

# MPKV Colorata Colorat

फुले कृषि विद्यापीठ MAHATMA PHULE KRISHI UIDYAPEETH RAHURI

**Institution of Excellence Award** 





# Mahatma Phule Krishi Vidyapeeth

Rahuri - 413 722, Dist. Ahmednagar www.mpkv.ac.in



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 in 29<sup>th</sup> 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 64 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 10 constituent and 40 unaided affiliated Agricultural Technical Schools and 40 Agricultural Polytechnics 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 Agricultural Education**

The university offers various educational programmes viz., Post-graduate (M.Sc. (Agri.) and Ph.D.), Under graduate [B.Sc. (Hons) Agriculture, B.Sc. (Hons) Horticulture, B.Tech. (Agricultural Engineering),

B.Tech. (Biotechnology), B.Tech. (Food Technology), B.Sc. (Hons) Agri. Business Management, B.Sc. (Hons) Animal husbandry] and Diploma in Agriculture (Agril. Tech. Schools and Polytechnics). 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. (Honors) Agri. programme, one College of Horticulture at Pune for B.Sc. (Honors) Horticulture and one College of Agricultural Engineering and Technology 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 and College of Agri. Business Management, Talegaon Dabhade. Initiation of PG Diploma and Post Doctoral programme

Period /	Particulars of Development
Year	•
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 A. C. Pune
1990-95	Started Inter Faculty Department of Irrigation and Management
1995-2000	Revised curricula of UG programme was implemented (1998-99)
	Implemented PG programme in Agri-Business Management in
	Agricultural Economics at MPKV, Rahuri
	Started Ph. D. programme in Biochemistry at central campus, MPKV,
	Rahuri
2000-05	Started Ph. D. programme by course work in 5 Departments
2000-05	Implemented revised M. Sc. (Agri.) curricular programme as suggested by ICAR
	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
	Third position in competitive examination conducted by ICAR, New
	Delhi at National level
	College of Agriculture, Pune celebrated its' Centenary Year
	The Ninth ICAR Sports Meet organized at MPKV, Rahuri during Feb. 22-25, 2008

under Center for Advanced Agricultural Science and Technology (CAAST) for Climate Smart Agriculture and Water Management (CSAWM) from the academic year 2018-19.

The intake capacity of 9 constituent colleges and 64 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 divisions.

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 Post graduate and for Ph.D. programme - 78 students per year.





The university has 8 constituent, 1 granted and 1 non-granted (Ladies) Agril. Tech. Schools, affiliated Agril. Tech. Schools (40) and affiliated Agril. Polytechnics (40). In all total 90 Agril. Tech 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 a intake capacity of 40 students.

Period /	Particulars of Development
Year	
2008-10	Started Master of Business Management Programme in Agriculture at
	A.C, Pune
	MPKV bagged second position in ICAR's JRF 2008
	Construction of Bio-technology Lab at A.C, Pune The University secured the third position in JRF examination
	conducted by ICAR, New Delhi at national level. (2009-10)
	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
2011-12	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
	Establishment of College of Agriculture, Nandurbar
2013-15	Asian Inst itute 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
2015-17	Started CET examination for admission to Doctoral programme
	International Collaboration with Asian Institute of Technology,
	Bangkok for ELP in Horticulture

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 and implemented from the year 2017-18, Post Graduate progamme has been revised as per the NCG recommendations and implemented from the year 2009-10. Started new PG degree course in Agricultural Business Management i.e. M.B.A. (Agri) and Ph.D. programmes in 18 disciplines of Agriculture and Agril. Engineering, 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. As a result, the students of this university have excelled in various public service competitive examinations, SRF, JRF fellowships, GATE, ARS and extracurricular activities like sports, NCC, NSS etc.









As a result, the students of this university have excelled success in various public service competations, SRF, JRF fellowships and extracurricular activities like sports, NCC, NSS etc. Up till the year 2017, since inception, university has produced skilled human resources as below.

Sr. No.	Degree	No. of students
1	Ph. D.	722
2	M. Sc. (Agri.)	5849
3	M. Sc. (Hort.)	104
4	M. Tech. (Agril. Engg.)	285
5	M.Sc. (Agri. Biotech)	26
6	MBA (Agri.)	161
7	B. Sc. (Honors) Agriculture	26669
8	B. Sc. (Honors) Horticulture	1823
9	B. Tech. (Agril. Engg.)	3193
10	B. Tech. (FST)	976
11	B.Sc. (Honors) Agri. Business Management	1086
12	B.Sc. (Agril. Biotech)	1035
13	Agril.Tech. Schools	55647
14	Agril. Polytechnics	527
15	Mali Training Center	4024
	Total	102127

#### 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 Biocontrol Project, Centre for Advanced Studies in Agrometeorology, Biological Nitrogen Fixation Scheme, Agriclinic 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.

#### Rajarshee Chatrapati 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.

#### 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 like 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.

#### College of Agriculture, Karad

The College of Agriculture, Karad was established in the year 2013. The intake capacity of this college is 60 students per year. It offers under graduate B.Sc. (Honors) Agriculture degree programme.



#### College of Agriculture, Nandurbar



The Nadurbar district was established on 1.7.1998 from the division of Dhule district. It includes 6 tahsils in the district. Nandurbar, the northern most district town of Maharashtra State is located in the tribal areas. The College of Aglriculture, Nandurbar started from the year 2013-14 with the intake capacity of 60 students per year and 80 percent seats are reserved for tribal students. It offers under graduate B.Sc. (Honors) Agriculture degree programme.

#### College of Agriculture, Muktainagar

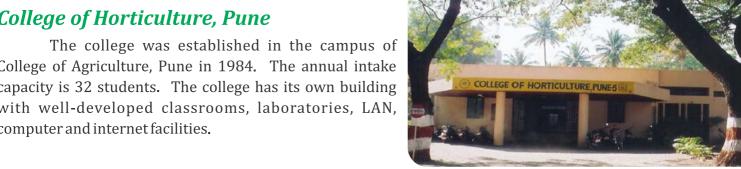
The college was established in 2015. It has an annual intake capacity of 60 students per year. It offers under graduate B.Sc. (Honors) Agriculture degree programme.

#### 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

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







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

The college was established in 1969 after realizing the need for agricultural engineers for soil conservation, irrigation management, farm mechanization and post harvest processing. In 1996, the college was named after the former Union Minister of State for agriculture and 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. The programme is implemented at eight affiliated colleges of the university.

#### 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 discplines 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, Biochemistry, Food Science and Technology, Soil Science and Agril. Chemistry, Agricultural Biotechnology and Irrigation

Water Management. The Ph. D. programme is offered in twenty 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.





#### **Affiliated Colleges**

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

#### **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.



At present, the library has over one lakh collection comprising of 72869 books, 27660 back volumes, 9193 theses, (Total 1, 09,722). Facilities like Lending of books for home reading, Open Access to library collection, Photo Copying facility, Inter Library Loan facility, Reading Room Facility are made available to the students and staff of the university. Apart from this, library offers IT-based services such as INTERNET Services, Retrieval of CD ROM Databases, Online e-journals/virtual journals(CeRA/Jgate), Online ETAD (e-theses abstracts database) Knowledge

Portal (Online catalogues), KrishiPrabha: Full text Ph.D. Theses Database of India, Ten thousand full text doctoral theses on agriculture and allied subjects are made available through KrishiPrabha portal. AgriCat /WorldCat of e-Granth Project Video Cassettes/DVDs Teaching of Course "Library and Information Services" The library has e-resources such as 23 CD ROM Databases, 549 e-books, 4694 e-journals, 350 video cassettes, 190 DVDs and 8 Digital Archives. In order to enhance reading habit of the students, the library organizes book exhibitions from time to time.





#### Agricultural Knowledge Management Unit (AKMU)

The MPKV, Rahuri has V-SAT connectivity at Central Campus, constituent colleges and research stations. AKMU has a good network of OFC and Wi- Fi connectivity with 200 nodes. The video conferencing facility has been created at three places at central campus and 8 centers (College of Agriculture- Kolhapur, Pune and Dhule, ZARS-Igatpuri and Solapur, ARS, Kasbe Digraj, Dist. Sangli, CSRS, Padegaon, Dist. Satara and Oilseed Research Station, Jalgaon. The project is wholly owned and controlled by MPKV, Rahuri with server at AKMU and in the service for students and scientists. This is the mega project of MPKV under special funds received from ICAR, New Delhi.

#### V Deans committee

The University is being implementing the UG syllabus as per the recommendations of the V Dean Committee of the ICAR, New Delhi from 2017-18. The component of Student READY has been included in the UG syllabus for developing confidence in the graduates. An utmost effort has been made to improve and maintain high technology standards in education.

#### Accreditation to University Colleges

Upon the recommendations of the ICAR Peer Review Committee and Education Division, and meeting the accreditation criteria, the National Agricultural EducationAccreditation 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 (2018-22).

#### Memorandum of Understanding

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 Leaning Programme in Agri Business Management
- Asian Institute of Technology, Bangkok
  - Unified 4+1 UG-PG Agribusiness Management

#### B) National Linkages

- Mahindra and Mahindra Tractors, Mumbai
- · National Research Center on Camel, Bikaner, Rajasthan
- Indian Institute of Soil Science (IISS), Bhopal, Madhya Pradesh







- Maharashtra Rajya Marathi Vishwakosh Nirmiti Mandal, Mumbai
- Maharashtra State Draksh Bagaitdar Sangh, Pune
- Bayer Crop Science Limited, Pune
- Prime Datamatics LLP (PRIME), Pune
- Jain Irrigation Systems Ltd., Jalgaon

#### Infrastructure facilities

- International Hostel for Foreign Students at Central Campus and College of Agriculture, Pune.
- Girls hostels at all constituent colleges and constituent Agricultural Technical Schools.
- 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 Agricultural Technical 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 Agricultural Technical 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.





#### 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.

Sr. No.	Exam	2013- 14	2014- 15	2015- 16	2016- 17	2017- 18	Total
01	ARS	03	05	00	02	06	16
02	UPSC	03	01	06	02	06	18
03	MPSC	66	48	137	104	18	373
04	Banking	48	46	141	86	15	336
05	Agril Dept./ Univ./KVK	86	97	74	137	55	449
	Total	206	197	358	331	100	1192

#### **Educational Acheivements**

- 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 crores 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.
- The University is implementing the UG syllabus as per the recommendations of the V Dean Committee of the ICAR, New Delhi from 2017-18.
- The component of Student READY has been included in the UG syllabus for developing confidence in the graduates. An utmost effort has been made to improve and maintain high technology standards in education.
- The University has launched MBA (Agri.) programme with intake capacity of 30 students per year from 2008-09 at College of Agriculture, Pune.
- In addition to previous 11 disciplines, the University has started Ph.D. programme in the discipline of Agril. Biochemistry, Plant Physiology, Agril. Microbiology and Seed Technology from academic year 2008-09 to strengthen the basic research in the University.
- The Post graduate Ph.D. programme in Agril. Engineering Faculty in the discipline of Irrigation and Drainage Engineering, Soil and Water Conservation Engineering with intake capacity of 3 students per discipline is started from the Academic year 2013-14 at Dr. Annasaheb Shinde, College of Agriculture Engineering.





- The M.Sc. (Hort.) PG programme has been started in three disciplines viz., Fruit Science, Vegetable Science at central campus, MPKV, Rahuri and Floriculture and Landscape Gardening at College of Agriculture, Pune from 2008-09 to produce trained manpower.
- The PG programme in the discipline of Agronomy, Agril. Botany (Genetics & Plant Breeding), Agril. Entomology, Soil Science and Agricultural Chemistry is started from 2009-10 and in the discipline of Dairy Science from the academic year 2014-15 with intake capacity of 6 students per discipline at College of Agriculture, Kolhapur.
- 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 students of this university are excelling in various competitive exams viz., JRF/SRF, GATE, ARS, MPSC, UPSC etc.
- 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.
- ISO 9001:2008 certification to MBA Agri.) prog. of AC, Pune: The MBA (Agri.) programme at College of Agriculture, Pune confirmed the registration to ISO 9001: 2008 for its Quality Management System. BSI is a world authority on management system and registered to BS EN ISO 9001: 2008.
- Centenary Building at College of Agriculture, Pune: The programme of inauguration of Centenary Building at College of Agriculture, Pune was organized on 10<sup>th</sup> June, 2012 with the auspicious hands of Mrs. Pratabhatai Devisingh Patil, Hon'ble President, Government of India.
- Golden Jubilee, College of Agriculture, Kolhapur: Golden Jubilee year ceremony of College of Agriculture, Kolhapur was organized on 18<sup>th</sup> October, 2012 with the auspicious hands of Dr.D.Y.Patil, Hon'ble Governor of Tripura and in presence of Shri. Radhakrishna Vikhe Patil, Hon'ble Minister of Agriculture, Shri. Harshavardhan Patil, Hon'ble Minister of Cooperation, Shri.Satej Patil, Hon'ble State Home Minister.
- 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 (2018-22).





- CET examination for admission to M.Sc. (2008 -09), Ph.D (2015-16), and UG programme (2018-19).
- From the academic year 2012-13 Agriculture Technology Schools have been upgraded and 3 years semi English Agri. Polytechnic have been started through unaided affiliated Agril. Polytechnics.
- University ranked first in registration of online e courses in India.

#### International Programme

- The University has started International 3+1 B.Sc. (Agri.) programme in collaboration with College of Agriculture, Baramati and 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.

# Adjunct faculty/Guest Lecture/Workshops/Seminar/Trainings organized/attended

- For the capacity building of faculty the 278 faculty members and 57 students proceeded for Winter School/Summer School/Refresher courses National International Conference at various places of the country during the year 2017-18.
- For the capacity building 20 training programmes were organized benefiting 1360 stakeholders.

 CAFT in Horticulture and Agril. Meteorology has organized one training programme each during the year 2017-18 with 20 and 24 number of beneficiaries respectively.

 "TIFAN" competition was organized in collaboration with SAEINDIA during March 22-23, 2018 on a theme "Self Propelled Onion Harvester" at Central Campus, MPKV, Rahuri.

• International Society for Noni Science, World Noni Research Foundation, Noni BioTech, Chennai and College of Agriculture, Pune has organized National Symposium on "Noni and Herbal Wealth for Sustainable Wellness" during March 24-25, 2018.







- One day training programme on 'Importance of Intellectual Property Rights in Agriculture Research and Education' at MPKV, Rahuri was organized on 26th September, 2018.
- Department of Soil Science and Agril. Chemistry, MPKV, Rahuri has organized 26th State Level Seminar on "Fostering Soils to Meet Emerging Challenges in Agriculture" at central campus during October 30-31, 2018.

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

- During the year 2017-18, 27 students secured JRF fellowship, 5 SRF fellowship.
- 48 and 6 students from University have qualified NET and GATE Examination respectively during academic year 2017-18.
- Mr. Guru P.N. (Ph.D.AG. 015/39), Post Graduate Institute student qualified ARS examination.
- During the year 2017-18, more than 100 students secured job in Central Govt., State Govt., Banking and Private sector.

Year	JRF	SRF	NET	GATE
2013-14	35	3	11	6
2014-15	45	7	06	5
2015-16	43	16	14	6
2016-17	43	14	18	2
2017-18	27	5	48	6
Total	208	45	97	25

#### **Sport Activities**



 The XVIII All India Inter Agril-Universities Sports and Games Meet 2017-18 held at University of Agricultural Sciences, GKVK, Bengaluru from 30th January to 3<sup>rd</sup> February, 2018. The following Teams of Mahatma Phule Krishi Vidyapeeth, Rahuri received the prizes in various events.

Sr. No.	Team/Event	Rank
1.	Kho-Kho (Men)	Winner
2.	Kho-Kho (Women)	Runner
3.	Kabaddi (Men)	Winner
4.	Kabaddi (Women)	Runner
5.	Volley Ball (Men)	Winner

- The University team obtained running trophy of overall winnership during the Maharashtra State Utkarsha Social and Cultural Event 2017-18 organized from  $23^{rd}$  to  $26^{th}$  February, 2018 at Swami Ramanand Tirth Marathwada Vidyapeeth, Nanded.
- The Zonal Elocution competition of Zone-III on the eve of 14<sup>th</sup> Agricultural Science Congress on the subject of "Transforming Agrarian Economy; innovative Solutions through Science and Technology" was conducted at Mahatma Phule Krishi Vidyapeeth, Rahuri on 14<sup>th</sup> August,2018. Ms.Dandekar Ujjwala from MPKV, Rahuri secured Runner Up position.





#### **Patents**

- Patent have been granted to the Mahatma Phule Krishi Vidyapeeth Rahuri on a process for "Preparation of low fat spread in the form of water in oil type emulsion' from Government of India (Patent No. 271417, Application No. 1796MUM, 2009).
- Patent have been granted to the Mahatma Phule Krishi Vidyapeeth Rahuri on a process "Whey utilization in preparation of alcoholic beverage" from Government of India (Patent No. 277283, Application No. 2693/MUM/2011).

#### Foreign Students Admission

• During the academic year 2017-18, 5 international students have been admitted in the university for Under and Post graduation.

#### Significant Educational Activities during 2017-18

#### 32<sup>nd</sup> Convocation of MPKV, Rahuri

32<sup>nd</sup> Convocation of University was held on 25<sup>th</sup> October, 2017 at central campus, MPKV, Rahuri. Hon'ble Shri. Vidyasagar Rao, Governor of Maharashtra presided the function in presence of Shri. Pandurang Fundkar, Hon'ble Minister for Agriculture and Horticulture, Maharashtra State and Pro-Chancellor, MPKV, Rahuri. Hon'ble Shri. A.S. Kiran Kumar, Chairman, Space Commission; Secretary, Department of Space, India and Chairman, ISRO was the chief guest and the Guest of Honour for function. Total 3784 degrees were conferred to students



# 12<sup>th</sup> Maharashtra State Inter University Research Convention AVISHKAR 2017-18

The Mahatma Phule Krishi Vidyapeeth, Rahuri hosted the 12<sup>th</sup> Maharashtra State Inter University Research Convention AVISHKAR

2017-18 during 15<sup>th</sup> to 17<sup>th</sup> January 2018 at Central Campus, Mahatma Phule Krishi Vidyapeeth, Rahuri. About 600 students, 200 Team Managers, Judges and Officials participated from 20 Universities of Maharashtra in this research convention. Hon'ble Padma Bhushan Shri. Vijay Bhatkar, Vice Chancellor, Nalanda University inaugurated the function.

#### 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  $3^{\rm rd}$  December, 2017 at various constituent and affiliated colleges under the jurisdiction of MPKV, Rahuri.





#### World Environment Day

The World Environment Day was celebrated on 5<sup>th</sup> June, 2018 at Central Campus, MPKV, Rahuri under the chairmanship of Hon. Vice Chancellor, Dr. K.P. Viswanatha, Shri Adarsha Reddy, Deputy Conservator of Forest Ahmednagar was the chief guest for the function.

#### International Yoga Day

The International Day of Yoga was observed on 21<sup>st</sup> June, 2018 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 21<sup>st</sup> June, 2018. More than 2500 staff, students and NSS volunteers participated. Shri. Shridhar Dhas, a notable Yogacharya delivered lecture on "Yoga".



#### Tree Plantation Programme

"Tree Plantation" programme was organized during  $1^{\text{st}}$  July to  $31^{\text{st}}$  July, 2018 at various constituent and affiliated colleges under the jurisdiction of MPKV, Rahuri.



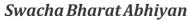
The Peer Review Team (PRT) of the Indian Council of Agricultural Research (ICAR), New Delhi visited the MPKV, Rahuri and accredited colleges for accreditation work. The team was led by the Chairman Dr.B.S. Chundawat, Former Vice Chancellor, Sardar Krushinagar Dantiwada Agricultural University, Sardar Krushinagar, Gujarat with

Member Secretary and ADG (EQA & R),





ICAR, New Delhi Dr. G. Venkateshwarlu and members Dr. J. Singh, Dr. S. S. Siwach, Dr. B. K. Sharma and Dr.M. Pratap.





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 campus clean with healthy atmosphere.





#### CAAST for Climate Smart Agriculture and Water Management (CSAWM) under NAHEP, ICAR (2018-22)

#### **Objectives**

- To Start PG Diploma & Post Doctoral proramme in CSAWM
- Strengthening PG and Ph.D. degree programme
- Development of RS/GIS/SDSS base tools & mobile application
- Capacity building, entrepreneurship & employability



#### **Lower Agriculture Education:** Educating Rural Youth for Agricultural Entrepreneurship

- A Diploma in Agriculture course is run since 1974 at constituent and granted Agriculture Technical School and Diploma in Agriculture Technology is being run at affliated private Agriculture Polytechnic on non grant basis from the academic year 2012-2013. The Certificate Course in Mali Training is also on run since 1974.
- There are 8 constituent, 1 granted and 1 non-granted (Ladies) Agriculture Technical Schools located at Puntamba (Ahmednagar), Manjari Farm (Pune), Borgaon (Satara), Solapur, Kolhapur, Kasbe Digraj (Sangali), Dhule, Jalgaon and Malegaon Camp (Nasik).
- There are 40 private Agriculture Polytechnics and 40 private Agriculture Technical Schools are run on non grant basis in the jurisdiction of university.
- There are 5 Mali Training Centers located at Ganeshkhind (Pune), Sharadanagar (Baramati), Narayangaon (Pune), Loni (Ahmednagar) and Rahuri (Ahmednagar).
- Each Agriculture Technical School has intake capacity of 60 students per year. The total intake capacity of 50 Agriculture Technical Schools is 3000 students per year. The total intake capacity of 40 Agriculture Polytechnic Schools is 2400 students per year. The total intake capacity of 5 Mali Training centers is 200 students per year.
- The concept of Lower Agricultural Education revolves around improving the competency of participating students as well as creating trained manpower at the grass root level.

#### Accomplishment and Challenges

- Till today, 57,146 and 3400 students completed the Agriculture Diploma and Agriculture Polytechnic diplomas, respectively and 4239 students have passed the Mali Training Certificate Course.
- Some of the passed out students have established their own business related to Agriculture like Nursery management, Livestock management, Poultry management, Fruit and Vegetable industry, Agro Service centre.
- The passed out students have opted for Government and Agriculture University services like
- Agriculture Assistant, Gramsevak, Canal Inspector etc. and they are also working in private sector, as a Sales Representative, Garden Inspectors etc.
- These courses prepare students with the knowledge and skills they need for a rapidly evolving field of agriculture.
- There is a shortage of agricultural Diploma students. Career opportunities range from the laboratory to the field, from the city to rural areas, farm managers, market development officers, journalists and bankers.
- These courses are being run to impart skill oriented practical training to students in order to provide the opportunity for self-employment and employment in different organizations.





#### Research

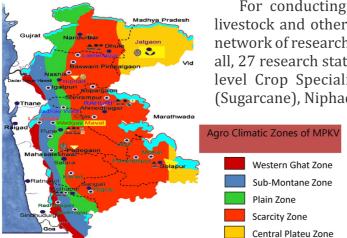
The jurisdiction of Mahatma Phule Krishi Vidyapeeth, Rahuri extends over the Western Maharashtra comprising of 10 districts divided into five agro climatic zones viz., Western Ghat Zone, Sub-mountain Zone, Plain zone and Scarcity zone. In addition, Jalgaon district with assured rainfall which falls in 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.
- $\bullet \quad \text{To evaluate and modify technology for protected cultivation of flowers and vegetables for export.}\\$
- 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 station



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 76 non-plan schemes funded by State Govt., 47 AICRPs on different crops/plant sciences, One Network Projects funded by ICAR on 100% basis and one Centrally Sponsored Research Schemes funded by the Central Govt.,

Ministry of Agriculture, is working in MPKV, Rahuri.





Sr. No.	Research Station	Lead Function	Verification Function
A. West	tern Ghat Zone		
1	Igatpuri (Zonal Agril Research Station)	Rice, Silvipasture, 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-	<b>Montane Zone</b>		
1	Kolhapur (Zonal Agril Research Station)	Maize, Small millets, Pandharpuri Buffaloe, Horti - pastural Systems, Sugarcane	Grases, 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-meteoroogy, 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. Cent	tral 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 257 Varieties/hybrids, developed 34 farm implements/machineries and 1431 recommendations / technologies for the benefit of farming community.

#### **MPKV Varieties**

Cereals	Varieties
Paddy	Radhanagari 185 , Indrayani, Kundalika, Pawna, Phule 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
Littel Millet	Phule Nachni, <i>Phule Bhagar</i> , Phule Ekadashi
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, <i>Phule Sakas</i> , Phule Sakas
Mothbean	MBS-27
Rajama	Mutha, Varun, Phule Rajama
Cowpea	Phule Pandhari , <i>Phule Vithai</i>
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 , <i>Phule Morna</i> , Phule Bharti
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





C. CCI		
Safflower	Bhima, Girna, Phule Kusuma, SSF -658, SSF 708, Phule SSF-733, Phule Chandrabhaga	
Maratand	TPM-1	
Mustard	1PM-1	
Cash Crops	Co 410 Co 740 Co 7210 (Saniiyani) CoM 7125 (Samueda) Co 7527	
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	
Cotton	<b>Deshi-7</b> : Y-1, Joyti, JLA 794, Rh-arb-02-01 (w), RAC-024, Phule Dhanvantari, Phule Anmol, <i>Phule Yamuna</i> , <i>Phule Rukhmai</i> , <i>Phule Tarang</i> , <i>Phule Dhara</i> , Phule Shwetambari, Phule Chetana <b>American:</b> 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 Cro		
Bitter gourd	Hirkani, Phule Green Gold, Phule Ujwala, Phule Prianka	
Bottle Gourd	Samart	
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
<b>Dolichos bean</b>	Phule Gouri, Phule Ashwini, Phule Suruchi
Snake Gourd	Phule Vaibhav
Broccoli	Ganesh Broccoli
Lettuce	Phule Padma
Betelvine	Krishna (DPB-6)
Turmeric	Phule Swarupa
Gavar	Phule Gavar
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
<b>Custard Apple</b>	Phule Purandar
Fig	Phule Rajewadi
Banana	Phule Pride
Papaya	Phule Vijaya
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















#### Significant Research Achievements during 2017-18

- Released 6 crop variety, 1 farm implements, 39 recommendations and 1 plant source for biotic stress in 46th Joint Agresco Meet 2018 held at Dr. BSKKV, Dapoli Parbhani during 24-26 May, 2018
- Cenchurus variety Phule Madras Anjan -1 and Masrvel Grass variety Phule Marvel -1 are notified in the 79th meeting of Central Sub Committee on Crops Standard, notification and release of varities for Agriculture crops .
- Custard apple variety Phule Janaki was identified in national workshop Group Meeting of AICRP on arid Zone Fruits during 16-18, January, 2018 at Horticulture Research Station, Kamaalanagar, Anantpur.
- Identified and recommended Bajara variety MH-2114 (DHBH-1397) for National level- Zone A (Rajasthan, Gujrat, Haryana, Punjab, M.P., U.P and New Delhi) during Annual Group Meeting at Jodhpur during 22-24 March, 2018.
- First time identified pest on Babchi, Dawana and Punarnava a medicinal and aromatic plants from Maharashtra.

#### Workshop organized

- One day Brainstorming Workshop on "Researchable Issues in Agriculture and Avenues for External Funding" was organized at Dr. Nanasaheb Pawar Auditorium, MPKV, Rahuri. Total 450 scientist from MPKV, Rahuri attended the workshop.
- On the eve of World Bamboo Day a Workshop on "Bamboo for Sustainable Development" was organized on 18<sup>th</sup> September, 2018 at College of Agriculture, Pune.

#### MoU signed for research

SN	Organization	Mode of collaboration
1.	Agricultural Microorganism Manufacturer & Farmer Association, Nasik (AMMFA)	Bioferilizer and biopesticide research and registration.
2.	International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Hyderabad.	Collaboration in researc h for development, training and other agreed activities.
3.	Maharashtra Hybrid Seed Company Pvt. Ltd., Jalna (Mahyco)	Germplasm assessment and use
4.	Mula Education Society	Medicinal and aromatic plant research
5.	Bamboo Research & Training Centre	Bamboo Research & Training for Enterprenurship





# Seed Production Programme 2017-18

Seed Production	University Farm : 9,680 q. Farmers Participatory : 31,320 q. Total : 41,000 q.
Planting Material (No. of grafts)	11.2 Lakhs
Biopesticides	25 q & 41 lit.
Biofertilizers	61 q & 8033 lit.

### New Projects Sanctioned

SN.	Project	Amount (Rs. in Crores)
1.	Bamboo Plantation Research Project	3.19
2.	Bamboo Start up Promotion Centre	0.33
3.	Enhancing Breed er seed Production for increasing Indigenous Production of millets in India	0.70
4.	Delivering more produce and income to farmer through enhancing genetic gains for chickpea and pigeonpea	0.53
5.	Evaluation of bioefficacy, phytotoxicity and safety to natural enemies of belt expert and other biopesticides against Helicoverpa and <i>Spodoptera</i> in chilli.	0.55
6	Minor millet Seed Hub Project	1.58
7.	Pulses Seed Hub Project	6.00
8.	Establishment of lift irrigation for sustainable seed production at the University Campus of MPKV, Rahuri	15.22
9	Master Training Programme for Management of Soil Carbon and Sugarcane Productivity enhancement under climate change scenario	1.02





#### 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 Appratus



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, microirrigation, 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 and 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 43 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-2017:** An informative and photographic exhibition depicting the education, research and extension education activities of the university was organized at MPKV, Rahuri. *Krishidarshani-2018* was released on this occasion.





**Extension Education Council meeting (EEC)**: The EEC meetings were organized for preparation action plan for University extension activities, technology transfer, modern agriculture technology etc.





- **Zonal Agricultural Research and Extension Advisory Council Meeting (ZAREAC)**: ZAREAC meeting for Kharif 2018, Rabi and summer 2018-2019 were organized for transfer of university developed technologies to the farmers through line department.
- Annual Zonal Workshop of KVKs: ICAR-ATARI, Pune in collaboration with MPKV, Rahuri organized Annual Zonal Workshop of KVKs of Maharashtra, Gujarat and Goa during 5-7 May, 2018 at MPKV, Rahuri. Dr. A.K. Singh, DDG (Agril Extension), ICAR, New Delhi; Dr. K.P. Viswanatha, Vice Chancellor, MPKV, Rahuri and Dr. V.P. Chahal, ADG (Agril Extension), ICAR, New Delhi inaugurated the workshop. In this workshop, 79 KVKs (47 from Maharashtra, 30 from Gujarat and 2 from Goa)



participated and presented their progress reports for 2017-18 and action plan for 2018-19. For technological backstopping, 8 ICAR institutes (NIASM, Baramati; NRCP, Solapur; NRCG, Pune; DFR, Pune; CICR, Nagpur; CCRI, Nagpur; DOGR, Pune and CRIDA, Hyderabad) and Dean and Director of Research of MPKV, Rahuri shared their usable technologies to make fast technology flow to the farmers. Directors of Extension Education of 6 State Agricultural Universities also attended the programme. Knowledge Systems and Homestead Agriculture Management in Tribal Areas (KSHAMTA) to achieve balanced growth and economic development, Nutri-sensitive Agricultural Research and Innovations (NARI), Value Addition and Technology Incubation Centers in Agriculture (VATICA) are the new programs to be implemented by KVKs.

- Action Plan Workshop of KVKs organized: An Action Plan Workshop of KVKs in the university jurisdiction was organized at MPKV, Rahuri in co-ordination with the ICAR Agricultural Technology Application Research Institute (ATARI), Zone-VIII, Pune.
- Agro Technology Week at Krishi Vigyan Kendras: Live crop demonstrations, exhibition depicting various agricultural technologies, technical deliberations were



- organized at Krishi Vigyan Kendras for farming community. The technical programme covered various technical deliberations from diversified field of agriculture. The farmers, students from the KVK jurisdiction visited the crop cafeteria depicting various technologies recommended for farmers.
- Scientific Advisory Committee (SAC) meetings organized: The SAC meetings of every KVK under the jurisdiction of MPKV, Rahuri to review the progress made by KVK and their future action plans. The Hon,ble Vice Chancellor and Director of Extension Education, MPKV, Rahuri participate and guide the KVK staff and other stakeholders.





- *Unnat Sheti-Sammurudha Shetkari Abhiyan*: The *Unnat Sheti-Sammurudha Shetkari Abhiyan* was effectively implemented in collaboration with Dept. of Agriculture, MS in the jurisdiction of MPKV, Rahuri.
- Workshop on e-content Development: A two day workshop on e-content development was organized by the Department of Extension Education in co-ordination with the Knowledge Bridge, Ahmednagar at MPKV, Rahuri. Dr. K. D. Kokate, Director, Extension Education presided over the function. Dr. S. R. Gadakh, Director of Research, Dr. S. A. Ranpise, Associate Dean, Lower Agril. Education, Dr. M. C. Ahire, Head, Department of Extension Education and Master Trainers Mr. Bhushan Kulkarni and Mr. Eknath Kore were present on this occasion. The concluding programme was presided by Vice Chancellor Dr. K. P. Viswanatha in presence of Dr. A. L. Pharande, Dean, Faculty of Agriculture and Dr. D. D. Pawar, Registrar.
- Vanmahotsov programme organized: Krishi Din and Vanmahotsov programme was organized at the Mahatma Phule Krishi Vidyapeeth, Rahuri to celebrate the birth anniversary of former Chief Minister of Maharashtra late Vasantrao Naik. Dr. K. P. Viswanatha, Vice Chancellor, MPKV, Rahuri presided over the function. Shri. Adarsha Reddy, District Conservator of Forests, Ahmednagar was the chief guest. Dr. K. D. Kokate,



Director, Extension Education, Dr. S. R. Gadakh, Director of

Research, Mrs. Kirti Jamdhade, Divisional Forest Officer, Shri. Anil Dound, Tahsildar, Rahuri, Registrar Dr. D. D. Pawar, Comptroller Shri. Vijay Kote, Shri. Pandit Lonare, District Superintendent Agricultural Officer, Ahmednagar were present on the dias. After the programme, the university staff and students planted around 23,655 trees at the central campus. This include neem, jamun, mango, bamboo, karanj, aonla, hirda, behada, kagzi lime and various medicinal plants. A target of 1,06,182 trees for planting this year has been set by the university in its ten district jurisdiction

- Sankalp Se Siddhi Programmes at KVKs: A programme on New India Manthan: Sankalp se Siddhi were organized by Krishi Vigyan Kendra, Dhule and Borgaon in collaboration with Department of Agril., Govt. of Maharashtra. The programme at KVK, Dhule was participated by various dignitaries who include Dr.Subhashji Bhamare, Hon'ble Minister of State for Defence, GoI, while at KVK, Borgaon Shri. Sanjeevraje Naik-Nimbalkar, Hon'ble President, Zilla Parishad, Satara and Shri. Anandrao Patil,
  - Hon'ble Member Legislative Council were present as a chief guests. On this occasion expert lectures were organized and dignitaries gave away oath on "New India Manthan-Sankalp se Siddhi" to the participants.
- **Live Web Casting** of Interface of Hon'ble Prime Minister Shri. Narendra Modi was organized for the farmers at MPKV, Rahuri.







#### **Kisan Aadhar Sammelan-2018**

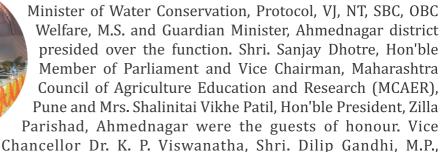
A mega event of Kisan Aadhar Sammelan-2018 with the moto on Doubling of farmers income by 2022 was organized at the Mahatma Phule Krishi Vidyapeeth, Rahuri during October 15-18, 2018 in collaboration with Department of Agriculture, M.S. and Agriculture Technology Management Agency (ATMA), Ahmednagar. The event comprised of Live Crop Demonstrations, Agriculture and Animal Exhibition and Farmers-Scientists Interactions.

#### Inauguration of Kisan Aadhar Sammelan-2018

The Kisan Aadhar Sammelan-2018 was inaugurated at the auspicious hands of Shri. Chandrakant (Dada) Patil, Hon'ble Minister of Revenue, Relief and Rehabilitation and Public Works (Excluding Public Enterprises), Agriculture and Horticulture, M.S. and Pro Chancellor, MPKV, Rahuri on

15th October, 2018. Prof.

Shri. Ram Shinde, Hon'ble



Ahmednagar, Shri. Shivajirao Kardile, M.L.A., Shri. Sacchindra Pratapsinh, Commissioner, Agriculture, M.S., Shri. Chandrashekhar Kadam, Vice President, Shri. Saibaba Sansthan, Shirdi, Shri. Rahul Dwivedi, District Collector, Ahmednagar and university Executive Council members Dr. Bhaskar Patil, Mrs. Sunita Patil, Shri. Nathaji Chougule, Dr. Pankajkumar Mahale and Dr. Vijayprakash Thombre were present on

the dias. Former Vice Chancellors Dr. S. S. Magar, Dr. K. E. Lawande, Directors Dr. K. D. Kokate, Dr. A. L. Pharande, Dr. S. R. Gadakh, Registrar Dr. Dilip Pawar, Comptroller Shri. Vijay Kote, University Engineer Shri. Milind Dhoke, District Supd. Agril. Officer Shri. Pandit Lonare, Associate Director of Research Dr. V. D. Shende, experts, Heads of Departments, scientists and farmers were present on this occasion.

#### Visit of dignitories to Kisan Aadhar Sammelan-2018

Shri. Mahadeo Jankar, Minister of Animal Husbandry, Dairy
Development and Fishery Development, M.S. and Shri. Pasha Patel, Chairman, Agriculture Price
Commission, M. S. visited the Kisan Aadhar Sammelan-2018 and addressed the farmers. Dr. R. B.
Deshmukh, Former Vice Chancellor, MPKV, Rahuri was the chairman for this session. Vice Chancellor
Dr.K. P. Viswanatha, Dr. M. C. Varshneya, Former Vice Chancellor, Anand Agriculture University, Anand
and Kamdhenu Veterniary University, Gujarat, Directors Dr. K. D. Kokate, Dr. A. L. Pharande and Dr. S. R
Gadakh were present on the dias.



किसान आधार संमेलन







#### Farmers-Scientists Interactions

Farmers-Scientists interactions were organized during the Kisan Aadhar Sammelan-2018. The major themes included Farmers Producers Company and Fruit and Vegetable processing, Watershed Development and Management, Water Resources and Irrigation

Management, Agriculture Economics and Agriculture Price Fixation, Advanced Climatesmart Agricultural Technologies, Mechanization and Animal, Fishery Management and Protected Floriculture and Vegetable Cultivation. Experts and scientists interacted with the farmers. Eminent speakers and experts like Shri. Popatrao Pawar, Shri. Vilas Shinde, Shri. Vijayanna Borade, Shri. Popatrao Sankpal, Shri. Bharat Patil, Shri. Dnyaneshwar Bodkhe, Shri. Rajaram Chaudhary guided the farmers during the interactions.

#### **Live Crop Demonstrations**

Crop demonstrations on over 100 acres were organized for the benefit of farmers during the Kisan Aadhar sammelan-2018. It included demonstrations on cereals, pulses, oilseeds, forage, vegetables, flowers and cash crops. In all demonstrations of 45 crops and 131 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, drone spraying were also organized on this occasion.

#### Agriculture Exhibition

An Agriculture Exhibition was organized during the Kisan Aadhar Sammelan-2018. It included 124 stalls. Both the Government organizations and private companies showcassed their technologies in the exhibition. This included stalls on agriculture inputs, improved agriculture implements, processing, subsidiary occupations, mushroom production, medicinal and aromatic plants, publications etc. The animal component included indigeneous and improved breeds of cattle, goat, sheep, poultry, dogs and horses. The Government schemes of Department of Agriculture, ATMA, Zilla Parishad and all technologies were exhibited in the event





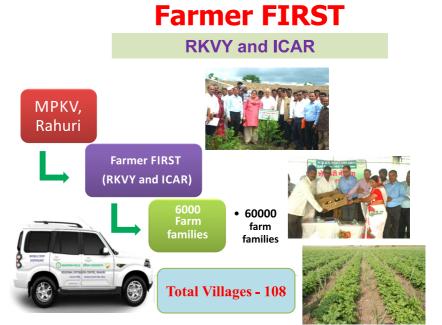
# Kisan Aadhar Sammelan 2018 - *Glimpses*





#### 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. 71.30 lakhs is made available by the ICAR for the year 2016-17 to 2018-19.



#### Technology Modules of the project

Name of	Content
technology	
Five point <i>rabi</i>	· In situ soil and water conservation
sorghum	· Selection of varieties as per soil type
production	· Seed treatment
technology	· Hoeing at proper stage
	· Plant protection measure
Pulse Production	· Selection of varieties for seed replacement
technology	· BBF planting
	· Bio-fertilizer (Azotobactor, PSB etc.)
	· Seed Treatment
	· Bio pesticides
	· IPM
	· Mechanical harvesting
Integrated	· Integration of agronomical crops + Horticultural crops + Poultry
Farming System	(Grampriya, Giriraj) - Chick, ration etc./ Goat - Bucks and does
	(Sangamneri/Osmanabadi), Animal Component – AI dosages of
	Phule Triveni, Forage Crops - Phule Jaywant, Phule Gunwant,
	Fisheryetc.













#### Rashtriya Krishi Vikas Yojana-Farmer FIRST

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 2017-18 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

Sr. No.	Interventions	Demonstr ations
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

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 will be organized up to 2018.





#### 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

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 agroadvisory 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.



# University Publications at a Glance

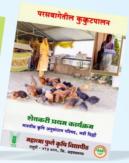


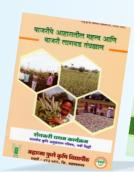


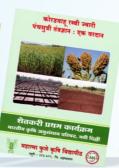






























Directorate of Extension Education

# Mahatma Phule Krishi Vidyapeeth

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