkal who is managing forty cows and experienced the benefits of loose housing system. The team also visited the *Samadhan* variety plot of wheat of Shri. Wadekar. Prof. Desai and Shri. Babasaheb Adhav welcomed the dignitaries and farmers. Dr. Adangale, Co-PI, RKVY FFP anchored the programme and expressed thanks. Farmers in large number participated in this programme. Mr. A. V. Attar, Assistant Professor of Horticulture, Dr. Deepika Aglawe, R.A. and Field Assistants Shri. Rohit Ughade, Shri. Saddam Shaikh, Shri. Shivaji Jadhav, Jr. Clerk took efforts in organizing the programme.

### 132. Training programme organized under RKVY Farmer FIRST project



March 11, 2020. A training programme was organized by MPKV, Rahuri at central campus, Rahuri under RKVY Farmer FIRST project. Dr. S. R. Gadakh, Director, Research and Extension Education, MPKV, Rahuri in his inaugural address to the farmers highlighted the importance of subsidiary occupations like dairy and poultry from their income point of view. The dairy enterprise is well settled in western Maharashtra along with sugarcane cropping, he said. The poultry,

therefore, would be a sort of ATM to farmers, particularly the farm women, he asserted. Prof. M. N. Desai, Manager, Agriculture Technology Information Centre and PI, RKVY FFP gave the introductory and welcome remarks. In the technical session Dr. Vishnu Narwade guided on cattle health management and Dr. Sunil Adangale on backyard poultry. Farmers also expressed their views and shared their experiences. Dr. Adangale, Co-PI, RKVY FFP anchored the programme and expressed thanks. Around 100 farmers participated in this programme from Manori, Kanhegaon and Tandulwadi villages.

### 133. Visit to RKVY FFP demonstrations at Hanmantgaon and Hasnapur



March 17, 2020. Various crop demonstrations were organized at Hanmantgaon and Hasnapur villages (Tal. Rahata, Dist. Ahmednagar) under the Rashtriya Krishi Vikas Yojana (RKVY) Farmer FIRST project. The MPKV team of Prof. M. N. Desai, Manager, Agriculture Technology Information Centre and PI, RKVY FFP, Dr. P. B. Kharde, Officer Incharge, Communication Centre and PI, ICAR FFP, Dr. S. S. Sadaphal, Assistant Professor of Agril. Extension, Mr. A. V. Attar, Assistant Professor of Horticulture and Shri. S. B. Rajmane, Agril. Asstt. visited these demonstrations. They visited the sugarcane-potato intercropping of farmer Shri. Nanabhau Vikhe, where the potato was being harvested. These intercropping demonstrations

have been organized continuously by MPKV under RKVY FFP wherein the farmers have been incurring good returns from potato crop, which help to reduce the cost of production of sugarcane crop. They further visited the sugarcane-onion and sugarcane-chickpea intercropping demonstration plots of *Krishi Bhushan* Shri. Machindra Gholap and Shri. Sameer Patel. Shri. Gholap and Shri. Patel also expressed satisfaction of university technologies which have been demonstrated on their farm.

### 134. Effective steps taken by university in



building has been made compulsory. Social distancing has been made compulsory. Educational posters for awareness purpose have been published and displayed in the campus. The attendance of officers and employees has been made as per Government circulars during the lockdown period. The UG, PG and Ph. D. students' hostels have been sealed and strict monitoring has been observed at main gate.

### 135. Training programme on Communication Skills and Personality Development organized at Dhule

March 3-5, 2020. A training programme on Communication Skills and Personality Development was organized at College of Agriculture, Dhule under the guidance of Dr. Milind Ahire, Associate Dean, AC, Dhule by Dr. Sandip Patil, Training Convener and I/C



Professor of Agriculture Extension and Communication Section. Dr. Shashikant Khalane, I/C Head, Dept. of Psychology, ZB Patil College, Dhule; Prof. Vivian Thomas, Ex Professor, MPKV, Rahuri and Mr. Sushil Dhanavate, Hypnotist and Life Coach, Thane were the expert lecturers for the training programme. About 170 UG and PG students were benefitted by the training. Dr. A. B. Gaikwad, Shri. S.H. Ban, Shri Bharat Baviskar, Shri R.J. Mankar and Shri D. V. Kshirsagar took efforts for the successful organization of training programme.

### 136. Women melawa organized at College of Agriculture, Dhule



March 11, 2020. A Women melawa was organized at College of Agriculture, Dhule on the occasion of Women's day for SC awareness on welfare schemes and policies under SC- SP Sub Plan 2020 sponsored by ICAR, New Delhi. Associate Dean Dr. Milind Ahire in his presidential address gave the information



of different government schemes related to women empowerment. Prof Usha Patil was the chief guest for this programme. More than 150 women, officers, students and staff were present on this occasion. Dr. Sandip Patil, I/C Professor of Agriculture Extension gave introductory remarks, while, Dr. Dinesh Nandre, PC, KVK, Dhule expressed vote of thanks.

### 137. Annual Prize Distribution and Students Cultural Gathering organized at Dhule



March 11-12, 2020. The Annual cultural programme and Prize distribution ceremony was organized at College of Agriculture, Dhule under the chairmanship of Dr. Milind Ahire, Associate Dean, AC, Dhule. Shri. Prakash Holkar, popular Poet and Lyrist was the Chief Guest for the programme. Prof. Jitendra Suryawanshi, Student Welfare Officer welcomed the guests and anchored the programme. Dr. S. P. Sonawane, Vice President, Student Council gave introductory remarks. Student Yogita Chaged, Chairperson, Students Council presented the Annual Report, while, Pratik Jadhav, Sport Secretary presented the Annual Report of Sport. On this occasion the Annual College Publication *Mrudgandh* was released with the auspicious hands of Dr. Ahire and Shri. Holkar. Dr. Sandip Patil, I/C Professor of Agriculture Extension and Communication Section edited the publication. Students presented various dances, acts, singing, *powada* and other cultural

programmes. Prof Pushpashil Shelke, PTI expressed vote of thanks. Faculty and students were present on the occasion.

### 138. Expert visit regarding ESP, EAP and GRM to CAAST-CSAWM Project



March 5-7, 2020. An expert visit regarding ESP, EAP and GRM to CAAST-CSAWM Project, MPKV, Rahuri was held. Dr. S. D. Gorantiwar, Principal Investigator CAAST-CSAWM briefed about the project. In this visit Mr. Ranjit Kumar Sahoo, Social Safeguard Specialist, NAHEP, New Delhi, Ms. Indira Prakash, Environmental Safeguard Specialist, NAHEP, New Delhi were present. During this visit Dr. Y. G. Fulpagare, Associate Dean, PGI, MPKV, Rahuri Dr. M. C. Ahire, Associate Dean, COA, Dhule, Dr. S. D. Gorantiwar, PI, CAAST-CSAWM, Dr. M. G. Shinde, Co-PI, CAAST-CSAWM. Dr. S. B. Nandgude, I/C, PME Cell and Head, Dept. of SWCE, MPKV, Rahuri and Dr. P.L. Kulwal, Nodal Officer, ESP, MPKV, Rahuri were present. During this visit Dr. Gorantiwar presented objectivewise progress of the different activities, research and extension which were conducted under this project.

An interaction session was organized with students of MPKV, Rahuri with NAHEP experts, New Delhi. During this interaction session the students interacted with the experts. The 20 students who had successfully completed one-month International level training



at AIT, Bangkok, Thailand and other students from central campus, Rahuri shared their experiences with the expert. After that the NAHEP experts took review regarding ESP, EAP and GRM activities and progress of university presented by nodal officers. They evaluated the progress by visiting the new building of CAAST-CSAWM and different research fields of the CAAST-CSWAM project and appreciated the performance of project and also suggested to plan all research activities with consideration to environment and which would help to reduce carbon footprints.

### 139. Workshop on Social Science Course Curriculum Development for PG Diploma organized at Pune



March 7-8, 2020. A two day workshop on Social Science Course Curriculum Development for Post Graduate Diploma in Climate Smart Agriculture and Water Management was organized at CAAST-CSAWM, Sub Centre, College of Agriculture, Pune with objective to finalize course contents of social science courses under module 1 and 4. This two days' workshop was started with an informal opening-cum-welcome ceremony by Dr. M. C. Ahire, Associate Dean, College of Agriculture, Dhule and Workshop Organizing Secretary. The inaugural function was chaired by Dr. K. D. Kokate, Former DDG (Agricultural Extension), ICAR, New Delhi and Director of Extension Education,

MPKV Rahuri, co-chaired by Dr. V. V. Sadamate, Agricultural Extension Specialist and Former Advisor, Agriculture, Planning Commission, GoI, New Delhi and Dr. D. V. Deshpande, HoD, MDP and Professor, Centre for Management Development programme, VAMINICOM, Pune. Dr. Ahire in his introductory remarks briefed about the workshop. Dr. Kokate in his inaugural address narrated the importance of the social science and their courses for Climate Smart Agriculture and Water Management. During the technical sessions the invitees, experts deeply and critically reviewed eight social sciences courses their objectives, importance and course contents including theory and practical. On second day, six social sciences courses were critically reviewed along with suggestions and comments on each for their improvements. Total 25 experts from different institutes participated in this two-day workshop. Dr. S. N. Ghadge, Research Associate anchored the programme and Dr. S. A. Dhenge, Research Associate expressed vote of thanks.

### 140. Expert lecture on Aeroponics organized at MPKV, Rahuri



March 17, 2020. An Expert lecture on Aeroponics was organized by CAAST-CSAWM, MPKV, Rahuri for students and faculty. The expert lecture started with welcome ceremony in the presence of Dr. S. R. Gadakh, Director of Research and Extension Education. Dr. S. D. Gorantiwar, Principal Investigator, CAAST-CSAWM,

Dr. M. G. Shinde, Co-Principal Investigator, CAAST-CSAWM, faculty and CAAST-CSAWM members were present for the lecture. Er. K. Prabhu Sankar, Business Incubator and TBI Incubatee, Coimbatore delivered a lecture on Aeroponics. The expert shared his knowledge about aeroponics technology, climate control, toxin free plant protection process, automation, toxin free mineral nutrient regime, standard cultural practices for crops. He also explained the monitoring and analysis of aeroponics based farming through cloud infrastructure. He also gave the idea about the aeroponics crops and its revenue projection. Dr. Shinde introduced the guest. Dr. V. P. Kad, Head, Dept. of APE, Dr. ASCAET was the organizing secretary for this lecture. Dr. S. R. Gadakh gave his presidential remarks for the lecture and guided for adaptation of such technology at MPKV campus. Dr. Gorantiwar in his remarks shared the planning of aeroponics training for staff. All staff of Dr. ASCAET and PGI, MPKV, Rahuri were present for the lecture. Dr. P. B. Jadhav, RA (IDE) and Dr. M.A. Patil, RA (IDE) coordinated the lecture. Dr. Shinde expressed vote of thanks.

#### **141. Farmers workshop on Advanced irrigation system and fertilizer management organized**



March 4-6, 2020. A three days farmers workshop on Advanced irrigation system and fertilizer management

was organized in collaboration with CAAST-CSAWM, Dept of IFD-IWM, MPKV, Rahuri and IFFCO, New Delhi. Dr. S.D. Gorantiwar, Principal Investigator, CAAST-CSAWM was the Convener of the workshop. The Organizing Secretary of the workshop was Dr. M. S. Mane, Head, Dept. of IFD-IWM. Topics on Information and communication technology for irrigation water management, micro irrigation concept, care, maintenance and operation, its advantages, its layout, fertilizer management through micro irrigation, use of organic farming for enhancing crop productivity, management of onion crop were covered in this workshop by different experts from MPKV, Rahuri. Dr. Ranjit Kumar Sahoo, Social Safeguard Specialist and Dr. Indira Prakash, Environmental Safeguard Specialist, NAHEP (World Bank Expert) were present for the valedictory function of the workshop. Both of them gave their remarks. They appreciated about arrangement of such workshop for farmers and made them aware about the latest technologies about crop and irrigation management. Dr. Pradnya Jadhav, RA(IDE) and Dr. Mangal Patil RA (IDE) coordinated the workshop. Dr. D.D. Khedkar anchored the workshop. Dr. Mane expressed vote of thanks.

#### **142. Exposure visit on Agro climatic networking at Bamburdi Gumut village**



March 11, 2020. The CAAST-CSAWM, MPKV, Rahuri had organized a visit on Agro climatic networking

at Bamburdi Gumut village of Ahmednagar district. On this occasion Dr. H.G. More, former Director of Extension, MPKV Rahuri, Mr. Arun Deshmukh, AGM, Sugarcane Project and Head, Agronomy Division, Netafim Irrigation India, Pvt.Ltd., Pune, Dr. S. D. Gorantiwar, PI, CAAST-CSAWM and Head, Agril. Engg., Dr. M.G. Shinde, Co-PI, CAAST-CSAWM, *Sarpanch, Upsarapanch*, all the Grampanchayat members, villagers, farmers and ten research associates from CAAST- CSAWM project were present. During this visit Mr. Deshmukh guided the farmers regarding technology for irrigation water management, micro irrigation concept, care, maintenance and operation, its advantages, layout, fertilizer management through micro irrigation. Dr. Gorantiwar explained different research and extension activities which were conducted under this project. In this exposure visit progressive farmers and scientists from MPKV, Rahuri visited cropping system, varieties of crops, poultry, dairying industry, organic fertilizer project, vermi composting project, horticulture field etc.

of Agriculture, Dhule was the Organizing Secretary for this training programme. Farmers were trained on management of mango orchard, pest and disease management of onion and grapes, guava pruning technology and pest and disease management of pomegranate by experts from MPKV, Rahuri. Dr S. B Jadhav, Associate Professor Dept. of Horticulture, Dr. Vikas Bhalerao Junior Plant Pathologist, AICRP, Dr. A. R. Walunj, Entomologist and Dr. S. S. Kulkarni Associate Professor, Dept. of Horticulture, MPKV, Rahuri guided the farmers. Total 65 farmers participated in this training programme. Dr.Shubhangi Ghadge, RA (Agri.Ext. and Comm.) and Dr. Sevak Dhenge RA (SS) CAAST-CSAWM coordinated the programme.

### 143. Farmers training programme organized at Buchkewadi village



March 13, 2020. A one day farmers training programme on Fruit Crop Production and Insect Pest Disease Management was organized by CAAST-CSAWM, MPKV, Rahuri at Buchkewadi village, Tal. Junnar, Dis. Pune. Dr.M.C. Ahire, Associate Dean, College



## 6. Awards

### 1. Seed Technology Research Centre awarded the Best Centre



April 7-9, 2019. The Seed Technology Research Centre of MPKV, Rahuri was awarded with the Best Centre in the Annual Meet of All India Coordinated Research Project on National Seed Project organized at the CCSHaryana Agriculture University, Hissar, Haryana. The meet was organized by the Project Directorate of ICAR-Indian Institute of Seed Science, Mau, Varanasi. MPKV's STRC unit was awarded the Best Centre award for 2018-19 at the hands of Dr. Trilochan Mohapatra, Secretary, DARE and Director General, ICAR, New Delhi. Dr. V. R. Shelar, Seed Research Officer, MPKV, Rahuri, Dr. A. V. Solanke, Head, Department of Agronomy and Chief Scientist, Seed, Dr. C. B. Salunkhe, Seed Production Officer and scientists received the coveted award. Shri. Ashwani Kumar, Joint Secretary, Seeds, Department of Agriculture, Cooperation and Farmers Welfare, New Delhi, Dr. D. K. Yadav, ADG (Seeds), ICAR, New Delhi, Dr. A. K. Sheravat, Director of Research, CCSHAU, Hissar, Dr. K. G. Gerawal, Dean, F/A, Dr. D. K. Agarwal, Project Director, ICAR-IISR, Mau and Dr. V. P. Sangwan, Head, Seed Research and Technology Department were present on this occasion. Vice Chancellor Dr. K. P. Viswanatha, Directors Dr. Pharande and Dr. Gadakh congratulated the scientists for this award.

### 2. Vice Chancellor Dr. K. P. Viswanatha conferred the honorary rank of Colonel



May 22, 2019. Vice Chancellor Dr. K. P. Viswanatha was conferred the honorary rank of Colonel (NCC) in the grand Investiture ceremony jointly organized by Dr. Annasaheb Shinde College of Agricultural Engineering and Technology and 17 Maharashtra Battalion NCC (Aurangabad Group) at MPKV, Rahuri. This honorary rank was conferred to Vice Chancellor Dr. K. P. Viswanatha by Maj. Gen. Gajendra Prasad, YSM, VSM, Add. DG (NCC), Maharashtra Directorate, Mumbai. In his acceptance speech Vice Chancellor Dr. K. P. Viswanatha thanked the NCC for conferring upon him this prestigious honorary rank of Colonel and further said that it is a great pride for him. It is not only an honour for me, but all my university, college staff, faculty and students, he said. He said that the NCC is the biggest youth organization in India and its motto is unity, discipline, national integration and self discipline. The NCC through these nine decades has worked for innovativeness, disaster management and given a helping hand to people in distress. Its role in nation building is enormous. MPKV has organized a National Integration Camp and also social service camps. The university is in association with the NCC and assured it all support. Maj. Gen. Gajendra Prasad in his conferment address briefed about the important







awardee farmer were present on this occasion. Mrs. Nalkar has successfully demonstrated the integrated farming system model through ICAR Farmer FIRST programme on her farm. Her IFS model comprises of dairy, goat rearing, farm pond fishery, backyard poultry apart from crop demonstrations on bajra, red gram, fodder crops and pomegranate cultivation. Dr. K. P. Viswanatha, Vice Chancellor, Dr. S. R. Gadakh, Director of Research and Extension Education and Dr. P. B. Kharde, PI, ICAR FFP congratulated Mrs. Nalkar for this prestigious award.

### 5. Vice Chancellor Dr. K. P. Viswanatha awarded the LIFE TIME ACHIEVEMENT AWARD at International Conference on GRISAAS-2019 held at ICAR-NAARM, Hyderabad

October 20-22, 2019. Vice Chancellor Dr. K. P. Viswanatha was felicitated with LIFE TIME ACHIEVEMENT AWARD of Astha Foundation at International Conference on GRISAAS-2019 held at ICAR-NAARM, Hyderabad. The award consists of a citation and certificate. The Executive Committee of the Astha Foundation conferred this prestigious award to Vice Chancellor Dr. K. P. Viswanatha for his outstanding contribution in the field of Plant Breeding on the occasion of International Conference on Global Research Initiatives for Sustainable Agriculture and Allied Sciences (GRISAAS-2019). Dr. S. P. Singh, President, Astha Foundation and S. Rani, General Secretary felicitated Dr. Viswanatha with this prestigious award. As a Vice Chancellor of MPKV, Rahuri Dr. Viswanatha has initiated many activities which has improved the university's ranking at national level. He has also initiated the cleanliness campaign in the university. He has called for Clean University Green University campaign.

### 6. CSRS, Padegaon awarded the Excellent Performer Award



October 14-16, 2019. MPKV's Central Sugarcane Regional Station, Padegaon was awarded the Excellent Performer Award for the year 2018-19 for its contribution in sugarcane research. The CSRS, Padegaon team led by Dr. B. S. Raskar, Sugarcane Specialist received the award at the hands of Dr. R. K. Singh, ADG (CC), ICAR, New Delhi and Dr. A. D. Pathak, Director and Project Coordinator, Sugarcane, ICAR-IISR, Lucknow during the Annual Group Meet of AICRP on Sugarcane organized at UAS, Dharwad (Karnataka). This centre has rich contribution in sugarcane research and released prominent sugarcane varieties which have benefited the farmers. Vice Chancellor Dr. K. P. Viswanatha and Director of Research Dr. S. R. Gadakh congratulated the CSRS, Padegaon scientists for this award.

### 7. MPKV ICAR Farmer FIRST programme adjudged Best Presentation Award





January 3, 2020. The ICAR Farmer FIRST programme of MPKV, Rahuri was presented with the Best Presentation Award in the Annual Review Meeting held at KVK, Babhaleshwar. Dr. P. B. Kharde, PI and Dr. S. S. Sadaphal, Co-PI received the certificate at the hands of Dr. Lakhan Singh, Director, ICAR-ATARI, Zone-VIII, Pune. Krishi Vigyan Kendras and ICAR FFPs from Maharashtra and Gujarat states participated in the two days Annual Review Meeting. ICAR FFPs from MPKV, Rahuri, NAU, Navsari and JAU, Junagadh presented their reports. Dr. R. K. Singh, Former Head, Department of Agril. Economics, CSAAUT, Kanpur, Dr. Sambhaji Nalkar, Head, KVK, Babhaleshwar were present on the dais. MPKV's ICAR FFP is being implemented in Chinchvihire and Kangar villages and it is focusing on integrated farming system for sustainable income to the farmers. Vice Chancellor Dr. K. P. Viswanatha and Director, Extension Education Dr. S. R. Gadakh congratulated the MPKV's ICAR FFP team.

Central Ministry of Agriculture and Farmer Welfare, Government of India. Eight State and two Union Territories of Western Region of India participated in this exhibition. KVK, Dhule participated in this exhibition and displayed the various agricultural technologies. Farmers in large number visited the stall and got information on these technologies. The award was received by Dr. Dinesh Nandre, Senior Scientist and Head, KVK, Dhule, Dr. Pankaj Patil, SMS, PP and Dr. Dhanraj Chaudhary, SMS, ASDS at the hands of Shri. M. B. Ojha, Commissioner, Agriculture, Madhya Pradesh and Dr. S.K. Rao, Vice Chancellor, RVSKVV, Gwalior.

## 8. KVK, Dhule received the Best Stall Award in Krishi Vijay-2020



February 2020. The MPKV's Krishi Vigyan Kendra, Dhule received the Best Stall Award in Krishi Vijay-2020. The Western Region Agriculture Fare Exhibition (Krishi Vijay 2020) was organized at Gwalior by Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya (RVSKVV), Gwalior in association with the

## 7. Human Resource

### 7.1 Executive Officers

Sr. No.	Executive Officer	Period	
1	The Chancellor	Hon'ble C. Vidyasagar Rao	30 August, 2014 to 4 September, 2019
		Hon'ble Shri Bhagat Singh Koshyari	5 September, 2019 to till date
2	The Pro Chancellor	Hon'ble Shri. Chandrakant (Dada) Patil	1 May, 2018 to Oct. 2019
		Hon'ble Shri. Dadaji Bhuse	30 December 2019 to till date
3	The Vice Chancellor	Dr. K.P. Viswanatha	31 December, 2015 to till date

### 7.2 Executive Council Member list (1 April, 2019 to 31 March, 2020)

Sr. No.	Category	Hon. Member	Address	Period
1	Ex-officio Chairman	Hon. Dr. K. P. Viswanatha, Vice-Chancellor	Mahatma Phule Krishi Vidyapeeth, Rahuri	--
2	Ex-officio Member	Director of Agriculture ( Input & Quality Control) nominated by Agricultural Commissioner, Govt. of Maharashtra	Commissionrate of Agril., Central Building, Pune	--
3	Ex-officio Member	Regional Joint Director of Animal Husbandry nominated by Commissioner of Animal Husbandry	Veternary Dispensary, Near Ashok Stambha, Nashik	--
4	Ex-officio Member	Director of Horticulture	Near Superintendant of Agril officer of Maharashtra State office, Narvir Tanaji Road, Shivajinagar, Pune	--
5	Ex-officio Member	Chief Conservator of Forest (Regional)	Old Mumbai-Agra Highway, Tryambak Naka, Opp. to Adivasi Vikas Bhavan, Nashik	--
6	Member (Nominated by V.C.)	Director of Research	Mahatma Phule Krishi Vidyapeeth, Rahuri	01/09/2017 to 31/08/2019 24/09/2019 to 23/09/2021
7	Nominated Member (Nominated by V.C.)	Dean (Agril.)	Mahatma Phule Krishi Vidyapeeth, Rahuri	01/09/2017 to 31/08/2019 24/09/2019 to 23/09/2021



8	Ex-officio Member	Regional Dy. Director of Fisheries, Nashik nominated by Fisheries Commissioner, Govt. of Maharashtra	Old Govt. Ashwin Barrel No.13, Near Divisional Comminssior Office, Nashik Road, Nashik	--
9	Ex-officio Member	Regional Dairy Development Officer nominated by Dairy Development Commissioner, Govt. Of Maharashtra	Nasik Division, Campus of Govt. Dairy Scheme, Tryambak Raod, Nashik	--
10	Member (Agriculture Scientist)	Dr. Bhaskar Rustamrao Patil	Shahunagar, Khamgaon road, Chikhli, Dist. Buldhana	11/08/2016 to 10/08/2019
11	Member (Agriculture Scientist)	Dr. Bandi Venkateswarlu	House no. 5-5-552, Plot no. 30, Abhyudayanagar, L B Nagar, Hyderabad	31/08/2019 to 30/08/2022
12	Member (Progressive Farmers 05)	Shri. Tushar Balasaheb Pawar	A/P Belwade Haveli, Tal Karad, Dist Satara.	08/02/2018 to 05/03/2020
13		Shri. Nathaji Dattatray Chowgule	A/P Malwadi, Kotvali, Tal. Panhala, Dist. Kolhapur	30/07/2018 to 05/03/2020
14		Saw. Sunita Jaywant Patil	A/P Binchur (Bhavaninagar) Tal. Valva, Dist. Sangli	30/07/2018 to 05/03/2020
15		Dr. Pankajkumar Suresh Mahale	Plot. No. 65, Jay Hind Colony, Deopur, Dhule	30/07/2018 to 05/03/2020
16		Dr. Vijayprakash Kisanrao Thombre	A/P Mangalvar Peth, Kej, Dist. Beed	30/07/2018 to 05/03/2020
17	Member (ICAR Nominate) (One)	Dr. K. V. Prasad	Director, ICAR- Directorate of Floriculture Research, College of Agriculture Campus Pune	15/03/2017 to 14/03/2020
18	Agro Industrialist (One)	Shri. Dattatray Bhavusaheb Pansare	Shri Dattakrupa Niwas, Line No. 02, Banglow no. 2, Opposite Shilpa guardan, Manik Nagar, Ahmednagar	25/7/2019 to 05/03/2020
19	Member ( Member Maharashtra Legislative Assembly-03)	Hon. MLA, Shri. Shivajirao Kardile	A/P Burhanagar, Tal. & Dist. Ahmednagar	21/12/2015 to 10/11/2019
20		Hon. MLA, Shri. Bhausahab Malhari Kamble	Gondhawani, Ward No.01, Shirampur, Dist- Ahmednagar	21/12/2015 to 31/08/2019
21		Hon. MLA, Shri. Rahul Jagtap	A/P Pimpalgaon Pisa, Tal- Shrigonda, Dist-Ahmednagar	21/12/2015 to 10/11/2019



22	Member ( Member Maharashtra Legislative Council-02)	Hon. MLC, Shri. Prakash Gajbhiye	Sai Prabhu Apartment, Ravi Nagar Chawk, Nagpur	05/10/2015 to 06/06/2020
23		Hon. MLC, Shri. Narendra Darade	A/P Bhabulgaon, Tal. Yeola, Dist. Nashik	06/02/2019 to 21/06/2024
24	Member (Chairman of Agril.Committee of ZP) (Two)	Vacant Post	--	--
25		Vacant Post	--	--
26	Ex-officio Member Secretary	Registrar	Mahatma Phule Krishi Vidyapeeth, Rahuri	--
27	Invitee	Comptroller	Mahatma Phule Krishi Vidyapeeth, Rahuri	--

### 7.3 Academic Council Members (1 April 2019 to 31 March 2020)

Sr. No.	Category	Hon. Member Name / Designation	Address	Remark
1	Ex-officio Chairman	Hon. Dr. K. P. Viswanatha, Vice Chancellor	Mahatma Phule Krishi Vidyapeeth, Rahuri	
2	Ex-officio Member	Director of Extension Education	Mahatma Phule Krishi Vidyapeeth, Rahuri	
3	Ex-officio Member	Director of Instructions	Mahatma Phule Krishi Vidyapeeth, Rahuri	
4	Ex-officio Member	Director of Research	Mahatma Phule Krishi Vidyapeeth, Rahuri	
5	Ex-officio Member	Dean (Agril.)	Mahatma Phule Krishi Vidyapeeth, Rahuri	
6	Ex-officio Member	Dean (Agril. Engg.)	Mahatma Phule Krishi Vidyapeeth, Rahuri	
7	Ex-officio Member	Associate Dean (PGI)	Post Graduate Institute, Mahatma Phule Krishi Vidyapeeth, Rahuri	
8	Ex-officio Member	Associate Dean (CAE)	Dr. ASCAE, Mahatma Phule Krishi Vidyapeeth, Rahuri	
9	Ex-officio Member	Associate Dean (LAE)	Lower Agriculture Education, Mahatma Phule Krishi Vidyapeeth, Rahuri	
10	Ex-officio Member	Associate Dean	College of Agriculture, Pune	
11	Ex-officio Member	Associate Dean	College of Agriculture, Kolhapur	
12	Ex-officio Member	Associate Dean	College of Agriculture, Dhule	



13	Ex-officio Member	Associate Dean	College of Agriculture, Nandurbar	
14	Ex-officio Member	Associate Dean	College of Agriculture, Karad	
15	Ex-officio Member	Head, Department of Agronomy	Mahatma Phule Krishi Vidyapeeth, Rahuri	
16	Ex-officio Member	Head, Dept. of Animal Science and Dairy Science	Mahatma Phule Krishi Vidyapeeth, Rahuri	
17	Ex-officio Member	Head, Department of Agril. Botany	Mahatma Phule Krishi Vidyapeeth, Rahuri	
18	Ex-officio Member	Head, Department of Soil Sci. & Chemistry	Mahatma Phule Krishi Vidyapeeth, Rahuri	
19	Ex-officio Member	Head, Department of Agril. Economics	Mahatma Phule Krishi Vidyapeeth, Rahuri	
20	Ex-officio Member	Head, Department of Agril. Engineering	Mahatma Phule Krishi Vidyapeeth, Rahuri	
21	Ex-officio Member	Head, Department of Agril. Entomology	Mahatma Phule Krishi Vidyapeeth, Rahuri	
22	Ex-officio Member	Head, Department of Agril Extension	Mahatma Phule Krishi Vidyapeeth, Rahuri	
23	Ex-officio Member	Head, Department of Horticulture	Mahatma Phule Krishi Vidyapeeth, Rahuri	
24	Ex-officio Member	Head, Department of Plant Pathology	Mahatma Phule Krishi Vidyapeeth, Rahuri	
25	Ex-officio Member	Head, Dept. of Food Science & Technology	Mahatma Phule Krishi Vidyapeeth, Rahuri	
26	Ex-officio Member	Head, Department of Bio-Chemistry	Mahatma Phule Krishi Vidyapeeth, Rahuri	
27	Ex-officio Member	Head, IFD-Irrigation Water Management	Mahatma Phule Krishi Vidyapeeth, Rahuri	
28	Ex-officio Member	Head, Department Agril. Meteorology	College of Agriculture, Pune	
29	Ex-officio Member	Head, Department of Farm Machinery & Power, Mech. Engg., Physics,	Mahatma Phule Krishi Vidyapeeth, Rahuri	
30	Ex-officio Member	Head, Department of Irri.& Drainage Engg.	Mahatma Phule Krishi Vidyapeeth, Rahuri	
31	Ex-officio Member	Head, Dept. of Soil & Water Conservation Engg.,	Mahatma Phule Krishi Vidyapeeth, Rahuri	

32	Ex-officio Member	Head, Department of Agril. Process Engg.,	Mahatma Phule Krishi Vidyapeeth, Rahuri	
33	Ex-officio Member	Head, Department of Farm Sturcture, Rural Elect., Civil & Elect. Engg.	Mahatma Phule Krishi Vidyapeeth, Rahuri	
34	Ex-officio Member	Soils Specialist	Agril. Research Station, Solapur	
35	Ex-officio Member	Sugarcane Specialist	Central Sugarcane Research Station, Padegaon	
36	Ex-officio Member	Oilseeds Specialist	Oilseeds Research Station, Jalgaon	
37	Ex-officio Member	Wheat Specialist	Wheat Research Station, Niphad, Dist. Nashik	
38	Ex-officio Member	Student Welfare Officer	Mahatma Phule Krishi Vidyapeeth, Rahuri	
39	Ex-officio Member Secretary	Registrar	Mahatma Phule Krishi Vidyapeeth, Rahuri	
<b>Invitee Member (As per decision of AC (68) held on 15/2/96, vide subject No. 2)</b>				
40	Invitee	Associate Director of Research	NARC, Sub-Montane Zone, Shenda Park, Kolhapur	
41	Invitee	Associate Director of Research	NARC, Plain Zone, Ganeshkhind, Pune	
42	Invitee	Associate Director of Research	NARC, Western Ghat Zone, Igatpuri, Dist. Nashik	
43	Invitee	Associate Director of Research	NARC, Scarcity Zone, Raviwarpeth, Solapur	
<b>Invitee Member (As per decision of AC (95) held on 14/02/11 )</b>				
44	Invitee	Principal	College of Horticulture, Pune	
<b>Invitee Member (As per decision of AC (98) held on 14/02/13 )</b>				
45	Invitee	Associate Director of Research	Office of the Directorate of Research, MPKV, Rahuri	
<b>Co-opt Members (As per subject no. 6 of AC held on 25/09/2018)</b>				
46	Co-opt. Member	Dr. R. B. Deshmukh	(Former Vice Chancellor, MPKV, Rahuri) Raj Banglow, 46, Vrindwan, Sector A/B, Co operative Housing Society, Panchwati, Pashan, Pune-411008	6/9/2018 to 5/9/2020





47	Co-opt. Member	Dr. K. E. Lawande	(Former Vice-Chancellor, Dr. BSKKV, Dapoli)C7, Nisarg Phase II, KasbateVasti, Wakad, Pune 411 057	6/9/2018 to 5/9/2020
48	Co-opt. Member	Dr. V. M. Mayande	(Former Vice Chancellor, Dr. PDKV, Akola) B-504, Mont Vert, Biarritz-2, Baner-Pashan Link road, Pune 411 021	6/9/2018 to 5/9/2020
49	Co-opt. Member	Dr. K. V. Prasad	Director, ICAR- Directorate of Floriculture Research, College of Agriculture Campus Pune 411 005	6/9/2018 to 5/9/2020
<b>Principal of Affiliated Colleges (MAU Act 1983, Section 33 (2) (viii) read with Statute 4 (viii))</b>				
50	Ex-officio Member	The Principal	College of Agril. Business Manegement, Narayangaon, Dist. Pune	
51	Ex-officio Member	The Principal	College of Agriculture, Akluj, Dist-Solapur	
52	Ex-officio Member	The Principal	College of Agril. Biotechnology, Vidyanagari, Bhigwan Road, Baramati, Dist-Pune	
53	Ex-officio Member	The Principal	College of Agriculture, Ambi, Tal-Wadgaon Maval, Dist-Pune.	
54	Ex-officio Member	The Principal	K.K.Wagh College of Agriculture, Nasik, Dist-Nasik	
55	Ex-officio Member	Nodal Officer	College of Agriculture, Muktainagar, Jalgaon	
56	Ex-officio Member	Nodal Officer	College of Agriculture, Halgaon, Dist. Ahmednagar	

## 7.4 Academic Officer

Sr. No.	Designation of post	Name of Officer	Pay Scale (Rs.)	Period	
				From	To
1.	Dean, Faculty of Agril. and Director of Instruction	Dr.A.L.Pharande	37400-67000 +10000 AGP + 4000 SPLA	01.04.2019	31.03.2020
2.	Director of Research	Dr.S.R.Gadakh	37400-67000 +10000 AGP + 4000 SPLA	01.04.2019	31.03.2020
3.	Director of Extension Education	Dr.S.R.Gadakh Holding additional charge	37400-67000 +10000 AGP + 4000 SPLA	01.04.2019	31.03.2020
4.	Associate Dean (PGI)	Dr.P.A.Turbatmath	37400-67000 +10000 AGP + 3000 SPLA	01.04.2019	31.08.2019
		Dr. Y.G.Phulpagare Holding additional charge	37400-67000 +10000 AGP + 3000 SPLA	01.09.2019	31.03.2020
5.	Associate Dean, Agril. Engineering	Dr.D.D.Pawar	37400-67000 +10000 AGP + 3000 SPLA	01.04.2019	31.03.2020
6.	Associate Dean (LAE)	Dr.S.A.Ranpise Addl. Charge	37400-67000 +10000 AGP	01.04.2019	31.03.2020
7.	Associate Dean, College of Agril. Dhule	Dr.A.M.Musmade Holding additional charge	37400-67000 +10000 AGP	01.04.2019	31.12.2019
		Dr.M.C.Ahire Holding additional charge	37400-67000 +10000 AGP	01.01.2020	31.03.2020
8.	Associate Dean, College of Agril.Pune	Dr.P.N.Rasal	37400-67000 +10000 AGP + 3000 SPLA	01.04.2019	22.01.2020
		Dr.G.G.Khot Holding additional charge	37400-67000 +10000 AGP + 3000 SPLA	23.01.2020	31.03.2020
9.	Associate Dean, College of Agril.Kolhapur	Dr.G.G.Khot Holding additional charge	37400-67000 +10000 AGP	01.04.2019	22.01.2020
		Dr.P.N.Rasal	37400-67000 +10000 AGP + 3000 SPLA	23.01.2020	31.03.2020
10.	Associate Dean, College of Nandurbar	Dr.S.B.Kharbade	37400-67000 +10000 AGP + 3000 SPLA	01.04.2019	31.03.2020
11.	Associate Dean, College of Agril.Karad	Dr.R.R.Surywanshi Holding additional charge	37400-67000 +10000 AGP + 3000 SPLA	01.04.2019	31.03.2020



## 7.5 Academic Staff- Head of Department (Annual Report 1.04.2019 to 31.03.2020)

Sr. No.	Designation of post	Name of Officer	Pay Scale (Rs.)	Period	
				From	To
1.	Head, Department of Agronomy	Dr.A.V.Solanki Holding additional charge	37400-67000 +10000 AGP	01.04.2019	31.03.2020
2.	Head, Department of Soil Science & Agril. Chemistry	Dr.A.D.Kadlag Addl.Charge	37400-67000 +10000 AGP	01.04.2019	17.07.2019
		Dr.B.D.Bhakre	37400-67000 +10000 AGP	18.07.2019	31.03.2020
3.	Head, Department of Agril. Botany	Dr.R.W.Bharud	37400-67000 +10000 AGP	01.04.2019	31.05.2019
		Dr.A.S.Jadhav Addl.Charge	37400-67000 +10000 AGP	01.06.2019	31.03.2020
4.	Head, Department of Entomology	Dr.C.S.Patil Addl.Charge	37400-67000 +10000 AGP	01.04.2019	17.07.2019
		Dr.C.S.Patil	37400-67000 +10000 AGP	18.07.2019	31.03.2020
5.	Head, Department of Pathology	Dr.C.D.Deokar Addl.Charge	37400-67000 +12000 AGP	01.04.2019	31.05.2019
		Dr.T.K.Narute Addl.Charge	37400-67000 +10000 AGP	01.06.2019	17.07.2019
		Dr.T.K.Narute	37400-67000 +10000 AGP	18.07.2019	31.03.2020
6.	Head, Department of Horticulture	Dr.S.A.Ranpise	37400-67000 +10000 AGP	01.04.2019	31.03.2020
7.	Head, Department of Animal Science & Dairy Science	Dr.Y.G.Fulpagare Holding additional charge	37400-67000 +10000 AGP	01.04.2019	31.03.2020
8.	Head, Department of Food Science & Technology	Dr.U.D.Chavan Holding additional charge	37400-67000 +10000 AGP	01.04.2019	17.07.2019
		Dr.U.D.Chavan	37400-67000 +10000 AGP	18.07.2019	31.03.2020
9.	Head, Department of Agril. Engineering	Dr.S.D.Gorantiwar Addl. Charge	37400-67000 +10000 AGP	01.04.2019	18.07.2019
		Dr.S.D.Gorantiwar	37400-67000 +10000 AGP	19.07.2019	31.03.2020
10.	Head, Department of Agril. Meteorology	Dr.J.D.Jadhav Holding Additional Charge.	37400-67000 +10000 AGP	01.04.2019	31.03.2020





Sr. No.	Designation of post	Name of Officer	Pay Scale (Rs.)	Period	
				From	To
11.	Head, Department of Extension Education	Dr.M.C.Ahire	37400-67000 +10000 AGP	01.04.2019	31.12.2019
		Dr.S.B.Shinde Holding Additional Charge.	37400-67000 +10000 AGP	01.01.2020	31.03.2020
12.	Head, Department of Agril. Economics	Dr.D.B.Yadav	37400-67000 +10000 AGP	01.04.2019	31.03.2020
13.	Sugarcane Specialist, Padegaon	Dr.B.S.Raskar	37400-67000 +10000 AGP	01.04.2019	31.03.2020

#### 7.6 Other Officers (Annual Report 1.04.2019 to 31.03.2020)

Sr. No.	Designation of post	Name of Officer	Pay Scale (Rs.)	Period	
				From	To
1.	Registrar	Dr.S.R.Kasar	37400-67000 + 8700 AGP	01.4.2019	31.03.2020
2.	Comptroller	Shri.V.A.Kote	15600-39100 + 6600 AGP	01.04.2019	31.03.2020
3.	Students Wealfare Officer	Dr.M.R.Chavan Holding additional charge	15600-39100 + 6600 AGP	01.04.2019	31.03.2020
4.	University Librarian	Shri.K.N.Patil Holding additional charge	15600-39100 + 6600 AGP	01.04.2019	31.03.2020
5.	University Engineer	Shri.M.P.Dhokhe	15600-39100 + 7600 AGP	01.04.2019	31.03.2020
6.	Sports Officer	Shri.D.M.Gaikwad Holding additional charge	15600-39100 + 6600 AGP	01.04.2019	31.03.2020
7.	Medical Officer	Dr. (Smt.) V.R.Hile	9300-34800+ 4400 AGP	01.04.2019	31.03.2020



## 7.7 University Manpower

Sr. No.	Name of Post	Pay Scale (Rs.)	Sanctioned Post	Filled Post	Vacant Post
1	2	3	4	5	6
<b>Group-A</b>					
1	Vice-Chancellor	Fix Pay Rs. 75,000+5000	1	1	0
2	Registrar	37400-67000 GP 8700	1	1	0
3	Director of Research	37400-67000 GP 10000 +SPL 4000	1	1	0
4	Director of Extension Education	37400-67000 GP 10000 +SPL 4000	1	0	1
5	Director of Instructions And Dean, Faculty of Agriculture,	37400-67000 GP 10000 +SPL 4000	1	1	0
6	Associate Dean (Agri.)	37400-67000 GP 10000 +SPL 3000	7	2	5
7	Associate Dean (Agril Engineering)	37400-67000 GP 10000 +SPL 3000	1	1	0
8	Head of Department	37400-67000 GP 10000	12	9	3
9	Professor of Agronomy	37400-67000 GP 10000	11	4	7
10	Professor of Soil Science and Agril. Chemistry	37400-67000 GP 10000	6	2	4
11	Professor of Bio Chemistry	37400-67000 GP 10000	1	1	0
12	Professor of Food Science and Technology	37400-67000 GP 10000	1	0	1
13	Professor of Irrigation and Water Management	37400-67000 GP 10000	1	1	0
14	Professor of Agril. Botany	37400-67000 GP 10000	17	9	8
15	Professor of Agril. Entomology	37400-67000 GP 10000	6	1	5
16	Professor of Plant Pathology	37400-67000 GP 10000	9	4	5
17	Professor of Horticulture	37400-67000 GP 10000	9	4	5
18	Professor of Animal Science and Dairiy Science	37400-67000 GP 10000	6	2	4
19	Professor of Agril. Economics	37400-67000 GP 10000	5	1	4
20	Professor of Agril. Extension	37400-67000 GP 10000	5	3	2
21	Professor of Statistics	37400-67000 GP 10000	2	0	2



22	Professor of Soil and Conservation Engineering	37400-67000 GP 10000	2	2	0
23	Professor of Agril. Process Engineering	37400-67000 GP 10000	2	2	0
24	Professor of Irrigation and Drainage Engineering	37400-67000 GP 10000	3	0	3
25	Professor of Farm Power Machinery	37400-67000 GP 10000	5	0	5
26	Professor of Physics	37400-67000 GP 10000	1	0	1
27	Professor of Electric Engineering	37400-67000 GP 10000	1	0	1
28	Professor of Civil Engineering	37400-67000 GP 10000	1	0	1
29	Professor of Mathematics	37400-67000 GP 10000	1	0	1
30	Associate Director of Research	37400-67000 GP 9000	3	0	3
31	Professor of Food Process Technology	37400-67000 GP 10000	1	0	1
32	Professor of Food Safety and Quality	37400-67000 GP 10000	1	0	1
33	Professor of Food Process Engineering	37400-67000 GP 10000	1	0	1
34	Professor of Food Business Management	37400-67000 GP 10000	1	0	1
35	Professor of Food Plant Operations	37400-67000 GP 10000	1	0	1
36	University Librarian	37400-67000 GP 10000	1	0	1
37	Asso.Prof, Agronomy	37400-67000 GP 9000	42	34	8
38	Asso.Prof, Agril.Botany	37400-67000 GP 9000	32	25	7
39	Asso.Prof, Bio Chemistry	37400-67000 GP 9000	3	3	0
40	Asso.Prof, Soil Science and Agril.Chemistry	37400-67000 GP 9000	22	14	8
41	Asso.Prof, Agril. Entomology	37400-67000 GP 9000	14	7	7
42	Asso.Prof, Plant Pathology	37400-67000 GP 9000	18	12	6
43	Asso.Prof, Animal Science and Dairy Science	37400-67000 GP 9000	15	11	4
44	Asso.Prof, Agril. Economics	37400-67000 GP 9000	11	7	4
45	Asso.Prof, Horticulture	37400-67000 GP 9000	30	21	9
46	Asso.Prof, Agril. Extension	37400-67000 GP 9000	11	8	3
47	Asso.Prof, Statistics	37400-67000 GP 9000	2	2	0
48	Asso.Prof, English	37400-67000 GP 9000	1	0	1
49	Asso.Prof, Hindi /Marathi	37400-67000 GP 9000	2	0	2
50	Asso.Prof, Food Science and Technology	37400-67000 GP 9000	1	1	0
51	Asso.Prof, Soil and Conservation Engineering	37400-67000 GP 9000	6	5	1





52	Asso.Prof, Agril. Process Engineering	37400-67000 GP 9000	6	4	2
53	Asso.Prof, Farm Power Machinery	37400-67000 GP 9000	4	2	2
54	Asso.Prof, Irrigation and Drainage Engineering	37400-67000 GP 9000	4	2	2
55	Asso.Prof, Physics	37400-67000 GP 9000	1	0	1
56	Asso.Prof, Veterinary Science	37400-67000 GP 9000	2	1	1
57	Asso.Prof, Food Process Technology	37400-67000 GP 9000	2	0	2
58	Asso.Prof, Food Safety and Quality	37400-67000 GP 9000	2	0	2
59	Asso.Prof, Food Process Engineering	37400-67000 GP 9000	2	0	2
60	Asso.Prof, Food Business Management	37400-67000 GP 9000	2	0	2
61	Asso.Prof, Food Plant Operations	37400-67000 GP 9000	2	0	2
62	Asst.Prof, Agronomy	37400-67000 GP 9000	65	33	32
63	Asst.Prof, Soil Science and Agril.Chemistry	15600-39100 GP 6000	35	30	5
64	Asst.Prof, Bio Chemistry	15600-39100 GP 6000	5	3	2
65	Asst.Prof, Food Science and Technology	15600-39100 GP 6000	2	0	2
66	Asst.Prof, Agril.Botany	15600-39100 GP 6000	52	40	12
67	Asst.Prof, Agril. Entomology	15600-39100 GP 6000	46	29	17
68	Asst.Prof, Plant Pathology	15600-39100 GP 6000	45	35	10
69	Asst.Prof, Animal Science and Dairy Science	15600-39100 GP 6000	26	12	14
70	Asst.Prof, Agril. Economics	15600-39100 GP 6000	20	15	5
71	Asst.Prof, Horticulture	15600-39100 GP 6000	49	40	9
72	Asst.Prof, Agril. Extension	15600-39100 GP 6000	20	14	6
73	Asst.Prof, Veterinary Science	15600-39100 GP 6000	5	3	2
74	Asst.Prof, Statistics	15600-39100 GP 6000	10	6	4
75	Asst.Prof, Mathematics	15600-39100 GP 6000	2	2	0
76	Asst.Prof, Agril. Meterology	15600-39100 GP 6000	3	1	2
77	Asst.Prof, English	15600-39100 GP 6000	3	2	1
78	Asst.Prof, Home Science	15600-39100 GP 6000	1	0	1
79	Asst.Prof, Soil and Conservation Engineering	15600-39100 GP 6000	9	8	1
80	Asst.Prof, Food Process Technology	15600-39100 GP 6000	4	0	4
81	Asst.Prof, Food Safety and Quality	15600-39100 GP 6000	3	0	3
82	Asst.Prof, Food Process Engineering	15600-39100 GP 6000	3	0	3



83	Asst.Prof, Food Business Management	15600-39100 GP 6000	2	0	2
84	Asst.Prof, Food Plant Operations	15600-39100 GP 6000	3	0	3
85	Asst.Prof, Agril. Process Engineering	15600-39100 GP 6000	7	3	4
86	Asst.Prof, Farm Power Machinery	15600-39100 GP 6000	7	4	3
87	Asst.Prof, Irrigation and Drainage Engineering	15600-39100 GP 6000	11	10	1
88	Asst.Prof, Physics	15600-39100 GP 6000	1	0	1
89	Asst.Prof, Electric Engineering	15600-39100 GP 6000	1	1	0
90	Asst.Prof, Civil Engineering	15600-39100 GP 6000	1	0	1
91	Asst.Prof, Mechanical Engineering	15600-39100 GP 6000	1	1	0
92	Student Welfare Officer (College level)	15600-39100 GP 6600	1	0	1
93	Student Welfare Officer (University level)	15600-39100 GP 6600	1	0	1
94	Deputy Registrar	15600-39100 GP 6600	2	2	0
95	Medical Officer	9300-34800 GP 5400 (MBBS) 9300-34800 GP 4600	2	1	1
96	Asst.Registrar / Asst.Compt.	9300-34800 GP 4600	23	11	12
97	Deputy University Engg.	15600-39100 GP 6900	1	0	1
98	Sports officer	15600-39100 GP 6600	1	0	1
99	Security Officer	9300-34800 GP 4600	1	0	1
100	PA to V.C.	9300-34800 GP 4600	1	0	1
101	Asstt.Engg. (Civil)	9300-34800 GP 5400	1	1	0
102	Physical Training Instructor	15600-39100 GP 6000	8	4	4
103	College Librarian	15600-39100 GP 6000	7	3	4
104	University Engineer	37400-67000 GP 7600	1	1	0
105	Comptroller	37400-67000 GP 6600	1	1	0
106	Pay and Account officer	9300-34800 GP 4600	3	3	0
<b>Total Group A</b>			<b>862</b>	<b>530</b>	<b>332</b>
<b>Group B</b>					
1	Office Superintendent	9300-34800 GP4400	32	20	12
2	Superintendent(Computer)	9300-34800 GP4400	1	1	0
3	Superintendent( <b>Deputation</b> )	9300-34800 GP4400	3	1	2
4	Asstt. Superintendent.	9300-34800 GP4300	55	36	19
5	Stenographer (H.G.)	9300-34800 GP4400	9	4	5



6	Stenographer (L.G)	9300-34800 GP4300	18	4	14
7	Junior/ Sec. Engineer (Civil)	9300-34800 GP4200/4400	10	7	3
8	Junior/ Sec. Engineer (Electric)	9300-34800 GP4200/4400	5	2	3
9	Junior/ Sec. Engineer (Meca.)	9300-34800 GP4200/4400	0	1	-1
10	Sr. Tech. Asstt.	9300-34800 GP4200/4300	2	0	2
11	Chief Artist	9300-34800 GP4300	1	0	1
12	Movie Cameraman	9300-34800 GP4300	1	0	1
13	Sr.Res.Asstt.	9300-34800 GP4400	127	71	56
14	Veterinary Officer	9300-34800 GP4200/4400	3	0	3
<b>Total Group B</b>			<b>267</b>	<b>147</b>	<b>120</b>
<b>Group C</b>					
1	Sr.Clerk		150	105	45
2	Steno Typist		11	4	7
3	Clerk-Cum-Typist		226	176	50
4	Technical Asstt.(Lib)		1	1	0
5	Chief-Cataloguer		7	3	4
6	Issue Asstt.		9	4	5
7	Draughtsman		7	4	3
8	Tracer		7	2	5
9	Sr. Mechanic		4	1	3
10	Jr. Mechanic		3	2	1
11	Technical Asstt.		4	4	0
12	Mechanical Supervisor		1	1	0
13	Foremen Supervisor		2	1	1
14	Farm Mechanic		4	0	4
15	Fitter-Cum-Mechanic Turner		1	0	1
16	Fitter		6	5	1
17	Turner		3	3	0
18	Machinist		1	0	1





19	Foundryman		3	1	2
20	Audio Visual Operator		4	1	3
21	Carpenter		12	8	4
22	Welder		3	2	1
23	Wireman		24	11	13
24	Compounder (Medical)		2	1	1
25	FoundrymanCompounder(Vet.)		4	3	1
26	Nurse		1	1	0
27	Photographer		2	0	2
28	Artist-Cum- Photographer		4	4	0
29	Dark Room Asstt.		2	0	2
30	Asstt. Security Officer		1	1	0
31	Plumber		6	3	3
32	Maistry		12	5	7
33	Surveyer		1	1	0
34	Pump Operator		3	2	1
35	Telephone Operator		2	1	1
36	Compositor		2	2	0
37	Printer		1	1	0
38	Sr.Artist Technical Asstt.		1	1	0
39	Blacksmith		6	2	4
40	Electrician		3	1	2
41	Jeep Driver		67	37	30
42	Tractor Driver		17	6	11
43	Mechanic-Cum Electrician		1	1	0
44	Computer Operator		3	0	3
45	Agril. Asstt.		598	472	126
47	Live-Stock Supervisor		5	6	-1
48	Jr.Vet. Officer		2	1	1
49	Jr.Res.Asstt.		170	93	77
<b>Group C</b>			<b>1409</b>	<b>984</b>	<b>425</b>



Group D					
1	Laboratory Attendent		44	28	16
2	Library Attendent		8	4	4
3	Counter		54	29	25
4	Khalashi		0	0	0
5	Khansama		0	0	0
6	Binder		0	0	0
7	Massion		4	1	3
8	Mali		56	28	28
9	Security Gard		15	7	8
10	Lab-boy/keeper		0	0	0
11	Peon		181	133	48
12	G.House Attendant		0	0	0
13	Paricharak		0	0	0
14	Wireman Helper		0	0	0
15	Museum servant		0	0	0
16	Dresser		0	0	0
17	Vet Attendent		0	0	0
18	Watchman		153	89	64
19	Hamal		0	0	0
20	Field Maz.		0	0	0
21	Labor		1192	750	442
22	Gawali		0	0	0
23	Ploughman		0	0	0
24	Bullock Man		0	0	0
25	Milkman		0	0	0
26	Calf man		0	0	0
27	Polutaryman		0	0	0
28	Dairyman		0	0	0
29	Herdsman		0	0	0
30	Deliveryman		0	0	0
31	Cleaner		0	0	0
32	Sweeper		23	21	2



33	Attendants		0	0	0
34	Plant Collector		0	0	0
35	Workshop Mazdoor		0	0	0
36	Beldar		0	0	0
37	Ward Servant		0	0	0
38	Animal Attendent		0	0	0
39	Store. Asstt		0	0	0
40	Dispensary Attendant		0	0	0
41	Field Servant		0	0	0
42	Helper		0	0	0
43	Messenger		0	0	0
44	Naik		0	0	0
<b>Group D</b>			<b>1730</b>	<b>1090</b>	<b>640</b>
	<b>Total (A+B+C+D)</b>		<b>4268</b>	<b>2751</b>	<b>1517</b>





## 8. Campus Development Activities

### Rahuri Region completed work in 2019-20

Sr. No.	Name of Work	Estimated Cost	Fund Head	Remark
1	Replacment of damaged window, door shutter E & F boys hostel at Dr. ASCAET at C.C Rahuri	574009.00	ICAR-SAU	Work is completed
2	Providing BB coba water proofing to 2nd floor terrace (East side) E boys hostel at Dr. ASCAET at C.C. Rahuri	414090.00	ICAR-SAU	Work is completed
3	Providing BB coba water proofing to F hostel at Dr. ASCAET at C.C. Rahuri	865445.00	ICAR-SAU	Work is completed
4	Providing internal OBD colouring of F boys hostel at Dr. ASCAE at C.C. Rahuri	410894.00	ICAR-SAU	Work is completed
5	Construction of attached toilet block to existing KVPS office at MPKV, Rahuri (2nd call)	266675.00	University Receipt	Work is completed
6	Providing internal OBD colouring of E boys hostel at Dr. ASCAE at C.C. Rahuri	410894.00	ICAR-SAU	Work is completed
7	Providing chain link fencing with UCR to vegetable office complex(onion/tomato scheme) at C.C. Rahuri	696115.00	Product testing	Work is completed
9	Providing strong room facility and renovation at examination hall room no. 29 Dr. ASCAE at C.C. MPKV, Rahuri	161169.00	ICAR-SAU	Work is completed
10	Water proofing to Dr. Annasaheb shinde auditorium for Dr. ASCAE at C.C. MPKV, Rahuri	230762.00	ICAR-SAU	Work is completed
11	The work of Providing & fixing colour coated zinalume profiled sheets by replacment old A.C. Sheets, Structural steel works to Pluse Imp. Project at C C. Rahuri	243178.00	Revolving fund	Work is completed
12	Repairs and renovation to quarter No. E-2,10,54, D-13 and F-55 by water proofing, toilet flooring dado colouring and other allied works at C.C. Rahuri	296001.00	Maint & Repairs	Work is completed
13	Construction of store shed to NARP Dry land centre (Agro ForestrY) agronomy department at C.C. Rahuri	560954.00	Bamboo Project	Work is completed
14	Proposed chain link fencing to library building at C.c. Rahuri	565655.00	ICAR-SAU	Work is completed



15	Renvation of flooring doors, windows celing and other allied items for lecture hall (GF) for Agril Chemistry and soil science in agril Faculty building at C.C. Rahuri	819054.00	ICAR-SAU	Work is completed
16	Renovation fo Acoustic boards, water proofing coloring doors windows and other allied items for lecture hall no. 124 in agril chemistry and soil science in Agril Faculty building at C.C. Rahuri	660151.00	ICAR-SAU	Work is completed
17	Construction of farm shed for AICRP on Agroforestry at MPKV Rahuri	1560024.00	Bamboo Project	Work is completed
18	Construction of structural steel shed for displaying informations boards at horticulture at C.C. Rahuri	430393.00	Revolving fund (Horticulture)	Work is completed
19	Construction of various building for horticulture department at C.C. Rahuri	3675600.00	Revolving fund (Horticulture)	Work is completed
20	Providing colouring for internal passage and other allied works in post graduate institute at Central Campus Rahuri	260500.00	ICAR-SAU	Work is completed
21	Construction of Gene Bank at Central Campus Mahatma Phule Krishi Vidyapeeth Tal-Rahuri Dist- Ahmednagar	25515465.00	State Plan	Work is completed
22	Electrification work for Gene Bank project at Central campus MPKV Rahuri	2500000.00	State Plan	Work is in progress
23	Engineering, Fabricating, supplying, installing testing commissioning of thermal insulation works, refrigeration plant and the associated electrical works for Gene Bank Project, MPKV, Rahuri	13977852.00	State Plan	Work is completed

### Rahuri Region progress work in 2019-2020

Sr. No.	Name of Work	Estimated Cost	Fund Head	Remark
1	Providing cupboard shutter for E & F Boys hostel Dr. ASCAET building at C.C. Rahuri	800966.00	ICAR-SAU	Work is in progress
2	Providing external coloring to Class room, Toilets & Staircase of Dr. ASCAET at C.C Rahuri	856817.00	ICAR-SAU	Work is in progress
3	Providing external coloring to lab & toilet block of Dr. ASCAET at C.C Rahuri	863042.00	ICAR-SAU	Work is in progress



4	Providing acoustic wall paneling alluminum sliding window & internal OBD colouring to lecture hall A & B at Dr. ASCAET at C.C. Rahuri	396944.00	ICAR-SAU	Work is in progress
5	Providing acoustic wall paneling alluminum sliding window & internal OBD colouring to lecture hall C & D at Dr. ASCAET at C.C. Rahuri	396944.00	ICAR-SAU	Work is in progress
6	Construction of class rooms at Nursery of Horticulture department at C.C. Rahuri	1125274.00	Revolving und (Horticulture)	Work is in progress
7	Supply installation testing commissioning operation and maintenance of solarsteam cooking system (4Nos) for boys/girls hostel mess (capacity 300 stuents per day) in the Jurdiction of MPKV Rahuri	10646820.00	ICAR-SAU	Work is in progress
8	Renovation of Acoustic boards, water proofing coloring doors windows and other allied items for lecture hall no. 125 in agril chemistry and soil science in Agril Faculty building at C.C. Rahuri	658251.00	ICAR-SAU	Work is in progress
9	Supplying fixing and erecting of V.T. Pump sets substation transformers metering unit and water meter for lift irrigation scheme for central campus of MPKV Rahuri	23750506.00	RKVY	Work is in progress
10	construction of Girls hostel for Dr. Annasaheb Shinde college of Agri. Engineering and Technology at C.C. MPKV Rahuri	19798998.00	ICAR-SAU	Work is in progress
11	Construction of Girls hostel for UG students at C.C. MPKV Rahuri	57890175.00	State Plan	stay is given
12	Construction of Girls hostel for PG students at C.C. MPKV Rahuri	54045600.00	State Plan	stay is given
13	Construction of various building for organic farming Project at C.C. Rahuri	11089400.00	State Plan	Work is in progress
14	Providing internal and external colouring to Adminstrative Building at C.C. Rahuri	1753290.00	Maint & Repairs	Work is in progress
15	Construction of intake well, intake pipe line, jackwell with pump house and foot bridge fo rLift Irrigation scheme for C.C. Rahuri	15206009.00	RKVY	Work is in progress
16	Providing and laying 800 dia HDPE Pipe line, 800 & 450 mm dia PSC Pipe line, 315 mm dia PVC pipe, Balancing Chamber for Lift Irrigation scheme for C.C. Rahuri	102797821.00	RKVY	Work is in progress



17	Construction of administrative building boys & girls hostel at Punyshlok Ahilyadevi Holkar Agriculture College at Halgaon Tal-Jamkhed Dist - Ahmednagar	242789000.00	State Plan	Work is in progress
18	External electrification Providing electric supply, street lights and other amenities at Punyashlok Ahilyadevi Holkar college of Agriculture Halgaon Tal-Jamkhed Dist- Ahmednagar	9876041.00	State Plan	Work is in progress
19	Providing internal electrification to the college building, Hostels, Library, Amenity building, Gymkhana, Guest house and Residential quarters at Punyashlok Ahilyadevi Holkar college of Agriculture Halgaon Tal-Jamkhed Dist- Ahmednagar	13461093.00	State Plan	Work is in progress

### Pune Region completed work in 2019-2020

Sr. No.	Name of Work	Estimated Cost	Fund Head	Remark
1	Renovation to the Girls hostel block (3 Nos) at Agriculture Technical School manjri dist-Pune	3645383.00	Maint & Repairs Special grants	Work is completed
2	Repairs to road surface from kahirewadi gate to main building to Agriculture college Pune	1211619.00	Maint & Repairs Special grants	Work is completed
3	Water proofing to tarrace slab & renovation to toilet block for library building at A.C. Pune	855669.00	ICAR-SAU	Work is completed
4	Repairs & Renvoation toilet block on 2nd floor Girls hostel at A.C. Pune	698901.00	ICAR-SAU	Work is completed
5	Renovation to the toilet block of Agronomy building & water proofing to terrace slab at A.C. Pune	765530.00	ICAR-SAU	Work is completed
6	Renovation of Electrification to lecture hall & computer lab (1st floor) at Horticulture college, Pune	249510.00	ICAR-SAU	Work is completed
7	Providing Air conditioner to bio tech lab at A.C. Pune	265860.00	ICAR-SAU	Work is completed
8	Renovation of Electrification to labs & office rooms at ground floor of Horticulture college, Pune	265793.00	ICAR-SAU	Work is completed
9	Providing Air conditioner in shirname hall at A.C. Pune	265196.00	ICAR-SAU	Work is completed



10	water proofing to the dome area to old main building at A.C. Pune	413040.00	ICAR-SAU	Work is completed
11	Water proofing to jack arch roof slab of chemistry building at A.C. Pune	906255.00	ICAR-SAU	Work is completed
12	Construction of toilet block of Gents & Ladies at Dairy Section at A.c. Pune	503860.00	ICAR-SAU	Work is completed
13	Providing LED tube light fittings to B,C,D & E boys hostel at A.c Pune	441314.00	ICAR-SAU	Work is completed
14	Internal electirfication to shirname hall at Agriculture colloge Pune	261306.00	Maint & Repairs Special grants	Work is completed
15	Providing LED tube light fittings to girls hostel at A.c Pune	356575.00	ICAR-SAU	Work is completed
16	Providing electrification to the seed sales counter near main entrance gate of Horticulture college Pune	141616.00	University Receipt	Work is completed
17	Fixing of Broken Glass pans for rooms of boys hostel, construction of platforms for drinking water coolers and other allied works for Boys hostel at Agril. Colloege Pune	286891.00	ICAR-SAU	Work is completed

### Pune Region progress work in 2019-2020

Sr. No.	Name of Work	Estimated Cost	Fund Head	Remark
1	Construction of Grils hostel of college of Agriculture pune for MPKV, Rahuri	20593708.00	ICAR-SAU	Work is in progress
2	Construction of Auditorium at College of Agriculture Pune	63154800.00	State Plan	stay is given
3	Construction of Girls hostel for UG students for college of agriculture Pune	62649710.00	State Plan	stay is given



**Dhule Region completed work in 2019-2020**

Sr. No.	Name of Work	Estimated Cost	Fund Head	Remark
1	Renovation of lecture hall, office with plastering colouring PVC carpet for extension building at Agriculture college Dhule	286593.00	ICAR-SAU	Work is completed
2	Providing false ceiling colouring to laboratory lecture hall to dairy section at Agriculture College, Dhule	293357.00	ICAR-SAU	Work is completed
3	Renovation by providing water proofing replacement of drainage line water supply of library at Agriculture college Dhule	261908.00	ICAR-SAU	Work is completed
4	Providing inverter for examination hall at College of Agriculture Dhule	150274.00	ICAR-SAU	Work is completed
5	Renovation of electrification work and replacing existing tube fitting by energy saving LED Panel lights for examination hall at College of Agriculture Dhule	238641.00	ICAR-SAU	Work is completed
6	Renovation by providing false ceiling with internal colouring to examination hall at A.C. dhule	853153.00	ICAR-SAU	Work is completed
7	Renovation of electrification work to old Quarter at Nimkhedi farm ARS Jalgaon	144817.00	Maint & Repairs	Work is completed
8	Renovation of electrification work of Girls Hostel at ATS Jalgaon	72366.00	Maint & Repairs	Work is completed
9	Providing BB Coba water proofing to NB-1, NB-2 type Qtr at ARS, Niphad, Dist- Nshiek	148293.00	University Receipt	Work is completed

**Dhule Region progress work in 2019-2020**

Sr. No.	Name of work	Estimated Cost	Fund Head	Remark
1	Renovation of drainage line overhead and ground waters tank at A.C. Dhule (2nd Call)	5616996.00	Maint & Repairs Special grants	Work is in progress
2	Construction of Auditorium at College of Agriculture dhule	52067200.00	State Plan	stay is given
3	Construction of Girls hostel for UG students for college of agriculture dhule	58441510.00	State Plan	stay is given





4	Providing internal electrification to the office building, Hostels, Library, Amenity building, Gymkhana, Guest house and Residential quarters at Agriculture college Muktainagar Dist- Jalgaon	14835836.00	State Plan	Work is in progress
5	Providing external electrification and street lights to the office building, Hostels, Library, Amenity building, Gymkhana, Guest house and Residential quarters at Agriculture college Muktainagar Dist- Jalgaon	12506571.00	State Plan	Work is in progress
6	Supplying Installation testing and commissioning of automatic electric fraction passenger LIFT at Administrative Building at College of Agriculture Muktainagar Dist- Jalgaon	1485619.00	State Plan	Work is in progress
7	Construction of administrative building boys & girls hostel at agriculture college Muktainagar Dist- Jalgaon	209572000.00	State Plan	Work is in progress
8	Supplying Installation testing and commissioning of automatic electric fraction passenger LIFT at Administrative Building at College of Agriculture Muktainagar Dist- Jalgaon	1485619.00	State Plan	Work is in progress
9	Providing ON GRID root top solar Energy systems for Adminsistrative building boys hostel and girls hostel at Agriculture College Muktainagar dist- Jalgaon	1651669.00	State Plan	Work is in progress

### Kolhapur Region progress work in 2019-2020

Sr. No.	Name of Work	Estimated Cost	Fund Head	Remark
1	Construction of half covered threshing yard at NARP shenda park Kolhapur	2064473.00	ICAR-SAU	Work is in progress
2	Construction of rat proof godown at NARP shenda park Kolhapur	2657744.00	ICAR-SAU	Work is in progress
3	Construction of Auditorium at College of Agriculture Kolhapur	56137600.00	State Plan	stay is given
4	Construction of Girls hostel for UG students for college of agriculture Kolhapur	62649710.00	State Plan	stay is given
5	Construction of Building and infrastrucure facilities for Krantisinha Nana Patil Government College of Food Technology at Peth tal-walwa dist-Sangli.	381517281.00	State Plan	stay is given



## List of works in progress at Dhule (2018-19)

Sr. No.	Name of work	Estimated Cost	Fund Head	Remarks
1	Providing internal Electrification to the office building, Hostels, Library, Amenity building, Gymkhan, Guest house, and Residential quarters at Agriculture College Muktainagar, Dist - Jalgaon.	14835836/-	State Plan	Work is in progress
2	Construction of entrance wall for main gate at Agril. College, Nandurbar	254979/-	TSP	Work is completed
3	Providing ON GNID roof top solar energy systems for administrative building boys hostel and grils hostel at Agril. College, Muktainagar, Dist- Jalgaon	1651669/-	State Plan	Work is completed
4	Supplying installation testing and commissioning of automatic electric traction passenger LIFT at Administrative building at College of Agril. Muktainagar, Dist- Jalgaon	1485619/-	State Plan	Work is completed
5	Providing solar hot water systems for boys hostel, girls hostel and guest house at Agril. College Muktainagar, Dist- Jalgaon	1352955/-	State Plan	Work is in progress
6	Providing external electrification and street lights to the office building hostels library amenity building gymkhana guest house & residential quarters at Agriculture College, Muktainnagar, Dist- Jalgaon	12506571/-	State Plan	Work is in progress
7	Construction of administive building boys & girls hostel at agriculture college Muktainnagar Dist- Jalgaon	209572000/-	State Plan	Work is in progress



## 9. The Financial Status of Universities

During the Financial Year 2019-2020 the grants of Rs.296,14,90 thousand have been received from Government of Maharashtra under Non-Plan Sector, out of these the expenditure of Rs.296,14,90 thousand has been incurred.

The grants of Rs.25,97,35 thousand have been received under Plan Scheme against which the expenditure of Rs.16,11,35 thousand has been incurred.

ICAR, New Delhi, Govt. of India and State Government (other Dept.) grants of Rs.55,80,10 thousand have been received & expenditure out of these grants is Rs.47,72,12 thousand.

During the Financial Year 2019-2020 the Abstract of Received grants and expenditure incurred by the University are given below.

Sr. No	Head of Account	Sanctioned / Released Grants (Rs. Thousand)	Expenditure (Rs. Thosuan)
1.	<b>State Govt. 01- Crop. Husb. (Non-Plan Scheme ) ( 24150025)</b>		
	1) (04) Pension Payment	147,70,00	147,70,00
	2) (31) Asstt. Grants (Non- Salary)	7,02,26	7,02,26
	3) (36) Asstt. Grants (Salary)	138,87,78	138,87,78
	Total Rs.	<b>293,60,04</b>	<b>293,60,04</b>
2.	<b>State Govt. 03 – Ani. Husb. (Non-Plan Scheme) (24150197)</b>		
	1) (36) Asstt. Grants (Non- Salary)	7,70	7,70
	2) (31) Asstt. Grants (Salary)	2,47,16	2,47,16
	Total Rs.	2,54,86	2,54,86
	<b>(Non-Plan) Total Rs.</b>	<b>296,14,90</b>	<b>296,14,90</b>
3.	<b>State Govt. 01- Crop.Husb. (Plan Scheme) ( 24150072) (2415 1086)</b>		
	1) (31) Asstt. Grants (Non – Salary)	1,20,00	1,20,00
	2) (35) Asstt. Grants for Capital Creations.	17,50,00	7,64,00
	3) (36) Asstt. Grants (Salary)	7,27,35	7,27,35
	Total Rs.	<b>25,97,35</b>	<b>16,11,35</b>
4.	College of Agriculture, Nandurbar (24158291)	2,70,00	2,70,00
5.	E.B.C. Scholarship (24150938)	19,68,94	19,68,94
6.	D.C.P.S. State Govt. Share (24151021)	3,40,81	3,40,81
7.	ICAR ( 75:25 ) Schemes 75 % Share / Govt. of India etc. Grant -in-aid Schemes	<b>55,80,10</b>	<b>47,72,12</b>
8.	University Revenue Receipts Financial: - The Revenue generated by the University during F.Y. 2019-2020 is Rs. 47.58 Crore. From the University Revenue Receipt Rs. 45.34 Crore allotted to various Schemes for Contingency expenditure for various office & farm activities and for capital for various revolving funds.		







# Mahatma Phule Krishi Vidyapeeth

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