

MPKV at a Glance 2019

Recipient of Government of India's
Institution of Excellence Award

महात्मा फुले कृषि विद्यापीठ,
राहुरी



MAHATMA PHULE KRISHI VIDYAPEETH
RAHURI



Mahatma Phule Krishi Vidyapeeth

Rahuri - 413 722, Dist. Ahmednagar

www.mpkv.ac.in

Citation

Gadakh S. R., Kharde P. B., Deshmukh B. A., Sadaphal S. S. and Rajmane S. B. (2019)
MPKV : At a Glance-2019, Mahatma Phule Krishi Vidyapeeth, Rahuri. 44 p.

Chief Editor

Dr. Sharad Gadakh

Director, Extension Education

Editor

Dr. Pandit Kharde

Officer Incharge, Communication Centre

Associate Editors

Dr. Bhagwan Deshmukh

Dr. Sachin Sadaphal

Shri. Sunil Rajmane

Photographs

Shri. Rajendra Jambhale

Shri. Pradeep Kolapkar

Shri. Balasaheb Salve

MPKV/Extn./Pub.No.2289/Dec./2019



Mahatma Phule Krishi Vidyapeeth

Rahuri, Dist. Ahmednagar - 413 722 (MS)

The Mahatma Phule Krishi Vidyapeeth (MPKV), Rahuri is the premier Agricultural University in Maharashtra that renders services to the farmers through Education, Research and Extension Education. In pursuance of the Maharashtra Agricultural University (Krishi Vidyapeeth) Act 1967, initially, the Maharashtra Agricultural University (Krishi Vidyapeeth) was established for the entire Maharashtra State and started functioning in March, 1968 with its office at Mumbai. The office was shifted to College of Agriculture, Pune. Later on in 1972, four agricultural universities were established in Maharashtra. Mahatma Phule Krishi Vidyapeeth, Rahuri is one of them established on 29th March, 1968 for the western Maharashtra having jurisdiction spread over 10 districts *viz.*, Jalgaon, Nandurbar, Dhule, Nashik, Ahmednagar, Pune, Solapur, Satara, Sangli and Kolhapur. The University is named after the great social reformer "Mahatma Jyotiba Phule".

MANDATES

- To provide education in agriculture and allied sciences.
- To have further advancement of learning and research in agriculture and allied sciences.
- To integrate and coordinate the teaching of the subjects in the different faculties of the university.
- To coordinate the education, research and extension education activities for augmentation of agricultural production.
- To provide integrated agricultural education activities at all levels for maximum effectiveness and at a minimum cost.
- To undertake and guide extension education programmes.

GOAL

Sustainable growth of agriculture by interfacing education, research and extension education initiatives complemented with efficient and effective institutional, infrastructural support that will create a proper fit between humanity and its habitat.

VISION

To harness science to ensure comprehensive and sustained physical, economic and environmental access to food and livelihood security through generation, assessment, refinement and adoption of appropriate technologies.



Overview

- MPKV-Recipient of "Institution of Excellence Award (2008)" by Govt. of India - A Special grants of Rs.100 crore.
- MPKV bestowed with the "Sardar Patel Best Institution Award" by the ICAR, New Delhi for excellence in the field of Education, Research and Extension Education.
- Born as per the Maharashtra Agricultural University (Krishi Vidyapeeth) Act 1967, in the year 1968 with its head quarter at Rahuri, Dist. Ahmednagar (M.S.).
- The Hon'ble Governor of Maharashtra state is the Chancellor of the University, The Minister of Agriculture, Maharashtra state is the Pro-Chancellor, while, Vice Chancellor is the Head of the University.
- The highest policy making body is the Executive Council. The Hon'ble Vice Chancellor, MPKV is the Chairman of this Council. The Council constitutes of nominated peoples representatives, eminent members from Agriculture and Development Departments, Scientists, representative of ICAR and progressive farmers.
- The University is assisted by Academic Council, Agricultural Research Council, Extension Education Council, Council for Co-ordination and Review of Seed Production and Agricultural Development Programme.
- The jurisdiction of MPKV consists of 10 districts of Western and North Maharashtra viz., Jalgaon, Dhule, Nandurbar, Nashik, Ahmednagar, Pune, Solapur, Sangli, Satara and Kolhapur comprising of 5 Agro-climatic Zones.
- MPKV consists of 27 research stations in 5 agro-climatic zones including 4 State level Crop Specialists, 4 Zonal Agricultural Research Stations and 17 Strategic and Verification Research Centres to conduct research.
- Seven constituent Agriculture Colleges at Pune, Dhule, Kolhapur, Nandurbar, Muktainagar, Karad and Halgaon, one Horticulture College at Pune and one Agricultural Engineering and Technology College at Rahuri and 63 unaided affiliated Colleges in the jurisdiction of MPKV.
- MPKV offers Post Graduate education at Central Campus, Rahuri and College of Agriculture, Pune, Kolhapur and Dhule; Ph.D. programme at Rahuri; B. Tech. (Agril Engg.), M. Tech. (Agril. Engg.) at Rahuri with high quality faculty and modern laboratories. Special infrastructure facilities for international students.
- Faculty of Lower Agricultural Education offers Diploma courses in Agriculture through 9 constituent, one granted and 76 unaided affiliated Agricultural Technical Schools under MPKV.
- Seventeen KVKs in the jurisdiction of MPKV. Four Krishi Vigyan Kendras (KVKs) under MPKV at Dhule, Mamurabad (Jalgaon), Borgaon (Satara) and Mohol (Solapur). 13 KVKs are under NGOs in the jurisdiction of MPKV for transfer of technology.

EDUCATION

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, Animal Husbandry, Diploma in Agriculture Technology and Polytechnics 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, 7 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. Center for Advanced Agricultural Science and Technology (CAAST) for Climate Smart Agriculture and Water Management (CSAWM) under the NAHEP of the University has started the Post Doctoral programme and will soon start the Post Graduate Diploma in Climate Smart Agriculture and Water Management.

Under Graduate Programme

Intake capacity of 9 constituent colleges and 63 unaided affiliated Agril and Allied colleges is 844 and 4730 respectively, per year for the under graduate programme. At present university has 64 unaided affiliated Agriculture and Allied colleges offering degree programmes in Agriculture and Allied subjects on non-grant basis with intake capacity of 60 students in Agriculture colleges and 40 students in Allied colleges and some of the colleges have additional division.

Period/Year	Particulars of Development
1907	Establishment of College of Agriculture, Pune
1960	Establishment of College of Agriculture, Dhule
1963	Establishment of College of Agriculture, Kolhapur
1968	Establishment of Mahatma Phule Agricultural University, Rahuri
1969	Establishment of Dr. A.S. CAE, MPKV, Rahuri
1972	Establishment of PGI, MPKV, Rahuri
1975 -80	Setting up the authority Statutory bodies such as Board of studies, Faculty and Academic Council, Executive Council for finalization of academic regulations, curricula etc.
1980-85	Implemented M. Tech. programme at CAE, MPKV, Rahuri Started B. Sc. (Hort.) degree programme at Pune Started Department of Food Science and Technology at central campus, MPKV, Rahuri Established National Level Residue Analysis Laboratory at central campus, MPKV, Rahuri
1985-90	Started Department of Agril. Meteorology at College of Agriculture, Pune
1990-95	Started Inter Faculty Department of Irrigation and Management
1995- 2000	Implemented revised UG curriculum (1998-99) Started PG programme in Agri-Business Management in Agricultural Economics at MPKV, Rahuri Started Ph. D. programme in Biochemistry at central campus, MPKV, Rahuri Established High-Tech Floriculture and Vegetable Project at College of Agriculture, Pune Started Ph. D. programme by course work in 5 Departments
2000-05	Implemented revised M. Sc. (Agri.) curricular programme as suggested by ICAR The University was awarded with the 'Sardar Patel outstanding Agricultural University Award- 2002' for overall development in agriculture Established State Level Bio-technology laboratory and Bio-control Laboratory at central campus, MPKV, Rahuri Connected the University library and college libraries to V-SAT for internet facility
2005-07	Inclusion of Agriculture Subject in School Education : A Report submitted to Govt. of Maharashtra in Jan. 2007 Implemented revised syllabus as per Fourth Deans' Committee Report for under graduate degree programme from 2006-07
The accreditation to the University was granted for the work up to 2006-2007	
2007-08	Third position in competitive examination conducted by ICAR, New Delhi at National level College of Agriculture, Pune celebrated its' Centenary Year The Government of India sanctioned an amount of Rs. 100 crores as special grants as an Institution of Excellence
NAEAB granted accreditation to all the constituent colleges of the MPKV, Rahuri for a period of five years up to August, 2013.	
2008-10	Started Master of Business Management Programme in Agriculture at College of Agriculture, Pune MPKV bagged second position in ICAR's JRF 2008 Construction of Bio-technology Lab at College of Agriculture, Pune The University secured the third position in JRF examination conducted by ICAR, New Delhi at national level. (2009-10)



Post Graduate Programme

The intake capacity of M.Sc. (Agri.) programme is - 294 students, M.Sc. (Hort.) - 28, M.Tech. (Agril. Engg.) - 12, M.Sc. (Agril. Biotech.) - 8, M.B.A. (Agri.) – 30 students thus in all total 372 students for Master's programme and for Doctoral programme - 84 students per year.

Lower Agricultural Education

The University has constituent Agricultural Technology Schools (09) affiliated Agricultural Technology Schools (38) and affiliated Agril. Polytechnics (39) in all total 87 Agricultural Technology Schools and Agril. Polytechnics with a intake capacity of 60 students per year. The University has one constituent and four affiliated Mali Training Center with an intake capacity of 40 students.

During the last decade, successful efforts have been made in improving the course curricula of UG and PG programmes. UG curriculum is revised as per the V Deans recommendation, implemented from the year 2017-18, Post Graduate programme has been revised as per the NCG recommendations, and implemented from the year 2009-10. Provided additional facilities and amenities viz., ladies hostels, library buildings, tissue culture laboratories and polyhouse facilities at all the constituent colleges. In addition, a Hi-Tech Floriculture and Vegetable Project at Pune and Radioisotope, Biotechnology laboratories, Post Harvest Management Laboratory and Biodiversity Center at Rahuri are established. The students are encouraged for participation in various educational, social and cultural activities.

	Construction of Laboratories for Bio-technology Research Center at MPKV, Rahuri Started CET examination for admission to Master programme Post Graduate curriculum has been revised as per the NCG recommendations and implemented from the year 2009-10
2010-12	The MBA (Agri.) programme at College of Agriculture, Pune confirmed the registration to ISO 9001:2008 for its Quality Management System. The video conferencing facility launched at MPKV, Rahuri & College of Agriculture- Kolhapur, Pune and Dhule Ph.D. degree programme was started in three disciplines viz. Irrigation and Drainage Engineering, Soil and Water Conservation Engineering, Agricultural Processing Engineering at Dr. A. S. College of Agril. Engineering., Rahuri from the academic year 2011-12
2012-13	Celebration of Golden Jubilee Year : College of Agriculture, Kolhapur International Collaboration with Van Hall Larenstein University, Netherland for B.Sc. (Agri.) 3+1 & B.Sc. (AH) 2+2 programme Establishment of College of Agriculture, Karad (2013) Establishment of College of Agriculture, Nandurbar (2013)
2013-15	International Collaboration with Asian Institute of Technology, Bangkok for Unified 4+1 UG-PG Agribusiness Management programme Started PG programme in the discipline of Dairy Science at College of Agriculture, Kolhapur Establishment of College of Agriculture, Muktainagar (2015)
2015-17	Started CET examination for admission to Doctoral programme International Collaboration with Asian Institute of Technology, Bangkok for ELP in Horticulture
NAEAB granted accreditation for a period of two years (2017-18) i.e. up to March 31, 2018.	
2017-19	UG curriculum has revised as per V Deans Committee Recommendation and implemented from the academic year 2017-18 Started CET examination for admission to Under-Graduate programme ICAR sanctioned CAAST for Climate Smart Agriculture and Water Management (CSAWM) under National Agril. Higher Education Project amounting to Rs. 19.90 crores Establishment of College of Agriculture, Halgaon (2018)
NAEAB granted accreditation for a period of five years (2018-19 to 2022-23)	



As a result, the students of this university have excelled success in various public service competitions, SRF, JRF fellowships and extracurricular activities like sports, NCC, NSS etc. Up till the year 2018, since inception, University has produced skilled human resources as below.

Sr. No.	Degree	No. of students
1	Ph. D.	840
2	M. Sc. (Agri.)	6356
3	M. Sc. (Hort.)	146
4	M. Tech. (Agril. Engg.)	309
5	M.Sc. (Agri. Biotech)	37
6	MBA (Agri.)	279
7	B. Sc. (Agri.)	31647
8	B. Sc. (Hort.)	2150
9	B. Tech. (Agril. Engg.)	3786
10	B. Tech. (FST)	1503
11	BBA (Agri.)	1557
12	B.Sc. (Agril. Biotech)	1494
13	Agril.Tech. Schools	55647
14	Agril. Polytechnics	527
15	Mali Training Center	4024
Total		110302

Constituent Colleges

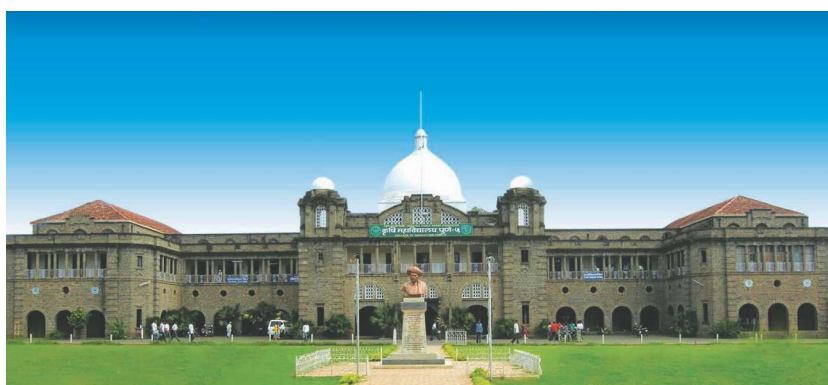
List of constituent under graduate colleges and their intake capacity

Sr. No.	Name of College	No. of Colleges	Intake Capacity
1.	College of Agriculture, Pune/Dhule/Kolhapur/Karad/Nandurbar/Muktainagar /Halgaon	7	748
2.	College of Horticulture, Pune	1	32
3.	Dr. A.S. College of Agril. Engineering and Technology, MPKV, Rahuri	1	64
Total		9	844



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 with land holding of 90 ha. 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 and Prawns Farming Unit, Medicinal and Aromatic Plants Project and a well equipped nursery.



Name of the Course/ Degree	Intake Capacity
B.Sc. (Hons) Agriculture	190
M.Sc. (Agri.)	54
M.Sc. (Hort.)	06
M.B.M. (Agri.)	30
Ph.D. (Agril. Met.)	02

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. The College has a beautiful campus with spacious buildings for each department. The college has a total land holding of 206.43 ha. 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.



Name of the Course/ Degree	Intake Capacity
B.Sc. (Hons) Agriculture	128
M.Sc. (Agri.)	24
M.Sc. (Hort.)	04

Rajarshee Chhatrapati Shahu Maharaj College of Agriculture, Kolhapur

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. This college is celebrating its Golden Jubilee Year in the year 2013. This college has annual intake capacity of 190 students with land holding of 85.55 ha. It offers PG degree programme in various subjects. 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.



Name of the Course/ Degree	Intake Capacity
B.Sc. (Hons) Agriculture	190
M.Sc. (Agri.)	48
M.Sc. (Hort.)	06

College of Agriculture, Karad

College of Agriculture, Karad established in 2013. The College has newly established Administrative building, Library, Boys' and Girls' hostels, Students Amenity Complex, Playground and Instructional Farm. The first batch of students from this College has successfully completed B. Sc (Agri.) degree programme during 2016-17.



Name of the Course/ Degree	Intake Capacity
B.Sc. (Hons) Agriculture	60

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. The College has newly established Administrative building, Library, Boys' and Girls' hostels, Students Amenity Complex, Playground and Instructional Farm.



Name of the Course/ Degree	Intake Capacity
B.Sc. (Hons) Agriculture	60

College of Agriculture, Muktainagar

The college established in 2015. It has an annual intake capacity of 60 students per year. It offers under graduate B.Sc. (Honors) Agriculture degree programme.

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. It offers under graduate B.Sc. (Honors) Horticulture degree programme. The college has its own building with well-developed classrooms, laboratories, LAN, computer and internet facilities.



Name of the Course/ Degree	Intake Capacity
B.Sc. (Hons) Horticulture	32

Dr. Annasaheb Shinde College of Agricultural Engineering and Technology, Rahuri

The college is 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 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 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 and 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.



Name of the Course/ Degree	Intake Capacity
B.Tech. (Agril.Engg.)	64
M.Tech. (Agril.Engg.)	12
Ph.D. (Agril.Engg.)	12

Post Graduate Institute, Rahuri

The Post Graduate Institute was established in 1972 to meet the higher educational needs of agriculture in the State. The institute offers M.Sc. (Agri) degree in 18 disciplines namely- Agronomy, Genetics & Plant Breeding, Seed Science & Technology, Plant Physiology, Animal Science, Dairy Science, Plant Pathology, Agril. Microbiology, Agricultural Economics, Agricultural Entomology, Extension Education, Fruit Science, Vegetable Science, Bio-chemistry, Food Science and Technology, Soil Science and Agril. Chemistry, Agricultural Biotechnology and Irrigation Water Management. The Ph. D. programme is offered in seventeen disciplines. 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 centres are available to students 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 and Bakery Unit.



Name of the Course/ Degree	Intake Capacity
M.Sc. (Agri.)	168
M.Sc. (Hort.)	12
M.Sc. (Bio-tech.)	08
Ph.D. (Agriculture)	70

Affiliated Colleges

The University has 64 affiliated unaided Agriculture and allied colleges in its jurisdiction.

Sr. No.	Affiliated Colleges under the jurisdiction	No. of Colleges	Intake capacity
1.	B.Sc. (Hons) Agriculture	27	2820
2.	B.Sc. (Hons) Horticulture	5	240
3.	B.Tech. (Food Tech.)	8	400
4.	B.Tech. (Biotechnology)	6	360
5.	B.Tech. (Agri.Engg.)	8	440
6.	B.Sc. (Hons) Agri. Business Management	9	440
7.	B.Sc. (Hons) Animal Husbandry	1	30
Total		64	4730

Educational Quality Assurance and Reforms

1. Curriculum Development

A. Undergraduate

- University is implementing the under graduate syllabus as per the recommendations of the V Dean Committee of the ICAR, New Delhi from the academic year 2017-18.
- The component of Student Rural Entrepreneurship Awareness Development Yojana (READY) has been included in the under graduate syllabus for developing confidence in the graduates.
- An utmost effort has been made to improve and maintain high technology standards in education. The key aspects of revised curriculum includes

1. Student Rural Entrepreneurship Awareness Development Yojana (READY)
2. Introduction of Common Courses / Courses on Yoga and Human Values & Ethics
3. Practice/Practical Oriented Under Graduate Programme
4. Holistic Distribution of Courses

5. Degrees in Agricultural Sciences as Professional
6. Uniformity in UG and PG Degree Nomenclature

B. Post-Graduate

- PG curriculum is being revised at national level by ICAR-NCG (National Core Group). Subject Matter Experts (SMEs) of different disciplines from the University are contributing their suggestion to Convener, BSMA of different disciplines.
- Centre for Advanced Agricultural Science and Technology for Climate Smart Agriculture and Water Management of the University has started the Post Doctoral programme and will soon start the Post Graduate Diploma in Climate Smart Agriculture and Water Management.

C. Lower Agricultural Education

- Revision of syllabus for Agril. Polytechnic (Three Years English Medium)

2. Quality Assurance

- Accreditation: Upon the recommendation of the ICAR Peer Review Committee and Education Division and meeting the accreditation criteria, the National Agricultural Education Accreditation Board (NAEAB) has granted accreditation to the University and it's following constituent colleges for the period of five years (2018-19 to 2022-23).
 - College of Agriculture, Pune
 - College of Agriculture, Dhule
 - RCSM College of Agriculture, Kolhapur
 - College of Agriculture, Nandurbar
 - Dr. AS College of Agriculture Engineering and Technology, Rahuri
 - Post Graduate Institute, Rahuri
 - University is encouraging its unaided affiliated colleges to get accredited from National Agricultural Education Accreditation Board (NAEAB). Further, Affiliated colleges under the ambit of University are evaluated periodically by internal evaluation committee under the Chairmanship of respective Deans to maintain and ensure the educational standards.
- 3. Minimum Requirements for Establishments of New College in Agriculture and Allied Disciplines as per ICAR Guidelines viz., Land Requirements, Departments, Faculty Strength and Infrastructure.
- 4. Declaration of Agriculture and Allied Courses as Professional Agriculture, Animal Husbandry, Dairy Development and Fisheries Department, Government of Maharashtra vide notification declared following undergraduate courses as professional educational courses:
 - B. Sc. (Honors) (Agriculture)
 - B. Sc. (Honors) (Horticulture)
 - B. Tech. (Agriculture Engineering)
 - B. Tech. (Food Technology)
 - B. Tech. (Biotechnology)
 - B. Sc. (Honors) (Community Science)
 - B. Sc. (Honors) (Forestry)



Adjunct faculty/Guest Lecture/Capacity Building

- For the capacity building of faculty the 174 faculty members and 16 students proceeded for Winter School/Summer School/Refresher courses National International Conference at various places of the country during the year 2018-19.
- Special lecture on 'Challenges before Indian Youth on Issues in Agriculture' by Social Reformer Shri. Kumar Saptarshi was organized on 17th January, 2019 at College of Agriculture, Karad.
- National Level Food and Nutritional Security Conclave and XIV Convention of the ISAB jointly organized by MPKV, Rahuri and Indian Society of Agril. Biochemists have been organized during 25-27th February, 2019 at Central Campus, MPKV, Rahuri.
- A Guest Lecture of Dr.D.Raghunatha Rao, Sr. Deputy Director/Scientist F, ICMR, Hyderabad on 'Nutrition & Health' organized at College of Agriculture, Pune on 8th March, 2019.
- Two PG & thirteen Ph.D students attended International Training entitled “Drones, AI and Geo-informatics for Climate Smart Agriculture and Water Management” during 14th October to 13th November, 2019 at AIT, Bangkok, Thailand.

International Programmes

- The University has started International 3+1 B.Sc. (Agri.) programme in collaboration with College of Agriculture, Baramati & Van Hall Larenstein University, Netherland from the academic year 2012-13.
- University also started International 2+2 B.Sc. (Animal Husbandry) programme in collaboration with Agriculture Development Trust, Baramati and Larenstein University, Netherland from the academic year 2013-14 with intake capacity of 30 students.
- The University has started International BBA (Agri.) 2+2 programme in collaboration with College of Agriculture, Baramati and Van Hall Larenstein University, Netherland from the academic year 2014-15 with intake capacity of 20 students per year.
- University also started International Unified 4+1 UG-PG Agribusiness Management programme in collaboration with College of Agriculture, Baramati and and Asian Institute of Technology, Bangkok from the academic year 2014-15 with intake capacity of 30 students per year.



Memorandum of Understandings

University has signed MoUs with various National and International Universities and organizations for mutual collaboration.

A) International Linkages

■ Van Hall Larenstein University, Netherland

- B.Sc. (Agri.) 3+1
- B.Sc. (AH) 2+2
- BBA (Agri.) 2+2
- Experiential Learning Programme in Agri Business Management



■ Asian Institute of Technology, Bangkok

- Unified 4+1 UG-PG Agribusiness Management
- Experiential Learning Programme in Horticulture Module

B) National Linkages

- Jain Irrigation Systems Ltd., Jalgaon
- Indian Institute of Soil Science (IISS), Bhopal, Madhya Pradesh
- Maharashtra State Draksh Bagaitdar Sangh, Pune
- Maharashtra Rajya Marathi Vishwakosh Nirmitti Mandal, Mumbai
- National Research Center on Camel, Bikaner, Rajasthan
- Bayer CropScience Limited, Pune
- Prime Datamatics LLP (PRIME), Pune
- Finolex Industries Ltd., Pune

Placement Cell

The employment bureau guides the students in securing appropriate jobs. The lectures of subject matter specialists are regularly organized for preparation of public service examinations. Campus interviews by various private companies are regularly organized for helping the students to get jobs.

Success in JRF/SRF/NTS and Public Private Competitive Examinations

- During the year 2018-19, 31 and 24 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.
- 56 & 4 students from University have qualified NET & GATE Examination respectively during academic year 2018-19.
- During the year 2018-19, more than 234 students secured job in Central Govt., State Govt., Banking and Private sector.

Sport Activities

- The 'XIX All India Inter Agril-University Sports and Games Meet 2018-19' was held at Punjab Agricultural University, Ludhiana from 2nd to 5th January, 2019 MPKV, Rahuri secured following prizes.

Sr. No.	Events	Men/ Women	Rank
1	Kho -Kho	Women	Winner
2	Kabaddi	Men	Runner up
3	Table Tennis	Women	Third
Athletics			
4	400 M Run	Women	Winner
5	Discuss Throw	Women	Runner up

- The University team obtained Winnership in State Level Vice Chancellors T-20 Cricket Tournament held at Sant Gadgebaba University, Amaravati during the 6th to 13th January, 2019.
- Mr. Jadhav Jayesh and Mr. Mehetre Tejas of College of Agriculture, Dhule secured Winnership in Ex-Chancellor, P.C. Alexander Elocution Competition in Marathi and English, respectively.
- MPKV Team Avishkar has secured two prizes in State Level Avishkar-2018-19 held at Gondwana University, Gadchiroli.

Name of Students	Category	Rank
Mr. Pritam Bhosale	Agriculture and Animal Husbandry	First
Miss. Snehal Thorat	Commerce, Management and Law	First



University Library

Library plays a pivotal role in dissemination of knowledge and information to the students, readers, research scholars in their education, research and extension activities. To cater the needs of the readers, the University Library started functioning at Central Campus in the year 1971. The library is providing all types of scientific and technological information to the students, teachers, scientists and progressive farmers.

Library Services

- Internet Service (with speed of 1GB from NKN through BSNL)
- Retrieval of CD-ROM Databases
- Online e-Journals / Virtual e-Journals (CeRA / J- Gateplus)
- Online books (Astral / CABI / CRC)
- Online ETAD (e-theses abstracts database) (Digital Library)
- CAS (Current Awareness Service)
- SDI (Selective Dissemination of Information)
- Knowledge Portal (Web OPAC)
- Krishikosh: Institutional Repository of Indian National Agricultural Research System (Theses Uploaded 4984 Up to 2018)
- KrishiPrabha: Full text Doctoral Thesis Repository



Available holdings and e-resources in libraries

Particulars	University Library	College of Agriculture Library		
		Pune	Kolhapur	Dhule
Books	72869	49853	38666	41045
Back Volumes of Journals	27660	5093	4904	2600
Theses	9193	--	215	110
Current Periodicals	224	21	29	29
e-Books	549	126	129	105
Online e-books (CRC Netbase.com)	106	106	106	106
CD -ROM Database (1972 - 2010)	23	23	65	23
Video Cassettes	350	30	--	--
DVD's	190	324	75	75
Online Journals (CeRA/Jgate)	3967	3967	3967	3967
Statistical Database	Indiastat.com	Indiastat.com	Indiastat.com	Indiastat.com
Online Doctoral Theses Database	KrishiPrabha	KrishiPrabha	KrishiPrabha	KrishiPrabha
AgriCat/WorldCat	e-Granth	e-Granth	e-Granth	e-Granth

Infrastructure Facilities

- Girls hostels at all constituent colleges and constituent Agri. Tech Schools.
- International Hostel for Foreign Students at Central Campus and College of Agriculture, Pune.
- Ladies Gymnasium at Central Campus, Rahuri
- Biotechnology Laboratory and Bio-control Laboratory at Central Campus and at College of Agriculture, Pune.
- Excellent Library buildings at all constituent Colleges.
- Shade net and Poly houses have been erected at various constituent Colleges and Agri Tech Schools for M. Sc., Ph. D. Research and UG experiential learning programme.
- Farms have been modernized by providing godown, micro irrigation facilities and automatic fertigation units at some selected places.
- Various farm implements are provided at constituent colleges and Agri. Tech School farms
- Threshing yards, store rooms have been constructed at PGI Farm.
- Various Departmental laboratories have been renovated and furnished with State-of-art equipments viz., Electron microscope, HP, LC, GC, Photosynthesis system, spectro-radiometer, NMR, Line quantum sensor, TDR Moisture meter, etc.
- The unique facility of Phytotron and rain out shelter is being erected at central campus.



Educational Achievements

- **Sardar Patel Award:** The University has been awarded with Sardar Patel Outstanding Institute Award – 2002 of ICAR, New Delhi.
- The University has been awarded special funds of Rs. 100 crore by the Government of India in its Union budget of 2007-08 as an Institute of Excellence. The University has procured various states of art equipments and strengthened its laboratories, farms and hostels from these funds.
- The University has started PG programmes leading to M.Sc. (Agril. Biotechnology) with intake capacity of 8 students from the academic year 2007-08.
- As per core group appointed by ICAR, New Delhi, Syllabus of PG programme has been revised considering the state/ local requirement and implemented from 2009-10.
- The University played pivotal role for inclusion of Agriculture subject in syllabus of secondary school education of Maharashtra State Board of Secondary and Higher Secondary Education, Pune. Due to the Concerted efforts of the University, the Board has recommended its decision to State Government to include Agriculture subject for IX and X standard from 2010-11.
- The Hi-Tech Floriculture and Vegetable Production Project at College of Agriculture, Pune has been best owed with an International Award “Golden Eagle for Prestige and Quality Europe 2010” by the ACTUALIDAD, Magazine of Tourism, Industry and Commerce, Spain during March, 2010.
- Agril. Polytechnic: From the academic year 2012-13 Agriculture Technology Schools have been upgraded and 3 years semi English Agri. Polytechnic have been started through 88 unaided affiliated Agril. Polytechnics.
- CET examination for admission to M.Sc. (2008 -09), Ph. D (2015-16), and UG programme (2018-19).
- Upon the recommendations of the ICAR Peer Review Committee and Education Division, and meeting the accreditation criteria, the National Agricultural Education Accreditation Board (NAEB) has granted accreditation to MPKV, Rahuri and its constituent colleges (College of Agriculture, Pune/Dhule/Kolhapur/Nandurbar, Dr. ASCAET/PGI, MPKV, Rahuri) for the period of five years (2018-19 to 2022-23).
- University ranked first in registration of online e courses in India.
- ICAR, New Delhi has awarded the Certificate of Appreciation to University for valuable contribution to Krishikosh for achieving a milestone for submitting more than 850 theses in digital repository.
- The Project Monitoring Committee (PMC) of the National Agricultural Higher Education Project (NAHEP), ICAR, New Delhi has sanctioned CAAST sub-project entitled “Climate Smart Agriculture and Water Management” under the NAHEP amounting to Rs. 1990.1 (Rupees one thousand nine hundred ninety lakh and ten thousand only) for the period of four years starting 2017-18 and ending 2020-21.
- ISO: 9001: 2015 Certification: MBA (Agri.) Programme at College of Agriculture, Pune and Agricultural Technical School, Solapur achieved ISO: 9001: 2015 Certification for its Quality Management System for the period of three years (2019 to 2022).



Awards

- ICAR Best Teacher Awards were bestowed on the occasion of Golden Jubilee Celebration of the University held on 29th March, 2019 at Central Campus, Rahuri to the following faculties.

Sr. No.	Name of Awardees
1	Prof. R. S. Bhondave, Associate Professor of Agronomy, College of Agriculture, Pune
2	Dr. G. B. Kabre, Associate Professor of Agricultural Entomology, College of Agriculture, Dhule
3	Dr. R. D. Bansod, Professor of Soil and Water Conservation Engineering, Dr. A. S. College of Agril. Engineering and Technology, MPKV, Rahuri
4	Dr. Mrs. R. S. Thakare, Associate Professor of Soil Science and Agril. Chemistry, College of Agriculture, Dhule
5	Dr. D. D. Patange, Assistant Professor of Animal Husbandry, College of Agriculture, Kolhapur
6	Dr. C. S. Patil, Associate Professor of Agriculture Entomology, Post Graduate Institute, MPKV, Rahuri

- 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.

New Projects/Proposals

- A Referral Laboratory for testing quality parameters of Bio-pesticides sanctioned by Department of Biotechnology, Government of India, New Delhi at Agril. Entomology Section, College of Agriculture, Pune.
- New project of RKVY at College of Agriculture, Pune entitled "Development of Master Trainers on Carbon Management for Sugarcane Soils" was sanctioned for two years with budgetary provision of Rs. 1.02 crore.
- ICAR has sanctioned Experiential Learning Module entitled "Mass Production of Bio-agents and Bio-pesticides" at RCSM College of Agriculture, Kolhapur with budgetary provision of Rs. 54.92 lakh.
- ICAR has sanctioned Experiential Learning Module entitled "Nursery Management of Horticultural Crops" at College of Agriculture, Nandurabr with budgetary provision of Rs. 50.41 lakh.
- The project proposal for establishment of 'Agricultural Science Museum' at College of Agriculture, Pune has been sanctioned by ICAR with budgetary provision of Rs. 40.00 lakh.

New Constituent College

- Agriculture, Animal Husbandry, Dairy Development and Fisheries Department, Govt. of Maharashtra vide resolution dated: 28.11.2018 has given administrative approval for establishment of College of Food Technology at Peth, Dist. Sangli.

Significant Educational Activities

33rd Convocation of MPKV, Rahuri

- The 33rd Convocation of University was held on 7th December, 2018 at central campus, MPKV, Rahuri. His Excellency Shri. Ch. Vidyasagar Rao, Governor of Maharashtra and Chancellor, MPKV, Rahuri presided the function. Shri. Nitin Gadkari, Hon Union Minister for Road Transport and Highways, Shipping, Water Resources, River Development and Ganga Rejuvenation, Govt. of India was the chief guest and the Guest of Honour for function was Shri. Ram Shinde, Hon. Minister of Water Conservation and Protocol, Maharashtra State and Guardian Minister, Ahmednagar District.

Total 4411 degrees were conferred to students.

1. UG- 4010 2. PG-401 3. Ph.D-45



Agriculture Education Day

- In order to attract the talent, building strong agricultural base and create awareness among the students and parents regarding the agricultural education in various field "Agriculture education day" was organized during on 3rd December, 2018 at various constituent and affiliated colleges under the jurisdiction of MPKV, Rahuri.

Golden Jubilee Celebration

- Golden Jubilee Celebration was organized on 25th, 26th & 27th March, 2019 at College of Agriculture, Dhule, Pune and Kolhapur respectively.
- University Foundation Day and Golden Jubilee Celebration of the University was organized on 29th March, 2019 at Central Campus, MPKV, Rahuri. Hon. Vice-Chancellor, Dr. K. P. Viswanatha presided over the function. Dr. A. K. Mishra, Hon. Chairman, Agricultural Scientist Recruitment Board, New Delhi was the Chief Guest for the function. On this occasion, all former Vice Chancellors, Deans, Directors, Associate Deans, Head of Departments, Professors and Scientists were felicitated for their contribution in over all development of the University.



International Yoga Day

- The International Day of Yoga was observed on 21st June, 2019 various constituent and affiliated colleges under the jurisdiction of MPKV, Rahuri.
- Central campus MPKV, Rahuri
- Yoga Camp was organized on the eve of International Yoga Day at University ground on 21st June, 2019. More than 2500 staff, students and NSS volunteers participated.





- Dr. Pravin Rajaram Deshpande, Director, Arogaydham, Nisargopchar Yoga Kendra, Nashik delivered lecture on “Yoga”.

Tree Plantation Programme

- “Tree Plantation” programme was organized during 1st July to 31st July, 2019 at various constituent and affiliated colleges under the jurisdiction of MPKV, Rahuri.



Blood Donation Camp

- The Blood donation camp was organized with the help of Civil Surgeon, Ahmenagar on 15th August, 2019 at Central Campus, Rahuri. Dr. K.P.Viswanatha, Hon. Vice Chancellor, MPKV, Rahuri inaugurated the blood donation camp.



“SWACHA BHARAT ABHIYAN”

- “SWACHA BHARAT ABHIYAN” was organized at various constituent and affiliated colleges under the jurisdiction of MPKV, Rahuri.
- The core objective of programme is to keep Clean, Green and Plastic Free Campus with Healthy Atmosphere.



**World Bank aided ICAR-NAHEP Programme
Centre for Advanced Agricultural Science and Technology (CAAST)
for Climate Smart Agriculture and Water Management (CSAWM)**

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,

- To develop the capacity amongst the faculties and scientists for the development and adoption of the precise Climate Smart Agriculture and Water Management technologies.
- 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.
- 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.
- 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 Crore 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 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 fifteen faculty members and 22 Research Associates from different disciplines.

This project has 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.

The CAAST-CSAWM organized the inception workshop at Central Campus MPKV, Rahuri. The scientists/ academicians Washington State University, Pullman, WA, USA and AIT, Bangkok, Thailand along with several national partners attended this workshop for the formulation draft framework of PG Diploma in climate smart agriculture and water management Subsequently to thus one day workshop on Social Science and International Symposium on strategizing education and innovations in robotics, drones and IoTs for climate smart agriculture were organized.

CAAST-CSAWM project organized different activities on climate smart agriculture and water management subjects for strengthening the capacity building of faculties and PG & Ph.D. students of MPKV, Rahuri such as training programmes, workshops. 228 faculties & 903 students were trained from 18 trainings programmes, 352 faculties & 996 students participated in 15 workshops, 47 faculties & 153 students participated in a International symposium, 113 faculties & 314 students received benefits from 07 guest lectures, 64 faculties & 71 students experienced and learned climate smart technological information from nine visits, 77 faculties & 175 students improve their skills from four demonstrations.

First batch of 20 Post Graduate students including one faculty member from MPKV, Rahuri were 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. The next batch of 20 Post Graduate students is expected to attend this training at Asian Institute of Technology, Bangkok, Thailand in February and March, 2020. Seven faculties shall attend training programme at Washington State University, USA,

CAAST-CSAWM project developed IoT based Phule soil moisture sensor based irrigation scheduler, Phule irrigation scheduler based automatic pump controller, android based mobile application for the management of pest and diseases of different crops and also identified 42 indigenous traditional knowledge practices for climate smart agriculture.

CAAST-CSAWM project is implementing climate smart village approach in eight selected villages and intern investigating the possibility scaling-up of climate smart agriculture and water management technologies.



RESEARCH

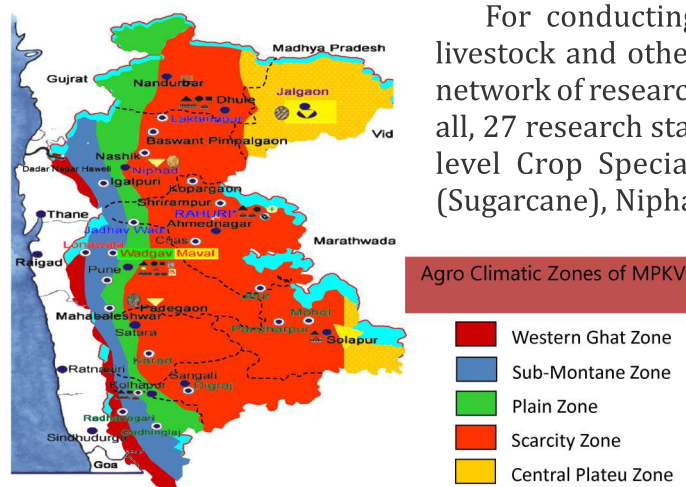
The jurisdiction of Mahatma Phule Krishi Vidyapeeth, Rahuri extends over the Western Maharashtra comprising of 10 districts divided into five agro climatic zones *viz.*, Western Ghat Zone, Sub-mountain Zone, Plain zone and Scarcity zone. In addition, Jalgaon district with assured rainfall which falls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

The Directorate of Research has responsibility to plan, co ordinate and execute the overall research programmes of the university to augment the production and productivity of different agriculture crops. The Directorate of Research is headed by Director of Research and is assisted by Associate Director of Research, Deputy Director of Research, Research Editor and supporting staff at university and regional level.

Research Mandates

- To improve production and productivity of cereals, pulses, oilseeds, sugarcane, cotton, fruits, vegetables, flowers and farm animals.
- To conserve natural resources and improve their efficiency for sustainable production of crops and animal produce.
- Conservation of genetic resource and their maintenance.
- To develop technology with integrated pest, disease and nutrient management to increase production for making agricultural production cost effective and sustainable.
- To develop post-harvest technology for minimizing post-harvest losses and production of value-added products.
- To design and develop farm implements and technology for mechanization of agriculture.
- To evaluate and modify technology for protected cultivation of flowers and vegetables for export.
- To develop transgenic or genetically modified varieties of cereals, pulses, fruits and vegetables having resistance to biotic and abiotic stresses, herbicides and with improved shelf-life.

Network of research stations



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 (Soil). In addition to this, 4 Zonal Research Stations are located at Igatpuri, Pune, Kolhapur and Solapur. There are 18 Sub-Research Stations where mainly verification 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 feedbacks received from the farmers.

At present, there are 82 non-plan schemes funded by State Govt., 44 AICRPs on different crops /plant sciences, one centrally Sponsored Research Scheme funded by the Central Govt., Ministry of Agriculture and Farmers Welfare, New Delhi is working in MPKV, Rahuri.



Sr. No.	Research Station	Lead Function	Verification Function
A. Western Ghat Zone			
1	Igatpuri (Zonal Agril Research Station)	Rice, Silviculture, Soil Water Conservation Engineering	Rice, Beans, Rainfed fruits, Plantations crops, Coffee, turmeric.
2	Lonavala	Rice (Screening for Blast)	--
3	Mahabaleshwar	Wheat(Screening against Rust)	Vegetables (cruciferous), Berries
4	Radhanagari	Paddy	Beans, Wheat, Wal
B. Sub-Montane Zone			
1	Kolhapur (Zonal Agril Research Station)	Maize, Small millets, Pandharpuri Buffaloe, Horti - pastoral Systems, Sugarcane	Grasses , Rainfed fruits,& Vegetables, Soyabean, Ground nut, Organic Farming in vegetables
2	Regional Sugarcane and Jaggery Research Station	Sugarcane, Jaggery	Sugarcane based Cropping System
3	Gadhinglaj	Organic farming, Basmati Rice	Sorghum(k), Pulses, Chilli and Oilseeds
4	Karad	INM for cropping system	Pulses, Maize, Jowar (Kharif) Soyabean, Sunflower , Groundnut.
5	Vadgaon Maval	Rice	Rice based cropping system
C. Plain Zone			
1	Ganeshkhind Pune (Zonal Agril Research Station)	Fruits, Vegetables, Flowers, Rajmah bean, Spices, Plantation crops	Pulses , oilseeds and Wheat
2	Digraj	Turmeric, Soyabean, Groundnut , betelvine , Problematic Soils	Jowar(Kharif), Pulses, Sugarcane, Sugar Beet
3	Niphad (State level)	Wheat, Wheat based cropping system	Pearl millet, Pulses and oilseeds
4	Pimpalgaon Baswant	Grapes , Onion and Garlic	Pomegranate and Vegetables

D. Scarcity Zone			
1	Solapur (State Level) (Zonal Agril Research Station)	Soils, Dry farming, Safflower, Agro-meteorology, Sunflower	Pearl millet, Pulses and Sorghum.
2	Mohol	Sorghum (R)	Pulses and Oilseeds
3	Jeur	Organic Farming System	Rabi jowar and Pulses
4	Pandharpur	Pulses , Oilseeds	Arid Zone Fruit Crops
5	Chas		Pearl millet, Pulses, Sorghum (R) and Dry farming
6	Padegaon (State level)	Sugarcane, Sugarcane based Farming and Cropping System	Sugarbeet
7	Rahuri	Sorghum, Pulses, Irrigated Cotton, Forages, grasses Groundnut (s), fruits, Vegetables, Cropping System, water management, Organic Farming , IPM, Farm Machinery, PHT, Biotechnology, STCR, Cattel, Gaot Sheep.	
8	Kopargaon	Sunflower	Pearl millet, Pulses, Cotton Soyabean and Wheat
9	Shrirampur	Citrus	--
10	Dhule	Dry Farming, Pearl Millet, Grasses	Sorghum (K), Pulses , Oilseeds, Rainfed Cotton, Arid Zone fruit crops
E. Central Plateau Zone			
1.	Jalgaon (State Level)	Oilseeds, Banana, And Beetelvine , Rainfed Cotton	Pulses , sorghum (K), Soyabean, Sunflower



Research Achievements

The Mahatma Phule Krishi Vidyapeeth, Rahuri has released 263 Varieties/hybrids, developed 36 farm implements/machineries and 1517 recommendations / technologies for the farmers.

MPKV Varieties

Cereals	Varieties
Paddy	Radhanagari 185 , Indrayani, Kundalika, Pawna, P hule Maval, Bhogawati, Phule Radha, Phule Samrudhi, Phule RDN-6
Pearlmillet	Shradha, Saburi, Shanti, ICTP-8203 , Aadishakti , Dhanshakti, Phule Mahashakti
Sorghum	Maldandi 35-1, Swati, S.S.V-84, Selection-3, Phule Yashodha, Phule Maulee, Phule Amruta, S.S.V-19 SS, Phule Uttara, Phule Chitra, Phule Vasudha, CSV-22, Phule Anuradha, Phule Revati, Phule Panchami , Phule Schitra, Phule Rohini , Phule Madhur , Phule Vasundhara .
Wheat	NI-5439, N-5643, NI-5749, Vinita, Kadava, NIAW-34, Trimbak, Panchawati, Tapowan, Godawari, Netravati, Phule Samadhan
Maize	Hunuis , Manjari, Panchganga, Karvir, Phule Rajarshi , Phule Maharshi, Phule Madhu
Little Millet	Phule Nachni, Phule Bhagar, Phule Ekadashi, Phule Kesari
Barti	Phule Barti-1
Pulse Crops	
Pigeon pea	T-Vishakha-1, Pragati (ICPL-87), Vipula, Phule Rajeshwari Tur-12
Mung	Phule Mung-2, Vaibhav
Udid	TPU-4
Horse Gram	Sina, Man, Phule Sakas , Phule Sakas
Mothbean	MBS-27
Rajama	Mutha, Varun, Phule Rajama
Cowpea	Phule Pandhari , Phule Vithai
Chickpea	Vikas, Vishwas, Phule G-12, Vijay, Vishal, Virat, Vihar, Rajas, Digvijay Kripa (Phule G-0517), Phule Vikram , Phule Vikrant
Oilseed Crops	
Groundnut	SB-XI , Phule Pragati, TAG-24, Koyna, Phule Vyas, TPG-41, Phule Unap, JL-501, Phule Unnati, Phule Warana, Phule Morna, Phule Bharti, Phule Dhani
Sunflower	SS-56, Bhanu, Phule Raviraj, <i>Phule Bhaskar</i>
Soybean	Phule Kalyani, KS-103, Agrani (KDS-344), Phule Sangam
Sesamum	Phule Til-1, Tapi, Padama, JLT -408
Niger	Sahayadri, Phule Karala, Phule Vaitarna
Safflower	Bhima, Girna, Phule Kusuma, SSF -658, SSF 708, Phule SSF-733, Phule Chandrabhaga
Mustard	TPM-1

Cash Crops	
Sugarcane	Co 419, Co 740, Co 7219 (Sanjivani), CoM 7125 (Sampada), Co 7527, CoM 88121 , Krishna, Co 8014 (Mahalaxmi), CoC 671 , Co 86032 (Nira), Co 94012 (Phule Savitri), CoM 0265 (Phule 265), Phule 10001 Phule 09057 (CoM1285)
Cotton	Deshi-7 : Y-1, Joyti, JLA 794, Rh-arb-02-01 (w), RAC-024, Phule Dhanvantari, Phule Anmol, Phule Yamuna, Phule Rukhraj Phule Tarang, Phule Dhara, Phule Shwetambari, Phule Chetana, Phule Mahi American : Nira, JLH- 168, Phule 688, Savitri, Phule 388, Sampada, Phule 492
Forage Crops	
Hybrid Nipear	Yeshwant, Phule Jaywant , Phule Gunwant
Stylo	Phule Kranti
Oat	Phule Harita, Phule Surabhi
Jowar	Ruchira, Phule Amruta, CSV-19-SS
Maize	African Tall
Bajara	Giant Bajara
Lucerne	RL-88
Marvel	Phule –Marvel-06-40, Phule Gowardhan, Phule Marvel -1
Vegetable Crops	
Bitter gourd	Hirkani, Phule Green Gold, Phule Ujwala, Phule Priyanka
Bottle Gourd	Samrat
Brinjal	Manjari Gota, Vaishali, Pragati, Krishna, Phule Harit, Phule Arjun
Chilli	Musalwadi Selection, Agnirekha, Phule Jyoti, Phule Suryamukhi, Phule Sai, Phule Mukta
Cucumber	Himangi, Phule Shubhangi, Phule Prachi
French Bean	Phule Surekha, Phule Suyash
Peas	Sel-82, Phule Priya
Garlic	Godavari, Sweta, Phule Baswant , Phule Nilima
Okra	Phule Kirti, Phule Utkarsha, Phule Vimukta
Onion	N-53, N-2-4-1, N-257-9-1, Baswant 780, Phule Safed, Phule Suvarna, Phule Samarth
Tomato	Bhagyashree, Dhanashree, Rajashree, Phule Raja, Phule Jayashree, Phule Kesari
Radish	Ganesh Synthetic
Sponge Gourd	Phule Prajakta, Phule Komal
Ridge Gourd	Phule Sucheta
Dolichos bean	Phule Gouri, Phule Ashwini, Phule Suruchi, Phule Suvarn
Snake Gourd	Phule Vaibhav
Broccoli	Ganesh Broccoli
Lettuce	Phule Padma
Betelvine	Krishna (DPB -6)

Turmeric	Phule Swarupa
Gavar	Phule Gavar
Fenugreek	Phule Kasturi
Fruit crops	
Pomegranate-	Ganesh, G-137, Mridula, Phule Arakta , Bhagwa, Phule Bhagwa Super, Phule Anardana
Acid lime-2	Sai Sharbati , Phule Sharbati
Sweet orange	Phule Mosambi
Mango	Sai Sugandha , Phule Abhiruchi
Custard Apple	Phule Purandar
Fig	Phule Rajewadi
Banana	Phule Pride
Papaya	Phule Vijaya
Ber	Phule Shabari
Flower crops	
Aster	Phule Ganesh White, Phule Ganesh Pink, Phule Ganesh Violet, Phule Ganesh Purple
Gladiolus	Phule Ganesh, Phule Prerna, Phule Tejas, Phule Neelrekha
Tuberose	Phule Rajani, Phule Rajat



Significant Research Activities during 2018-19

- Released 8 crop variety, 1 farm implements, 40 recommendations and 6 plant source for biotic stress in 47th Joint Agresco Meet – 2019 held at MPKV, Rahuri during 29-31st May, 2019.
- Safflower variety SSF-13-71 has been identifies for the release under rainfed and irrigated condition during the Annual Group Meeting held at CSAUAT Kanpur on 4-6 September, 2019.
- Referral Laboratory for testing quality parameters parameters of Bio pesticides was sanctioned by DBT GOI New Delhi at Agril Entomology Section, College of Agriculture, Pune.

Workshop/Meet organized

- 47th Joint AGRESCO Meet was organized at Mahatma Phule Krishi Vidyapeeth, Rahuri on 29-31 May, 2019. The inaugural function was Chaired by Dr. K. P. Viswanath, Hon'ble Vice Chancellor, MPKV, Rahuri while Shri Chandrakant Patil, Hon'ble Minister of Revenue, Agriculture, PWD (excluding undertakings) and Relief & Rehabilitation of Maharashtra State was the Chairman for concluding session.
- One day workshop on “ Mobile and Web based application of Phule Jal and Phule Irrigation Scheduler was organized by RKVY-IWMI at Shriram College of Agricultural Engineering, Paniv on 4.04.2019.
- Brainstorming workshop on Bamboo plantation was organized at MPKV, Rahuri on 30.04.2019.

MoU signed for research

Sr. No.	Organization	Mode of collaboration
1.	ICAR- CIRC Central Institute for Research on Cattle, Meerut (U. P.)	Collaboration in Teaching, Research and Extension
2.	Yuva Mitra Sinnar, Nashik	Knowledge Dissemination and Technology transfer to Sangamneri Goat Rearers
3.	GMGC IPR Services Pvt. Ltd., Pune	Patenting potential technologies of MPKV, Rahuri

Seed Production Programme 2018-19

Seed Production	University Farm	- 7294 q
	Farmers Participatory	- 5100 q
	Seed Hub Project	- 2648 q
	Tribal Sub Plan Programme	- 2940 q
	Total	-17982 q
Planting Material (No. of grafts)	11.8 Lakhs	
Biopesticides	128 q & 87 Lit.	
Biofertilizers	41 MT & 5500 Lit.	

Joint AGRESCO-2019 meeting organized

May 29-31, 2019. The 47th 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. Bhawe, Dr. Patil, Dr. Narkhede, Dr. Mankar, Shri. Sopan Kasar, Registrar and Shri. Vijay Kote, Comptroller were present on the dais. 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.



Central Instrumentation Cell, MPKV, Rahuri



Inductively Coupled Plasma Mass Spectrometer (ICPMS)



Inductively Coupled Plasma Optical Emission (ICPOES)



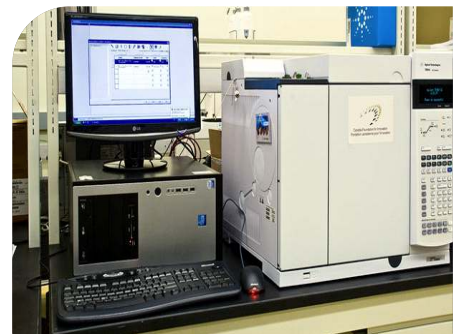
Total Organic Carbon Analyzer (TOC)



X-Ray Diffraction System (XRD)



Electron Microscope



Gas Chromatographer



Pressure Plate Membrane Apparatus



Leaf Area Meter



Phytotron



Rainout Shelter



Biotechnology Laboratory



Remote Sensing Laboratory



EXTENSION EDUCATION

A. Innovative Outreach Programmes

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-eco situations, 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.

In addition to this, this Directorate performs activities like co-ordination of extension education activities in the jurisdiction of University. DEE through its various units *viz.*, Agricultural Technology Information Centre (01), Regional Extension Centres (04), District Extension Centres (05), Krishi Vigyan Kendras (17) and College Extension Blocks (06) 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 feed back.

B. Innovative Extension Approaches

Regional Extension Centres (REC) /District Extension Centres (DEC) : The RECs and DECs 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 colleges *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 Husbandary, Horticulture and Plant protection. The activities like monthly district workshops, fortnightly trainings, demonstrations on farmers 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.

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, while, 4 KVKs *viz.*, KVK-Dhule, KVK-Mohol (Solapur), KVK-Borgaon (Satara) and KVK-Mamurabad Farm (Jalgaon) are 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.

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, Kolhapur, Karad, Nandurbar and Muktainagar. 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.

Agricultural Technology Information Centre (ATIC) : The National Agricultural Technology Project (NATP) provided funds to establish Agricultural Technology Information Centre (ATIC), a 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.

Press, Publicity and Publications : The Communication Centre of Mahatma Phule Krishi Vidyapeeth, 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 *Krishi Darshani*, an annual farm diary which is very popular among the farmers. Besides *Shri Sugi*, a periodical is published before every season of the year, also an e news-MPKV Happenings are published regularly. Besides DVDs of various crops are prepared by this centre. A *Phule Krishi Darshani* Mobile App has been developed by this centre. A Printing Press is also operated by the centre for printing work.

Efforts for self employment opportunities for farmers, farm women and farm youth: The University is making efforts for generating self employment opportunities for farmers, farm women and farm youth through capacity building programmes. For this purpose 17 Krishi Vigyan Kendras of university jurisdiction are engaged in organizing training programmes for self employment on various aspects like organic farming, nursery management, seed production, vegetable cultivation, Hi-tech floriculture, poultry, drip and sprinkler irrigation, soil and water testing, vermicompost, turmeric processing, post harvest technology, mushroom production technology, hygienic milk production and milk products etc.

Human Resource Development : In view of capacity development of different stakeholders, various training programmes are organized by the Directorate of Extension Education for the officers of Govt. agencies, officials of line departments, private company officials, farmers, farm women and youth on the topics viz., Diversified Agriculture, Integrated Nutrient Management, Improved Agro-techniques, Integrated Crop Production Technologies, Animal Husbandry and Dairy sciences, Integrated Disease



and Pest Management etc. The University also organizes training programmes for the KVK SMSs on need based topics. Apart from this, various training programmes on agricultural mechanization, micro-irrigation, operation, repair and maintenance of harvesting and threshing machines are organized for the benefit of farmers. Similarly, the university is organizing several training programmes in collaboration with MANAGE, Hyderabad, EEI, Anand, NABARD, Pune etc. During last five years the University has trained 53172 human resource through 1088 training programmes.

Retrospection Programmes : A programme on “Retrospection” is regularly organized by the University for depicting the significant activities of the university related to education, research and extension education. On this occasion the university publication “*Krishi Darshani*” is released every year. This innovative programme has been started from 1992.

Mechanisms for Research-Extension Linkages & Coordination with Development Departments: The Research-Extension linkage between the University and various line departments is implemented through Joint Agresco, Zonal Agricultural Research and Extension Advisory Committee (ZAREAC), Memorandum of Understanding (MOUs), Monthly District Workshops, Training Programmes and Diagnostic Team Visits etc.

Farmers-Scientists Forum : The University has evolved the concept of Farmers-Scientists Forum (FSF). The basic idea of formulating the Farmers-Scientists Forum is to demonstrate and to educate the farmers about the technology generated by the university at different locations. Besides, operational problems in adoption of these technologies have been identified and accordingly the technologies are refined, updated so that they are accepted and farmers are empowered with the technology. Total 51 Farmers-Scientists Forums are established in the jurisdiction of the University and 1650 farmers have been registered as members. The members of these FSF have received recognitions at state and national level. The member farmers have received the IARI Best Farmer Awards, *Krishibhushan* awards by Govt. of Maharashtra and *Sahyadri Krishi Sanman Awards* by Doordarshan, Mumbai.

Significant Extension Education Activities

Retrospection – 2018: A programme on Retrospection – 2018 was organized on 3rd January 2019 at Central Campus, Rahuri. Vice Chancellor Dr. K. P. Viswanatha presided over the function, while, Shri. Sudhir Mungantiwar, Hon'ble Minister of Finance & Planning and Forests departments was present as chief guest. On this occasion the reports regarding extension education, education, research, agril. engineering,



lower agril. education, administration, development works and accounts conducted during the year 2018 were presented by Dr. K.D. Kokate, Director of Extension Education, Dr. A.L. Pharande, Dean (F/A), Dr. S.R. Gadakh, Director of Research, Dr. D. D. Pawar, Registrar, Shri. Vijay Kote, Comptroller, Shri. Milind Dhoke, University Engineer, MPKV, Rahuri respectively. An exhibition depicting the significant activities of the university related to education, research and various extension activities carried out by College Extension Blocks, Research centers was organized. The university publication *Krishi Darshani-2019* was released and innovative Phule Krishidarshani mobile app was launched at the auspicious hands of dignitaries. All HODs, Professors, staff, students and members of Farmers- Scientists Forum were present for the programme.

Action Plan Workshop of KVKs: Mahatma Phule Krishi Vidyapeeth, Rahuri and ICAR-ATARI, Zone VIII, Pune jointly organized an Action Plan Workshop of KVKs for western Maharashtra during 7-8 March, 2019 at MPKV, Rahuri. The workshop was inaugurated by Dr. K.D. Kokate, Director of 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 159 Programme Coordinators, SMSs and other staff of KVKs participated in the programme.



The XVI Extension Education Council (EEC) Meeting was organized on 6 February, 2019 under the Chairmanship of Vice Chancellor Dr. K.P. Viswanatha at MPKV, Rahuri. Hon'ble Members of EEC Former Directors, Zonal Project Directorates Dr. S. Prabhu kumar and Dr. A. M. Narula, Progressive farmers Shri. Narendra Patil and Shri. Rajaram Chaudhary gave valuable suggestions during the meeting. Dr. K. D. Kokate, Director of Extension Education, Dr. S. R. Gadakh, Director of Research, Dr. D. D. Pawar, Registrar, Shri. Vijay Kote, Comptroller, MPKV, Rahuri were present for the meeting.

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 19th June, 2019 for Nashik, Pune and Kolhapur divisions.

Vanmahotsav-2019 was celebrated at MPKV, 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. 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.

Farming system for Nutrition Project (FSN): Krishi Vigyan Kendra, Mohol, Dist. Solapur and Krishi Vigyan 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 20th June, 2019 under FSN project.



Launching of Awareness programme of Jalshakti Abhiyan : An Awareness programme of Jalshakti Abhiyan was launched at MPKV, Rahuri in coordination with the Department of Agriculture and Krishi Vigyan 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. Sambhaji Nalkar, 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.

Technology Weeks Celebrated: Agro Technology Week was celebrated at Krishi Vigyan Kendra, Dhule during 15-17 February, 2018. On this occasion of Agro Technology Week Front line demonstrations, Agril Exhibition etc. were organized at central farm of Krishi Vigyan Kendra. The inaugural function was presided over by Dr. S.R. Gadakh, Director of Research, MPKV, Rahuri. Dr. A. M. Musmade, Associate Dean, College of Agriculture, Dhule. The three day technical programme covered various technical deliberations from diversified field of agriculture. In all large number of farmers, women farmers, youths from the KVK jurisdiction participated in the Agro Technology Week.



Activities under the 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.



Training Programme on Vermicompost production and Silage making organized under ICAR Farmer FIRST 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. Prahlad Pogle, 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. 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. 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.

Exposure visit of ICAR Farmer FIRST programme organized : 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 Rahata taluka and Devgad, Punatgaon villages of Newasa taluka 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.



A Farmers Exposure visit was organized under the ICAR Farmer FIRST programme on January 20, 2018. Dr. A. D. Kadlag, Head, Dept. of Soil Science and Agril. Chemistry flagged the bus. About 30 farmers and farm women from Chinchvihire and Kangar villages visited the Krushik, an Agril. Exhibition at KVK, Baramati. They visited different live demonstration plots of various innovative techniques in agriculture, irrigation management, organic farming, flower cultivation, fruit and vegetable crop production showcased on KVK farm. The visit was guided by Co-PIs Dr. S. S. Sadaphal, Dr. B. A. Deshmukh, Field Assistants Shri. Magar and Shri. Gaikwad.

Kisan Aadhar Sammelan-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 Experts lectures.

Inauguration of Kisan Aadhar Sammelan-2019

The Kisan Aadhar Sammelan-2019 was inaugurated at the auspicious hands of Dr. Ashok Dalvai, Chief Executive Officer, National Rainfed Area Authority, Govt. of India, New Delhi. Vice Chancellor Dr. K. P. Viswanatha presided over the function. Shri. Vishwajeet Mane, Director General, MCAER, Pune, Dr. Ravi Prakash Dani, Former Vice Chancellor, Dr. PDKV, Akola, Executive Council Members Prof. Nathaji Chaugule and Mrs. Sunita Patil, Shri Prataprao Bhosale, Member, Executive Council, Kamdhenu University, Gujarat, delegates from Uzbekistan, Shri. Shivaji Jagtap, DSAO, Ahmednagar, Dr. A. L. Pharande, Dean Faculty of Agriculture, Dr. S. R. Gadakh, Director of Research and Extension Education, Registrar Shri. Sopan Kasar, Comptroller Shri. Vijay Kote, University Engineer Shri. Milind Dhoke, experts, Heads of Departments, scientists and farmers were present on this occasion.





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. The live Integrated Farming System models were displayed on Shri. Adsure brothers farm.



Expert Lectures : Expert Lectures were organized during the Kisan Aadhar Sammelan-2019. During this programme Shri. Vilas Shinde, Chief Executive Officer, Sahyadri Agro Farms, Nashik guided on Farmer Producer Company and fruit and vegetable processing. Mrs. Swati Shingade, President, Pure Organic Farmer Producer Company, Baramati guided on the topic Agriculture Entrepreneurship and Opportunities . Vice Chancellor Dr.K. P. Viswanatha presided over the function. Dr. S. D. Sawant, Vice Chancellor, Dr. BSKKV, Dapoli, Dr. V. M. Mayande, Former Vice Chancellor, Dr. PDKV, Akola, Dr. M. C. Varshneya, Former Vice Chancellor, Kamdhenu University, Gandhinagar, Gujarat, University



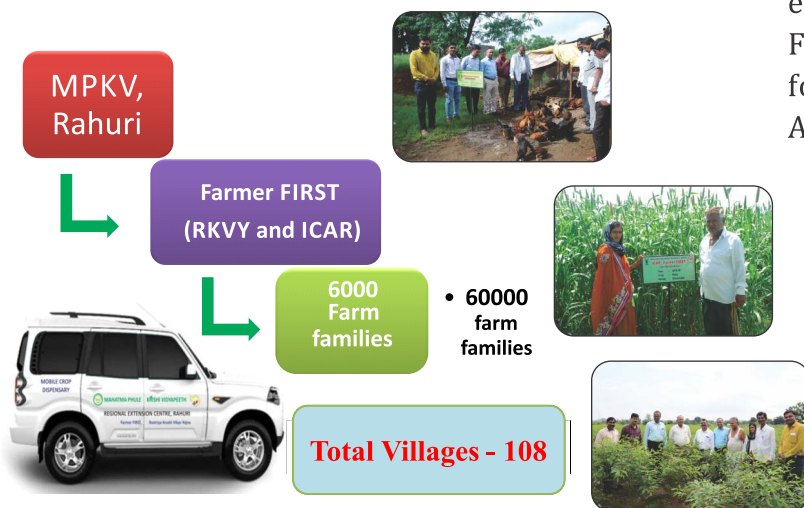
Directors Dr. A. L. Pharande and Dr. S. R. Gadakh, scientists, staff, farmers and students were present on this occasion.

Agriculture Exhibition : An Agriculture Exhibition was organized during the Kisan Aadhar Sammelan-2019. The University technologies were showcased in the exhibition. This included live samples of university released varieties, agriculture inputs, improved agriculture implements, publications etc. An Animal Exhibition was also organized during this event. The animal component included indigeneous and improved breeds of cattle, goat, sheep, poultry and dogs. The Government schemes of Department of Agriculture, ATMA, Zilla Parishad and all technologies were exhibited in the event.



Farmer FIRST

RKVY and ICAR



Adaptive Research Projects

ICAR Farmer FIRST Programme - The project entitled “Socio-economic Empowerment of Farmers through Farming System Interventions for Sustainable Agriculture Development in Ahmednagar District” is in operation under ICAR Farmer FIRST programme. The project is funded by the Indian Council of Agricultural Research, New Delhi. The project is implemented in Chinchvihire and Kangar villages of the Ahmednagar district. The funding of Rs. 87.30 lakhs is made available by the ICAR for the year 2016-17 to 2019-20.

Technology Modules of the project

Name of technology	Content
Five point <i>rabi</i> sorghum production technology	<ul style="list-style-type: none"> • In situ soil and water conservation • Selection of varieties as per soil type • Seed treatment • Hoeing at proper stage • Plant protection measure
Pulse Production technology	<ul style="list-style-type: none"> • Selection of varieties for seed replacement • BBF planting • Bio-fertilizer (Azotobactor, PSB etc.) • Seed Treatment • Bio pesticides • IPM • Mechanical harvesting
Integrated Farming System	<ul style="list-style-type: none"> • Integration of agronomical crops + Horticultural crops + Poultry (<i>Grampriya, Giriraj</i>) - Chick, ration etc./ Goat – Bucks and does (<i>Sangamneri/Osmanabadi</i>), Animal Component – AI dosages of Phule Triveni, Forage Crops – Phule Jaywant, Phule Gunwant, Fishery etc.

Rashtriya Krishi Vikas Yojana- Farmer FIRST Project

The project entitled Farmer FIRST has been sanctioned to the Directorate of Extension Education under the Rashtriya Krishi Vikas Yojana (RKVY) for the year 2015-16 to 2019-20 with total financial outlay of Rs.5.90 crore. The Farmer FIRST is an 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 project is implemented on cluster basis with field demonstrations, trainings, field visits, farmers rally, and workshops as the main components of project. The collaboration of State Department of Agriculture and concerned agencies of that district are also taken for implementing the project effectively. The technologies being demonstrated on farmer's field are Sugarcane + Vegetable Intercrops, Cotton based production technology, Groundnut based production technology, Gram based production technology, Bacterial Blight disease management in pomegranate, Cigatoka disease management in Banana, Onion set planting (*Chingali Kanda*), Mole Plough technology for ill drained soil and Animal Component. In all 5550 crop demonstrations, farmers training, officers training and farmers rally have been organized under this project.

Sr. No.	Interventions	Demonstrations
1	Sugarcane + Vegetable intercrops (A'nagar, Pune, Sangli, Kolhapur)	1500
2	Cotton production technology (Dhule, Jalgaon, Nandurbar)	900
3	Groundnut production technology (Jalgaon)	300
4	Gram production technology (Dhule)	300
5	Bacterial Blight management in Pomegranate (Solapur, Nashik)	600
6	Cigatoka disease management in Banana (Jalgaon)	300
7	Onion set planting (Chingali Kanda) (Ahmednagar, Pune, Nashik)	900
8	Mole plough technology (Sangli, Satara, Kolhapur)	450
9	Animal Component (A'nagar, Pune)	300
	Total	5550



Soil Protection and Rehabilitation for Food Security (ProSoil) Project : The German Ministry of Economic Cooperation and Development (BMZ) has started the Initiative "One World – No Hunger". Under this initiative, the project "Soil Protection and Rehabilitation for Food Security in India (Pro SOIL)" is integrated into the Natural Resource Management Portfolio of GIZ. The project, "Pro SOIL" aims to implement sustainable approaches to the protection and rehabilitation of degraded soils, including soil fertility, in selected areas of India. National Institute of Agricultural Extension Management (MANAGE) facilitates the network approach envisaged as the National Consortium Facilitating Agency (NCFA), under the pro-SOIL collaboration through capacity building support, technical guidance and overall network management at national as well as state level (through the network of state level Consortium Facilitating Agencies - CFA). Other relevant stakeholders include the Ministry of Agriculture and Farmers Welfare, State Agricultural Universities, ATARI, KVKs and NGOs. Three NGOs, BAIF Research Development Foundation, Watershed Organization Trust (WOTR) and Foundation for Ecological Security (FES) are building the capacities of smallholder farmers to protect and rehabilitate their soils and to invest in soil fertility management. The advisory services provided directly to farmers. These advisory services will include recommendations regarding the selection of crops and fertilizer recommendations, among others. The steering of the project is jointly carried out by GIZ and the National Bank for Agriculture and Rural Development (NABARD) in India.

Through this project the team of scientists of MPKV and other SAUs and KVKs create quality agro-advisory content, which is simple, understandable, timely, relevant and localised content to the farmers. The overall objective of this project is to create and disseminate localized, timely and quality content around climate change adaptation in agriculture sector using ICT based platform called "Network for information on Climate (EX) change (NICE)".

Climate Change Knowledge Network in Indian Agriculture" (CCKN-IA) : The project "Climate Change Knowledge Network in Indian Agriculture" (CCKN-IA) of the Ministry of Agriculture is implemented with technical cooperation of Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). (GIZ) GmbH is an enterprise owned by the German Government. GIZ implements sustainable development through international cooperation, on behalf of Germany and other partners. Climate Change Knowledge Network-Indian Agriculture (CCKN-IA) has initiated the process of developing "block level contingency crop plans" in all its implementing states starting from Maharashtra. The project CCKN-IA which is a bilateral project between BMZ (German Federal Ministry for Economic Cooperation and Development) and Ministry of Agriculture, GoI, implemented through GIZ in India has initiated the process of developing "block level contingency crop plans" which is first of its kind in India. At the state level particularly in Maharashtra the Mahatma Phule Krishi Vidyapeeth, Rahuri took lead with support from Department of Agriculture, M.S.

Rashtriya Krishi Vikas Yojana : In order to achieve 4% growth rate in agriculture, the project entitled Transfer of Integrated Crop Management Technologies Developed by MPKV, Rahuri was implemented by the Directorate of Extension Education under the Rashtriya Krishi Vikas Yojana (RKVY) during the year 2011-14 with total financial outlay of Rs. 7.31 crore. The project was implemented on cluster basis with field demonstrations, trainings, field visits, farmers rally and workshops as the main components of project. The collaboration of State Department of Agriculture and concerned agencies of



that district was also taken for implementing the project effectively. Total 6287 crop demonstrations, 51 farmers training, 17 officers training and 13 farmers rally were organized for the benefit of farming community and other stakeholders.

Farmer's Participatory Action Research Programme (FPARP): A Farmer's Participatory Action Research Programme (FPARP) was implemented by the University during 2008-09 to 2010-11. The project was financially sponsored by Ministry of Water Resources, Government of India. It was implemented in two phases with objectives to increase the agriculture productivity and profitability and to enhance the yield and income per drop of water. Total 100 technologies on advanced irrigation methods were demonstrated on farmer's field. Technologies viz., Drip irrigation system for vegetable crops, sugarcane and banana crops, Overhead Sprinkler irrigation system, Micro-Sprinkler irrigation system for vegetable sequence, Raingun irrigation system for sugarcane and Moisture conservation practices in rainfed agriculture were demonstrated through this project.

Scaling up of Water Productivity through Capacity Building of Farmers and Trainers (Officers) through training cum demonstrations: A project on Scaling up of Water Productivity through Capacity Building of Farmers and Trainers (Officers) through training cum demonstrations was implemented by the university during 2007-08 to 2011-12. It was funded by Ministry of Agriculture, Govt. of India with funds of Rs. 124 lakhs. Total 5525 farmers and 550 Agriculture Officers were trained on judicious use of water.

National Agricultural Innovation Project (NAIP) sanctioned to MPKV, Rahuri: The ICAR, New Delhi had sanctioned an amount of Rs.1.40 crore under National Agricultural Innovation Project (NAIP) entitled "Sustainable Rural Livelihood Security for backward districts of Maharashtra" to the Directorate of Extension Education, MPKV, Rahuri for 2007-2014. The project was in consortium mode with BAIF, Pune as the team leader. The other partners being Bharatiya Vidyapeeth, Pune, Hegdewar Seva Centre, Nandurbar and Dr.PDKV, Akola. The project was implemented in Ahmednager district (Devthan and Waki clusters) and Nandurbar district (Mandane and Dhadgaon clusters). The significant achievements of the project were 20 % average increase in crop productivity of finger millet, increase in workdays created- 120 days and resulted in average family income Rs 7500/- and prepared 400 kg finger millet biscuits and marketed through ATIC, MPKV, Rahuri and nutritional security through value addition by producing value added products of finger millet-biscuits and papad, Mango- Amchur, etc. and it supported additional income to the family. This NAIP Project was awarded Certificate of Appreciation by ICAR, New Delhi for outstanding contribution in research on Sustainable Rural Livelihood Security in Backward Districts of Maharashtra.

Harnessing Opportunities for Productivity Enhancement (HOPE) of Rabi Sorghum project: A project on Harnessing Opportunities for Productivity Enhancement (HOPE) of Rabi Sorghum was sanctioned to MPKV, Rahuri for 2009-10 to 2012-13. It was financed by Bill and Melinda Gate Foundation, USA. The partners in this project were ICRISAT, Hyderabad, NRCS, Hyderabad and Marathwada Krishi Vidyapeeth, Parbhani. The main objective of this project was to enhance the productivity of Rabi Sorghum in the State by 35% through adoption of new crop production technologies including high yielding varieties. The project was implemented in western Maharashtra in Ahmednagar,

Pune and Solapur districts on demonstrations of five point rabi sorghum production technology developed by this University. The results of this project were encouraging even in drought condition. The increase in grain yield and fodder yield were observed to be 54.14 % and 44.71%, respectively.

Thrust Areas in Extension Education

- Cluster based demonstrations through RKVY Farmer FIRST project and ICAR Farmer FIRST Programme
- Organization of need based training programmes
- Extension activities through PPP mode
- Development of Mobile Apps for various University technologies
- Digitalization of Agril. Technologies (Interactive CDs)
- Documentation of extension activities through quality publications
- Emphasis on Livelihood Security and options of Livelihood Security
- Agro advisory services through mobile phone
- Application of video-conferencing during the training
- Market Intelligence/ Weather information through Information Technology and Cyber Extension
- Strengthening of linkages with development departments, other government departments, Non Government Organizations etc.

Golden Jubilee Year (2018-19)

A programme on Golden Jubilee Year and University Foundation Day Celebration was organized on March 29, 2019 at Central Campus, Rahuri. Vice Chancellor Dr. K.P. Viswanatha presided over the function, while Prof. (Dr.) A.K. Misra, Hon'ble Chairman, ASRB, New Delhi was present as chief guest. On this occasion Former Vice Chancellors of MPKV, Rahuri, Dr. BSKKV, Dapoli, Dr. VNMAU, Parbhani who made their valuable contribution for this university were felicitated by the auspicious hands of dignitaries. Also, Former Directors of Research, Directors of Extension Education, Deans, F/A, Heads of Department, University Scheme In charges were also honoured for their remarkable contribution towards this university. An exhibition depicting the significant activities of the university related to education, research and various extension activities carried out was organized. The university publication Souvenir on 50 Years Journey of MPKV was released at the auspicious hands of dignitaries. All HODs, Professors, staff, students and members of Farmers- Scientists Forum were present for the programme. On the same line, to celebrate Golden Jubilee Year, various programmes were also organized at College of Agriculture, Dhule, College of Agriculture, Kolhapur and ARS, Kasbe Digraj.



University Publications at a Glance





Directorate of Extension Education
Mahatma Phule Krishi Vidyapeeth
Rahuri - 413 722, Dist. Ahmednagar
www.mpkv.ac.in

