



MAHATMA PHULE KRISHI VIDYAPEETH

Rahuri - 413 722, Dist. Ahmednagar, Maharashtra (India)

www.mpkv.ac.in

MAHATMA PHULE KRISHI VIDYAPEETH



MAHATMA PHULE KRISHI VIDYAPEETH, RAHURI



Years of

Journey

FIFTY YEARS OF JOURNEY

MAHATMA PHULE KRISHI VIDYAPEETH, RAHURI



Mahatma Phule Krishi Vidyapeeth, Rahuri
Dist. Ahmednagar - 413 722 (M.S.)
www.mpkv.ac.in



FIFTY YEARS OF JOURNEY **MAHATMA PHULE KRISHI VIDYAPEETH, RAHURI**

■ **Citation**

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CONTENTS

■ Messages, Foreword	I - XIV
■ History of MPKV	1-40
■ Education	41-94
■ Research	95-126
■ Extension Education	127-165
■ Awards	166
■ Economic Impact of MPKV Varieties	167
■ Epilogue	168



Shri Ram Nath Kovind
President of India



राष्ट्रपति
भारत गणतंत्र
PRESIDENT
REPUBLIC OF INDIA

MESSAGE

I am happy to know that the Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra is celebrating its golden jubilee and bringing out a souvenir to commemorate the occasion.

The Agricultural University is named after Mahatma Phule, who served society by recognising the need for socio-educational transformation. It has contributed to the agricultural growth of the country and the state of Maharashtra. It has made impressive contributions to the country's education, research and extension domains across the agricultural sector, comprising both crop and animal husbandry segments. I appreciate that the alumni of this University have been serving the cause of agriculture both within and outside the state.

As the University celebrates its 50th year, I am sure it would continue to excel as an institution of higher education in field of agriculture. On this occasion, I extend my warm greetings and felicitations to the faculty, staff and students of Mahatma Phule Krishi Vidyapeeth and wish the golden jubilee celebrations every success.


(Ram Nath Kovind)

New Delhi
March 6, 2019



Shri M. Venkaiah Naidu
Vice - President of India



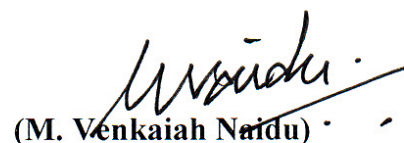
भारत के उपराष्ट्रपति
VICE-PRESIDENT OF INDIA

MESSAGE

I am happy to know that the Mahatma Phule Krishi Vidyapeeth (MPKV), Rahuri is celebrating its Golden Jubilee Year.

Being one of the premier agricultural universities, MPKV renders useful services to the farmers through education, research and extension education. The University offers a wide range of courses to cater to the requirements of young students who want to make their career in the agricultural field.

I convey my best wishes to students, teachers and the staff of MPKV and wish the golden jubilee celebrations a grand success.



(M. Venkaiah Naidu)

New Delhi
12th November, 2018



Shri Narendra Modi
Prime Minister of India



प्रधान मंत्री
Prime Minister

MESSAGE

I am pleased to learn that Mahatma Phule Krishi Vidyapeeth (MPKV), Rahuri is celebrating its Golden Jubilee, coinciding with the centenary celebrations of Shri Sai Baba's Samadhi.

India is essentially an agricultural economy and nation. Our Government has taken several measures to provide a boost to the farm sector, reflected through our commitment to double the income of farmers by the year 2022. We have implemented initiatives like Pradhan Mantri Krishi Sinchayee Yojana, Pradhan Mantri Fasal Bima Yojana, Soil Health Cards, Minimum Support Prices and e-NAM which are hugely befitting our hardworking farmers.

Mahatma Phule had dedicated his life to social, educational and economic issues. He introduced the tool of education for the deprived sections of the society to bring about the much-needed change in various spheres of life. Mahatma Phule Krishi Vidyapeeth had been established with the objective to enhance food and livelihood security through assessment, refinement and adoption of appropriate technologies. MPKV has developed successful collaborations in agricultural research and education with national and international institutions.

The Golden Jubilee celebrations are an ideal occasion for agricultural experts, farmers, researchers and students to discuss ways and means to embrace latest technology and increase employment opportunities.

Best wishes for the Golden Jubilee celebrations of Mahatma Phule Krishi Vidyapeeth and centenary celebrations of Shri Sai Baba's Samadhi.



(Narendra Modi)

New Delhi
27 February, 2019



Shri Radha Mohan Singh
Minister of Agriculture



सत्यमेव जयते

कृषि मंत्री
भारत सरकार
MINISTER OF AGRICULTURE
GOVERNMENT OF INDIA

17th January, 2019

MESSAGE

The Mahatma Phule Krishi Vidyapeeth, Rahuri has played a major role to ensure the food security and farmer's prosperity. In spite of varying climatic conditions, declining farm resources, we could achieve higher production especially in food grains due to hard working farmers as well as the strenuous efforts of our National Agricultural Research System.

I am happy to note that the MPKV, Rahuri is celebrating its golden jubilee this year. Over the years, this university has made a remarkable achievement in education, research and extension education. I congratulate the scientists, staff and students for their efforts.

I convey my best wishes for the souvenir and celebrations of golden jubilee of the university.


(Radha Mohan Singh)



Shri Ch. Vidyasagar Rao
Governor of Maharashtra



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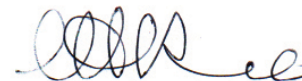
6th November 2018

MESSAGE

I am pleased to know that the Mahatma Phule Krishi Vidyapeeth (MPKV), Rahuri is celebrating the Golden Jubilee Year of its establishment this year.

During the last five decades of its meaningful existence, the Mahatma Phule Krishi Vidyapeeth has rendered a yeoman's service to society by serving the farming community. The University has done commendable work in agricultural education, research and extension services. I wish and hope that MPKV will rise to the occasion and help the government in attaining the goal of doubling the income of farmers early.

I congratulate MPKV on the joyous occasion of its Golden Jubilee year and wish it continued success in its future endeavours.



(Ch. Vidyasagar Rao)



Shri Devendra Fadnavis
Chief Minister
Maharashtra



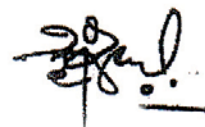
Mantralaya
Mumbai 400 032

17th November 2018

MESSAGE

I am happy to know that the Mahatma Phule Krishi Vidyapeeth, Rahuri has made significant contributions in the field of agricultural education, research and extension education. In the long run of 50 years, the University has developed several improved varieties of different crops. It is noteworthy that the University research findings are being widely adopted by the cultivators. It is commendable that the University has actively participated in Swachha Bharat Abhiyan and is on the path of clean, green and plastic free campus.

I extend my best wishes on the momentous occasion of Golden Jubilee of the University and wish all the success in their future initiatives.



(Devendra Fadnavis)



चंद्रकांत (दादा) पाटील

मंत्री

महसूल, मदत व पुनर्वसन, सार्वजनिक बांधकाम (सा.उ.व.), कृषी व फलोत्पादन
महाराष्ट्र शासन

दि.१५.११.२०१८

शुभ संदेश

महात्मा फुले कृषी विद्यापीठ, राहुरी, जि.अहमदनगर यंदा सुवर्णमहोत्सवी वर्ष साजरे करीत आहे, हे समजून आनंद झाला.

महात्मा फुले कृषी विद्यापीठ शेती, शिक्षण, संशोधन आणि विस्तार शिक्षण या कार्याद्वारे राज्यातील शेती व शेतकऱ्यांसाठी गेली ५० वर्षे कार्यरत असून शेतकरीभिमुख संशोधन तसेच विद्यापीठाच्या शिफारशींचा मोठ्या प्रमाणावर अवलंब करीत शेतकरी शाश्वत विकास करीत आहे, हे खरोखरीच कौतुकास्पद आहे.

थोर समाजसुधारक व शेतकऱ्यांचे कैवारी महात्मा जोतिबा फुले यांचे नाव सार्थ करीत विद्यापीठातील शास्त्रज्ञ, प्राध्यापक, व कर्मचारी या कार्याचा वारसा असाच पुढे नेतील, अशी मला खात्री आहे. राज्यातील या अग्रेसर विद्यापीठाकडून शिक्षण व संशोधन क्षेत्रात उत्तरोत्तर भरीव कार्य होवो, या सदीच्छेसह सुवर्णमहोत्सवी वर्षानिमित्त माझ्या हार्दिक शुभेच्छा.

C.B.Patil
(चंद्रकांत पाटील)



SANJAY DHOTRE
B.E., L.L.B
M.P.
Vice Chairman
MCAER



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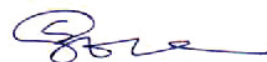
Shri Sanjay Dhotre
M.P. and Vice Chairman
MCAER, Pune

MESSAGE

The Mahatma Phule Krishi Vidyapeeth, Rahuri named after the great social reformer Mahatma Jyotiba Phule has made significant contribution to the agriculture development of the state. It is a premier Agriculture University in the state of Maharashtra.

MPKV since its establishment has released many prominent crop varieties including cereals, pulses, oilseeds, fruits, vegetables, flower crops etc. Besides its achievements in agriculture education is significant especially in developing agri entrepreneurs and trained manpower. It is implementing innovative extension programmes for the benefit of farmers.

The Golden Jubilee is a great occasion not only for the university but the farmers and other stakeholders as well. My sincere and best wishes to the university.



Vice Chairman

MCAER, Pune



प्रा. राम शिंदे

मंत्री, मृद व जलसंधारण, राजशिष्टाचार,
विमुक्त जाती, भटक्या जमाती,
इतर मागासवर्ग व विशेष मागास प्रवर्ग कल्याण
महाराष्ट्र शासन



!! शुभसंदेश !!

महात्मा फुले कृषि विद्यापीठाची स्थापना १९६८ साली झाली. सन २०१८ हे वर्ष विद्यापीठ सुवर्ण महोत्सवी वर्ष म्हणुन साजरा करत असल्याचा मला आनंद होत आहे. या ५० वर्षांच्या वाटचालीत विद्यापीठाने शेतकरी हिताचे मोठे संशोधन केले आहे. शेतक-यांची झालेली प्रगती आपण पाहत आहोत ते विद्यापीठाच्या संशोधनाचे फळ आहे. कृषि विद्यापीठाने कृषि शिक्षणात मोठा पल्ला गाठला आहे. विद्यापीठाने मोठ्या प्रमाणावर कृषि तंत्रज्ञ घडविले आहेत. कृषि विद्यापीठ आणि कृषि विभाग एकत्र येऊन कृषि विस्ताराचे नवीन आणि प्रभावी समीकरणाचे उदाहरण राज्यासमोर ठेवले आहे. महात्मा फुले कृषि विद्यापीठ शेतक-यासाठी कृषि पंढरी म्हणून ओळखले जाते. विद्यापीठाच्या सुवर्ण महोत्सवी वर्षानिमित्त विद्यापीठाच्या पुढील उज्वल आणि दैदीप्यमान वाटचालीसाठी माझ्या मनःपूर्वक शुभेच्छा.

(प्रा. राम शिंदे)



श्री. सदाभाऊ खोत
राज्यमंत्री
कृषी व फलोत्पादन, पणन आणि
पाणीपुरवठा व स्वच्छता
महाराष्ट्र राज्य
मंत्रालय, मुंबई- ४०० ०३२.



शुभ संदेश

दिनांक : २७.०२.२०१८.

सन २०१८ हे वर्ष महात्मा फुले कृषि विद्यापीठ राहुरीचे सुवर्ण महोत्सवी वर्ष आहे. विद्यापीठाच्या या ५० वर्षांच्या वाटचालीत विद्यापीठाने भरीव कृषि संशोधन कार्य केलेले असून त्याचबरोबर कृषि शिक्षणाद्वारे कृषि तज्ञ घडविले आहेत. विद्यापीठाचे विस्तार शिक्षणात मोठे योगदान आहे. विद्यापीठाने आतापर्यंत शेतकरी हिताचे मोठे संशोधन केलेले असून यामुळे शेतकऱ्यांचे जीवनमान उंचविण्यात मदत झालेली आहे.

विद्यापीठाची ही सर्व प्रगती विद्यापीठाचे शास्त्रज्ञ, कर्मचारी यांच्या कष्टाचे फळ आहे. विद्यापीठाच्या ५० वर्षांच्या शिक्षण, संशोधन आणि विस्तार कार्यातील अभूतपूर्व यशामुळे हे विद्यापीठ इतर विद्यापीठांना दिपस्तंभ ठरत आहे. विद्यापीठाच्या सुवर्ण महोत्सवी वर्षानिमित्त मी विद्यापीठातील सर्व शास्त्रज्ञ व कर्मचारी यांना शुभेच्छा देतो , तसेच शेतकरी हिताचे संशोधन विद्यापीठात होत राहो, ही सदिच्छा.

कृषि विद्यापीठाच्या पुढील वाटचालीस माझ्या हार्दिक शुभेच्छा !!!

(सदाभाऊ खोत)



DR. TRILOCHAN MOHAPATRA, Ph.D
FNA, FNASc, FNAAS
SECRETARY & DIRECTOR GENERAL



भारत सरकार
कृषि अनुसंधान और शिक्षा विभाग एवं
भारतीय कृषि अनुसंधान परिषद
एवं किसान कल्याण मंत्रालय, कृषि भवन, नई दिल्ली 110 001
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MESSAGE

I am pleased to know that the Mahatma Phule Krishi Vidyapeeth, Rahuri is celebrating its Golden Jubilee of its establishment this year. It is a great occasion for the University especially completing fifty years with a glorious history. At this juncture, the University's contribution is to be remembered that enabled farmers' access to new varieties and technologies not only in Maharashtra, but other States too. Besides, the University has significantly contributed to the human resource development, to the extent that the University Alumni are occupying prominent positions in the country.

I extend my greetings and best wishes to the University for its Golden Jubilee celebrations.


(T. MOHAPATRA)

Dated the 16th November, 2018
New Delhi



Shri Eknath Dawale, IAS
Secretary (Agriculture)

MESSAGE



It is indeed a great pleasure to know that the Mahatma Phule Krishi Vidyapeeth, Rahuri is celebrating its Golden Jubilee this year. This University has made a remarkable contribution for agricultural development of the State.

The crop varieties and technologies by this university are widely adopted by the farmers. Graduates of this University have made their contribution in various areas like agro entrepreneurship, agriculture, scientist, administration etc. It is also implementing the manifold extension programmes for effective transfer of technology.

My best wishes for the Golden Jubilee celebrations.



(Eknath Dawale)
Secretary (Agriculture)
Agriculture Department
Maharashtra State



Shri. Suhas Divase
IAS
Commissioner, Agriculture



MESSAGE

It gives me immense pleasure to congratulate Mahatma Phule Krushi Vidyapeeth, Rahuri (MPKV) which is celebrating Golden Jubilee Year of its establishment during 2018-19. Named after the greatest reformer of Maharashtra, Mahatma Phule, MPKV, Rahuri has done and is continuing to do commendable job in agriculture education, research and extension.

Agriculture is the core sector of Indian economy which is facing various challenges in terms of productivity, profitability and sustainability. Use of technology in agriculture has opened up multiple opportunities in addressing these challenges. Innumerable graduates from Mahatma Phule Krishi Vidyapeeth, Rahuri are playing a key role in agriculture as students, researchers, professionals and policy makers.

I extend my greetings and best wishes for the Golden Jubilee Year of Mahatma Phule Krishi Vidyapeeth Rahuri.


Commissioner Agriculture



Dr. K. P. Viswanatha
Vice Chancellor

FOREWORD

Mahatma Phule Krishi Vidyapeeth is a premier Agricultural University of Maharashtra established on March 29, 1968 and subsequently named after the social reformer of 19th Century “Mahatma Jyotiba Phule”. With 50 years of long journey, the university has made significant contributions in the area of Agricultural Education, Research and Extension Education to serve the farmers of the Western Maharashtra, in particular, and Maharashtra, in general. The support, contributions and hard work of many visionary Chancellors, Vice Chancellors, Directors of Education, Research and Extension Education and Scientists and all the teaching and non-teaching staff of our university deserve and pleasantly demand appreciation and acknowledgement. This souvenir is a wonderful document of the various milestones, events and memories of all those former Vice Chancellors, former Directors, Officers and Scientists. They have taken their valuable time to reminisce their memories and helped in bringing out this souvenir like a Coffee Book describing the growth experience of the university through its journey of the life for the benefit of the academia, students and the citizens of our country.

It is also our duty to commit to our memory the invaluable contributions of all those great souls who are not in this world today, but helped this university to grow to its present level with their hard work and dedication. With great pleasure I appreciate and thank everyone who has contributed his/her might in preparing this memorable document.



(K. P. Viswanatha)

HISTORY OF MPKV

HISTORY OF MPKV



HISTORY OF MPKV

Formation of the Agricultural Universities

Till the agricultural universities were established the agricultural education and research were managed by the respective State Department of Agriculture and colleges were affiliated to the traditional universities as one of the faculties. Looking to the complexity of the agricultural problems and in depth education and research, the concept of farm universities was conceived. With the recommendations of Radhakrishnan Commission (1948) the agricultural universities were established in this country from 1960.

The first university was established at Pantnagar in Uttar Pradesh. This was followed by establishment of the agricultural universities in different States.

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 from 29th March, 1968 with its office at Bombay.

The office was shifted in the year 1969 to College of Agriculture, Pune. In the year 1969 two, and later on in 1972 four agricultural universities were established.

Mahatma Phule Krishi Vidyapeeth, Rahuri is one of them established in 1969 for the western Maharashtra having jurisdiction spread over ten districts namely Satara, Sangli, Kolhapur, Ahmednagar, Solapur, Pune, Nasik, Dhule, Jalgaon and Nandurbar. The university is named after the great social reformer Mahatma Jyotiba Phule.

As per the amendments of the acts of 1983, the Executive Council of University is the highest body. The Academic Council takes the decision in the academic matter and is supported by Faculty and Boards of Studies in different Subjects. With the formation of the four agricultural

universities in the State and with a view to having proper co-ordination in working and to avoid duplication of work, the Maharashtra Council of Agricultural Education and Research was established at Pune.

Till the formation of agricultural universities different sections at the College of Agriculture, Pune worked as technical department with the Professors In-charge being a state level specialist.

With the formation of agricultural universities the entire administrative set up was changed. The posts of Heads of Departments with control over teaching, research and extension education in the entire jurisdiction of the university were created.

Initially only agricultural faculty started functioning with the Dean, as the Head of Faculty with administrative and technical control.

The faculty of Agricultural Engineering was established in 1969 followed by Faculty of Veterinary Sciences in 1988.

The Vice Chancellor is the Chief Executive Officer for day to day working in the university set up. The Governor of Maharashtra the Chancellor and Minister for Agriculture of Maharashtra State is the Pro-Chancellor of the university. The education, research and extension education are the principal functions of the agricultural universities.

In order to coordinate these functions at the university level the Vice Chancellor is assisted by the Director of Instructions, Director of Research and Director of Extension Education. With the implementation of the National Agricultural Research Project, research was reorganized on zonal basis with Associate Directors of Research as In-charge of the zone, directly responsible to the Director of Research. For the educational purpose, the constituent Colleges of University for Agriculture, Horticulture, Agricultural Engineering and Veterinary Sciences are headed by the Associate Deans who are responsible to the Dean/Director



Hon'ble Shri. S. B. Chavhan, the then Chief Minister of Maharashtra State, Hon'ble Shri. A. P. Shinde, the then Minister of State for Agriculture, Govt. of India and Hon'ble Shri. Y. B. Chavhan, the then Union Minister for External Affairs, Govt. of India on the occasion of inauguration of Faculty of Agriculture Building on 31st December, 1976



of Instructions for organizing the educational programme including examinations. The extension education is coordinated by the Director of Extension Education through the scientists working at various research stations and colleges.

Leadership

The university has been fortunate to have eminent personalities in their fields of work as Vice Chancellors ever since the formation.

Shri. Harishchandra Patil was the first Vice Chancellor of this university. The office of the Vice Chancellor was shifted to Rahuri and acquisition of the land and construction of the buildings was initiated during his tenure.

Dr. M.S. Pawar was the next Vice Chancellor who toiled to develop the campus by tree planting and developing the fields for research, construction of the Basic Science and Faculty of Agriculture buildings. The developments made during his time are seen in the form of greenery around the Central Campus. The post-graduate research work was shifted

from College of Agriculture, Pune and the Post Graduate Institute was established at Rahuri in 1972.

Dr. A.B. Joshi, an eminent educationist and research worker was the Vice Chancellor since 1977. To improve the competence of the faculty selected staff members were deputed for higher studies at Indian Agricultural Research Institute, New Delhi for the period of 1.5 year. The scheme was very useful to improve the instructional programme at



Post-graduate level. Construction of the library building was started in his tenure.

Dr. D.K. Salunkhe, a wellknown Food Scientist was the Vice Chancellor after the retirement of Dr. A.B. Joshi. The tenure of Dr. D.K. Salunkhe was full of developmental activities. The new colleges of Horticulture and Veterinary Sciences were opened during his tenure. The actual implementation of NARP commenced then and Communication Centre was established. A new housing complex was also built during



Dr. S.K. Dorge took keen interest in developing the barren areas of the campus by taking up massive tree plantation programme. As a result of this the university was awarded the coveted VANASHREE AWARD by the Government of Maharashtra. Due to his vast experience in the field of agricultural education, Dr. S.K. Dorge was elected as President of All India Agricultural Universities Association.





Dr. Y. S. Nerkar, an eminent Genetics took over from Dr. S. K. Dorge as Vice Chancellor. Various collaborative research programmes were sanctioned during this period. MPKV identified three breeds of animals for the first time. An Agricultural Technology Park was established in the university for serving the educational and research facilities. An innovative Annual Agricultural Lecture Series was started by him in the university. The novel activity of on farm evening visit and solutions to farmers problems evoked a good response from the farmers.

Dr. S.N. Puri, a wellknown Entomologist followed Dr. Nerkar as Vice Chancellor of MPKV. Dr. Puri was an able administrator who served for two three year terms as Vice Chancellor of the university. A lot of infrastructural developments took place during this period. Dr. Puri was instrumental in strengthening the Seed Production Programme, a Hi-Tech Floriculture Project at College of Agriculture, Pune and establishment



of a State Level Biotechnology Laboratory at Rahuri. The new concept of Regional Extension Centre along with Mobile Crop Dispensaries was initiated during his period. MPKV also received the Sardar Patel Best Agriculture University Award under his leadership.

Dr. R.B. Deshmukh, an eminent Plant Breeder took the reigns of Vice Chancellor of MPKV from Dr. Puri. On educational front, the Post Graduate Courses in certain disciplines of agriculture were also offered at Colleges of Agriculture at Pune, Dhule and Kolhapur. The Course Curriculum of lower agriculture education was revised and further the Agricultural Technical Schools were started. The All India Coordinated Research Projects and Network Projects gained momentum during this phase. The organization of innovative Agro Technology Week at Rahuri and International Hi-Tech Agri Exhibition at Pune and establishment of Farmers-Scientists Forum were the major achievements. MPKV received



the Institution of Excellence Award with Special grants of Rs. 100 crore from Govt. of India during this period.

Dr. T.A. More, a wellknown Horticulturist was the Vice Chancellor after the term of Dr. Deshmukh. New Government (constituent) Colleges of Agriculture were established at Nandurbar, Karad and Muktainagar.

MPKV facilitated the commencement of the International Integrated / Dual Degree Courses at the affiliated College of Agriculture, Baramati in collaboration with Van Hall Larenstein University, the Netherland and Asian Institute of Technology, Bangkok. Further, four new Research Stations were also established. Three new constituent Krishi Vigyan Kendras were granted to MPKV at Borgaon, Mohol and Jalgaon by the ICAR, New Delhi.

Dr. K. P. Viswanatha, the present Vice Chancellor took over the charge from Dr. T. A. More on 30th December, 2015. Many new initiatives were started in the last three years viz., plastic free green and clean campus, use of waste plastic in road making, watershed programme with *Adarsh Gaon Yojana* of Shri. Popatrao Pawar. In addition the *Kisan Aadhar Sammelan* in the main campus and shetkari melawa were organized in all other campuses of the university. Being Chairman of the State level Coordination Committee for Doubling Farmers Income, developed a model of Integrated Farming System which can be upscaled throughout the state. Finance Minister of Maharashtra has announced a grant of Rs. 151 crore for infrastructure, research and development during *Magova-2018* function of the university. New constituent college started at Halgaon for Ahmednagar district.





University Land before Development



University Land after Development

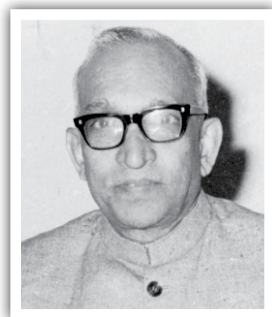




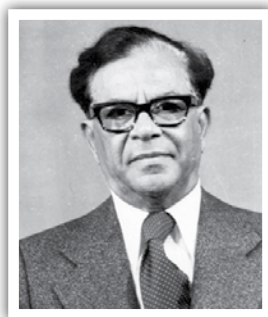
First Convocation of the Maharashtra Krishi Vidyapeeth in 1969



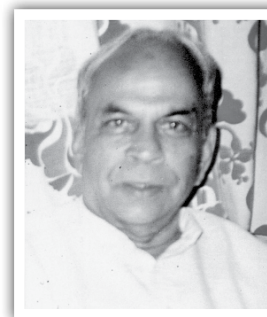
PILLARS OF MPKV



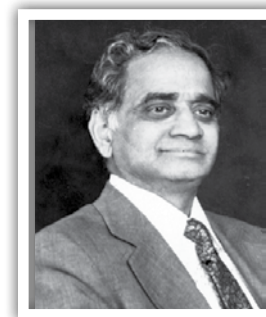
Dr. H. G. Patil
(1968-1971)



Dr. M. S. Pawar
(1972-1977)



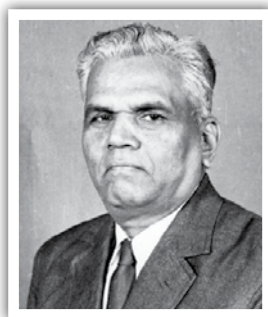
Dr. A. B. Joshi
(1977-1980)



Dr. D. K. Salunkhe
(1980-1986)



Dr. N. G. Perur
(1986-1989)



Dr. S. K. Dorge
(1989-1996)



Dr. Y. S. Nerkar
(1996-1999)



Dr. S. N. Puri
(1999-2004)



Dr. R. B. Deshmukh
(2005-2010)



Dr. T. A. More
(2010-2015)



Dr. K. P. Viswanatha
(2015 onwards)



REMINISCENCES OF THE GOLDEN DAYS OF MY TENURE AT THE MPKV, RAHURI



Dr. Yogendra S. Nerkar

Former Vice Chancellor, MPKV, Rahuri

In retrospection, really golden were those days of my association with the Mahatma Phule Agricultural University, as an under-graduate student of the first batch (1960-64) of the College of Agriculture at Dhule (then under the University of Pune) and then as an employee (1971-75) and much later as the Vice Chancellor (1996-99). I owe a great deal to the University, as well as my teachers, friends and colleagues at different Institutions of the University, who had been instrumental in shaping my personality, career and life. I take this opportunity to express my deep sense of gratitude to all of them.

After spending seven years (1964-71) at the Indian Agricultural Research Institute, New Delhi for my M.Sc. and Ph.D. degrees and post-doctoral fellowship in Genetics, I started my career as Assistant

Professor at the College of Agriculture at Kolhapur in 1971. This College polished my art and craftsmanship of teaching. As a youth, the activities in the College in its formative period were enjoyable, adventurous and fruitful for me. I consider Kolhapur as my second home. Subsequently, I was posted as the Plant Breeder at Rahuri and was assigned the task of initiating research in Pulses. I had the privilege of establishing a voluntary centre of the All India Coordinated Pulses Improvement programme at Rahuri. In a short span of time (1973-75), we established a strong research programme on pigeon pea, mung, urd and chickpea with vigorous activities on germplasm bank, crossing of a wide range of parental lines, handling the segregating materials by novel breeding methodologies and varietal evaluation. Strong linkages were established with the All India programmes and the ICRISAT for collaborative research. As a young scientist, this was a period for me to learn and



cherish the value of hard work, keeping abreast with the latest scientific developments, determination and commitment to the cause of the University and the farming community. Our hero was the then Vice Chancellor (late) Shri. M.S. Pawar, an able scientist and administrator par excellence. Later in 1975, I left the University to join as Professor in the Marathwada Agricultural University.

In April, 1996, the then Governor of Maharashtra, (late) Dr. P.C. Alexander nominated me as the Vice Chancellor of the MPKV and I took over the most coveted and highest position in the higher education system. I relinquished the office after completing my term in May, 1999. The position of the Vice Chancellor of an Agricultural University is unique, because the system integrates education, research and extension education. And inherently, the office is committed to the betterment of the farming community. I was quite clear in my mind that a University is not merely a seat of learning, but also of creation of new knowledge. I also had clarity and strong conviction that within the framework of the University Act, the incumbent must exercise freely and frankly, to fulfill the aspirations of all the stakeholders. Of course, the dictates of conscience should prevail. With these guidelines, I performed my duties, and was more than satisfied when I left. I am pleased to mention here some of the programmes, activities and ventures executed during my tenure. Almost all the sanctioned posts were filled in urgently.

Education

From the academic year 1998, the MPKV started Ph. D. degree programme partly by course work and partly by research in 15 more disciplines in addition to the existing 4 disciplines; M.Sc.(Agri.) degree programme was initiated in Agri-business management; Ph.D. programme was also offered for the teachers of the Veterinary faculty at Shirwal. The undergraduate instruction was overhauled, eliminating the outdated contents and including modern topics and concepts including biotechnology, post harvest technology, computer technology, bio-

fertilizers, bio-control of pests, polyhouse production, micro irrigation, etc. Under lower education, a two year diploma course exclusively for girls was started at the Agricultural School at Manjri. For improving technical competence of the technical staff eight Summer Institutes in Advanced Subjects were offered by the MPKV for the teachers, researchers and extension workers in the Agricultural Universities in the country. The University offered, at constituent colleges and research stations, 18 Refresher Trainings on modern agricultural concepts for the benefit of the staff members.

Research

A total of 221 research projects were submitted to different funding agencies, out of which 48 were sanctioned during the period and many more would have been sanctioned subsequently. Collaborative research programmes were undertaken jointly with six International Agencies and





National Institutes like the BARC and NCL. National Research Centres were established by the ICAR on Grapes at Pune, on Onion and Garlic at Rajgurunagar and on Rabi Sorghum at Solapur.

About a dozen improved crop varieties and improved technologies were released for the farmers. For the first time, based on a prolonged research by the animal scientists, the MPKV identified for release three breeds of animals: Phule Triveni Breed of cow (with higher milk and fat %), Phule Sangam Breed of sheep (with 20% higher meat and superior wool), and Unnati Breed of goat (with 20% higher meat).

Establishment of Agricultural Technology Park

On July 29, 1998, the Agricultural Technology Park was inaugurated at the Central Campus by H.E. Dr. P.C. Alexander, Governor of Maharashtra and Chancellor of the MPKV to serve as an educational and research facility as well as a training and guidance centre for farmers and agro-industry entrepreneurs.

Extension Education

MPKV initiated an activity of helping farmers to establish their commodity cooperatives /self- help groups so as to have direct linkages between the producers and markets/consumers (e.g. the Rahuri - Sonai Model). Off Campus-On Farm Evening Group Discussions (*Krishi Jana Jagaran*) were organized fortnightly on the farms of progressive farmers who prospered by adopting the improved technology. Annual Agricultural Lecture Series for a week were started at the Central Campus on Gandhi Jayanti (October 2, 1997). Innovative and progressive farmers, policy makers, social workers were invited to deliver the talks for the students, teachers and farmers during this week. Permanent agricultural technology and information centres were started at the pilgrimage centres: Pandharpur, Shirdi and Prakash. MPKV undertook collaborative technology transfer activities jointly with the NGOs like the Comprehensive Rural Health Scheme of Jamkhed, Vanarai of Pune,



Janaseva Foundation of Pune and the Indo-German Watershed Project of Ahmednagar. Model Improved Technology Demonstrations were planted at a prominent place in the University in each cropping season, exhibitions were arranged at these sights and a week-long visits of farmers from 10 districts in the MPKV jurisdiction were organized at these demonstrations/exhibitions in collaboration with the Agriculture and allied Departments. The University also initiated paid consultation service for agro-industries and agencies.

Special Development Activities

An unusual 'Grants-in-Aid' formula was applied by the Govt. of Maharashtra for funding the SAU's from April, 1996, due to which financial crunch was felt by the MPKV. To overcome this financial stringency, the University created a revolving fund and adopted measures like increased seed and nursery production, paid product testing etc., and more than doubled its annual receipts. A High Tech Flower and Vegetable Cultivation Centre was established. In January, 1999, the Government of Maharashtra sanctioned this project for which expert consultant was appointed and a beginning was made.

National Workshops, Seminars, Symposia

The MPKV organized 18 different All India Workshops, Group Meetings, Symposia and Seminars.

Best Agricultural University Award of the ICAR

Based on the MPKV's extraordinary activities the ICAR prompted the University to submit an application for the Best University Award. The application was submitted in 1999. In the subsequent year the MPKV was honoured by the Award.

These are some of my memorable events. During the next 20 years my successors strengthened the University and I am sure in the near future the MPKV will scale more heights to become a world-renowned Agricultural Power House. My best wishes!





MEMOIRS OF A VICE CHANCELLOR

Dr. S. N. Puri

Former Vice Chancellor MPKV, Rahuri / KKV, Dapoli / CAU, Imphal



It was quite a surprise for me to hear from Secretary to the Chancellor about my appointment as Vice Chancellor of MPKV, Rahuri. In fact, I had submitted my biodata to the Search Committee appointed to recommend the candidates for the post of Vice Chancellor of Dr. Panjabrao Deshmukh

Krishi Vidyapeeth, Akola. I had not applied or given my biodata for consideration for post of Vice Chancellor, MPKV, Rahuri. Yet, I was called for interaction with His Excellency Chancellor for both the universities and I was selected for the post at MPKV. Thus it was a fortuitous arrival as the Vice Chancellor of the Mahatma Phule Krishi Vidyapeeth, Rahuri!

Overcoming the Financial Crunch of MPKV

Any educational institution and the financial crunch are two undividable friends, as it were. And MPKV was no exception really. After I joined, within a few days, I realised that it was a difficult assignment considering the large number of students, teachers and labourers working here. Above all, the new grant-in-aid formula was under operation and MPKV along with other Agricultural Universities in Maharashtra was receiving only 8% of its budget for expenditure as contingency grants and it was difficult to meet the day-to-day demands of every college, school, research station, scheme and every employee. Even for small things like bills of telephones and electricity we had to struggle.

In order to overcome the difficulty, we decided to concentrate on increasing revenue receipts of the university. As an incentive, we assured the scientists that the increased revenue receipts at their unit would be spent in that unit only for creating additional facilities. Encouraged by this assurance, everybody tried sincerely to increase their revenue receipts

and as a result we could see a considerable increase in the revenue receipts taking it to more than Rs. 14 crores per annum in the last year of my tenure.

Strengthening of Seed Production Programme

MPKV was striving hard for coming out from the financial crunch. It was necessary to have the strong support of ICAR and the Executive Council to overcome the financial vagaries. Dr. Mangala Rai, the then Deputy Director General (Crops) of ICAR visited this University in 2000 in connection with the Annual Meeting of Indian Society of Genetics and Plant Breeding. Fortunately we had an excellent crop of wheat on a very large area of approximately 115 acres. He was highly impressed and when I discussed with him about financial difficulties, he advised to go for seed production programme and made financial assistance of more than 80 lakhs available for three projects on loan basis. It helped us to improve the infrastructure at central farm and we could return this loan within the given time in accordance with the conditions laid down by the ICAR, New Delhi.

Oldest University without Administrative Building

Although the university was established in 1968, it had no administrative building of its own or an auditorium to accommodate the growing number of students as well as faculty. Dr. C. B. Gaikwad, who was the Director of the Central Farm, was a very sincere person. I entrusted him with the task of increasing the area under sugarcane by making available an amount of Rs. 70 lakhs as working capital and pooling the services of four persons of his choice to work at the Central Farm under the sugarcane project. Shri. Sanjay Deshmukh, the then Comptroller was very helpful and extended



all the co-operation. Western Maharashtra experienced severe drought during that year and the Government was planning to bring fodder from Rajasthan by train to supply it to the animal shelter houses erected in the affected areas. In one of the meetings, which I had attended, the District Collector, Ahmednagar came forward with an offer to purchase sugarcane for fodder on cash payments. Charged with this offer, we in the university decided to make use of this opportunity and, on daily basis, we started sending truck loads of sugarcane to the animal shelter houses. With the receipt of payments in cash, we took the decision to construct our own administrative building which was completed in 2004 and it was inaugurated in 2005 by the then Hon'ble Chief Minister of the State (Late) Shri. Vilasraoji Deshmukh. Probably, it was the only University to construct its own administrative building from its own revenue receipts in India.

Dr. M. S. Pawar Auditorium

It was very painful to see the students sitting crammed on the floor at the so called auditorium (Common Examination Hall) of the College of

Agricultural Engineering, during some functions. Therefore, I decided to have an auditorium constructed by following all codal formalities. The present building of the auditorium was constructed from the revenue receipts of MPKV. We took an instant decision to name it after the great visionary Dr. M. S. Pawar, Former Vice Chancellor who planned the development of present campus under very difficult conditions. Sometimes I think had it not been for Dr. M. S. Pawar, it is difficult to imagine what shape MPKV would have taken.

Construction of Swapnapurti Quarters

During my stay at Rahuri, I used to go for morning walks to Mula Dam area. I found many school going children of our staff using cycles. During the rainy season, many of them used to fall down and their dress used to get soiled. I thought over this issue but no solution was in sight. During my visit to the research stations, I found one or two rooms remained locked in most of the places. On my insistence they opened the locked room and I found many unserviceable items dumped there.





In many cases keys were not traceable indicating that items were not needed. We took massive drive for inspection of unserviceable material and within a period of six months with the approval of Executive Council called the auction of these items. To the surprise of everybody, we could collect Rs. 1 crore 30 lakhs from this exercise.

Immediately a plan for the construction of the family quarters was initiated and 36 one BHK quarters at Swapnapurti apartments and 60 quarters for the D group employees were constructed. When the families of employees residing at the Mula Dam were shifted to the new quarters inside the campus the smiles of satisfaction on their faces was the real reward for all the pains we had to bear.

Construction of Nivara

When the Mula Dam quarters in the possession of MPKV were demolished a lot of building material was collected. The idea of having 'NIVARA' to conduct common social functions for the MPKV family came up. We put to use all that salvaged building material and constructed the present 'NIVARA'.

Statue of Mahatma Jyotiba Phule

Although the University is named after him there was no statue of Mahatma Phule in the campus of MPKV, Rahuri. Every year the Jayanti of Mahatma Jyotiba Phule was observed by garlanding a photo. On one such occasion I declared that the next time we should garland the statue of Mahatma Phule. We started our efforts. Before me, many attempts were made for this but with no positive results. I requested all the employees working in the University to donate their one day's salary for this purpose. There was a very good response to this appeal and sufficient amount was collected. We selected a novel model of the statue emphasizing Mahatma Jyotiba Phule's contribution towards promoting the education of girls. After a critical evaluation by the committee of experts, the present design of statue was selected. We could install the statue of Mahatma Jyotiba



Phule at the entrance of main gate which was also renovated at the same time. This was made possible by the co-operation of all the employees of the university.

The Phadtare Hall at Pune

College of Agriculture, Pune is more than 100 years old college. But there was no auditorium. The ICAR was approached for financial assistance. However, we were told that, no provision for construction of auditorium was available. Dr. R. S. Paroda, the then Director General ICAR suggested that money was available for renovation. We decided to convert existing Phadtare Hall, which was used as the common examination hall and also as an auditorium for common functions. Some amount from the revenue receipts and 15 lakhs from the ICAR were allotted to have the fully furnished and air conditioned Phadtare Hall. This was used extensively by the college as well as other offices of the Government of Maharashtra in Pune.

Girls Hostel at Kolhapur

College of Agriculture, Kolhapur was facing serious problem of encroachment from the Ujgaon side. With the number of girl students increasing, it was decided to construct a girls' hostel with the modern concept of self-content cubicles for six girls in one unit for the undergraduate college. The amount was spent from the revenue receipts of the University. Many people appreciated this hostel for its novel idea.

Girls Hostel at Dhule

College of Agriculture, Dhule had good potential for dry land horticulture. By creating irrigation facilities, big orchards were planned and Dr. T. A. More who was working as the Associate Dean developed these orchards excellently. The girl students had serious accommodation problems at Dhule. Therefore, a girls' hostel was constructed from the revenue receipts.

Lower Education

Lower Agricultural Education was not receiving much attention. Hostel facilities for the girl students were inadequate. During the visit to these schools, girl students were requesting for hostel accommodation. Most of the students come from poor families. Therefore it was decided to construct hostel for girls. In every Agriculture School a hostel to accommodate 20 girls along with a kitchen and a common-room facility costing Rs. 15 lakhs from the revenue receipts of the university were constructed. Eight such hostels were constructed at the constituent schools of MPKV. This gave me some consolation for we were following the path shown by Mahatma Jyotiba Phule to promote girls education.

Hi-Tech Floriculture Project at Pune

There were two projects during those days which brought much needed visibility to the University. Hi-Tech Floriculture project at the College of Agriculture, Pune at the cost of Rs. 3 crores was completed in record time of 3 months and after the inauguration the first consignment of flowers was sent to the market within 90 days. This project was producing roses, carnation, gerbera and coloured capsicum. The total receipt from the sale of produce from this project was more than Rs. 30 lakhs per annum. Many dignitaries from State Government, Central Government as well as ICAR visited this project. It was the largest polyhouse on campus of any Agricultural University in India at that point of time. This project had trained many farmers and students thereby helping in increasing the area under the protected cultivation in the State. (Late) Shri. A. L. Chougule and his team made sincere efforts for the success of this project.

Commercial Vegetable Project

We initiated Commercial Vegetable Project under Dr. Sharad Gadakh of Central Farm. The vegetable crops like bitter gourd, cucumber, bottle gourd and beans were grown over an area of more than 30 acres. After harvesting and grading, packaging was done and sent to Mumbai Market



on daily basis. Dedicated efforts of the scientists could make this project a profit making unit even after meeting the salary of scientific staff. It was an excellent confidence building experiment to show that agriculture could be made a profitable enterprise.

March Towards Sardar Patel Outstanding ICAR Institution Award

The university was progressing well in the area of research as well as education. Concerted efforts were made by the Associate Deans under the guidance of then Dean, Dr. S. S. Kadam through special coaching classes to increase the number of Junior Research Fellows from the University. As an incentive enhanced special financial support was given to the respective colleges on the basis of number of JRF coming from there.

My predecessor Dr. Y. S. Nerkar had tried to strengthen research activities in MPKV and the University received many awards for its contribution in research on pulses and other crops from the ICAR. The research activities were making significant contributions by developing

new crop varieties and agro technologies under the guidance of Dr. R. B. Deshmukh the then Director of Research.

We initiated the new concept of Regional Extension Centre for each region by providing a team of scientists and mobile crop dispensaries which were later extended to the district levels also. All these efforts made by us and contributions of earlier Vice Chancellors enabled us to compete for the ICAR award. It was proud moment for me to receive the coveted Sardar Patel Outstanding ICAR Institution Award of ICAR – 2002 given annually to the best Agricultural University in India.

New Initiative in Biotechnology

The University had deputed four scientists for undergoing specialized training in Biotechnology to foreign Universities / Institutions in the past few years. However, after their return home they were appointed in the vacant positions wherever existed. Their knowledge could not be put to proper use. We converted the existing tissue culture unit into Biotechnology unit and brought all those trained persons under one roof and initiated some work. The money for purchasing equipments etc. was provided from the revenue receipts. Good beginning was made. Hon'ble Shri. Jayantrao Patil, former Finance Minister of Maharashtra visited this facility. He was very happy and declared Rs. 10 crores as a special grant to MPKV to establish State Level Biotechnology Laboratory for Maharashtra State at Rahuri. The present Biotechnology Centre is the outcome of these efforts.

Transparency in Administration

During my interaction, people used to speak about the Engineering Section (Works Department) of the University. But the input received was not good in taste. We thought over it and decided to decentralise decision making for the works to be undertaken by Works Department.

A committee comprising all the Associate Deans, Heads of Department and Officer In-charge of the unit where works were to be taken up along



with the Comptroller and University Engineer was constituted under the Chairmanship of Dr. R. B. Deshmukh, the then Director of Research. This committee used to prioritize the works and examine estimates and open and finalise the tenders for recommending to the concerned authorities. Dr. R. B. Deshmukh used to have marathon meetings. This helped to bring much needed transparency in the governance.

Probable Labour Unrest Avoided

The Government of Maharashtra decided to stop the practice of employing labourers on daily wages to reduce expenditure. More than 1800 labourers were working in MPKV for years as daily wagers. It was a big challenge to implement the decision of the Government to terminate these labourers. Considering the sensitive nature of this issue many meetings were arranged with the labourers during 3-4 months and they were taken into confidence informing them about our inability to help them despite our strong desire to do so. The meeting of the Legal Advisers were arranged and necessary steps were initiated to avoid legal complication by filing caveat at the appropriate courts. The compensation as per Government Directives was paid to all the labourers who were to be retrenched. After completing all the formalities, more than 1800 daily paid labourers were retrenched w.e.f. 1st April 2001. Thanks to Dr. Purushottamrao Bhapkar, the then Registrar who handled the situation firmly and no untoward incidence was reported. I had many sleepless nights till the issue was settled amicably.

The Daunting Challenges

The university is progressing well under the guidance of the Hon'ble Vice Chancellor, Dr. K. P. Viswanatha. He is well aware of the many challenges before it. A few of them, as I see are as follows:

1. The number of private, unaided, Agricultural and allied colleges is on the increase. Therefore, maintaining the quality of education both at undergraduate and post graduate levels is a tough challenge.

2. The research is going on but the support from the ICAR is dwindling. Many posts under the ICAR projects have been withdrawn. It is a mammoth challenge to maintain the pace of research with reduced manpower and financial support. Ways will have to be thought of.
3. The Hon'ble Prime Minister, Shri. Narendra Modi has given a slogan of "More Crop Per Drop" of water. We need to revisit our research agenda to target this objective. If not, we should revisit our research programmes in Soil and Water Conservation, Irrigation and Plant Breeding to make necessary amendments in research objectives and priorities.
4. The Hon'ble Prime Minister wants to double the income of farmers before 2022. It is a Himalayan task! So far we have worked on doubling the production but not the income. It will need a different approach. The new research areas like market intelligence, timely forewarning to farmers regarding change in price structure and guidance to avoid losses due to natural disasters will be the key to our approach.
5. Global warming has started showing its impact. This year major kharif crops have suffered due to less rains and losses increased due to high temperature. Rabi crops are likely to face similar threat. How are we going to make our research priorities to face this challenge is the real issue.

In order to maintain the position of this university at the top at the national level, we will have to make collective efforts.

There is always light at the end of the tunnel. Our university has weathered many storms successfully and we will overcome these challenges by working together towards it.



FIFTY YEARS OF AGRICULTURE EDUCATION, RESEARCH AND EXTENSION EDUCATION AT MPKV, RAHURI (M.S.)

Dr. R. B. Deshmukh

Former Vice Chancellor, MPKV, Rahuri



Maharashtra is one of the pioneering States in the country in starting agricultural education with the establishment of College of Agriculture, Pune in 1907. The Education Commission Report prepared after the Independence by Hon'ble Dr. S. Radhakrishnan, an eminent educationist and the former President of India emphasized the importance of agricultural education. On the recommendations of this report, the Government of India had appointed a Commission in the year 1964 to look into the aspects of agricultural education under the Chairmanship of Dr. B. S. Kothari. The Commission was absolutely convinced of the fact that that better agricultural production and rural development could be achieved through the application of science and technology. This was the breakthrough in agricultural education that paved the way for the establishment of state Agricultural Universities on the basis of Land Grant Colleges in USA.

Maharashtra decided to establish the Maharashtra Agricultural University at Rahuri in the District of Ahmednagar. Until the land was acquired for this purpose and bare minimum facilities developed, its Head Office was temporarily located at Varali, Mumbai on March 29, 1968. Later the Head Office of the University was shifted to College of Agriculture, Pune and on October 20, 1969, the University was bifurcated and renamed as Mahatma Phule Krishi Vidyapeeth for Western Maharashtra and Konkan regions, and Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola for Vidarbha and Marathwada regions. In 1972 these two universities were bifurcated to establish two more Agricultural Universities namely Marathwada Krishi Vidyapeeth (now Vasant Naik Marathwada Krishi Vidyapeeth) and Dr. Balasaheb Sawant Konkan

Krishi Vidyapeeth at Parbhani and Dapoli in the District of Ratnagiri for Marathwada and Konkan regions, respectively. The university Head Quarters with Post Graduate Program was then shifted from College of Agriculture, Pune to Rahuri in 1972. A total of 2865 ha land was acquired from seven villages including government land adjoining to Mula Dam for the establishment of the first agricultural university in the state.

Jurisdiction, soils and climate

The jurisdiction of MPKV, Rahuri extends over Western Maharashtra consisting of ten districts, namely Jalgaon, Dhule, Nandurbar, Nasik, Ahmednagar, Pune, Solapur, Satara, Sangli and Kolhapur having 37.76 per cent (116.13 lakh ha) geographical and 40.87 per cent (72.08 lakh ha) arable area, and 37.40 per cent (4,20,28,469) population of the State. The topography is hilly and rolling terrain with 41 per cent light, 34 per cent medium and 25 per cent heavy type of soils. The annual precipitation varies from less than 500 to more than 6000 mm. Though this region of the State has relatively better irrigation facilities i.e. 24.07 percent (17.35 lakh ha) of the arable area as against 18.69 percent of the State, 80 per cent of its area is drought prone with hot and dry climate. Based on the agro-climate and farming situations, the region is subdivided into four major zones, 1) Western Maharashtra Ghat Zone, 2) Sub-Montane Zone, 3) Western Maharashtra Plain Zone and 4) Scarcity Zone. Large portion of Jalgaon district comes under Central Maharashtra Plateau zone having its head quarter at Aurangabad in the jurisdiction of VNMKV, Parbhani.

Higher Agriculture Education

Earlier, the Colleges of Agriculture, Pune and Dhule were under the Poona University, Pune, and the College of Agriculture, Kolhapur was under the Shivaji University, Kolhapur. After the establishment of



MPKV, all the three colleges were transferred to MPKV as the constituent colleges. The College of Agricultural Engineering at Rahuri was established during 1969 and the College of Horticulture was established at Pune in 1984. The College of Veterinary Sciences, Shirval (Satara) was transferred to the Maharashtra Animal and Fishery Sciences University, Nagpur. Recently three more constituent Agricultural colleges were started at Karad (Satara), Nandurbar and Muktainagar (Jalgaon).

Considering the increasing demand for graduates in agriculture and allied fields, a decision was taken by the state government in 2000-01 to grant permission to start un-aided private colleges in agriculture and allied faculties of SAUs.

Earlier M.Sc. (Agri.) and Ph.D. courses were offered at the Post Graduate Institute (PGI) and Dr. Annasaheb Shinde College of Agricultural Engineering at Rahuri. However, considering the increased number of graduates passing out every year, post-graduate courses in certain disciplines of agriculture are also offered at colleges of Agriculture at Pune, Dhule and Kolhapur. In addition to this, the post-graduate courses in horticulture and in Agri. Business Management (M.B.A.)

also are offered at the College of Agriculture, Pune. The University has produced a large number of outstanding graduates, post-graduates and Ph.D scholars. They serve the State and Country in various capacities in the Agricultural Universities, Indian Council of Agriculture Research, State Departments of Agriculture, Revenue, Co-operation, Finance, Forest, Home, Banking and private sectors, dealing in agricultural inputs such as seed, fertilizers, pesticides, farm machinery and implements and food processing industries.

At present, there are 27 Colleges of Agriculture, 5 Horticulture, 8 Agricultural Engineering, 8 Food Science and Technology, 6 Biotechnology, 9 Agricultural Marketing and Business Management, 1 Animal Husbandry and 1 Post-graduate College of Agribusiness Management run by different education societies / private organizations affiliated to MPKV, Rahuri. There is a common course curriculum for all these colleges across the country with some flexibility at university level to accommodate the regional requirements. The admission process to all these colleges including the constituent colleges is done by the Maharashtra Council for Agriculture Education and Research (MCAER), Pune established in 1983. There are common examinations conducted by the respective universities and coordinated by an Examination Board constituted by them with its Head Quarters located at the MCAER, Pune.

Lower Agriculture Education

Nine Agricultural schools one in each of the districts under the jurisdiction of MPKV (except Nandurbar) functioning under the State Department of Agriculture were transferred to MPKV in 1972. These Agricultural schools offer two years diploma course in agriculture after 10th standard. Since there was an increasing demand for the diploma holders from the State Department of Agriculture, Zilha Parishads and from the private sector, a decision was taken by the Government of Maharashtra in 1990s to grant permission to start private Agricultural Schools in the State.



As every Agricultural School was admitting 60 students every year and the total number of Agricultural Schools had crossed the mark of 250 in the state by 2005, it was felt necessary to revise the syllabus to improve employability of these students. As the Vice Chancellor of MPKV, I took lead and with the help of superintendents of constituent agricultural schools in MPKV reconstituted the course curriculum of diploma in agriculture by incorporating several new subjects pertaining to present and future challenges in agriculture. The significance of this course curriculum is that two third weightage is given to practical and one third to theoretical aspects. The agricultural schools were then renamed as Agricultural Technical Schools (ATS).

In 2011-12 Maharashtra Council for Agricultural Education and Research took a decision to upgrade all the private unaided Agricultural Technical Schools in the State to Agricultural Polytechnics making it a three-years course after 12th standard with semi English medium of instructions. However, after a few years, some of the Agricultural Polytechnics reverted to diploma course of two years duration. Today there are 49 Agricultural Polytechnics, nine constituent Agriculture Technical Schools, and 31 unaided Agriculture Technical Schools in the jurisdiction of MPKV.

Contributions in Agriculture Research

The unique feature of this University is that it accommodates extreme conditions of farming. Since, a large area of this University comes under drought prone conditions our emphasis has been on research in dry land agriculture. At the same time research in hi-tech agriculture was equally important and essential in order to keep pace with the innovativeness of the farmers and market driven production.

Fortunately, there was a very good network of agriculture research stations already established by the Department of Agriculture in the ten districts, which formed the jurisdiction of this University. In all 23 agriculture research stations including four state level specialist stations namely Soil Specialist, Solapur; Sugarcane Specialist, Padegaon (Satara); Wheat Specialist, Niphad (Nasik) and Oilseeds Specialist, Jalgaon were transferred to the University immediately after the formation of the university. Similarly, the Centers of several All India Coordinated Research Projects were started at the central campus and some of the



major research stations especially the specialist research stations at the campuses of the agricultural colleges. ARS, Igatpuri; ARS, Shenda Park, Kolhapur; RFRS, Ganeshkhind, Pune and ARS, Solapur were strengthened and upgraded as the Zonal Agricultural Research Stations of the four zones under the National Agriculture Research Project in 1982. In all, 144 non-plan research schemes of the State Government functioning at various research stations and agricultural colleges were transferred to MPKV. When I was the Director of Research (1995 – 2002), we merged the related small schemes together and formed 65 multidisciplinary consolidated research projects. In addition, there are more than 50 centers of different All India Coordinated Research Projects and the Network Projects functioning at MPKV.

Crop Improvement

So far more than 200 improved varieties and hybrids of cereals, pulses, oilseeds, cotton, sugarcane, forage crops, grasses, fruits, vegetables, spices and flower crops have been developed and released by MPKV for commercial cultivation. Some of them were released at national level by the central variety release committee. The research carried out by MPKV Scientists was appreciated at national and international level and attracted several recognitions and awards at personal and team levels. Some of the important varieties played an important role in increasing the production and productivity at the State level. The varieties added significantly to the income of the farmers are Indrayani, Bhogavati and Phule Samruddhi of paddy; NI5439, NIAW 34, Trimbak and Tapovan of wheat; Shraddha and Saburi of pearl millet; Phule Vasudha, Phule Revati and Suchitra of Rabi sorghum; Phule G 5, Phule G 12, Vijay, Vishal and Digvijay of Gram; PhulePragati (JL 24) groundnut, Bhima (S 4) Safflower, Phule Jaywant (RBN 13) Hybrid Neapier, African Tall forage maize; Sanjivani (Co 7219), Co 86032 and Phule (CoM) 265 of sugarcane; Phule Jyoti of chilli, Krishna brinjal, Phule Green Gold bitter gourd, Himangi cucumber, Baswant 780 and Phule Samarth onion; Sai

Sharbati and Phule Sharbati lime; Phule Mridula, Arakta and Bhagwa of Pomegranate etc.

Dry land technologies

The university, particularly the Agricultural Research Station, Solapur, has contributed significantly by developing and popularizing various dry land technologies, such as contour-bunding and contour-cultivation, soil and water conservation through compartment bunding, ridges and furrows, tied ridges and furrows, dead furrows, CCT, staggered CCT, integrated water harvesting and runoff recycling through farm ponds, strip cropping and intercropping, mulching, in-situ decomposition of crop residue, live bunds, presowing and inter culturing practices for different crops for moisture conservation. They also worked out rainfall probability analysis for 276 locations in Maharashtra, soil moisture adequacy indices for four soil depths at 72 locations and also developed contingency cropping plans for all ten districts of MPKV.

Crop production, protection, processing technologies and cropping / farming systems

The University has developed the crop production and protection technologies, and standardized cropping systems for almost all the crops for all the agro-climatic regions of the university through its research stations and the all India coordinated research projects. Development of equations based on soil analysis for calculating exact requirement of fertilizers to achieve targeted yields of various crops, integrated pests and disease management technologies, production and use of bio-pesticides and bio-fertilizers, in-situ decomposition of crop residues, scheduling of irrigation, use of micro irrigation, protected cultivation of flowers and vegetables, development of farmer friendly farm implements, post harvest handling and processing are some of the recent technologies developed by MPKV, which have benefitted farmers in increasing their farm incomes. Protocols for micro-propagation of some of the economically



important crops were standardized and various biotechnological tools are being used in the improvement of crop plants.

Livestock Research

MPKV has contributed substantially in livestock improvement. The ICAR funded cattle improvement project through triple cross breeding was successfully implemented at Rahuri to develop a new breed named as “Phule Triveni” which was distributed to farmers. Appreciable genetic improvement was achieved in Pandharpuri buffalos of farmers by distributing semen of proven bulls through milk co-operatives in Kolhapur area. Similar improvement was attained in sheep and goat herds of farmers in Dhule and Ahmednagar districts by providing genetically pure rams and bucks to the farmers.

Extension Education

The university scientists have always participated very actively in extension education. Participation of university scientists in transfer of technologies was increased significantly particularly during the period 1982 to 1998 when Training and Visit program was implemented by the State Department of Agriculture as it was mandatory for both, the extension staff of the department and the university scientists to participate in monthly district workshops. Though Training and Visit program of agriculture extension was abandoned by the Department of Agriculture in 1998, MPKV started Regional Extension Centers and the District Extension Centers with a team of experts who continued the activities of extension education at regional and district levels under the guidance of Director of Extension Education.

Zonal Agricultural Research and Extension Council meetings for Kharif and Rabi seasons provide a good platform to the university scientists to pass on the new recommendations of university approved by the Joint AGRESCO and the all India workshops to the extension officers of the department of agriculture. The technologies are given in the

form of Adaptive Trials and Front Line Demonstrations. The Extension Officers also present the results of the trials /demonstrations conducted on farmers’ fields during previous year and discuss the feedback with the scientists.

On my taking over as the Vice Chancellor, MPKV organized a mega event of Agricultural Technology Week during 10th to 14th October, 2005. It consisted of live demonstrations on 100 acres depicting more than 100 improved varieties of different crops, dry land farming technologies, conventional vs IPM vs organic crop production technologies, mechanical farming, conventional vs micro-irrigation etc. All 22 AICRP and Network research projects located at central campus, PGI instruction farm and all farm laboratories of different university departments were connected by roads so that farmers could visit them by their own cars / jeeps or by buses provided by the university. In addition, 240 pre-fabricated air conditioned stalls were provided to different government departments, private



companies, NGOs and Self Help Groups facilitating them to depict their technologies / products at this occasion. This event was inaugurated at the hands of Hon'ble Shri. Vilasraoji Deshmukh, the then Chief Minister of Maharashtra on 10th October 2005. Different technical sessions on topics of interest to farmers such as horticulture, dairy, crop production technologies, micro-irrigation, farm mechanization, postharvest handling and processing were arranged on all the days of technology week. This mega event was concluded by the address of Hon'ble Shri. Sharadchandraji Pawar, then Union Minister of Agriculture, Food and



Public Distribution. This event was really historical in the sense that more than three lakh farmers and students from all over the state registered and visited the demonstrations / research projects at the campus and many of them participated in the technical sessions. This was possible only because of guidance and cooperation from Shri. Balasaheb Thorat, Hon'ble Minister of Agriculture and Soil Conservation of Maharashtra and Pro-Chancellor of MPKV, Shri. Vijayrao Kolte, then Vice Chairman, MCAER, Pune and the Commissioner of Agriculture of the State. The

newspaper "Agrowon" almost played the role of media partner by giving a lot of publicity to this mega event.

In the same year, MPKV established 40 Farmers - Scientists Clubs were formed and each club was attached to one of the agricultural research stations / colleges / schools. One of the progressive farmers is the chairman and the scientist in charge of the research station / college / school is the coordinator. The club members meet once in a month on a pre-decided date either at the research station / college / school or on the farm of one of the member farmers and discuss the issues and problems faced by the farmers and the strategies to overcome them. New technologies / recommendations of Joint AGRESCO / all India workshops are also brought to the notice of farmers at that meeting. Front Line Demonstrations / Adaptive Trials were conducted preferably on the farms of the member farmers.

Recognitions / Awards

For the outstanding work done in the field of agricultural education, research, extension education and development, MPKV was recognized received several national awards from time to time.





Some of them are:

1. Priyadarshani award in 1992.
2. Sardar Vallabhbhai Patel Outstanding ICAR Institution Award 2002
3. JRF / SRF ICAR Awards consecutively for three years (2008, 2009, 2010)
4. Institution of Excellence award with a special grant of Rs. 100 crores in 2008.

Some Suggestions for future

1. To bring in the desired change in education in the allied faculties, it is necessary to establish remaining faculties viz., Horticulture, Food Technology, Biotechnology, Agriculture Marketing and Business Management and Animal Husbandry, and start at least one constituent college in each of these faculties preferably at the central campus of the University.
2. Every faculty will have a separate Dean whose office should be provided with enough support staff to monitor activities of private colleges in addition to the constituent undergraduate and post-graduate colleges.
3. As the number of private colleges have increased at a faster rate and are likely to increase further in future, a separate Examination Cell needs to be created at the Head Quarters of each of the Agricultural Universities in the State.
4. Revise the course curriculum of Agriculture Polytechnics and Agriculture Technical schools from time to time, may be after every five years, to make the students capable of accepting challenges of changing agriculture.
5. The Agriculture Polytechnics should develop in-house facilities for hands-on training and experiential learning for the third year students.
6. As the Agricultural Universities are already over burdened with higher education, research and extension education, the Government

of Maharashtra may think of establishing a separate Board for Lower Agricultural Education and all the Agri. Polytechnics and Agri. Technical Schools should be affiliated to the Board for all purposes.

7. Over the years farming has become a difficult profession because of climate change and fluctuations in prices of farm produce. The university should plan research programs to address these issues on priority.
8. The input costs are increasing at a much faster rate than the prices of farm produce, progressively narrowing down the profit margins of farmers and almost going in negative direction for dry land farmers. Hereafter our emphasis in agriculture research should be on increasing input use efficiency and reducing the cost of production.
9. In plant breeding, our focus should be on development of varieties resistant / tolerant to important biotic and abiotic stresses with wider adaptability, good quality and suitability for mechanical farming rather than high yield. This will help particularly the resource poor farmers (who are in majority) in reducing the cost of production and produce will fetch better price in market.
10. Sound research-extension linkage has become more important in view of the growing complexity in farming and allied callings and need for an effort for doubling the farmers' income by 2022. Such linkages are to be made effective at all levels so that both research and extension machinery work in unison without much overlapping and gaps.
11. The Directorate of Extension Education has to shoulder the responsibility of Transfer of profiteering technologies from the research origin to the extension clientele through the extension network including KVKs by the use of training classes, demonstrations, field visits, monthly workshops, individual and group contacts and mass media.

REMINISCENCES

Dr. Tukaram A. More

Former Vice Chancellor, MPKV, Rahuri



I have been the Vice Chancellor of the Mahatma Phule Krishi Vidyapeeth, Rahuri from 2011 to 2015. Many memories of the period endear me to the university and its growth. The joy redoubles when I ruminate over the facts that I was instrumental in contributing to the growth.

When the Government of Maharashtra granted three new government [constituent] colleges of agriculture to be established at Nandurbar, Karad and Muktainagar, with sanction of Rs. 144.9 crore and 226 teaching and supporting staff the joy at the was immeasurable, because now the university could cater agricultural education to the students and technology to the farmers of Nandurbar, Satara and Jalgaon districts. The area of service to the farmers and students increased further, with the establishment of 26 new affiliated (Private) colleges of agriculture and allied subjects.

With the financial support from the Central as well as the State governments, we could establish 4 New Research Stations viz., Pomegranate Research and Technology Transfer Centre at Lakhmapur, Agriculture Research Station, Nandurbar, Directorate of Floriculture Research [of ICAR], and the State-of-the-Art Semen Station and Bull-Calf Rearing Farm of NDDB Dairy Services at MPKV, Rahuri.

When the proposal from the College of Agriculture, Baramati was submitted for starting five International Integrated / Dual Degree Courses, the university encouraged the proposal and facilitated the commencement of the International Integrated / Dual Degree Courses at Baramati in collaboration with Van Hall Larenstein University, the Netherland, and Asian Institute of Technology, Bangkok. Under the guidance and support of the university, the course curriculum for these courses was designed and all the essential formalities were completed. These courses are now in vogue at the affiliated colleges in Baramati under the MPKV.

In order to increase the employability of the agricultural diploma holders, it was felt necessary to augment the domain knowledge and the practical hands-on experience of the students of the Agricultural Diploma. Therefore, the university proposed to convert the 2-Year Agricultural Diploma courses into 3-Year Agricultural Diploma courses and it was accepted and the same was implemented at all the Agricultural Technology Schools from 2013. Besides this, a one-year Gardeners' Training Diploma was also started from 2013-14.

When the Government of India decided to established additional Krishi Vigyan Kendras, 3 New Constituent KVKs in Borgaon [Dist. Satara]; Mohol [Dist. Solapur], and Jalgaon [Dist. Jalgaon] were





granted to MPKV, Rahuri in 2012. Now all the three KVKs are fully functional with the complete financial assistance of the Indian Council of Agricultural Research, New Delhi.

For the benefit of the farmers of the district of Nasik, a new District Extension Centre [DEC] was established at Nashik. A new Market Information Centre was started at the Central Campus of MPKV from 2012.

In order to review the activities and functioning of the various colleges and research stations, Video-Conferencing facilities were created at 11 centres under the jurisdiction of the MPKV.

MPKV, Rahuri scaled new heights with the introduction of Ph.D. Programmes in 3 disciplines in Dr. Annasaheb Shinde College of Agricultural Engineering, MPKV, Rahuri.

The standard of Agricultural Education got strengthened with the implementation of the IV Deans' Committee recommendations and a new RAWA programme commenced with 7 Experiential Learning Modules for the VIII Semester UG students.



It is a moment of great joy that our academic standing and our university are recognized even at the distant shores and therefore, eighteen foreign students opted to register themselves for M. Sc. and Ph.D. degrees at MPKV, Rahuri.

Considering the job market demands and the long-standing proposal of the university, a full-fledged Placement Cell was established in 2011 at MPKV.

The contribution of the untiring efforts of the scientists of the university and their recognition was evidenced by the fact that CIB & RC License was obtained for 4 Bio-pesticides developed by MPKV.

The establishment of the Agricultural Knowledge Management Unit [AKMU], and the organization of the first Krishi Sahitya Sammelan at the Central Campus MPKV, Rahuri during this period were of immense pride to the university.

It was felt necessary to effect exchange of knowledge and multifarious experiences of different institutions and organizations in order to augment the approaches and vision of the university and therefore, seventeen

Memoranda of Understanding [MOUs] were signed between MPKV and different universities, private organizations for mutual benefits in respect of education, research and extension.

Disaster Management Camp “*Avhan – 2012*” was organized through NSS at the university. A total of about 700 boys, 350 girls and 70 team members participated in the event.

Vision for MPKV's future

Mahatma Phule Krishi Vidyapeeth, Rahuri is one of the front runners Agricultural University in India. Keeping in mind the present status of MPKV in the field of agricultural research, education and extension and the above mentioned significant contribution made by me during my tenure as Vice Chancellor of MPKV, according to me, the following work need to be done by MPKV in the future on priority.

- On research front, MPKV has to develop varieties resistant to biotic and abiotic stresses, viral resistant, climate change, GM crops, suitable for mechanization, Post harvest Management, processing, etc. Efforts must be diverted to strengthen the Organic Farming, Dry land agriculture, Integrated Farming System model, Biotechnology, etc.
- The work which was initiated on breeding for resistance to Bacterial blight in pomegranate, and breeding for resistance to biotic and abiotic stresses in watermelon needs to be completed in the future.
- Efforts should be made to develop machineries to suit the small farmers, gender friendly, cost effective and fuel efficient, and also provide necessary training to the end users.
- We have submitted 5 proposals to establish the new research stations- for Potato in Satara District; Strawberry in Mahabaleshwer; Citrus in Chalisgaon; Centre of Excellence for Banana in Muktainagar and Hi-

tech Tissue Culture Laboratory for Banana in Jalgaon. Efforts must be made to get these sanctioned and started.

- Since MPKV does not have Constituent Colleges of Biotechnology, Food Science Technology and Agriculture Business Administration, there is an urgent need to establish the same.
- MPKV had submitted a new Irrigation Scheme to Govt. Maharashtra to bring more area under seed production of MPKV's varieties.
- Establishment of a separate Directorate of Seed and construction of a new Hostel for the Foreign Students and additional hostels for girls are the priority.

I consider myself fortunate enough that I could do the significant contribution in the overall development in agricultural education, research, extension and infrastructure development in MPKV, Rahuri.





THREE YEARS OF RESPONSIBLE JOURNEY

Dr. K. P. Viswanatha

Vice Chancellor, MPKV, Rahuri



I am immensely honored and privileged that I am given the vast responsibility to serve as Vice Chancellor of Mahatma Phule Krishi Vidyapeeth named after a great social reformer of the 19th century. After having served for 37 years in the five Agricultural, Horticultural and Veterinary

Universities of Karnataka, I took over the reins of the Mahatma Phule Krishi Vidyapeeth as Vice Chancellor on the evening of December 30, 2015 with utmost humility. My regimented journey of responsibility thus began with clarity of vision and a road-map for the next five years from December 31, 2015.

The Plight of MPKV Staff

When I took over as Vice Chancellor, the university was under severe crises such as restrictions by the State Government on “recruitment and promotion”, non-approval of roster of MPKV by the Divisional Commissioner, Nasik etc. Majority of the faculty, scientists, teachers and staff were under severe frustration because promotions and new recruitments were not coming through ‘for over a decade’. Due to large number of vacancy positions in the university and additional work load of the affiliated and private colleges on teachers and staff, each one of our staff was burdened with two or more additional responsibilities. Under such stressful circumstances, it was very difficult and challenging to get the work carried out from the staff. While I was working on such impenetrable labyrinths, the Accreditation for all the four Agricultural Universities of Maharashtra was kept in abeyance by the Indian Council of Agricultural Research, New Delhi, with many time-consuming stipulations and provisos warranting immediate action such

as recruitment of teaching staff, implementation of ICAR Model Act etc. Without the ICAR Accreditation, the prospect of the students seeking admission in various universities was quite bleak and the progress of the ICAR funded schemes, projects and scholarships and proposals would have faced a turbulent path. Therefore, I had to work conscientiously with utmost determination.

It was of a great moment of fulfillment and joy for everyone in the university when the Government of Maharashtra, on July 2, 2016, finally granted permission for promotions and recruitment. All the soreness and twinge that we experienced during the six months of the arduous journey towards this moment melted evaporated into joy, as it were!

Simultaneously, I was focusing my attention on other aspects of strengthening the university, such as plastic free, clean and green campus, as a part of **Swaccha Bharat Abhiyan** which initially was started at Rahuri and subsequently, extended to all other campuses of the University like



Pune, Dhule, Kolhapur etc. I am grateful to all our staff and students that every one of them involved themselves in making our campuses plastic free and green by adopting massive tree plantation programmes. All the students were taken into confidence and each of them was given the responsibility of planting a minimum of five tree saplings and was asked to take care of those planted trees during their stay in the campuses. There was a good response from all the students for this initiative at all the academic campuses of the university.

The waste plastic collected from all over the campus was used to an extent of 8 to 10 percent, in place of Tar (*dambar*) for road-laying within the campus. It was of great joy when Dr. Ashok Dalwai, Secretary of



Agriculture, Government of India inaugurated the road at the Central Campus of the university. This new initiative of MPKV received a wide publicity through print and electronic media.

Apart from these, the university administrative work got debilitated by the frequent transfers of the University Registrars. In the span of 11 months of the first year of my tenure, the university had seen five

Registrars! However, with assiduousness and thoroughness, almost all essential decisions were taken at the opportune and appropriate time.

Efforts were made to get the approval of the roster of MPKV by the Divisional Commissioner, Nasik. Fifty per cent of the posts of Assistant Professors and Associate Professors were advertised as per the State Government norms. The recruitment of Assistant Professors and Associate Professors was not only transparent but also was on absolute merit and roster. Similarly, the Maharashtra Agricultural Universities Recruitment Board also took the initiatives for promotions and recruitments of Professors, Head of Departments, Associate Deans and Directors. As a result, the ICAR, New Delhi was convinced about the action taken by the University. Based on the Self Study Report, the Peer Review Team of ICAR Accreditation Board was very much satisfied and convinced about the efforts of the university and the initiatives of the Maharashtra Council of Agricultural Education and Research, Pune. Eventually in 2018, we could get the accreditation for the next five years.

University Wasteland Comes Alive

Though the Central Campus of MPKV is spread over a huge area of 6777 acres, a vast area near the 'E' Block, Dairy and Goat unit, is barren because of rocky undulated marginal land. I was wondering as to how I could rejuvenate and infuse life into this barren field. An opportunity presented itself when I visited the progressive village *Hiware Bazar*, for the first time, during the visit of His Excellency Hon'ble Governor of Maharashtra to the village. I was very much impressed by the success of watershed programme at *Hiware Bazar* and was astonished to see water table at 50 feet in the open well in the month of May! I wasted no time and invited Shri. Popatrao Pawar to our campus and facilitated an interaction with the Faculty of Soil and Water Conservation Engineering and requested for funding from '*Adarsha Gaon Yojana*' of Maharashtra for which Shri. Popatrao Pawar is the Executive Chairman. After a few rounds of interaction and discussion, our proposal was accepted and



approved for funding `1.14 crores for watershed activities at the ‘E’ Block which comes under the villages *Varwandi* and *Digras* under ‘*Adarsha Gaon Yojana*’. His Excellency Hon’ble Governor of Maharashtra Ch.Vidyasagar Rao inaugurated this historic Watershed Programme of this University on October 23, 2017 when he was in the campus for the 32nd Convocation of MPKV. As a result, a scientific and a systematic watershed activity is in vogue at the Central Campus of MPKV, Rahuri in an area of 2382 acres.

Farmers Contact Programmes

The visibility of the university to the farmers, public, media, people’s representatives needed keen attention for a face-lift. Hence, it was planned and decided to have an effectual and systematic *Kisan Aadhar Sammelan* with live demonstrations of all the varieties developed by MPKV in the PG Farm along with animal exhibition. These were organized consecutively in 2017 and 2018 with *Kharif* crops. Both the





Kisan Aadhar Sammelans were inaugurated by Hon'ble Ministers for Agriculture---Shri. Pandurangji Phundkar in 2017 and Shri. Chandrakant Dada Patil in 2018---in the presence of the Guardian Minister of Ahmednagar district, several MLAs and MPs and thousands of farmers. Hon'ble Minister of Animal Husbandry Shri. Mahadevji Jankar also participated in both the years and was very much impressed with the contribution of the university and the way the demonstrations, both crops and cattle exhibitions were organized. Similarly, *Kisan Melas (Shetkari Melava)* were organized at all the other campuses of the university viz., Pune, Dhule, Kolhapur, Igatpuri, Solapur etc. Hon'ble Chief Minister of Maharashtra Shri. Devendra Fadnavisji inaugurated the **Agriculture Technology Week** during 2017 and Hon'ble Guardian Minister of Pune Shri. Girishi Bapat and Vice Chairman of MCAER inaugurated it during 2018. Thousands of farmers visited the live demonstrations at all the campuses and had interactions with the scientists.

Doubling the Farmers' Income

It is the dream and call of our Hon'ble Prime Minister Shri. Narendraji Modi to double the farmers' income by 2022. In Maharashtra MPKV was given this responsibility of accomplishing this dream by the ICAR, New Delhi. A State Level Co-ordination Committee was formed by the ICAR, New Delhi and I was made the Chairman. The Vice Chancellors of the other universities including Maharashtra Animal and Fishery Sciences University, Nagpur and all the Directors of National Research Centres are the members of this committee. After several rounds of meetings of this committee, we have submitted a comprehensive report, with a region-wise action plan details and initiatives for the entire State of Maharashtra for its implementation, to the ICAR, New Delhi and State Government. In this direction, MPKV has developed a model of Integrated Farming System (IFS) wherein all the activities of the agriculture (Dairy, Sheep, Goat, Poultry etc) is appropriately integrated and implemented. During our *Kisan Aadhar Sammelan*, the fields of two of the farmers (Shri. Adsure



Hon'ble Vice Chancellor participated in the National Level Conference on Doubling Farmers Income in the presence of Hon'ble Prime Minister



Brothers), with 3.4 acres per family, just adjacent to the PG farm, were made its demonstration plots with all the agricultural activities. Their income in 2017 was Rs.7 to 12 lakh/a. Within one year i.e. in 2018, the same got increased to Rs.7 to 9 lakh and Rs.12 to Rs.14 lakh/a. This was a very live and real time demonstration of doubling the farmers' income. His Excellency Hon'ble Governor of Maharashtra, two Agriculture Ministers, Animal Husbandry Minister Shri. Deepak Kesarkar, many MLAs, MLCs, Commissioner of Agriculture, Central Government Secretary Shri. S. K. Patnaik, Department of Agriculture and Farmers Welfare, New Delhi and above all more than one lakh farmers reviewed this in both the years 2017 and 2018. As a result, the contributions and the activities of the university were made very much visible to lakhs of farmers, media, and the public, including people's representatives. I hope this will continue every year as a tradition in MPKV, in the future also.

Convocations

It was of great privilege and an enormous joy organizing the 31st, 32nd and 33rd convocations during 2016, 2017 and 2018 with Chief



Guests Dr. Trilochan Mohapatra, Director General, ICAR; Dr.A. S. Kiran Kumar, Chairman, ISRO and Shri. Nitinji Gadkari, Hon'ble Minister of Road Transportation and Highways and Shipping, Central Government, New Delhi who delivered convocation address as Chief Guests during 2016, 2017 and 2018, respectively.





Campus, MPKV, Rahuri and compound to prevent encroachment and to protect our crops and experimental plots etc. However, for everyone's surprise, our Finance Minister made an encouraging announcement of `151 crore in place of `101 crore. He said that the extra 50 crore was for creating Research and Development facilities at the University. Hence, I feel this *Magova-2018* is a historical *Magova* for MPKV because it not only fetched a very good appreciation and encouragement but also a very liberal grant as announced by Hon'ble Finance Minister of Maharashtra State.

Ganeshkhind as the Bio-diversity Heritage Site

Ganeshkhind, one of our very well known research stations in the city of Pune has a rich history of having trees planted by *Peshwas*, botanical garden started by a British Botanist Dr. Woodrow and the historic contributions of Dr. Chima 'Development of *Locknow-49*' of guava and *Ganesh* Pomegranate variety which are still famous and being cultivated by the farmers. This historic agricultural research station at Ganeshkhind, Pune which is home to a valuable bio-diversity of trees, plants, flora and fauna, needs to be protected as provisioned in the Biodiversity Act. Hence, a sincere attempt was initiated to document all the diversity of microbes, birds, reptiles, plants, trees etc. A proposal was submitted to the Maharashtra State Bio-diversity Board to declare Ganeshkhind Research Station as a Bio-diversity Heritage Site. The result is expected any time.

Bamboo Research and Handicraft Training Centre

Yet another new initiative by MPKV is that the Bamboo Research and Handicraft Training Centre started functioning at Central Campus of Rahuri with the financial support from the Department of Forests to the tune of `3.5 crore. Under this project, Students of 10+2 are provided entrepreneurship training programme. The trainees can take up bamboo startup as an enterprise. All the Bamboo species of the country will





be collected, evaluated and characterized along with standardization of agro-techniques for nursery and cultivation purposes of bamboo. Also, research on micro propagation of bamboo will be initiated at the University under this project. Likewise, new research initiatives on dragon fruit, spineless cactus for fodder and quinoa which will create new avenues for dryland farmers in enhancing their farm income.

Conservation of Energy

When the country and the State are facing severe energy crises, University is planning to have green initiative like networking of solar, bio-energy and also energy production through bio-fuel to reduce the cost of electricity bill significantly. To start with, solar kitchen is provided to the students' hostels at the Central Campus with the ICAR funds. Attempts will be made to install solar power generation units with the help of MEDA by BOT arrangement with no extra financial burden on the University. Recycling of waste water, both at Rahuri and Pune will be initiated to utilize the sewage water for irrigation purpose.

Call of the Coming Days

Despite our sincere and honest attempts to improve the working atmosphere and to enhance the status of the university in the country and the State, there are things aplenty to do in the future. In accordance with the requirement and the instructions of the ICAR, we have been able to fill only 50 per cent of the vacant posts of technical staff. Permission is sought by the State Government to fill the remaining 50 per cent of the vacant posts. After I took over, in the last three years 42 of teaching and 475 non-teaching staff retired. However, recruitment of 4 percent of the non-teaching staff the vacant posts in the case of non-teaching staff is permitted by the State Government.

Yet, the we have approached the State Government and requested for the recruitment of at least 50 per cent of the non-teaching staff. We hope to receive a very positive response from the State Government.

With the involvement and committed support of all the officials of the university, teaching and non-teaching staff, it is possible to do many things in the university about which I am optimistic and hope to do as much as I can.

With a deep sense of gratitude, I sincerely acknowledge the hard work, commitment and support of all the Members of the Executive Council, All the Directors, Officers, Associate Deans, Heads of the Departments, Faculty, both teaching and non-teaching staff, students, the Press and Media friends for these accomplishments made possible through their support and I expect the same in future also for the remaining period of my tenure. I also place on record, the moral support and guidance of the former Vice Chancellors *viz.*, Dr. M. C. Varshneya, Dr. C. D. Mayee, Dr. S. N. Puri, Dr. Y. S. Nerkar, Dr. R. B. Deshmukh, Dr. K. E. Lawande, Dr. V. M. Mayande. I cherish my memories for having worked with the Vice Chancellors Dr. B. Venkateswarlu, Dr. Ravi Prakash Dani and Dr. Tapas Bhattacharya for their unforgettable moral support.

EDUCATION

EDUCATION



AGRICULTURAL EDUCATION

Historical Background

Agricultural education was started in the beginning of the 20th Century when 6 agricultural colleges were established at Kanpur, Lyallpur, Coimbatore and Nagpur in 1905, at Pune in 1907 and at Sabour in 1908. The importance of agricultural education has been emphasized in the report of the First Education Commission (1948) appointed by UGC, under the Chairmanship of Dr. S. Radhakrishnan. The Commission recommended the creation of rural universities in the country. Subsequently, two joint Indo-American Study Teams (1955 and 1959) suggested the establishment of agricultural universities on Land-Grant Pattern of USA. The first agricultural university came into being in 1960 at Pantnagar in Uttar Pradesh (now Uttaranchal). The Second Education Commission (1964) headed by Dr. D.S. Kothari recommended the establishment of at least one agricultural university in each state.

Mahatma Phule Krishi Vidyapeeth established in 1969, has been a center of human resource development to meet the growing demands of the state as well as nation for trained manpower specialized in agriculture. The University has made a spectacular progress in achieving its mandatory goals of education, research and extension over last 50 years.

Directorate of Instruction

With the establishment of University, Dr. N. Gopalkrishnan headed this Directorate and subsequently Dr. A. C. Sawant, Dr. S. K. Dorge, Dr. K. S. Pharande, Dr. N. D. Patil, Dr. B. H. Mogal, Dr. S. S. Magar, Dr. V. M. Pawar, Dr. S. S. Kadam, Dr. T. A. More, Dr. K. D. Kokate, Dr. A. S. Jadhav, Dr. H. G. More, Dr. R. S. Patil and Dr. B. R. Ulmek have shouldered the responsibility of leading the education of the University. The present Director of Instruction, Dr. A. L. Pharande is implementing and guiding the educational activities of the University. Director of Instruction is responsible for the due performance of the functions of the colleges and other teaching institutions and co-ordinate and guide education, in all the constituent and affiliated colleges of the University in close co-operation with the Deans of Faculties and other officers. The objective is to provide Diploma, Graduate, Post-graduate and Doctorate level quality education in Agriculture, Horticulture, Agricultural Engineering and Allied fields viz., Agril. Biotechnonology, Food Technology, Agriculture Business Management for producing the competent human resource and Skill Development in the field of Agriculture and Allied sciences.

Periodical Development Reflecting the Growth of Education

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 Water 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
	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 Ninth ICAR Sports Meet organized at MPKV, Rahuri during Feb. 22-25, 2008
	The Government of India sanctioned an amount of Rs. 100 crores as special grants as an Institution of Excellence



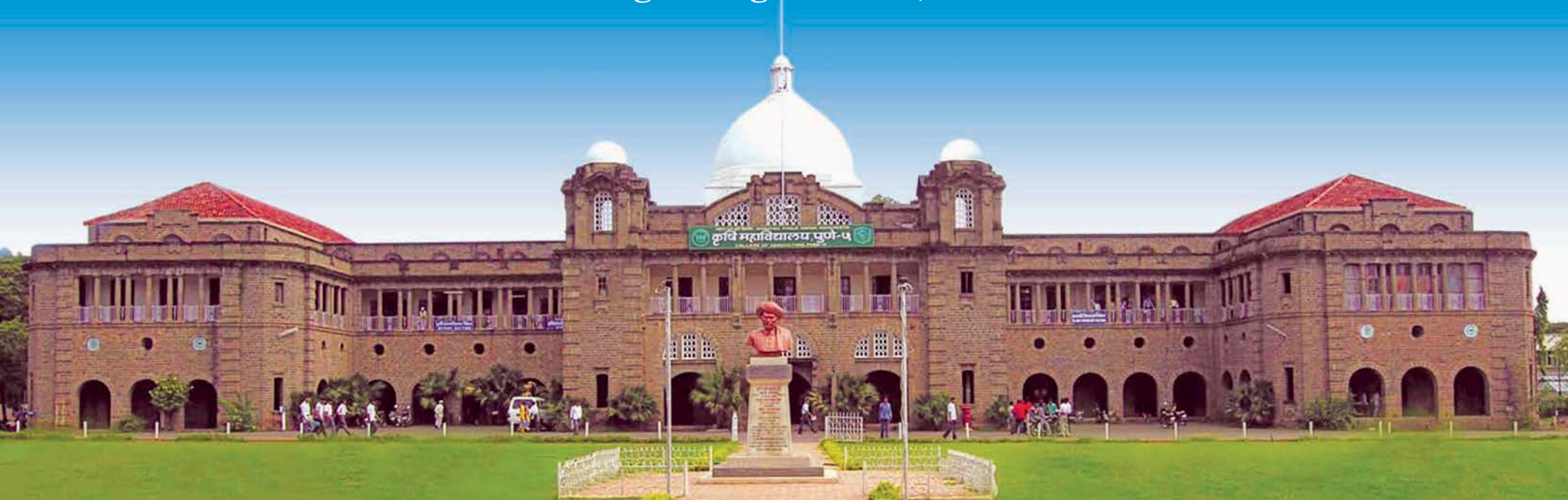
NAEAB granted accreditation to all the constituent colleges of the MPKV, Rahuri for a period of five years up to August, 2013	
2008-10	<p>Started Master of Business Management Programme in Agriculture at College of Agriculture, Pune</p> <p>MPKV bagged second position in ICAR's JRF 2008</p> <p>Construction of Bio-technology Lab at College of Agriculture, Pune</p> <p>The University secured the third position in JRF examination conducted by ICAR, New Delhi at national level (2009-10)</p> <p>Construction of Laboratories for Bio-technology Research Center at MPKV, Rahuri</p> <p>Started CET examination for admission to Master programme</p> <p>Post Graduate curriculum has been revised as per the NCG recommendations and implemented from the year 2009-10</p>
2010-12	<p>Construction of Post Harvest Management Laboratory, Eco Friendly Disease and Pest Management Laboratory, Bio Diversity Laboratory at central campus, MPKV, Rahuri</p> <p>The MBA (Agri.) programme at College of Agriculture, Pune confirmed the registration to ISO 9001:2008 for its Quality Management System.</p> <p>The video conferencing facility launched at MPKV, Rahuri & College of Agriculture- Kolhapur, Pune and Dhule</p> <p>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</p>
2012-13	<p>Celebration of Golden Jubilee year : College of Agriculture, Kolhapur</p> <p>International Collaboration with Van Hall Larenstein University, Netherland for B.Sc. (Agri.) 3+1 & B.Sc. (AH) 2+2 programme</p> <p>Establishment of College of Agriculture, Karad</p> <p>Establishment of College of Agriculture, Nandurbar</p>
2013-15	<p>Asian Institute of Technology, Bangkok for Unified 4+1 UG-PG Agribusiness Management programme</p> <p>Started PG programme in the discipline of Dairy Science at College of Agriculture, Kolhapur</p> <p>Establishment of College of Agriculture, Muktainagar</p>
2015-17	<p>Started CET examination for admission to Doctoral programme</p> <p>International Collaboration with Asian Institute of Technology, Bangkok for ELP in Horticulture</p>
NAEAB granted accreditation for a period of two years (2017-18) i.e. up to March 31, 2018	
2017-18	<p>Hosted the 12th Maharashtra State Inter University Research Convention AVISHKAR 2017-18</p> <p>UG curriculum has revised as per V Deans Committee Recommendation and implemented from the academic year 2017-18</p> <p>Started CET examination for admission to Under-Graduate programme</p> <p>ICAR sanctioned CAAST for Climate Smart Agriculture and Water Management (CSAWM) under National Agril. Higher Education Project amounting to Rs. 19.90 crores</p>
2018-19	<p>Establishment of College of Agriculture, Halgaon</p>
NAEAB granted accreditation for a period of five years (2018-19 to 2022-23)	

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. 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. 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. Up till the year 2018, since inception, University has produced 110322 skilled human resources.

Constituent collegewise programmes and their intake capacity

Sr.No	Name of Institute	Name of the Course/ Degree	Intake capacity
1.	Post Graduate Institute, Rahuri	Ph.D.	72
		M.Sc. (Agri.)	168
		M.Sc. (Hort.)	12
		M.Sc. (Bio-tech.)	8
2.	College of Agriculture, Pune	M.Sc. (Agri.)	54
		M.Sc. (Hort.)	6
		M.B.M. (Agri.)	30
		B.Sc. (Hons) Agriculture	190
3.	College of Agriculture, Kolhapur	M.Sc. (Agri.)	48
		M.Sc. (Hort.)	4
		B.Sc. (Hons) Agriculture	190
4.	College of Agriculture, Dhule	M.Sc. (Agri.)	24
		M.Sc. (Hort.)	4
		B.Sc. (Hons) Agriculture	128
5.	College of Agriculture, Karad	B.Sc. (Hons) Agriculture	60
6.	College of Agriculture, Nandurbar	B.Sc. (Hons) Agriculture	60
7.	College of Agriculture, Muktainagar	B.Sc. (Hons) Agriculture	60
8.	College of Agriculture, Halgaon	B.Sc. (Hons) Agriculture	60
9.	College of Horticulture, Pune	B.Sc. (Hons) Horticulture	32
10.	Dr. Annasaheb Shinde College of Agril. Engg. & Tech., Rahuri	Ph.D.	6
		M.Tech.(Agril.Engg)	12
		B.Tech. (Agril.Engg)	64

College of Agriculture, Pune



Historical Prospectives

The noted thinker, social reformer and agriculturist Mahatma Jyotiba Phule, appealed British Government to set institutions for agricultural education and research in India. This led to the opening of a branch for teaching agriculture in the College of Science at Pune in 1879.

- Started a degree course leading to Licentiate in Agriculture (L.Ag.) in 1899
- Establishment of college in 1907, formally opened by Lord Sydenham (Sir George Clarke), the Governor of Bombay and is one of the first five agriculture colleges established in India
- Bombay University recognized Degree course of Bachelor of Agriculture (B.Ag.) in 1909
- Started Post - Graduate Degree course of Master of Agriculture (M.Ag.) in 1916
- In the year 1934, nomenclature changed to Bachelor of Science in Agriculture B.Sc.(Agri.) degree
- First Batch of B.Sc. (Agri.) degree programme passed out in 1937
- In the year 1948, affiliated to the Poona University
- Started four year degree programme after Matriculation in 1950
- Started four year degree course during 1959 in Agriculture after Pre- degree University Examination of Pune University
- Affiliated to the Maharashtra Agricultural University in 1968
- After the establishment of Mahatma Phule Krishi Vidyapeeth, Rahuri in 1969 became one of the constituent college of the University
- Commencement of the Post-Graduate Degree programme in 1985
- Introduced the Hi-Tech Vegetable and Floriculture Project, in the year 2000
- Celebrated its Centenary in the year 2007
- Commencement of Master's Degree in Agricultural Business Management in the year 2008
- Centenary Building inauguration with the auspicious hands of Her Excellency Hon. Smt. Pratibha Devi Patil, the then President, Govt. of India in 2012

Glimpses of Developmental Growth



First Social Gathering (1909)



His. Excellency Dr. P. C. Alexander, the then Governor of Maharashtra at inaugural of Vegetable & Flower Project on August 10, 2001



Centenary Building



Centenary Building Inauguration at the auspicious hands of Her Excellency Hon'ble Smt. Pratibha Devi Singh Patil, the then President, Government of India



Dignitaries Visit



Hon'ble Shri. Sharadchandraji Pawar,
the then Minister of Agriculture, Maharashtra



Hon'ble Shri. Shivraj Patil, the then Home Minister,
Government of India



Hon'ble Shri. Vilasrao Deshmukh,
the then Chief Minister of Maharashtra



Hon'ble Shri. Sharadchandraji Pawar, the then Union Minister for Agriculture & Cooperation,
Govt. of India, Hon'ble Shri. Balasaheb Thorat, the then Minister of Agriculture, Maharashtra
& World Renowned Scientist Padma Vibhushan Dr. M. S. Swaminathan

Dignitaries Visit



Hon'ble Shri. Sharadchandraji Pawar,
the then Union Minister for Agriculture & Cooperation, Govt. of India



Hon'ble Shri. Devendraji Fadnavis, Chief Minister of Maharashtra



Hon'ble Shri. Pandurang Fundkar,
the then Minister of Agriculture, Maharashtra



World Renowned Agricultural Scientist Padma Vibhushan
Dr. M. S. Swaminathan interacting with the Staff and Students



College of Agriculture, Dhule



Historical Prospectives

- Established in 1960 and initially affiliated to the University of Pune
- Affiliated to the Maharashtra Agricultural University in 1968
- After establishment Mahatma Phule Krishi Vidyapeeth, Rahuri in 1969 became one of the constituent college
- Celebrated Golden Jubilee Year in 2010 and started Post Graduate Programme i.e. M.Sc. (Agri.)

Glimpses of Developmental Growth and Dignitaries Visit



Hon'ble Shri. Bapusaheb K.M. Patil,
the then Health & Cooperative Minister, Maharashtra



Foundation stone of Girls Hostel laid at the auspicious hands of Hon'ble
Shri. Rohidas Patil, the then Minister of Agriculture, Maharashtra



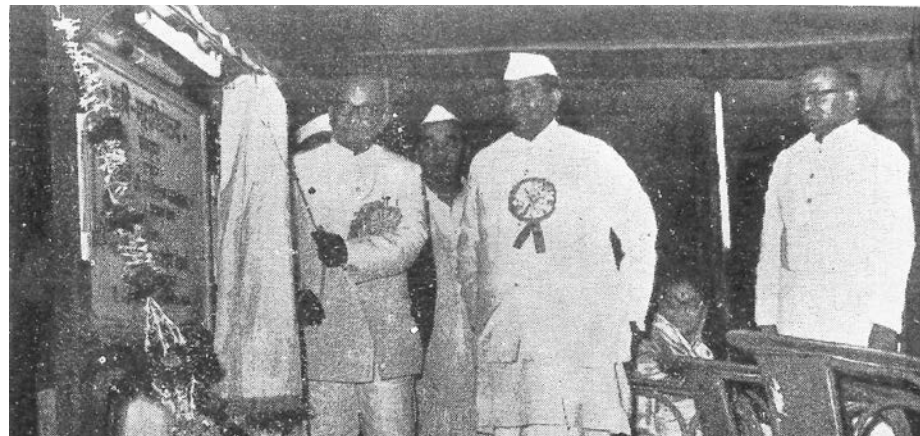
Hon'ble Shri. Prithviraj Chavan, the then Chief Minister, Maharashtra at inauguration function of New Building Work on October 27, 2012



Rajarshi Chhatrapati Shahu Maharaj College of Agriculture, Kolhapur



- Established in 1963 and initially affiliated to the Shivaji University, Kolhapur
- Affiliated to the Maharashtra Agricultural University in 1968
- After establishment Mahatma Phule Krishi Vidyapeeth, Rahuri in 1969 became one of the constituent college of the University
- Started Post Graduate Programme i.e. M.Sc. (Agri) in 2009
- Celebrated Golden Jubilee Year in 2012
- Renamed as Rajarshi Chhatrapati Shahu Maharaj College of Agriculture, Kolhapur in 2017



Glimpses of Developmental Growth



Hon'ble Shri. Sharadchandraji Pawar, Former Chief Minister of Maharashtra addressed as a chife guest during Silver Jubilee Annual Social Gathering (1987-88)



Golden Jubilee Celebration on October 18, 2012



Inauguration of PG Girls and Boys Hostel at the auspicious hands of Hon'ble Shri. Radhakrishna Vikhe Patil, the then Minister of Agriculture, Maharashtra on November 14, 2013



Inauguration of Bio Control Lab (October, 2017)



College of Agriculture, Karad (2013)



Hon'ble Shri. Prithviraj Chavan, the then Chief Minister, Maharashtra and other dignitaries at the inaugural function



College of Agriculture, Nandurbar (2013)



- Established in the year 2013 under the Tribal Sub Plan Scheme for Scheduled Tribe populated district (Nandurbar)
- Offers B.Sc. (Hons) Agriculture Degree Programme
- Intake Capacity : 60 students per year

College of Agriculture, Muktainagar (2015)

College of Agriculture, Halgaon (2018)



Inauguration of College of Agriculture, Muktainagar at the auspicious hands of Hon'ble Shri. Eknathrao Khadse, the then Minister of Agriculture, Maharashtra



The foundation stone laid at the auspicious hands of Hon'ble Shri. Devendraji Fadnavis, Chief Minister of Maharashtra on January 1, 2018

College of Horticulture, Pune (1984)





Dr. Annasaheb Shinde College of Agriculture Engineering & Technology, Rahuri



- Established in 1969, after realizing the need for agricultural engineers for soil conservation, irrigation management, farm mechanization and post harvest processing.
- Started Post Graduation Programme i.e. M. Tech (Agril. Engg.) in 1982 in four different disciplines viz. Agricultural Process Engineering; Irrigation and Drainage Engineering; Soil and Water Conservation Engineering and Farm Machinery and Power were started with intake capacity of 2 in each discipline which was subsequently increased to the current capacity of 4 in 2005.
- Renamed after the former Union Minister of State for Agriculture and architect of green revolution in India, Late Dr. Annasaheb Shinde, as Dr. Annasaheb Shinde College of Agricultural Engineering in 1996.
- Started Doctoral Degree Programme i.e Ph. D. (Agril. Engg.) in 2011 in three disciplines of Agricultural Engineering viz. Agricultural Process Engineering; Irrigation and Drainage Engineering; Soil and Water Conservation Engineering with intake capacity of 2 in each discipline.
- 2019- Celebrating Golden Jubilee Year

Glimpses of Developmental Growth and Dignitaries Visit



Old Building



Hon'ble Shri. Shashikantji Sutar, the then Agriculture Minister, Government of Maharashtra



Hon'ble Shri. Sharadchandraji Pawar, the then Union Minister for Agriculture & Cooperation, Govt. of India at inaugural function of statue of Dr. Annasaheb Shinde



Shadenet cluster



Post Graduate Institute, Rahuri



- Established in 1972 with objective to impart Post Graduation Degree to Agricultural graduates. Started in Basic Science building at central campus. Started Master programme in various disciplines in 1972.
- Established new Post Graduate building with administrative offices in 1979.
- Started Doctoral programme in Agricultural Botany, Horticulture, Agricultural Economics, Agricultural Chemistry and Soil Science disciplines in 1985.
- Initiated Doctoral programme during 1998-99 in 5 disciplines viz., Agronomy, Animal Science and Dairy Science, Agricultural Entomology, Agricultural Extension, Plant Pathology and Agricultural Microbiology.
- The Post Graduate programme in Agricultural Botany was modified into Genetics & Plant Breeding, Plant Physiology and Seed Science & Technology in 2006-07.
- The Post Graduate programme in Horticulture was modified into Fruit Science, Vegetable Science, Floriculture & Landscape Architecture and Post Harvest Technology in 2008-09.
- Post Graduate curriculum has revised as per the NCG recommendations, and implemented from the year 2009-10.
- At present the Post Graduate Institute offers M.Sc. (Agri.) degree programme in 18 disciplines and Ph.D. degree programme in 17 disciplines.

Glimpses of Developmental Growth and Dignitaries Visit



Inauguration of Faculty of Agriculture building by Hon'ble Shri. Yashwantrao Chavan, the then Foreign Minister, GoI (1976)



H. E. Shri. Sadik Ali, the then Governor of Maharashtra



Hon'ble Shri. Balasaheb Thorat, the then Minister of Agriculture, Maharashtra and Pro-Chancellor at inaugural function of Girls Hostel on June 1, 2007



Phytotron Laboratory



Lower Agricultural Education



ATS, Dhule



ATS, Kolhapur



ATS, Puntamba



ATS, Borgaon

- Lower agricultural education in the territory started in the beginning of the 20th century before pre independence when 4 ATS were established at Dhule in 1923, Kolhapur in 1929, Puntamba in 1938 and Borgaon in 1946.
- After independence 4 ATS were established at Manjri in 1947, Solapur in 1948, K. Digraj in 1958 and Jalgaon in 1964.
- Subsequently, after establishment of ZP all Technology Schools were transferred under their control.
- In 1974 all ATS were transferred under the ambit of Mahatma Phule Krishi Vidyapeeth, Rahuri.



ATS, Manjri



ATS, Solapur



ATS, K.Digraj



ATS, Jalgaon

Library

Library Services

- Internet Service
- Retrieval of CD-ROM Databases
- Online e-Journals / Virtual e-Journals
- Online books
- Online ETAD
- CAS (Current Awareness Service)
- SDI (Selective Dissemination of Information)
- Knowledge Portal (Web OPAC)
- Krishikosh: Institutional Repository of Indian NARS (Theses Uploaded 4984)
- KrishiPrabha: Full text Doctoral Thesis Repository



College Libraries



College of Agriculture, Dhule (1995)



College of Agriculture, Kollhapur (1997)



College of Agriculture, Pune (1997)



Student READY (Rural Entrepreneurship Awareness Development Yojana)

Objective

To reorient graduates of Agriculture and Allied subjects for ensuring and assuring employability and develop entrepreneurs for emerging knowledge intensive agriculture.

Experiential Learning/Hands on Training

Experiential Learning helps the student to develop competence, capability, capacity building, acquiring skills, expertise, and confidence to start their own enterprise and turn job creators instead of job seekers. This embraces the earning while learning concept.

Rural Agriculture Work Experience

Rural Agriculture Work Experience also enables the students to gain rural experience giving them confidence and enhancing on-farm problem solving abilities in real life situations especially in contact with farmers, growers, other stakeholders.



In Plant Training/ Industrial attachment

In-plant Training for a short period of time in relevant industry helps gain the knowledge and experience of the work culture. In-plant Training by reputed or organized sectors provide an industrial exposure to the students as well as helps develop their career in high tech industrial requirements.



Collection of soil samples



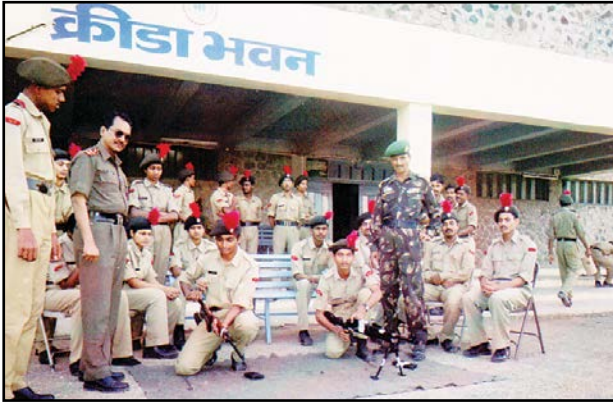
Preparation of soil sample for analysis



Students working in laboratory



NSS / NCC / Swachha Bharat Abhiyan





State-National Sports / Cultural Events



International Yoga Day Celebration





Glimpses of Convocation



Chief Guest : Hon'ble Shri.Fakhruddin Ali Ahmed, the then Minister of Agriculture, Govt. of India



8th Convocation



D. Lit. to Padmashri Vitthalrao Vikhe Patil

Glimpses of Convocation



Hon'ble Dr. Shankar Dayal Sharma, the then Governor of Maharashtra and Chancellor inaugurating the convocation



15th Convocation



Glimpses of Convocation



Chief Guest Hon'ble Shri. Sharadchandraji Pawar, the then Union Minister of Agriculture, Govt., of India



Hon'ble Shri. Sharadchandraji Pawar, the then Union Minister of Agriculture, Govt., of India bestowed with "*Krishiratna*" award

Glimpses of Convocation



Chief Guest Hon'ble Dr. Yoginder K. Alagh, the then Chancellor, Central University of Gujarat



D. Lit. to Hon'ble Dr. D. Y. Patil, the then Governor of Tripura



D. Lit. to Hon'ble Shri. Balasaheb Vikhe Patil, Former Minister of Heavy Industries, Govt. of India



Glimpses of Convocation



Chief Guest Hon'ble Dr. Trilochan Mohapatra, Secretary, DARE and DG, ICAR



Glimpses of Convocation



Chief Guest Hon'ble Shri. A.S. Kiran Kumar, Chairman, Space Commission; Secretary, Department of Space, India and Chairman, ISRO





Glimpses of Convocation



Chief Guest Hon'ble Shri. Nitin Gadkari,
Union Minister for Road Transport and Highways, Shipping, Water Resources, River Development and Ganga Rejuvenation, Govt. of India



Awards



◀ All India ICAR-JRF 2008
Second Position

All India ICAR-JRF 2009
Third Position ▶





Recognitions



Recognitions



**Certificate of Appreciation to MPKV for
valuable contribution to Krishikosh**

**Certificate of Accreditation to Pesticide
Residue Lab., Dept. of Entomology,
MPKV, Rahuri**



Educational Views and Experiences

Dr. N. D. Patil

**Former Dean and Director of Instruction,
MPKV, Rahuri- 413 722 Dist. Ahmednagar
(01.05.1985 to 18.08.1986)**



During the period of 1985-86, I had an opportunity to work as the Dean, Faculty of Agriculture and the Director of Instruction. During this short period, I have dealt many important aspects of education and research. Some of activities and achievements are given below. I was able to do so with the help of colleagues and support by the Honourable Vice Chancellor.

The most important and foremost achievement, I would like to say is the declaration of the State government for treating B.Sc. (Agri.) degree as the technical degree. This was due to the strike of the students of all the four agricultural Universities. Myself and the students attended the meeting with the Honourable Chief Minister (Maharashtra state). The three years course was made into four year. This has helped many graduates working in Agricultural Universities., state government departments and Zilla parishads and all were financially benefitted, then the Vice Chancellor has fully supported me to achieve this success.

During the visit of an accreditation team of ICAR to MPKV, it was pointed out that the number of Ph.D. holders of academic staff is very low and the University should improve it. The Vice Chancellor told to me to open the gate and give recognition to the eligible teachers as research guides and also allot them, the staff who applied for Ph.D. studies within a year of few years. We were able to see the rising number of teachers with Ph.D. degree. These well qualified and experienced academicians in various branches have helped to overall improvement in

agricultural education, research and extension education. This has also helped in making MPKV as a leading agricultural university in the state as well as in our country.

The MPKV is a member of the Indian Agricultural Universities Association. During 1985-86, I had an opportunity to attend its annual convention held at Shrinagar, Jammu and Kashmir state. During the programme, I presented a paper on the education of MPKV highlighting the importance of RAWE programme. This was well appreciated. The field experience is very useful to the students to develop skills.

In the three years degree course, there was no provision for training students at farmer's field level. This was included in the four years degree course as RAWE. The four agricultural universities co-ordination committee gave me this assignment and responsibility. Since then the RAWE programme is well implemented. This has helped graduates to improve farming activities and also management. The MPKV has a good setup of Agricultural Colleges located at Pune, Kolhapur and Dhule that time. Also, a large number of stations and sub-stations for research located in all agro- climatic regions. The farmer's problems, educational needs and extension training programme are well taken care of. This university has always stood strongly for the welfare of the farmers, agricultural students and professionals in Agribusiness.

During the period of 50 years, I strongly feel, MPKV has done extremely well and will also show similar progress in coming years. I wish all the success.

My Wonderful Memories with MPKV

Dr. B. H. Mogal

**Former Dean (F/A) & Director of Instruction,
MPKV, Rahuri-413 722 Dist. Ahmednagar
(19/08/1986 to 31/01/1996)**



I was born and brought up in a farmer's family in a village Shingave, in Niphad Taluka of Nashik district. I attended school up to 4th standard and later had to go daily 4 kilometers for 5th, 6th and 7th standard. Later for 8th and 9th the distance increased by 2 kilometers. I was fortunate to go to Nashik for 10th and 11th. After getting good marks in SSC it was a problem for me as to which branch I should select. My father did not agree to send me to either engineering or medical branch on account of financial limitations. A relative of a landlord suggested my father to send me to Agriculture College which was less expensive. I received merit scholarship for all the four years and passed out with good marks in 1959. Got government job as a teacher at the college. Later I was sent on deputation for M.Sc. (Agri.) at Indian Agricultural Research Institute, New Delhi in 1960-62. Again I had an opportunity to go to Penn State, USA for Ph.D. After returning from U.S.A., I worked at Dhule, Kolhapur and Pune agricultural colleges. Finally having served at Rahuri as a Associate Dean, Post Graduate Institute, Dean and Director of Instructions as well as Director of Research and retired in 1996.

Although several varieties of grain crops, pulses, fruits and vegetables have been released and became popular among

farmers we maintain the same status in society we had 100 years ago.

There is an urgent need to evaluate adoption and benefits from recommended practices to give feedback for solving problems. A format need to be prepared and information deposited at taluka level. This computerised information should be the basis for planning in food production, health and education. Universities be evaluated regularly to find out deficit and improvement.



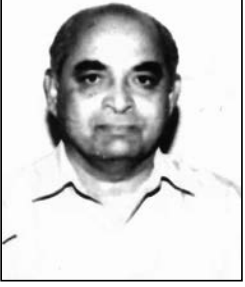


महात्मा फुले कृषि विद्यापीठ, राहुरी व्यक्तिमत्व विकास घडविणारे विद्यापीठ

डॉ. शंकरराव श्री. मगर

माजी कुलगुरु, डॉ. बा. सा. कों. कृ. वि., दापोली तथा

माजी अधिष्ठाता (कृषि) व संचालक शिक्षण, महात्मा फुले कृषि विद्यापीठ, राहुरी-४१३ ७२२
(०१/०२/१९९६ ते १६/०२/२०००)



स्वातंत्र्य प्राप्तीनंतर दिर्घकालीन उच्च शिक्षण घोरण निश्चित करण्यासाठी मा. राष्ट्रपती सर्वपल्ली डॉ. राधाकृष्णन यांच्या अध्यक्षतेखाली १९४८ नेमलेल्या उच्च शिक्षण आयोगात कृषि विषयक विद्यापीठाची संकल्पनाचा मुहूर्तमेढ रोवली. इंडो-

अमेरिकन कमिशन व बऱ्याच घडामोडीनंतर लॅण्ड-ग्रेट बेसीसवर पहिले कृषि विद्यापीठ, पंतनगर (१९६१) स्थापन होऊन महाराष्ट्रातील पहिले विद्यापीठ राहुरी येथे १९६८ साली होऊन आज मीतीस राष्ट्रातील जागतिक पातळीवर नावलौकिक कमवून दिमाखाने सूर्व महोत्सव साजरा करित आपलाही सिंहाचा वाटा आहे याचा मला व्यक्तीशः आनंद वाटणे हे सहज-सुलभ आणि नैसर्गिक आहे. कृषि-शिक्षणात विद्यापीठ स्थापन होण्यापूर्वी १९६७ साली कृषि महाविद्यालय, परभणी येथे श्रीगणेशा केला. पलखरे शैक्षणिक परिवर्तन कृषि विद्यापीठ स्थापनेपासून त्रै-मासिक परीक्षा सत्र अंमलात आणल्यानंतर झाले. पूर्व परांगत शिक्षण पद्धती इतिहास जमा झाली.

पदव्युत्तर शिक्षण पूर्ण केले की आपण परिपूर्ण झालो ही डोळ्यावरी झपाड या नवीन पद्धतीने झटकन उतरविली गेली. भारतीय समाज व्यवस्थेत औद्योगिकरणाच्या प्रभावाने बदललेली अर्थव्यवस्था आणि केवळ ज्ञान प्राप्तीची शिकवण याच्यात समन्वय घडवण्याची गरज निर्माण झाली होती. शिक्षणाच्या नव्या पर्वात माहिती तंत्रज्ञानाच्या अफाट साठ्यातून विद्यार्थ्यांना मिळणाऱ्या ज्ञानाचा फायदा समाजातील सर्व घटकांना मिळण्यासाठी समस्यापूर्ती क्षमता आणि परिपूर्ण कौशल्यवृद्धी आत्मसात करणे आवश्यक असल्याचे अनुभवांती आजही मला वाटते. शिक्षणाचे रुपांतर सामाजिक, तांत्रिक व आर्थिक मुल्यात करण्यासाठी जलद गतीने शैक्षणिक गुणवत्तेच्या संधी सुधारणे या बाबी विद्यापीठाने गांभिर्याने घेणे आवश्यक आहे. कृषि अनुसंधान परिषद नवी दिल्ली अंतर्गत अॅक्रिडिटेशन बोर्डाचा सदस्य म्हणून ६ वर्ष सदस्य असताना मी या उपयोजित कृषि शिक्षण पद्धतीचा अतिशय हिरीरीने पाठपूरावा केला.

हा एक प्रकारचा प्रभावी सामाजिक अर्थ व्यवस्थेतील बदल कृषि विद्यापीठाने स्विकारणे आवश्यक आहे. या संबंधीची राहुरी येथील महात्मा फुले कृषि विद्यापीठाची भूमिका प्रशंसनीय व स्तुत्य आहे.

वरील तत्त्वज्ञानाच्या गोष्टी कागदावर विलोभनिय वाटतात पण प्रत्यक्षात आचरणात आणण्यासाठी प्रथमतः विद्यापीठाच्या जडण-घडणीत सन्माननीय कुलगुरु यांच्या शैक्षणिक विद्वत्तेत बरोबर सामाजिक बांधिलकता, गुणवत्तापूर्ण सहभाग आवश्यक राहिला आहे. विशेषतः गतिमान कुलगुरु स्व. नानासाहेब पवार यांच्या ५ वर्षांच्या कालावधीत सुरु होऊन तो सतत पुढे टिकून राहिला आहे. या उत्स्फूर्त कार्यात शेतकरी हा जरी केंद्रबिंदू असला तरी संस्थेतील मनुष्यबळ विकास प्राध्यापक, शास्त्रज्ञ, विस्तार शिक्षण तज्ञ आणि कर्मचारी (आस्थापना) हा महत्वाचा कणा राहिला आहे. ही जरी संस्था असली तरी ते कुटुंब असून तीचा प्रत्येक घटक महत्वाचा असतो हे कुटुंब प्रमुख्याने ब्रीद वाक्य असे डॉ. डी.के. साळुंखे, मा. कुलगुरु नेहमीच सांगत असायचे. त्रिसुत्रातील तिसरा घटक म्हणजे विद्यापीठासंबंधी धुरीण म्हणजे कुलपती, प्रतिकुलपति व कार्यकारी परिषद या तीन सुत्रातील समतोल म्हणजेच विद्यापीठाची यशस्वी वाटचाल असून यात सूत्रबद्ध समतोल मी विद्यापीठात उच्च पदावर २००० पर्यंत काम करताना आनंद देऊन गेला.

प्रत्येकाच्या आयुष्यात व्यक्तिमत्व विकास हा व्यक्तिगत कौशल्य, सामर्थ्य, बुद्धिमत्ता आणि सहभाग यावर अवलंबून असतो त्यामध्ये वस्तुत्व विचार आणि आचार याचाही समावेश होतो. त्यापैकी जास्तीत जास्त बाबींचे आत्मसात होतात त्यावेळी व्यक्तिमत्व विकसित होते याच व्यक्तिमत्त्वाच्या आधारावर माणसाकडे नेतृत्व साहजिकच चालत येते. बऱ्याचवेळा विद्यापीठाने मला काय दिले? याऐवजी स्वतः सिंहावलोकन करून मी विद्यापीठाला काय दिले? असा सूत्र विचार केल्यास आपल्या प्रश्नाचे उत्तर आपणास नक्कीच मिळेल. मलाही हा दृष्ट चक्रातून जावे लागले. बी. एससी कृषि (ऑनर्स) ला फर्स्ट

क्लास मिळून मी एम.एस.सी. कृषि अभियांत्रिकेला प्रवेश घेतला पण ती पदवी फक्त पुणे विद्यापीठात होती. पुढील शिक्षणासाठी तिचा कृषि अभियांत्रिकेत उपयोग नव्हता. आपली उपयुक्तता विद्यापीठाला कृषि महाविद्यालय, पुण्याला पटवून द्यायची या जिद्दीने १९७०-७२ अध्यापनाबरोबर इस्टेट मॅनेजर म्हणून जीव ओतून रात्रंदिवस काम केले अविरत कष्टाचे चीज झाले. कृषि अभियांत्रिकेच्या सेवा जेष्ठता यादीत खूप खाली नंबर असतानाही मा. कुलगुरु नानासाहेब पवार यांनी माझी पी.एच.डी. च्या डेप्युटेशनसाठी खास विद्यापीठासाठी केलेल्या कामाची मला पावती मिळाली. डॉ. के.एस. फरांदे, सहयोगी अधिष्ठाता कृषि महाविद्यालय, पुणे यांच्या मार्गदर्शनामुळे भविष्याचा मृदशास्त्र शाखेचा इंडियन इन्स्टिट्यूट ऑफ टेक्नालॉजीचा प्रवेश अखिल भारतीय सरळ प्रवेश परिक्षाद्वारे मोकळा झाला. विद्यापीठ आस्थापना हे कृषि विद्यापीठ कायदा व त्यामध्ये बदल घडवून व्यक्तिमत्व विकास कुलगुरुच्या कार्यपद्धतीवर खस बाब म्हणून अवलंबून असतो. कृषि अभियांत्रिकीचा प्राध्यापक आंतरराष्ट्रीय ख्यातीच्या आयआयटी खरगपूर संस्थेमध्ये मृदशास्त्र शाखेमध्ये पी.एच.डी. ही पदवी-पदवीदान समारंभात स्व. इंदिरा गांधी मा. पंतप्रधान यांचे हस्ते स्विकारली. आंतरराष्ट्रीय किर्तीचे पी.एच.डी. मार्गदर्शक डॉ. एस.बी. वन्हाडे आणि ४ वर्षात भारतीय मृदशास्त्र सोसायटीचे आजन्म सभासत्व व गौरव या सन्मानचिन्हांसहीत १९७७ साली प्राप्त केले.

अनंत हस्ते कमलावराने

देता किती घेईल दोन कराने !

विद्यापीठ विद्याप्रमीसाठी व्यक्तिमत्व विकास कसा घडविते आणि कृषि कुलाचे गुरुवर्य म्हणजे कुलगुरु ध्रुवाचे अढळपद कसे राखतात त्याचे मुर्तोमत उदाहरण होय !

विसाव्या शतकातील शेवटी दोन दशके म्हणजे महात्मा कृषि विद्यापीठ, राहुरीच्या विविध संशोधन प्रकल्पाचे सुवर्ण-युग शास्त्रज्ञांची खाण होती. राष्ट्रीय स्तरावर चमकणारी ज्वारी, कडधान्ये (हरभरा) बाजरी, कापूस, पीक पद्धती, फळ पीके, आणि त्रिवेणी गाय, शेळी मेंढी प्रकल्पाबरोबर अखिल भारतीय पाणी व्यवस्थापन प्रकल्प अशी संशोधनाची शक्तीस्थाने होती. डॉ. ए.बी. जोशी माजी संचालक आय.ए.आर.आय. नवी दिल्ली, अद्वितीय शास्त्रज्ञ, कुलगुरु म्हणून लाभले होते. शास्त्रज्ञ म्हणून काम करावयाची इच्छा होती पण विभागवार सेवा जेष्ठतेचा अडसर होता. बढती, सरळसेवा निवड आणि संहिता असा अडचणीचा डोंगर समोर होता. पण मागील ४ वर्षांचे रेकॉर्ड, राष्ट्रीय प्रतिमा आणि मृदशास्त्र सोसायटीमधील

प्रकाशने आदरणीय कुलगुरु साहेबाना भावली आणि त्यांना कृषि अभियांत्रिकी सेवा जेष्ठतेचा शास्त्रज्ञ अखिल भारतीय समन्वयित पाणी व्यवस्थापन प्रकल्पात मृदपदार्थ विज्ञानवेत्ता म्हणून मृदविज्ञान व कृषिरसायन शास्त्रशाखेत टाकला. त्यास विरोध होणे क्रमप्राप्त पण नैसर्गिक होते पण माझ्या यशस्वी आयुष्याचे महाद्वार खुले झाले.

एकदा का दैवाचे फासे सुलटे फिर लागले की अपूर्वाईची संधी प्राप्त होते पण त्यास अथक प्रयत्नाची साथ आवश्यक असते आयआयटी च्या प्रकल्पात रात्रंदिवस कष्ट करण्याची मानासिकता गुरुवर्य डॉ. एस.बी. वराडे यांनी रुपविली होती. संशोधनाचे विविध प्रकल्प हाती घेताना स्वतः कुलगुरु जोशी साहेब प्रयोग क्षेत्रावर प्रश्नोत्तरे करीत अर्धाअर्धा तास थांबत अविरत संशोधन वार्षिक संशोधन बैठकामधून डॉ. झेंडे, डॉ. बी.बी. पाटील सारखे मार्गदर्शक विभाग प्रमुख हे खऱ्या अर्थाने माझ्या जीवनाचे शिल्पकार ठरले. डॉ. एन.के. सावंत अशा जेष्ठ शास्त्रज्ञाचा सल्ला उकृष्ट पेपर पहिल्या आंतरराष्ट्रीय कोरडवाहू परिषद, अँडलेड द ऑस्ट्रेलिया येथे उपयुक्त ठरला. परिषदेच्या खर्चाने ऑगस्ट १९८० मध्ये ऑस्ट्रेलियाची परिषद एक आठवड्याची अँडलेड दक्षिण ऑस्ट्रेलियाचे व्हागा-व्हागा कॅनदरो-मेलबर्न-सिडनी शैक्षणिक भेटी ज्ञानाचा खजिना मिळण्यास मदत झाली. कृषि अनुसंधान कृषि परिषद नवी दिल्ली यांनी कामाची दखल घेऊन कृषि परिषद पातळीवर काम करावयाची संधी द्यावयास सुरुवात केली.

कुलगुरुंना शास्त्रज्ञांच्या उकृष्ट प्राध्यापकांच्या फळीचा मोठा अभिमान असतो आज ही आहे. अ.भा. समन्वयित पाणी व्यवस्थापन प्रकल्पात पाण्याचे अंदाजपत्रक (Water Budget) या प्रयोगास त्यावेळेचे महानिदेशक डॉ. ओ.पी. गौतम यांनी १९८२ साली भेट देऊन कुलगुरु डॉ. डी. के. साळुंखे यांचेकडे माझ्या कामाची वाखाणणी केली. आंधळा मागतो एक डोळ... अशी माझी स्थिती झाली. कृषि विद्या, आणि मृदशास्त्र व कृषि रसायन शाखांचा विरोध डावलून माझी प्रमुख शास्त्रज्ञ म्हणून नेमणूक केली. त्याच प्रमुख शास्त्रज्ञ पदाने मला प्रोजेक्ट कोऑर्डिनेटर आणि उपमहानिदेशक याच्या सानिध्यात राष्ट्रीय स्तरावर काम करण्याची संधी मिळाली. कोरडवाहू परिषद, अँडलेड, दक्षिण ऑस्ट्रेलिया येथून परत येताना बरासा व्हॅली येथील ४ हजार एकरावरील ठिबक-सिंचन प्रकल्पाचा नियोजन आराखडा आणला होता. व्हेस्टाज कंपनीच्या सहाय्याने देशातील एक लाख क्षेत्रावर पहिला ठिबक प्रयोग सुरु केला. याच प्रयोगातून कृषि विकास प्रतिष्ठान बारामतीचे डॉ. आप्पासाहेब पवार यांचे शास्त्रीय नाते जुळले ते शेवटपर्यंत कायम राहिले.



भविष्यातील सर्वोच्च पदाची चाचणीची येथून सुरुवात झाली. डॉ. साळुंखे, कुलगुरु, युटाह स्टेट युनिव्हर्सिटी, लोमन येथे आयुष्यभर कार्यरत होते. चांद्रयान मानवाचा आहार या प्रकल्पाचे आहार तज्ञ म्हणून त्यांची ख्याती होती. लोगन येथील आंतरराष्ट्रीय इरिगेशन वॉटर मॅनेजमेंट सेंटरचे प्रमुख डॉ. स्कोगंबो यांच्या सहाय्याने देशात वाल्मी प्रकल्प मंजूर झाला होता. डॉ. साळुंखे साहेबांना त्या प्रकल्पात राहुरी विद्यापीठात आंतर विद्याशाखा इरिगेशन वॉटर मॅनेजमेंट वेगळी शाखा निर्माण करण्याची धुरा माझ्यावर प्रमुख शास्त्रज्ञ म्हणून सोपविली. त्याहीपेक्षा बुद्धिमत्ता, कार्यक्षमता, अथक परिश्रम आणि सेंट्रल वॉटर कमिशन, नवी दिल्ली (सी. डब्ल्यू. सी.) अध्यक्ष डॉ. चितळे साहेब. यांचेशी जवळीक या माझ्या जमेच्या बाजू होत्या. प्रमुख शास्त्रज्ञ या वेळेचा दोन शाखांच्या विरोधात आता इरिगेशन ड्रेनेज इंजिनीअर, कृषि अर्थशास्त्र आणि कृषि विस्तार शाखा यांची त्यात भर पडली. मी समजू शकत होतो पण अविरत बीनचूक काम वेळेत करणे एवढेच माझ्या हातात होते. तुम्ही काम करीत राहा मी तुमच्या पाठीशी आहे अशी ग्वाही कुलगुरु डॉ. साळुंखे साहेब सदैव देत होते. सुदैवाने आंतर विद्याशाखा जलसिंचन व्यवस्था असे वेगळे डिपार्टमेंट देशातील वाल्मी प्रकल्प अंतर्गत मंजूर झाले. त्याच प्रकल्पा अंतर्गत पाणी व्यवस्थापन प्रकल्पातील मी व डॉ. एच. के. पवार यांचे अमेरिकेतील १ वर्षाच्या प्रशिक्षणासाठी निवड झाली. प्रारंभिक प्रशिक्षण वाल्मी, औरंगाबाद हे अतिशय उपयुक्त ठरले. आयुष्यातील सर्वोत्तम शैक्षणिक आणि युटाह, कोलोरॅडो, कॅलिफोर्निया राज्यातील शेतीचा अभ्यास करण्यासाठी संपूर्ण १९८५ ला अपुरे पडलो. योगायोगाची गोष्ट म्हणजे तृतीय आंतरराष्ट्रीय ड्रीप इरिगेशन कॉन्फरस, कॅलिफोर्निया राज्यातील फ्रेस्नो येथे नोव्हेंबर, १९८५ साली संपन्न होणार होती. कोलॅरॅडो युन्टीव्हर्सिटीमार्फत रजिस्ट्रेशन करून भारतातील मागील ४ वर्षांचा ठिबक संशोधनाचा आढावा मांडण्याची संधी मला मिळाली. जागतिक पातळीवर ड्रीप इरिगेशन क्षेत्रात भारताचा प्रथमच शिरकाव झाला. त्या परिषदेसाठी पद्मश्री डॉ. आप्पासाहेब पवार, पद्मश्री भंवरलाल जैन आणि थोर कृषि व्यक्तिमत्व माजी मंत्री डॉ. अण्णासाहेब शिंदे हजर होते. ठिबक सिंचनाचा पाया पद्मश्री जैन यांनी तेथेच घातला. ऑस्ट्रेलियातील एका कंपनीबरोबर करार करून जळगांव येथे ठिबकसंच सामुग्री निर्मिती पुढच्या वर्षी चालू केली. पुढे संशोधनाची अत्याधुनिक ठिबक सामुग्री मे. जैन इरिगेशन सिस्टीम लि., जळगांव यांची इंटर फॅकल्टी डिपार्टमेंट मोफत पुरविली. दररोजची दैनंदिनी लिहिण्याचा सवय अमेरिकेत डॉ. फ्रीमन व डॉ. हरग्रीव्ह या शास्त्रज्ञांनी लावली. अगदी आजतागायत ३३ वर्षांचा आढावा माझ्या दैनंदिनीत

उपलब्ध आहे. पदव्युत्तर प्रबंध लिहावा त्या प्रमाणे माझा अमेरिका शास्त्रीय व तांत्रिक अहवाल मी तदनंतरचे कुलगुरु डॉ. पेरु यांना दिल्यावर त्यांनी इंटर फॅकल्टी डिपार्टमेंट जबाबदारी १९८६ साली माझ्यावर सोपविली. यू. एस. ऐड. प्रकल्पाधिकारी, मध्यवर्ती जल आयोग (सी.एन.सी.) राज्याचे जलसंपदा खाते या सर्वांचा समन्वय साधावयाची जबाबदारी माझ्यावर आली. मध्यवर्ती जल आयोगाच्या टेक्नीकल अँडव्हायजरी कमिटी आणि महाराष्ट्र राज्याच्या जलसंपत्ती खात्याच्या स्टेट टेक्निकल कौन्सिल (यु.एस.ऐड.) च्या सभासदापदी नेमणूक झाली. एका बाजूला संपूर्ण कामाचा व्याप वाढला तरी दुसऱ्या बाजूला वरीष्ठ प्राध्यापक, विभाग प्रमुख, अधिष्ठाता (कृषि) यांचा छुपा विरोध दिवसें दिवस वाढतच होता. विभागाचे वार्षिक यू. एस. ऐड बजेट काही कोटीत असावयाचे. राष्ट्रीय व राज्यस्तरीय बैठका, समयबद्ध विकास कामाचा खर्च, पदव्युत्तर शिक्षण अशा चक्रव्युहात सर्वजण अडकले होते. डॉ. भोई, डॉ. पवार, प्रा. दहिवालकर, प्रा. फिरके पायाला भिंगरी लावल्यासारखे रात्रंदिवस दररोजचे १२ ते १४ तास काम करीत. प्रमुख उद्देश हा मनुष्यबळ विकास हा होता. त्यामधून दरवर्षी लघुप्रशिक्षणासाठी १/५ आणि मध्यम, दीर्घ प्रशिक्षणासाठी २ प्राध्यापक अमेरिकेस पाठविण्याचे उद्दिष्ट होते. विद्यापीठ स्तरावरील निवड गुणवत्तेवर करून त्यास राज्य व सेंट्रल वॉटर कमिशनची मंजूरी आवश्यक होती. अविरत मेहनत करून नाना अडचणीला तोंड देत इंटर फॅकल्टी डिपार्टमेंट मधून अमेरिकेतील प्रशिक्षणासाठी आम्ही ४३ प्राध्यापक पाठवू शकलो. प्राध्यापकाच्या व्यक्तिमत्त्वाचा विकास स्व. डॉ. एन.जी. पेरु, मा. कुलगुरु डॉ. डी. के. साळुंखे आणि डॉ. संभाजीराव दोरगे अशा कुलगुरुंच्या जिज्ञासेमधून झाला. तरीही मूळ प्रश्न कायमच होता. प्रशासकिय दृष्टिकोनातून मी मूळच्या सहयोगी प्राध्यापक पदाला पुरता अडकलो होतो. सहयोगी प्राध्यापकाला देशांतर्गत विमान प्रवासाची खास सवलत डॉ. पेरु साहेबांनी शासनाकडून मिळवून दिली. प्रकल्प संचालक म्हणून सहाजिकच जेष्ठांचा विरोध तीव्र होऊ लागला. डिपार्टमेंट स्वतंत्र, अॅम्बसिडर डिझेल कार, १८५० चौ. फु. प्रशस्त निवासस्थान राज्य आणि सी. डब्ल्यू. सी. तसेच कृषि अनुसंधान परिषद या ठिकाणी सन्मानपूर्वक स्थान आणि ठिबक सिंचन संशोधनामुळे शेतकरी मेळाव्यामुळे सर्व साखर कारखाने, द्राक्ष बागायतदार संघ यामध्ये कृषि विद्यापीठाची प्रतिमा उठावदार झाली. इतर संशोधन प्रकल्प विशेषतः द्राक्ष, बोर, डालिंब कोरडवाहू फळपिक व त्यावर ठिबक सिंचन जिराईत दुष्काळ पट्यात आर्थिक सुबता देऊन गेली. कडधान्यपैकी हरभरा पिकाचे वाण संपूर्ण देशभर पसरले.

इंटर फॅकल्टीचा प्रशासन इमारती समोरील प्रात्यक्षिक व संशोधन फॉर्म संपूर्ण देशात काटेकोर पाणी वापर तंत्रात देशात आदर्श ठरला. महाराष्ट्र शासनाने राज्यस्तरीय ठिबक सिंचन समिती मा. कृषि आयुक्तांच्या अध्यक्षतेखाली स्थापन केली. स्थापनेपासून १९८६ ते १९९४ पर्यंत त्या समितीची मी सदस्य म्हणून राज्याचे ठिबकचे धोरण ठरविण्याची मला संधी मिळाली.

समयसे پہले और नशिबसे जादा किसीको कुछ नहीं मिलता ! या म्हणीची प्रचिती मला तद्नंतर १९८९ अखेरीस आली डॉ. संभाजीराव दोरगे साहेब एक तत्त्वनिष्ठ, निर्भिड आणि कार्यक्षम मनुष्य पारखण्यात निष्णात व्यक्तिमत्त्व कुलगुरु पदावर रुजू झाले. माझा १२ वर्षांचा प्रशासकीय वनवास संपला मा. जनाभाऊ एंबडवार, माजी कृषि मंत्री व व्हाईस चेअरमन, मकृशिसंप, पुणे हे निवड समितीचे अध्यक्ष होते. प्राध्यापक कृषि रसायनशास्त्रज्ञ व विभाग प्रमुख, इंटर फॅकल्टी डिपार्टमेंटच्या दोन्ही जागी माझी निवड झाली. विशेष म्हणजे डॉ. ए. बी. जोशी, मा. कुलगुरु हे महामहिम राज्यपालाचे प्रतिनिधी होते. अर्थात माझे-प्राधान्य इंटर फॅकल्टी, विभाग प्रमुख पदास होते. त्याची मुख्य दोन कारणे होती. त्या पदासाठी एक्सपर्ट तज्ञ म्हणून सेंट्रल वॉटर कमिशन नवी दिल्लीचे संचालक होते. मुलाखत ५ मिनीटात संपली. नॅशनल वॉटर पॉलिसी १९८७ ची रुपरेषा ठरविणाऱ्या टेक्निकल अॅडव्हॉयजर्स कमिटीचे मी आणि डॉ. मगर सन्माननीय सदस्य होतो. ह्याचे या विषयातील योगदान मला पूर्ण माहित आहे असे त्या सदस्यांनी सांगितले तेथेच माझी निवड पक्की झाली. दुसरे कारण म्हणजे मागील ३ वर्षांच्या अतिरिक्त कार्यभार ते सांभळत असल्यामुळे डॉ. जोशी यांना अॅडीशनल ३ अॅडव्हान्सचा प्रस्ताव मान्य करून घेतला. खुदा देता है तो छप्पर फाडके देता है याची प्रचिती मला आली.

प्रशासकीय स्थिरता मिळाली. प्रेमाचे सौदार्हाचे वातावरण निर्माण झाले. अमेरिकन मदत प्रकल्प जोरात सुरू झाले, प्रकल्प अंतीम टप्प्यात आला होता. ठिबक-सिंचन संशोधन उत्तुंग पातळीवर पोहोचले होत. पद्मश्री आप्पासाहेब पवार, पद्मश्री कवी ना. धो. महानोर आणि पद्मश्री भंवरलाल जैन यांनी महाराष्ट्र ढवळून काढला. इंटर फॅकल्टीच्या दोन्ही गाड्या पायाला भिंगरी लावल्यासारख्या पळू लागल्या. द्राक्ष, डाळिंब, बोर आणि काही प्रमाणात ऊस, भाजीपाला असे २११ लाख हे. क्षेत्र ठिबक खाली आले. महामहिम कुलपती शंकर दयाळ शर्मा यांनी भेट देऊन प्रकल्पाची प्रशंसा केली. त्यातच इंटरनॅशनल कॉन्फरन्स तेल आर्वाव्ह १९९३ साली आयोजित केली होती. स्वखर्चाने अथवा कंपनीमार्फत महाराष्ट्रातून

सुमारे ५०० ठिबक शेतकरी आवर्जून हजर राहिले. दुस्तुरखुद मुख्यमंत्री शरद पवार त्यास खास व्ही.आय.पी. म्हणून उपस्थित राहिले होते. ठिबकचा देशातील पहिला कारले पिकावर प्रयोग करणारा मोकसा मागे राहणारी पद्मश्री भंवरलाल जैन यांनी कंपनीचा पथक प्रमुख म्हणून माऊभय जैन आणि ना. धो. महानोर बरोबर मला साथ दिली, कॉन्फरन्सनंतर इस्त्राईल शेती पाण्याचा अभ्यास केला.

इस्त्राईलहून परत आल्यावर मला आपल्या कार्यशैलीत बदल करावा असे वाटू लागला. माझी संशोधक म्हणून विद्यार्थ्यांमध्ये ओळख होती. आपल्या अनुभवाचा ज्ञानाचा ओघ विद्यार्थ्यांपर्यंत पोहाचला पाहिजे असे वाटू लागले, विशेषतः पदवी परीक्षेतील विद्यार्थी प्रात्यक्षिक आणि विषयातील कौशल्य आणि समस्यापूर्ती कौशल्य आयुसीटीमध्ये कमी पडणार असे खाजगी कंपनी आयुसीटी उच्च पदस्थ खाजगीत सांगत होते. त्याच सुमारास कृषि परिषदेने १९९४ साली प्राचार्य व सहयोगी अधिष्ठाता, कृमवि जाहिरात प्रसिध्द झाली. कृषि अनुसंधान परिषद, नवी दिल्ली व राष्ट्रीय स्तरावर माझी प्रतिमा तयार झाली होती. मा. नानाभाऊ एंबडवार आणि निवड समितीमध्ये कामाचा व कार्याचा उल्लेख होत होता. या पार्श्वभूमीवर सहयोगी अधिष्ठता निवड समितीसमोर हजर झालो. एका बाजूला सर्वोच्च गुण ग्राहता आंतरराष्ट्रीय स्तरावरील प्रतिमा आणि प्रकाशने, तर दुसऱ्या बाजूला विद्यापीठातील सेवा जेष्ठतेमध्ये कमिटी पातळी असे चित्र होते. तथापी, एक जागा खास जेष्ठ प्राध्यापकासाठी असल्यामुळे या अटीतटीच्या निवडीत मी यशस्वी हाऊन कृषि महाविद्यालय, कोल्हापूर येथे प्राचार्य म्हणून रुजू झालो.

कृषि महाविद्यालय, कोल्हापूर येथील कारकीर्द फक्त काही महिन्याची होती. पण कामाचा, प्रशासनाचा, विद्यार्थी प्रेमाचा आत्मविश्वास मिळाला. प्रत्यक्ष उभा राहून विद्यार्थी वसतीगृहाची उभारणी, रस्ते, रंगीत दूरदर्शन संच, ८ मुलींचे वसतीगृह व विद्यार्थी खाणावळ सुरू करून अधून मधून अचानक विद्यार्थ्यांबरोबर जेवण, अशी आनंद जीवनाची तिजोरी ठरली. प्रात्याक्षिकांमधील विद्यार्थ्यांचा व्यक्तिशः सहभाग, एक्स्ट्रा करिक्युलर अॅक्टिव्हिटीज मध्ये राज्यस्तर जिमखाना, उकृष्ट खेळाचे मैदान आणि सर्व चारचाकी वाहने विशेषतः विद्यार्थ्यांच्या बसेस दुरुस्त केल्या. स्वयंशिस्त, वक्तशीरपणा आणि ज्ञानलालसा कौशल्य अशा बाबी विद्यार्थ्यांमध्ये रुजविण्याचा प्रयत्न यशस्वी ठरला. ग्रामिण कार्यानुभव व शास्त्रज्ञ, शेतकरी हितगूज यासाठी पूर्वीचा अनुभव कामी आला. उकृष्ट सर्वगुण संपन्न विद्यार्थी ही खरी



राष्ट्रविकासाची नांदी ठरते. कष्ट करावयाची लाज बाळगू नका, कठोर परिश्रमाला पर्याय नसतो असा दिलेला मंत्र आजही विद्यार्थी भेटल्यावर मला आठवण करून देतात. पण चॅरिटी बिगीन अँट होम हे मूलभूत पाळावे लागते.

तथापी प्रशासनाच्या गरजावेगळ्या असतात. कोल्हापूरच्या वातावरणात मी आतिशय एकरूप झालो असतानाच ऑक्टोबर ९४ मध्ये कृमवि, पुणे येथे बदलीचा आदेश मिळाला. मिसेस मगर ही चांगल्याच रुळल्या होत्या पण कडक प्रशासक आदरणीय कुलगुरु डॉ. दोरगे यांना कोण सांगणार कोल्हापूर विद्यार्थ्यांचे प्रमाचे ओझे घेत ऑक्टोबर मध्ये कृमवि, पुणे प्रार्चायपदी रुजू झालो. कृमवि, पुणे येथे राज्यातील सर्व कृषि पदवीधरांचा मेळावा महाज्ञ जेष्ठ कृषि शास्त्रज्ञ डॉ. बुधाजीराव मुळीक यांनी राज्याचे मुख्यमंत्री श्री. शरदचंद्र पवार यांच्या प्रमुख उपस्थितीत आयोजित केला होता. अपेक्षित १०/१५ हजार कृषि पदविधर आणि विविध विषयावर मंथन आणि निर्णय होणार होते. दहा दिवसाच्या अंतरावर आलेल्या मेळाव्यासाठी विद्यार्थ्यांच्या शैक्षणिक कार्यास बाधा न आणता पार पडणारी कसोटी होती, पूर्वा अनुभवास सर्वांच्या सहकार्याने मी ते इंद्रधनुष्य पेलू शकलो. आजी-माजी विद्यार्थ्यांच्या भेटीचा अनोखा योग उपभोगता आला. कृमवि, पुणे येथे ग्रंथालय जुन्या इमारतीस कृषि अनुसंधान परिषदेकडून कुलगुरु डॉ. दोरगे साहेब यांनी भरीव तरतूद आणली. कृषि महाविद्यालय आवारात भव्य ग्रंथालय उभारून अधिष्ठाता मोगल यांनी विशेष परिश्रम घेतले. कोल्हापूर कॉलेजच्या अनुभवाची परत एकदा पुण्याच्या कॉलेजामध्ये पडताळणी झाली. मुख्य समस्या मुलींच्या वसतिगृह व्यवस्थापनाची होती. १९९५ पर्यंत मुलींची संख्या १५० पर्यंत पोहोचवली होती.

महाराष्ट्रातील चारही कृषि विद्यापीठांच्या दृष्टिकोनातून पुणे महत्वाचे केंद्र असून तेथे महाराष्ट्र कृषि शिक्षण व संशोधन परिषदेच्या धोरणात्मक बैठका आणि परिषदेच्या निवड समितीच्या मुलाखतीचे निर्णय येथूनच होतात. अधिष्ठाता (कृषि) व संचालक शिक्षण पदाची मनोकामना पूर्ण तेथूनच करता आली, निवड समितीमध्ये देशातील जेष्ठतम कृषि तज्ञ व अँग्रीकल्चर सायंटीस्ट रिक्रुटमेंट बोर्डाचे माजी चेअरमन डॉ. जे. एस. पी. यादव, डॉ. किर्तीसिंग आणि डॉ. एन. एन. गोस्वामी, मृदशास्त्रज्ञ यांचा समावेश होता. निवड एकमताने झाली पण पूर्वग्रह दुशित प्राध्यापकांनी त्यास मुंबई हायकोर्ट (औरंगाबाद) येथे पिटीशन दाखल करून आमच्या निवडीस आव्हान दिले. मला काही सहजासहजी मिळूच द्यायचे नाही असा १९८४ सालापासून पूर्व परंपरागत विरोधीभावना त्यामागे होती. अर्थात ती मागणी मुंबई

हायकोर्ट औरंगाबादने फेटाळल्यामुळे अधिष्ठाता (कृषि) व संचालक शिक्षण पदाचा धुरा फेब्रुवारी १९९६ मध्ये हाती घेता आली.

अधिष्ठाता (कृषि) व संचालक शिक्षण पदाचा ४ वर्षांचा (फेब्रुवारी, १९९६ ते फेब्रुवारी, २०००) कालखंड संमिश्र भावनाचा पण कृषि अनुसंधान परिषद नवी दिल्लीच्या महानिर्देशक व उपमहानिर्देशक (शिक्षण) यांच्या सानिध्यातील देशातील कृषि शिक्षणावर दिशादर्शक सुवर्ण काळ ठरला. भारतीय डीन्स कमिटीचा सदस्य म्हणून डॉ. एस. एल. मेहता, डीडीजी. (एज्यु.) यांच्या प्रत्येक निर्णयाचा साक्षीदार म्हणून माझी नोंद झाली. कृषि विद्यापीठातर्गत आयटी व आयसीटीसाठी अँग्री टेक्नॉलॉजी सेंटर टेलिफोन पध्दतीमध्ये एस.टी.डी. फॅक्स पूर्ण विद्यापीठात संगळयाचे जाळे प्रचलित टेलिफोन पध्दतीत एसटीडी फॅक्स चा समावेश करून सर्व महाविद्यालये ऐकमेकास जोडली गेली. संगणकामुळे इंटरनेट सहज सुलभ वापरता येऊ लागले प्रमुख कार्यालयात कृषि महाविद्यालयांत फोटो कॉपी माईन पुरविण्याचा चंग बांधला. इलेक्ट्रॉनिक टाईप रायटर तसेच संगणक प्रिंटरस उपलब्ध करून देण्यावर विशेष भर देण्यात आला.





याच कालावधीमध्ये ग्रामिण कार्यानुभव (रुरल वर्क इक्सपेरीयन्स) सक्षम करण्यासाठी आर्थिक मदत मिळविली. विद्यार्थी संख्या आणि गुणवत्ता आधारीत तसेच विविध बाबीनुसार अनुदान सुत्र ठरविले. विद्यार्थी प्राध्यापक यांच्यामध्ये दुवा निर्माण व्हावा म्हणून उकृष्ट शिक्षक अॅवार्ड चालू केले. त्यामध्ये निवडीची पहिली शिफारस विद्यार्थ्यांनी द्यायची तरतूद केली. स्मार्ट क्लास रुमच्या निर्मितीमधून पॉवर पॉइंट प्रेझेंटेशनची व्यवस्था अनिवार्य केली. तथापी, यावर आजकाल प्राध्यापक व्याख्यानांची तयारी करीत नसल्याची टिकाही ऐकायला येत आहे. प्रत्येक नवनिर्माण यंत्रनेत गुणदोष असतात. विभाग प्रमुख अथवा जेष्ठ प्राध्यापकांनी यात विशेष लक्ष घालणे आवश्यक आहे. विद्यार्थींसाठी जे आर एफ, एस आर एफ आणि इतर राज्यातील विद्यापीठ प्रवेश प्रोत्साहन व स्कॉलरशिप अशा गुणवत्ता पटविणाऱ्या योजना कृषि अनुसंधान परिषदेने याच काळात अंमलात आणल्या. विद्यार्थी कौशल्य योजनेअंतर्गत इक्सपेरीयन्स लर्निंग योजना चालू करून प्रत्येक विद्यापीठास पॉलिहाऊस, फुड प्रक्रिया सेंटर इत्यादी अशी केंद्रे काढण्यासाठी कोट्यावधी रुपयाचे अनुदान आयसीएआरने उपलब्ध केले.

माझ्या दृष्टीकोनातून परीवर्तनाचा काळ होता. महात्मा फुले कृषि विद्यापीठ यात कुठेही कमी पडले नाही ही माझ्या भावी आयुष्याची पायाभरणी होती, उच्च पातळीवरून काम करीत असताना कदाचित मतभेद झाले असतील पण विद्यापीठाच्या विकासात त्यामुळे बाधा आली असे मला वाटत नाही. मनुष्यबळ विकास प्राध्यापकांची १ महिना प्रशिक्षण वर्ग मा. मेहता साहेबांच्या सल्याने आम्ही विद्यापीठात राबविले. त्यामध्ये प्राध्यापक वर्ग आणि संशोधक हा दूजाभाव केला नाही. आवश्यकता आणि गुणवत्ता असे दोनच बाबी संचालक शिक्षण आणि संचालक संशोधन यांनी कटाक्षाने पाळल्या. सुदैवाने याच काळात पुणे, कोल्हापूर आणि धुळे येथे सुसज्ज ग्रंथालये उभारता आली. विकास ही सतत चालणारी प्रक्रिया असते. अधिष्ठाता (कृषि) निवड ही संधी मिळाली. संधीला काळ, वेळ, रंग, रूप काहीच नसते. ती क्वचित येते, पण तुम्हाला ती मिळवावी लागते.

राहुरी कृषि विद्यापीठाच्या ३२ वर्षांच्या (फेब्रुवारी, २००० पर्यंत) कालखंडातील शिक्षण (पदवी-पदव्युत्तर) संशोधन (मृदपदार्थ विज्ञान-वेत्ता, प्रमुख शास्त्रज्ञ, विभाग प्रमुख) आणि कृषि विस्तार (ठिबक सिंचन जलसिंचन, मृदशास्त्र, प्रसारण) क्षेत्राच्या घडामोडीचा मी साक्षीदार आहे. सामाजिक कार्याचा उल्लेख म्हणून सावित्रीबाई फुले शिक्षण मंडळाचा पदाधिकारी आणि शालेय इमारती भवनाच्या उभारणीचा आधारस्तंभ म्हणून २०/२१ वर्ष वास्तव्य कायम स्मरणात आहे. माझ्या हितचिंतकानी कितीही आद्रेय गोष्टी (खोड्या) केल्या तरी अधिष्ठाता व अधिष्ठाता (कृषि) व संचालक शिक्षण झाल्यावर पूर्वग्रह आकष ठेवला नाही. संस्थेचे हित डोळ्यासमोर ठेवून गुणवत्तापूर्वक लायकीनुसार समान वागणूक दिली, ३१ मार्च २००० रोजी स्वखर्चाने स्वेच्छा निवृत्ती घेतली. विद्यापीठाच्या सूर्वर्ण महोत्सव निमित्ताने मन मोकळे करू इच्छितो, कविवर्य ग. दि. माडगुळकर ऐकवितात

दैवजात दुःख भरता दोष ना कुणाचा ! पराधीत आहे जगती पुत्र मानवाचा !!

भरताला श्री. रामाने सांगितले की, दैवगतीने दुःख झाले तर कोणाचाही दोष नाही कारण भोगणे ते फळ संचिताचे हा नियतीचा नियम आहे. त्याला मी तरी कसा अपवाद राहणार !



महाराष्ट्राच्या कृषि क्षेत्रातील जडणघडणीमध्ये महात्मा फुले कृषि विद्यापीठाचे योगदान

डॉ. विनायक मोतीराम पवार

माजी अधिष्ठाता (कृषि) व संचालक शिक्षण
महात्मा फुले कृषि विद्यापीठ, राहुरी-४१३ ७२२
(१७/०२/२००० ते ३१/०७/२०००)



आपल्या महात्मा फुले कृषि विद्यापीठाच्या कार्यास ५० वर्षे पूर्ण होत आहेत. आपल्या विद्यापीठाचा सुवर्ण महोत्सव साजरा होत असताना मला खूप आनंद होत आहे. महाराष्ट्राच्या कृषि क्षेत्रातील जडणघडणीमध्ये आपल्या राहुरी कृषि विद्यापीठाचे योगदान फार मोठे आहे. अशा या भारतात गाजलेल्या अग्रस्थानी असलेल्या कृषि विद्यापीठामध्ये मला सन १९७४-७५ मध्ये नोकरीची सुरुवात करण्याची संधी मिळाली. मी यामुळे नशीबवान ठरलो. मराठवाडा कृषि विद्यापीठ, परभणी येथील साधारणपणे १५ वर्षांच्या कारकीर्दीनंतर सन १९९१ पासून पुन्हा राहुरी कृषि विद्यापीठामध्ये वेगवेगळ्या पदावर सेवा करण्याची संधी मिळाली.

प्रथमतः मला सन १९९१ ते १९९५ या कालावधीमध्ये आपल्या राहुरी विद्यापीठाच्या मध्यवर्ती परिसरामध्ये कृषि किटकशास्त्र विभागामध्ये प्राध्यापक, विभाग प्रमुख पदावर सेवा करण्याची संधी मिळाली. या कालावधीमध्ये कृषि किटकशास्त्र विभागामध्ये जैवकिटकशास्त्र प्रयोगशाळेची स्थापना करून नविन उपक्रम सुरु करण्यात आला. सदरच्या काळात हेलीऑथीस आर्मीजेरा या किडीचा उपद्रव मोठ्या प्रमाणात वेगवेगळ्या पिकांमध्ये होऊन नुकसान होत होते. या किडीच्या जैवीक नियंत्रणासाठी हेलीकोव्हरपा हा जीवाणू मोठ्या प्रमाणात सदर प्रयोगशाळेत तयार करून शेतकऱ्यांना मोफत वाटण्याचा उपक्रम राबविण्यात आला. त्यामुळे या किडीचे नियंत्रण मिळविण्यात यश प्राप्त झाले. शेतकऱ्यांचा खूप फायदा झाला.

यानंतर सन १९९६ ते १९९८ या कालावधीमध्ये आपल्या विद्यापीठाच्या मध्यवर्ती परिसरामध्ये पदव्युत्तर महाविद्यालयाच्या सहयोगी अधिष्ठाता या पदावर सेवा करण्याची संधी मिळाली. या कालावधीमध्ये पदव्युत्तर महाविद्यालयाच्या विद्यार्थ्यांच्या सेमिस्टर एंडच्या विविध विभागांच्या परीक्षांमध्ये सुसयतता आणण्याच्या दृष्टीने काम करण्याचा प्रयत्न केला. या कालावधीमध्ये शिक्षण उपक्रम सुधारण्याबरोबरच विद्यार्थ्यांमध्ये खेळाची आवड जोपासण्यासाठी त्यांना प्रोत्साहित करून त्यांचा सर्वांगीण विकास, व्यक्तीमत्त्व विकास साधण्याचा प्रयत्न करण्यात आला. तसेच विद्यार्थ्यांमध्ये त्यांचे भावी आयुष्य घडविण्यासाठी कृषि उद्योजकता, प्रगतशील शेती, कृषि पुरक व्यवसाय इ. क्षेत्रांमध्ये गोडी निर्माण करण्याबरोबरच विविध प्रकारच्या स्पर्धा परीक्षांमध्ये

यश संपादन करण्यासाठी त्यांना उत्तेजित करण्यात आले. यासाठी त्यांना लागणाऱ्या ग्रंथालय, अभ्यासीका अशा सुखसोयी निर्माण करण्याबाबतचे प्रयत्न करण्यात आले. याशिवाय भारतातील निरनिराळ्या कृषि विद्यापीठातून प्राचारण करण्यात आलेल्या विविध विषयांतील तज्ञ परीक्षकांचे आपल्या विद्यापीठातील विद्यार्थ्यांना चांगले मार्गदर्शन मिळावे अशा प्रकारचे प्रयत्न करण्यात आले. त्यामुळे आपल्या भारत देशामध्ये विविध क्षेत्रांमध्ये नेमकी कशी प्रगती होत आहे याबाबत आपल्या विद्यार्थ्यांना मार्गदर्शनाची चांगली संधी मिळाली.

राहुरीच्या मध्यवर्ती परिसरामध्ये साधारणपणे ८ वर्षांच्या कार्यकिर्दीनंतर पुण्यासारख्या शतक गाठण्याच्या मार्गावर असलेल्या सहयोगी अधिष्ठाता या पदावर सन १९९८ ते २००० या कालावधीमध्ये सेवा करण्याची संधी मिळाली. सध्याच्या बदलत्या काळामध्ये कृषि शिक्षणाचे महत्त्व वाढत असताना मुलांमध्ये त्यामध्ये अधिक जागृता निर्माण करून त्यांना त्यांचे पुढील भविष्य उज्वल व्हावे या दृष्टीने सर्वांगीण विकास करण्याचे प्रयोग करण्यात आले. विशेषत्वाणे कृषि शिक्षणामध्ये मुलींची आवड जास्त प्रमाणात वाढू लागल्याने त्यांना लागणाऱ्या मुलभूत सुविधा मुख्यत्वेकरून खानावळ, वसतीगृहाची उपलब्धता, ग्रंथालय अशा विविध बाबींवर प्रकाशने लक्ष केंद्रित करून शासन स्तरावर आर्थिक मदत मिळविण्याचा प्रयत्न करण्यात आला. त्यामुळे मुलींचे सर्वांगीण कृषि शिक्षण सुकर झाले.

कृषि महाविद्यालयात शिक्षण घेत असतांना विद्यार्थ्यांना थेंअरी बरोबरच खऱ्या अर्थाने प्रात्याक्षिकेचे ज्ञान अवगत व्हावे याकरीता कृषि कार्यानुभव कार्यक्रम चांगल्या प्रमाणात यशस्वी राबविण्याबाबत विशेष प्रयत्न करण्यात आले. त्यासाठी खेड्यामध्ये मुले साधारणपणे एक सत्र राहत असतात. ग्रामिण भागाचा कार्यानुभव चांगल्या प्रकारे मिळण्यासाठी शेतीच्या विविध अंगांचा अभ्यास करून खऱ्या अर्थाने कौशल्य विकास साधण्यासाठी विविधांगी प्रयत्न करण्यात आले. अशा मुलांमार्फत शेतकऱ्यांच्या विकासासाठी विविध विस्तार शिक्षण पद्धतीचे उपक्रम यशस्वीपणे राबविण्यात आले.

राहुरीसारख्या भारतात आग्नेसर असलेल्या कृषि विद्यापीठामध्ये भरीव असे संशोधन झाले आहे. सदर संशोधनाच्या शिफारशी सर्वसामान्य शेतकरी वर्गापर्यंत पोहचविण्याच्या दृष्टीने



विविध विस्तार शिक्षण पध्दतीद्वारे कृषि तंत्रज्ञान प्रसारणाचे कार्य अविरतपणे चालू आहे. कृषि महाविद्यालय, पुणे येथे कृषि विस्तार विभागामार्फत विस्तार शिक्षण गटामधील विविध गांवांमध्ये कृषि तंत्रज्ञान प्रसारणाचे कार्य चांगल्याप्रकारे चालते आहे. या मार्फत कृषि तंत्रज्ञान प्रसारणाचे विविध उपक्रम यशस्वीपणे राबविण्याचा प्रयत्न करण्यात आला. तसेच पुणे विभाग स्तरावर विभागीय विस्तार सेवा केंद्राची स्थापना करून कृषि तंत्रज्ञान प्रसारणाचे कार्य अधिक प्रभावीपणे पार पाडण्यासाठी अविरत प्रयत्न करण्यात आले.

पुणे येथील कृषि महाविद्यालयामध्ये सन १९९८ ते २००० या दोन वर्षांच्या कालावधीमध्ये सहयोगी अधिष्ठाता पदावर सेवा करण्याची संधी मिळाल्यानंतर विद्यापीठाच्या मध्यवर्ती परिसरामध्ये संचालक विस्तार शिक्षण आणि अधिष्ठाता (कृषि) आणि संचालक शिक्षण या पदांवर काही दिवस विद्यापीठ पातळीवर सेवा करण्याची संधी मिळाली.

त्यानंतर माझ्या चांगल्या कामाची दखल घेतली जावून मला महाराष्ट्र शासनामार्फत मराठवाडा कृषि विद्यापीठ, परभणीच्या कुलगुरुपदी ०२ ऑगस्ट, २००० पासून पुढील पाच वर्षे सेवा करण्याची संधी मिळाली.

महाराष्ट्रातील कृषि क्षेत्रातील जडणघडणीमध्ये महात्मा फुले कृषि विद्यापीठाचा मौलिक सहभाग आहे. महाराष्ट्र शासन तसेच भारतीय कृषि अनुसंधान, नवी दिल्ली यांचे विद्यमाने राबविण्यात येणाऱ्या विविध उपक्रमामुळे महाराष्ट्राच्या कृषि क्षेत्राचा विविधांगी विकास होत आहे.

याप्रसंगी आपल्या कृषि विद्यापीठात कृषि शिक्षण, संशोधन आणि कृषि विस्तार क्षेत्रात काम कृषि शास्त्रज्ञांकडून कृषि क्षेत्राची भरभरून सेवा व्हावी आणि शेतकऱ्यांचा सर्वांगीण विकास होण्याचे दृष्टीने विद्यापीठाने मोलाची भर यापुढेही टाकत राहावी अशा शुभेच्छा महात्मा फुले कृषि विद्यापीठाच्या सुवर्ण महोत्सव प्रसंगी देत आहे.



सुवर्ण महोत्सवी वाटचाल : ओझरता दृष्टिक्षेप

डॉ. एस.एस. कदम



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माजी अधिष्ठाता (कृषि) व संचालक शिक्षण
महात्मा फुले कृषि विद्यापीठ, राहुरी-४१३ ७२२
(०१/०८/२००० ते ३०/०६/२००५)

विद्यापीठ स्थापनेपासून ५० वर्षांचा कार्यकाळ पूर्ण करित आहे. या निमित्ताने विद्यापीठाने सुवर्णमहोत्सवी वर्ष साजरे करण्याचे नियोजन केले आहे. त्याबद्दल हार्दिक अभिनंदन !

विद्यापीठाची स्थापना झाल्यापासून सुरुवातीच्या काळात प्रशासकीय कारभार पुण्याच्या कृषि महाविद्यालयात सुरु झाला. अनेक अडचणीतून संक्रमण करित नवीन विद्यापीठाची सुरुवात झाली. पहिले कुलगुरु म्हणून डॉ. हरिचंद्र पाटील यांची नियुक्ती झाली. साधारण दोन अडीच वर्षात विद्यापीठात नव नियुक्त प्राध्यापक व शास्त्रज्ञांची भर पडली.

यानंतर १९७२ साली डॉ. पवार यांची कुलगुरु म्हणून नियुक्ती झाली. एक आंतरराष्ट्रीय ख्यातीचे वनस्पती पैदासकार असल्यामुळे नवीन भाताच्या जाती निर्माण करण्याचे प्रयत्न झाले. परंतु त्यावेळी सगळ्यात महत्वाचा प्रश्न होता तो विद्यापीठ स्थलांतराचा. डॉ. पवार साहेबांनी विद्यापीठास देण्यात आलेल्या जमिनीचा ताबा घेण्याबाबतचे व मुख्यालय राहुरीस आणण्याचे अत्यंत कठीण कार्य पूर्ण केले. करडी शिस्त, सार्वजनिक स्वच्छतेचा खंदा पुरस्कर्ता व शास्त्रीय पद्धतीने प्रक्षेत्र आखणी व विकास कामे जोमाने सुरु होती. दोन भव्य इमारती उभ्या राहिल्या. अभियांत्रिकी महाविद्यालय एका इमारतीत सुरु झाले व दुसऱ्या इमारतीत प्रशासकीय कार्यालये आणि पदव्युत्तर महाविद्यालय सुरु झाले. पाच वर्षांचा कार्यकाळ कधी संपला कळलेच नाही.

यानंतर डॉ. जोशी, कुलगुरु म्हणून दिल्लीतून राहुरीस आले. आय.ओ.आर.आय. व भारतीय कृषि अनुसंधान संस्थेच्या कामाचा प्रदीर्घ अनुभव. त्यामुळे ज्वारी, बाजरी, मका, गहू, हरभरा, तूर, कापूस व ऊस या पिकांच्या नवीन जाती निर्माण करण्याच्या कार्यक्रमास प्रेरणा मिळाली.

सन १९८० ते १९८६ या काळात नवीन कुलगुरु म्हणून डॉ. साळुंखे यांचे नेतृत्व लाभलं. विद्यापीठात जीवसायन शास्त्र व अन्नविज्ञान तंत्रज्ञान या विभागांची भर पडली. मुलीसाठी स्वतंत्र कृषि विद्यालय सुरु झालं. मूलभूत संशोधनास दिशा मिळाली. श्रद्धा, सबुरी हे बाजरीचे वाण, विश्वास/विकास हे हरभऱ्याचे वाण आणि ऊसाच्या को-८६०३२ (नीरा) सारख्या वाणांनी महाराष्ट्रात क्रांती केली. देशपातळीवर या वाणांनी सर्वाच लक्ष वेधलं. पुढील तीन वर्षे डॉ. पेरुर यांनी विद्यापीठाचे नेतृत्व केले. या काळात प्रशासकीय सुधारणांना गती मिळाली. पुढील सहा वर्षे (१९९० ते १९९६) डॉ. दोरगे विद्यापीठाचे कुलगुरु होते. त्यांच्या काळात विद्यापीठाच्या पडीक जमिनीत मोठ्या प्रमाणात आंबा, चिक्कू सारख्या फळझाडांची लागवड झाली.

यानंतर डॉ. नेरकर यांचे विद्यापीठास नेतृत्व लाभलं. संशोधनास दिशा व गती प्राप्त झाली. पुढील सहा वर्षे डॉ. पुरी यांच्या नितृत्वाखाली विद्यापीठाने शिक्षण, संशोधन, विस्तार कार्यात नवी उंची प्राप्त केली. हरीत गृहात फुले, भाजीपाला तयार करण्याचं तंत्रज्ञान विकसीत झाले. विद्यापीठास भारतातील उत्कृष्ट कृषि विद्यापीठ म्हणून सन्मान प्राप्त झाला. यानंतर २००५ ते २०११ या कालावधीत डॉ. देशमुख कुलगुरु म्हणून कार्यरत होते. त्यांच्या मार्गदर्शनाखाली कडधान्य पिकावरच्या संशोधनास बळ प्राप्त झालं. यानंतर डॉ. मोरे यांनी पाच वर्षे (२०११ ते २०१६) कुलगुरु म्हणून काम केले. अंजीर संशोधन केंद्राची उभारणी झाली. फळे व भाजीपाला संशोधनास ऊर्जा प्राप्त झाली. आता डॉ. विश्वनाथा यांच्या नेतृत्वाखाली विद्यापीठाचा कारभार सुरु आहे.

विद्यापीठाच्या वाटचालीत अनेकांनी योगदान दिलं. त्यामुळे विद्यापीठाचा पाया मजबूत होण्यास मदत झाली. सन १९८१ साली विद्यापीठात येण्याचं भाग्य लाभलं. अन्नविज्ञान व तंत्रज्ञान विभागाच्या स्थापनेपासून कार्यरत राहण्याची संधी मिळाली. यानंतर तीन वर्षात

जीव रसायनशास्त्र विभागाची निर्मिती झाली. या दोन्ही विभागासाठी योगदान देण्याचे भाग्य लाभलं. या विभागांच्या सबलीकरण व संशोधनास दिशा देण्याच्या प्रक्रियेत खारीचा वाटा उचलता आला. पदव्युत्तर महाविद्यालयाचं चार वर्षे नेतृत्व करता आलं आणि शेवटच्या कालखंडात विद्यापीठात अधिष्ठाता व संशोधन संचालक (अतिरिक्त भार) म्हणून जबाबदारी प्राप्त झाली. कधी संशोधन प्रकल्प तपासणी पथक तर कधी कार्यालयीन बैठका तर कधी खाजगी महाविद्यालयांच्या प्रस्तावास मान्यता देण्यासाठी संस्थेची क्षमता तपासण्यासाठी द्याव्या लागणाऱ्या भेटी या जबाबदाऱ्या पार पाडताना काही मुलभूत गोष्टी करण्यास वेळ अपूरा पडला.

या विद्यापीठाचं एक वैशिष्ट्य म्हणजे या ठिकाणी अनेकांच्या प्रयत्नातून निर्माण झालेलं वर्क कल्चर प्रत्येक व्यक्ती आपलं काम, कर्तव्य अतिशय जबाबदारीने आणि वरिष्ठांच्या धाकाशिवाय प्रामाणिकपणे पार पाडतात. विद्यापीठास आज जो नाव लौकिक आहे त्याच मुख्य कारण म्हणजे विद्यापीठाची ही कार्य संस्कृती. आम्ही स्वतःला भाग्यवान समजतो की अशा विद्यापीठात जवळ जवळ २५ वर्षे काम करण्याची संधी मिळाली. डॉ. साळुंखे



सर, डॉ. खर्चे सर व डॉ. पाटील बी. सी. सर यांनी मुलांसारख सांभाळलं. डॉ. पुरी साहेब व आमचे मित्र डॉ. लक्ष्मणराव कांबळे यांच्या सारख्याकडून बरंच काही शिकता आलं. आयुष्यात अडचणीच्या काळात सहकारी मित्रांच पाठबळ लाभलं. त्यामुळेच आमची २५ वर्षे नोकरीची नौका किनाऱ्यावर सुखरूप पोहोचली. या सर्व आठवणी आज ही जगण्याची उमेद देतात.

विद्यापीठात काम करताना प्रत्येक प्राध्यापकाकडून / शास्त्रज्ञाकडून समाजाच्या काही अपेक्षा असतात. प्राध्यापकांनी प्रामाणिकपणे ज्ञानदान करावं. विद्यार्थ्यांना गरजेनुसार मदतीचा हात द्यावा. ज्ञानार्जन करावं व समाजासाठी, देशासाठी उच्च प्रतीचं संशोधन करावं. प्राध्यापकांनी / शास्त्रज्ञांनी आपण समाजाच्या किती अपेक्षा पूर्ण करतो याचं मूल्यमापन स्वतःच (दर दिवशी / दर महिन्यास / दर वर्षी) केल्यास विद्यापीठाच्या नावलौकीकात अजून भर पडेल.

विद्यापीठाच्या सुवर्ण महोत्सवी वर्षानिमित्त विद्यापीठातील सर्व घटकांना हार्दिक शुभेच्छा.





Agricultural Education in Mahatma Phule Krishi Vidyapeeth

Dr. A. L. Pharande

**Dean (F/A) & Director of Instruction
MPKV, Rahuri- 413 722 Dist. Ahmednagar
(18/07/2017 to till date)**



The science and art of agriculture has many references in the Vedic literature and the ancient history of the mankind. The agriculture sector in India provides livelihood to about 52% of the population of the country and contributes about 15% to the Gross Domestic Product. Trained human resource has been the key factor behind the Green Revolution, White Revolution, Yellow Revolution, that has led India to become self reliant in food and becoming a fast developing economy. Knowledge based, input-use efficient, eco-friendly and high tech precision agriculture has been the next stage for which efforts have been directed by Indian Council of Agricultural Research (ICAR) and Agricultural Universities (AUs) in planning, designing and executing the national agricultural educational programmes.

Maharashtra Agricultural University was the first Agricultural University of Maharashtra established in 1968. This was later named as Mahatma Phule Krishi Vidyapeeth after the great social reformer, Mahatma Jyotirao Phule. The University has a rich heritage to its credit in the field of agricultural education and research by having its origin in the College of Agriculture, Pune, which was established in the year 1907 and is one of the oldest Agriculture colleges in Asia. The MPKV jurisdiction is spread over 10 districts of Western Maharashtra (Kolhapur, Sangli, Satara, Solapur, Pune, Ahmednagar, Nasik, Dhule, Nandurbar and Jalgaon).

Quality Education for Competent Graduates

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. (Agri.) programme, one College of Horticulture at Pune for B.Sc.(Hort.) 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 and College of Agri. Business Management, Talegaon Dabhade. Initiation of PG Diploma and Post Doctoral programme under Centers for Advanced Agricultural Science and Technology (CAAST) for Climate Smart Agriculture and Water Management (CSAWM) from the academic year 2018-19.

Intake capacity of 9 constituent colleges & 64 unaided affiliated Agril & Allied colleges is 844 & 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.

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 constituent Agril. Tech. Schools (10), affiliated Agricultural Technology Schools (38) and affiliated Agril. Polytechnics (39) in all total 87 affiliated 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 a intake capacity of 40 students.

Up till the year 2018, since inception, University has produced 110322 skilled human resources.

Significant development and activities

Educational Quality Reforms

- UG curriculum has been revised as per V Deans Committee Recommendation and implemented from the academic year 2017-18.
- Successful efforts have been made for modification in Student READY (Rural and Entrepreneurship Awareness Development Yojana) programme to enhance students participation in the field, laboratory work and development of entrepreneurial skill leading to self employment.

- Started CET examination for admission to Under-Graduate programme.
- Peer Review Team under the chairmanship of Dr. B. S. Chundawat, Hon'ble Chairman, PRT & Former Vice Chancellor, SDAU, Dantiwada visited University & its constituent colleges during July 25-29, 2018.
- 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.

Capacity Building

- Two hundred seventy eight faculty and fifty seven students were participated in National / International Seminars / Symposia / Workshops /Training
- 20 training programmes organized with 1360 no. of beneficiaries.



- CAFT in Agricultural Meteorology & Horticulture (Fruits) were organized and trained 24 & 20 faculties respectively.





Student Development

- No. of students beneficiaries availing RAWE, NTS & In Plant were 661, 149 and 65 respectively during 2017-18.
- During 2017-18, two hundred twenty eight students availed various National/State scholarships/ fellowships.
- Kho-Kho (Men), Kabaddi (Men), Volley Ball (Men) team won Gold Medal in Inter Agricultural University Sports Meet (Agri -Unisports) 2017-18 held at University of Agricultural Sciences, Bengaluru (Karnataka).
- Students were qualified for SRF (5), JRF (27), GATE (6) and NET (48)
- Mr. Guru P.N. (Ph.D.AG. 015/39), Post Graduate Institute student qualified ARS examination.
- Shri. Bhausahab Pawar received Netaji Subhas- ICAR International

Fellowship for pursuing doctoral degree in Humboldt University, Germany.

International Collaboration

The University has developed international linkages with following institutes:

Asian Institute of Technology, Bangkok

- Experiential Learning Programme (Horticulture)

Van Hall Larenstein University, Netherland

- Experiential Learning Programme (Agriculture Business Management)



National Linkages

- Prime Datamatic LLP (PRIME), Pune for collaboration of M.Sc. & Ph.D. Research
- East West Seed India Private Limited, Aurangabad- for Promoting the agricultural studies and support the farmer's children by providing

financial support to pursue higher education viz., B.Sc.(Agri.)

- Bayer Crop Science Ltd., Mumbai- for Fellowship for PG students
- Society of Automotive Engineers India- for conducting All India level technical competition for Agricultural & Engineering Students under the heading TIFAN

Infrastructure Development

- Renovation of girls & boys hostels at constituent colleges.
- Renovation of different labs at constituent colleges.
- Energy saving LED street lights in the premises of the boys & girls hostel, library building and Examination hall and along the road of girls hostel at constituent colleges.

New projects / proposals

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.

Grading & Re-permission of unaided affiliated Agril. & Allied colleges

In view to maintain educational quality standards University committee completed the visit of 6 & 4 unaided affiliated Agril. & Allied colleges for grading & repermission respectively during 2017-18.

Other Significant Educational Activities

- 32nd Convocation of University was held on 25th October, 2017 at central campus, MPKV, Rahuri. His Excellency 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.

- Agro Technology Week Kharif-2017 was organized at College of Agriculture, Pune/Kolhapur/Karad/Nandurbar. Live demonstration of various crops, lectures on different Agro technologies were organized during the week.
- The Mahatma Phule Krishi Vidyapeeth, Rahuri hosted the 12th Maharashtra State Inter University Research Convention AVISHKAR 2017-18 during 15th to 17th January 2018 at Central Campus, Mahatma Phule Krishi Vidyapeeth, Rahuri. About 600 students, 200 Team Managers, Judges & Officials participated from 20 Universities of Maharashtra in this research convention.



- 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’ble 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'ble Minister of Water Conservation and Protocol, Maharashtra State and Guardian Minister, Ahmednagar District. Total 4411 degrees were conferred to students.

Innovation and Best Practices

- CAAST for CSAWM- PG Diploma and Post Doctoral programme
- CET examination for admission to UG programme (2017-2018)
- Establishment of ARS Forum
- Identified Adjunct faculty (29) /Guest Lecture
- Experiential Learning Modules (23) : to enhance the confidence and competence of students for starting up-their own enterprises
- Video Conferencing Facility (11)
- Initiated ICAR Best Teacher Award
- UG/PG Merit award to students in respective faculty
- Motivation to students for participation in Avhan, Ashwamedh, Indradhanushya and Avishkar for development of the students in disaster management, sports, cultural activities and inculcation of research aptitude respectively
- National/International linkages with academic institutes provides Fellowships and Scholarships to students for education, research and opportunity to study abroad.
- Development of Question bank
- Teacher-Students-Parents Interaction Forum

Strengths

- Strong network of agricultural education with 72 constituent and affiliated agricultural and allied sciences colleges and 87 Agril. Polytechnics and Agricultural Technology Schools.
- The meritorious students opt for seeking admissions in the constituent

colleges of this university both for undergraduates and post graduate studies.

- Excellent available e-resources in libraries.
- Strong linkages with national, international institutes, line departments and NGOs.

Weaknesses

- Inadequate availability of faculties in food technology, agril. Biotechnology, agribusiness management, community science and basic science due to lack of respective constituent colleges.
- Insufficient international exposure to the faculties.
- Lack of regularity in recruitment of staff.
- Insufficient basic science faculty.
- Inadequate financial powers (account code) to the controlling officers.

Threats

- Increased number of affiliated agricultural and allied colleges, agriculture polytechnic and Agriculture Technology Schools affecting the quality of education.
- Inclination of agricultural graduates in seeking employment in public administration rather than agricultural education and research.
- Lack of constituent colleges to generate skilled manpower in the emerging areas viz. Food technology, Agril. Biotechnology, Agriculture Business Management, Forestry, Fishery, community science etc.
- Inadequate staff: Significant vacancies of staff due to retirements and procedural constraints to fill up such positions in time.
- Climate change and variability.
- Administrative barrier in international exposure to scientists and academic staff.

Vision to overcome/minimize weakness and threats

1. Mahatma Phule Krishi Vidyapeeth, Rahuri has been a center of human resource development to meet the growing demands of the state as well as nation for trained manpower specialized in agriculture. The university has made a spectacular progress in achieving its mandatory goals of education. The University is celebrating its Golden Jubilee during the year 2018. On the eve of this celebration we must achieve following visionary aspects to ensure food & nutritional security under climate change situation
2. Improved educational quality standards through accreditation & Faculty upgradation.
3. Efforts to develop state-of-the art infrastructure and to enhance faculty competence for improving higher education in agriculture and allied disciplines.
4. Enhancing quality of human resource through vertical integration of agricultural education.
5. Creation of adequate and quality human resources to address the emerging situation.
6. Skill development in the field of agriculture and allied sciences.
7. Agricultural education to girls particularly with rural background so as to increase their involvement in farming and allied agro-business activities and for empowerment of rural women.
8. Modernize education systems. (Use of ICT, e learning resources, Interactive/Smart Classroom) Efforts to use technology enabled e learning resources.
9. Need to establish constituent colleges in allied sciences viz., Agril. Biotechnology, Food technology, Agri. Business Management, Forestry, Fishery and Community science etc.
10. Establishment of basic science faculty at central campus.
11. Initiation of faculty exchange programmes with international collaborates in specialized areas viz., Biotechnology, nanotechnology, molecular breeding, advance research related to climate change.
12. Capacity building through training at national & international level.
13. Development of Instructional farm includes erection of shadenet, Polyhouse, Green house, use of pressurized irrigation system etc.
14. Efforts to start PG Diploma & Post Doctoral programme in CAAST for Climate Smart Agriculture and Water Management.
15. Special attention on Ph. D. thesis work to cater the needs of farmers and to solve the problems of emerging situation.
16. Efforts to develop national & international collaborations providing the opportunities of higher education within & abroad.
17. Strengthening of Agri. Technology School /Agri. Polytechnics with the development of infrastructure & revision in syllabus.
18. Strengthening students council/Placement cell/ARS Forum
19. To establish a special cell to encourage youth to make career in agriculture.
20. Efforts to develop & strengthen alumni cell at each constituent college.
21. Strengthening of Wi-Fi & Internet connectivity at each constituent college.
22. Immediate initiatives to fill in the vacant posts of scientists for imparting quality education.

Keeping in mind with the successful progress in visionary aspects, I hope that quality of human resource will overcome all the constraints viz., changing climate situation, natural resource degradation, food and nutrition security via innovative research and Lab to Land extension of innovations leading to second Green Revolution.

RESEARCH

RESEARCH



RESEARCH

The university has a very good network of research stations spread over 5 different agro-climatic zones with 27 research stations and one 100 % Central Government funded project. The research is being carried out at the Central Campus, Rahuri, and at 4 Zonal Agriculture Research Stations (Igatpuri, Kolhapur, Pune and Solapur) after the establishment of National Agricultural Research Projects since 1985. Besides, this three crop specialists (Sugarcane, Wheat and Oilseeds) located at Padegaon,

Niphad and Jalgaon for crop specific research. Remaining centres are mainly verification centre where verification of research is being carried out. At present, there are 82 non-plan schemes funded by State Govt., also 8 supporting scheme for research, 44 AICRPs on different aspects of crop production and crop improvement, and one Centrally Sponsored Research Schemes funded by the Central Govt of India .

Yearwise establishment of Research Stations presently comming under MPKV, Rahuri

S.N.	Name of Research Stations	Year of Establishment	Research areas
1.	Oilseeds Research Station, Jalgaon	26 August, 1913	Oilseeds, Pulses
2.	Agriculture Research Station, Savl Vahir, Dist. Ahmednagar	1915	Sunflower, Soybean, Pulses
3.	Agriculture Research Station, Mohol, Dist. Solapur	5 June, 1918	Sorghum, Gram
4.	Zonal Agricultural Research Station, Ganeshkind, Pune	28 April, 1921	Floriculture, Pomology, Vegetable
5.	Sugarcane Research Station, Padegaon, Dist. Satara	28 April, 1932	Sugarcane, Cultivation practice
6.	Agriculture Research Station, Niphad, Dist. Nashik	20 October, 1932	Wheat, Bajra, Soybean
7.	Zonal Agricultural Research Station, Solapur	13 June, 1933	Dry land farming
8.	Agriculture Research Station, Vadagaon Maval, Dist. Pune	5 June, 1940	Rice
9.	Regional Wheat Rust Research Station, Mahabaleshwar, Dist. Satara	18 March, 1941	Wheat Rust, Vegetable, Strawberry
10.	Agriculture Research Station, Jeur, Dist. Solapur	31 May, 1941	Jowar, Pulses
11.	Zonal Agricultural Research Station, Igatpuri, Dist. Nashik	17 June, 1941	Rice, Karala, Ragi, Horticulture crop, Soil and water conservation,
12.	Agriculture Research Station, Chas, Dist. Ahmednagar	17 December, 1941	Dry Line
13.	Agriculture Research Station, Karad, Dist. Satara	28 April, 1948	Sugarcane, Jowar, Sunflower, Soybean

14.	Banana Research Station, Jalgaon	20 October, 1949	Banana
15.	Agriculture Research Station, Radhnagari, Dist. Kolhapur	1 May, 1954	Rice
16.	Agriculture Research Station, Gadhingalaj, Dist. Kolhapur	5 June, 1957	Chilli and Tobacco
17.	Regional Sugarcane and Jaggery Research Station, Kolhapur	1 January, 1958	Sugarcane, Jaggery
18.	Agriculture Research Station, Lonavala, Dist. Pune	20 June, 1958	Rice, Blight disease
19.	Agriculture Research Station, K. Digraj, Dist. Sangli	1958	Soybean, Groundnut, Turmeric
20.	Citrus Research Station, Shrirampur, Dist. Ahmednagar	30 July, 1959	Sweet orange, lemon
21.	Agriculture Research Station, Pimpalgaon Baswant, Dist. Nashik	1959 (Onion) 1964 (Grapes)	Grapes, Onion, Garlic
22.	Central Campus, Rahuri, Dist. Ahmednagar	1968	Field, Forage, Horticultural Crops, Natural Resource Management, Integrated farming, Animal Component
23.	Agriculture Research Station, Dhule	1968	Bajra, Grass, K. Sorghum Dryland Farming
24.	Agriculture Research Station, Pandharpur, Dist. Solapur	10 June, 1981	Pulses, Oil Seed
25.	Zonal Agriculture Research Station, Kolhapur	August, 1985	Minor millets, Maze, Soybean, Sugarcane
26.	Pomegranate Research Station, Lakhamapur, Dist. Nashik	2008	Pomegranate
27.	Fig and Custard Apple Research Station, Jadhavwadi, Purandar, Dist. Pune	25 July, 2009	Fig and Custard Apple

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.
-



Zonal Agricultural Research Station, Igatpuri (1941)



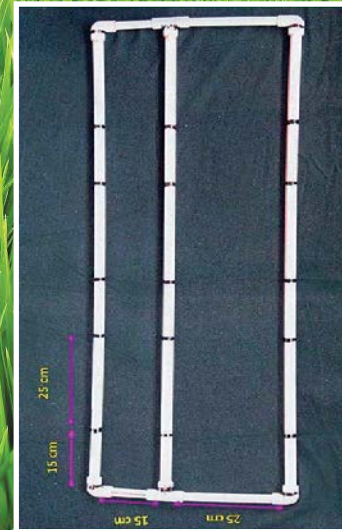
Crop	Name of Variety	Year
Niger	Sahyadri (IGP-76)	1983
	Phule Karala (IGPN- 2004-1)	2008
	Phule Vaitarana (IGPN- 8004)	2014
Paddy	L.K.-248	1954
	Darna	1980
Crop Production Technologies - 72		



Niger - Phule Karala



Finger Millet



Phule PVC Paddy transplanting marker



Fertilizer Brequette Machine

Zonal Agricultural Research Station, Kolhapur (1985)



Crop	Name of Variety	Year
Maize	Hunis	1977
	Manjri (Composite)	1980
	African tall (Composite)	1981
	Panchganga (Composite)	1986
	Karveer (Composite)	2005
	Rajarshi	2009
	Phule Maharshi	2016
	Phule Madhu (Sweet Corn hybrid)	2016
Finger Millet	Phule Nachani	
Little Millet	Phule Ekadashi	2015
Barti	Barti - 1	2016
Crop Production Technologies - 52		



Maize - Rajarshi



Barti - Phule Barti-1



Little Millet-Phule Ekadashi



Finger Millet-Phule Nachani



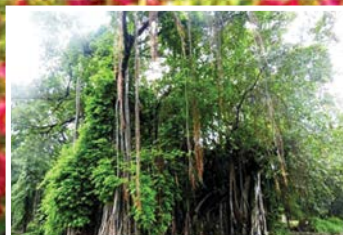
Pandharpuri Buffalo



Zonal Agricultural Research Station, Ganeshkhind, Pune (1921)



Ganeshkhind Garden
Established in 1872



Very old Ficus bengalensis tree
at Ganeshkhind Garden



Guava - Sardar



Pomegranate - Ganesh



	Crop	Name of Variety	Year
Fruits	Grapes	Cheema Sahebi	1960
	Pomegranate	Ganesh	1937
		G-137	
	Guava	Sardar	1927
	Annona	Hybrid No.2	
	Mango	Phule Abhiruchi	2014
	Papaya	Phule Vijaya	2018
	Custard apple	Phule Purander	2014
Vegetables	Fig	Phule Rajewadi	2015
	Sponge gourd	Phule Prajakta	1999
		Phule Utkarsha	2003
	Okra	Phule Vimukta	2016
		Phule Suyash	2003
	French bean	Phule Suyash	2003
	Broccoli	Ganesh Broccoli	2006
	Dolichos bean	Phule Suruchi	2009
Flowers	Aster	Phule Ganesh white	1999
		Phule Ganesh Pink	1999
		Phule Ganesh Violet	1999
		Phule Ganesh Purple	1999
	Gladiolus	Phule Ganesh	2001
		Phule Prerna	2002
		Phule Tejas	2004
		Phule Neelrekha	2004
Bean	Rajmah	Phule Rajani	2005
		Mutha	1992
		Varun	2001
		Phule Rajmah	2017

Crop Production Technologies - 139

Zonal Agricultural Research Station, Solapur (1933)



Crop	Name of Variety	Year
Safflower	Bhima	1982
	SSF-658 (Non Spiny)	2008
	SSF-708	2010
	Phule SSF-733	2011
	Phule Chandrabhaga (SSF-748)	2012
Sunflower	SS-56	1988
	Bhanu	2006
	Bhaskar	2015
Horsegram	Seena	1984
	Man	1986
	Phule Sakas	2016
Mothbean	MBS-27	1989

Dryland Production Technologies - 208



Safflower - SSF708



Hoeing for Moisture Conservation



Visit of Shri. Sharad Pawar on farm



Central Sugarcane Research Station, Padegaon (1932)



Sugarcane Varieties	Year
Co 419	1936
Co 740	1956
Sanjivani (Co 7219)	1982
Sampada (CoM 7125)	1982
Co 7527	1988
Krishna (CoM 88121)	1993
Mahalaxmi (Co 8014)	1994
Nira (Co 86032)	1996
CoM 9057	1999
Co 94012	2004
Phule 265 (CoM 0265)	2007
MS 10001 (Phule 10001)	2017
Sugarcane Production Technologies - 95	



Visit of Shri. Appasaheb Pawar and Shri. Shivajirao Deshmukh



Nira (Co 86032)



Phule 265 (CoM 0265)



MS 10001 (Phule 10001)

Agriculture Research Station, Niphad (1932)



Wheat Varieties	Year
NI 5439	1972
NI 5643	1972
N 5749	1975
Vinata [N 8223]	1985
NIAW 34	1995
NIAW 301	2001
Panchavati [NIDW 15]	2002
Godavari [NIDW 295]	2005
Tapovan [NIAW 917]	2005
Netravati [NIAW 1415]	2010
Phule Samadhan [NIAW 1994]	2014
Wheat Production Technologies - 27	



Visit of Nobel Laureate Dr. Norman Borlaug to ARS, Niphad (1974)



Trimbak (NIAW-301)



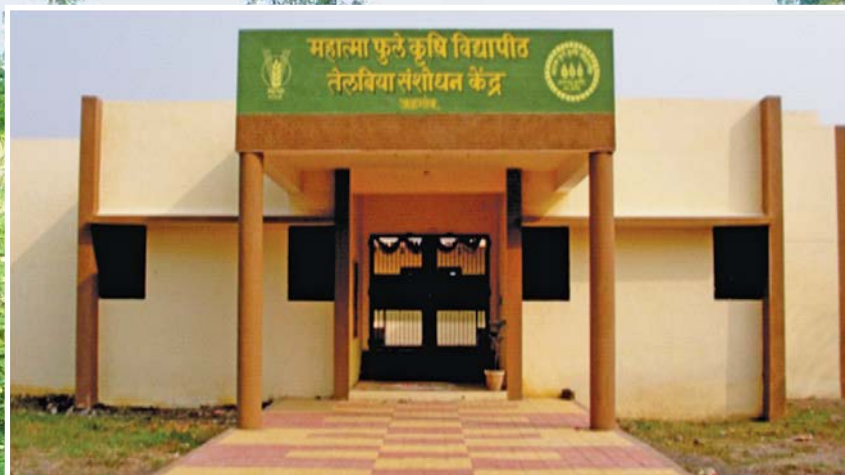
Niphad-34 (NIAW-34)



Phule Samadhan (NIAW 1994)



Oilseeds Research Station, Jalgaon (1913)



Crop	Name of Variety	Year
Groundnut	SB-XI	1965
	JL-24 (Phule Pragati)	1979
	JL-220 (Phule Vyas)	1965
	JL-286 (Phule Unap)	2004
	TPG-41	2004
	JL-501	2009
	JL-776 (Phule Bharati)	2014
	JL-1085 (Phule Dhani)	2018
Safflower	Girana	1990
	Phule Kusuma	2004
Sesamum	JLT -7 (Tapi)	1987
	JLT -26 (Padma)	1991
	JLT-408	2010
Mustard	TPM-1	2005
Cotton	Phule JLA-794	2003
	JLA-505	2015
Mungbean	Vaibhav	2001
Urdbean	TPU-4	1992
Oilseeds Production Technologies - 20		



Phule Bharati

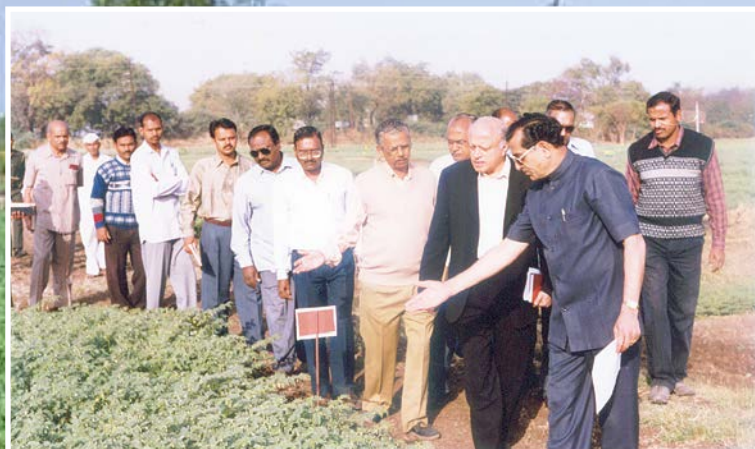


Phule Pragati (JL-24)



Phule Kusuma

Pulses Improvement Project, MPKV, Rahuri (1973)



Visit of Padmavibhushan Dr. M.S. Swaminathan to Pulse Project

Crop	Name of Variety (Year of Release)	Crop	Name of Variety (Year of Release)
Chickpea	Vikas (1982)	Chickpea	Himali (2012)
	Vishwas (1985)		Phule Vikram (2016)
	Phule G 12 (1989)		Phule Vikrant (2017)
	Vijay (1993)	Pigeon Pea	T-Vishakha 1 (1982)
	Vishal (1995)		Vipula (2006)
	Virat (2001)		Rajeshwari (2012)
	Vihar (2002)	Mungbean	Phule-M 2 (1989)
	Rajas (2005)		Vaibhav (2001)
	Digvijay (2006)	Urdbean	TPU- 4 (1992)
Kripa (2009)		Pulses Production Technologies - 40	



Mungbean - Vaibhav



Pigeon Pea - Vipula



Pigeon Pea - Rajeshwari



Chickpea - Vijay



Chickpea - Digvijay



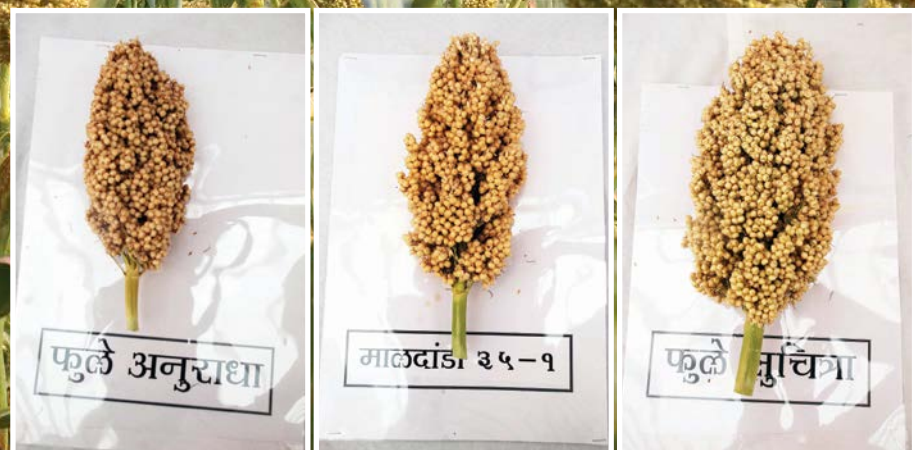
Chickpea - Phule Vikram



Sorghum Improvement Project, MPKV, Rahuri (1973)



Sorghum Variety (Year of Release)	Sorghum Variety (Year of Release)
Swati (1984)	CSV 22 (2007)
SSV 84 (Sweet Sorghum) (1990)	Phule Anuradha (2008)
Selection 3 (1994)	Phule Revati (2010)
Phule Yashoda (1998)	Phule Panchami (Pop grain) (2010)
Phule Maulee (1999)	Phule Suchitra (2012)
Phule Amruta (2003)	Phule Godhan (Forage Sorghum) (2013)
CSV 19 SS (Sweet Sorghum) (2004)	Phule Rohini (Papad) (2015)
Phule Uttara (Tender Grain) (2005)	Phule Madhur (Tender Grain) (2015)
Phule Chitra (2006)	Phule Vasundhara (Sweet Sorghum) (2015)
Phule Vasudha (2007)	Sorghum Production Technologies - 6



Cotton Improvement Project, Central Campus,MPKV, Rahuri (1972)



Name of Variety	Year
Sampada	1986
Savitri	1978
Phule-492	2002
Phule-388	2002
Phule-688	2008
Phule Anmol	2011
Phule Dhanwantary	2011
Phule Yamuna	2014
Phule Rukhmai	2014
Phule Tarang	2015
Phule Dhara	2015
Phule Asmita	2016
Phule Prabha	2016
Phule Suman	2016
Phule Swetambari	2016
Phule Chetana	2017
Phule Mahi	2018
Production Technologies - 30	



Phule Dhara



Phule Swetambari



Phule Dhanwantary



Phule 688



Phule Mahi



Forage and Grass Research Scheme, Central Campus, Rahuri (1971)



Crop	Name of Variety	Year
Bajarax Napier Hybrid	Yashwant	1987
	Phule Jaywant	2009
	Phule Gunwant	2016
Marvel (Irrigated)	Phule Govardhan	2013
Marvel(Rainfed)	Phule Marvel -06-40	2012
	Phule Marvel-1	2017
Madras Anjan	Phule Madras Anjan-1	2017
Stylo	Phule Kranti	2006
Maize	African Tall	1982
Bajra	Giant Bajra	1980
Sorghum	Ruchira	1982
Cowpea	Shweta	1986
Lucerne	RL-88	1995
Oat	Phule Harita	2006
	Phule Surabhi	2016
Crop Production Technologies - 39		



Phule Jaywant (2009)



Stylo-Phule Kranti (2006)

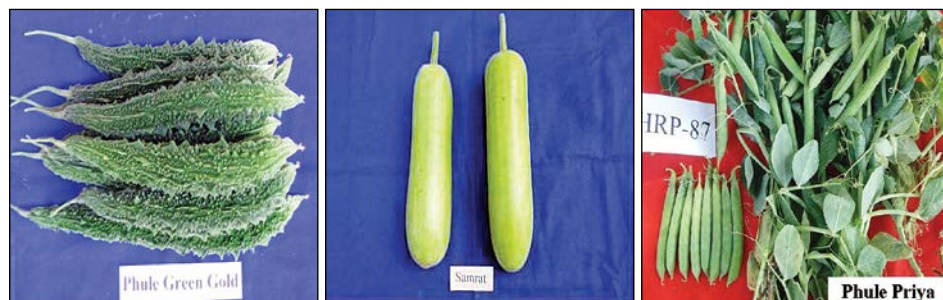
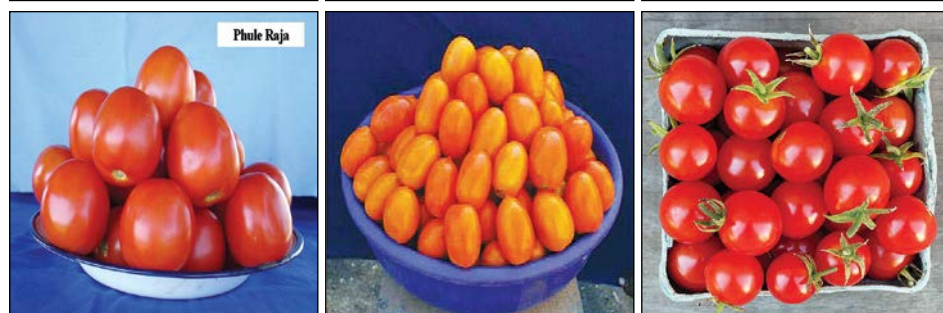


Phule Marvel- 06-40 (2012)



Phule Madras Anjan-1 (2017)

All India Coordinated Research Project on Vegetable Crops, MPKV, Rahuri (1971)



Crop	Name of Variety/Hybrid (Year of release)
Bitter gourd	Hirkani (1991), Phule Green Gold (1996), Phule Ujwala (1999), Phule Priyanka (1999)
Brinjal	Manjari Gota (1965), Vaishali (1985), Pragati (1988), Krishna (1991), Phule Harit (2002), Phule Arjun (2011),
Bottle gourd	Samrat (1992)
Cucumber	Himangi (1992), Phule Shubhangi (1999)
Chilli	Musalwadi Selection (1988), Phule Jyoti (1995), Agnirekha (1996), Phule Suryamukhi (1996), Phule Mukta (1999)
Snake Gourd	Phule Vaibhav (2001)
Dolichos bean	Phule Gauri (2001)
Cluster bean	Phule Guar (2016)
Sponge gourd	Phule Komal (F1) (2017)
Garlic	Godavari (1987), Sweta (1987), Phule Nilima (2014)
Okra	Phule Kirti (1999)
Ridge gourd	Phule Sucheta (2001)
Pea	Phule Priya (2010)
Tomato	Dhanashree (1992), Bhagyashraa (1992), Rajashree (1996), Phule Raja (2006), Phule Kesari (2017), Phule Jayashree (2018)
Onion	Phule Samarth, Phule Suvarna, Phule Safed, Baswant-780
Production Technologies - 119	





Arid Zone Fruits Research Station, MPKV, Rahuri (1981)



Phule Janaki



Visit of Shri. Vilasrao Deshmukh
Chief Minister of Maharashtra

Crop	Name of Variety
Pomegranate	Mridula (1994), Phule Arakta (2003), Bhagwa (2003), Phule Bhagwa Super (2013), Phule Anardana (2015)
Custard apple	Phule Janaki (2017)
Fruit Production Technologies - 24	



Ber Fruits



Fig (Phule Rajevadi) Fruits



Phule Bhagwa Super



Pomegranate Orchard

AICRP on Fruits MPKV, Rahuri (1990)



Phule Mosambi



Phule Sharbati



HDP in Guava



Rejuvenation in Mango

Crop	Name of Variety
Acid lime	SaiSharbati (1994), Phule Sharbati (2008)
Sweet orange	Phule Mosambi (2008)
Fruit Production Technologies - 68	



Phule Drinks



Mango
Pulp



Aonla
Syrup



Pomegranate
Squash

Agricultural Research Station, Vadgaon Maval, Dist-Pune (1940)

Agricultural Research Station, Radhanagari, Dist-Kolhapur (1954)



Name of Paddy Variety	Year
Indrayani	1987
Kundalika	1988
Pawana	1988
Phule Maval	2000
Phule Samruddhi	2007
Paddy Technologies - 22	

Name of Paddy Variety	Year
Halvi Sal 17	1962
Kalajirga	1966
Radhanagari 185-2	1974
Phule Radha	2006
Bhogavati	2006
Phule RDN – 6	2013



Indrayani



Phule Samruddhi



Phule Radha



Phule Bhogavati



Regional Wheat Rust Research Station, Mahabaleshwar (1941)

Agricultural Research Station, Lonavala, Dist. Pune (1958)



Visit of His Excellency Dr. P. C. Alexander, Governor of Maharashtra to Regional Wheat Rust Research Station, Mahabaleshwar on 22th May, 1995.



Visit of Shri. Balasaheb Sawant, Minister of Agriculture (Maharashtra) to Regional Wheat Rust Research Station, Mahabaleshwar on 11th Jan., 1969.

- This location is identified as hot-spot for leaf and stem rust diseases of wheat
- Every year approximately 3000 wheat genotypes are screened against different pathotypes/ races of stem and leaf rust under artificial epiphytotic condition
- Maintained 25 pathotypes of stem rust & 14 pathotypes of leaf rust



Visit of Nobel Laureate Dr. Norman Ernest Borlaug to Regional Wheat Rust Research Station, Mahabaleshwar on 7th March, 1974.



Silver Jubilee Celebration of Regional Wheat Rust Research Station, Mahabaleshwar on 16th Jan., 1969.



Identification of resistant varieties/ hybrids / donors against blast and scald diseases

- This location is identified as hot-spot for rice blast disease. More than 30000 rice entries have been screened against blast disease in the field and glasshouse conditions
- All rice varieties that are released at National and State level are screened against rice blast disease at ARS, Lonavala
- T-22, T-3, Basmati-370, IR 6007, BR-88, Ambemohar-157, Karjat-1 and Pavana varieties of paddy were recommended as resistant to leaf scald
- **Recommendations : 04**



Bajra Research Station, Dhule (1977)

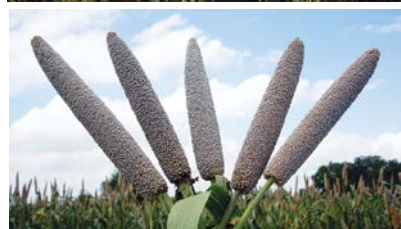
Regional Sugarcane and Jaggery Research Station, Kolhapur (1958)



Pearl Millet Variety	Year
Hybrid Shraddha	1990
Hybrid Saburi	1995
Hybrid Shanti	2006
Variety Dhanshakti	2012
Hybrid Phule Aadishakti	2015
Hybrid Phule Mahashakti	2017
MH 2114	2018
Bajara Production Technologies	26



Visit of Shri. Vilasrao Deshmukh
Chief Minister of Maharashtra



Phule Aadishakti



Phule Dhanshakti



Sugarcane Variety's (Year of Release)
Co 7527 (1988), Co 8014 (Mahalaxmi) (1994), Co 92005 (2009)
Production Technologies - 16



Co 7527



Co 8014 (Mahalaxmi)



Co 92005



Jaggery - Co 92005



Liquid jaggery



Jaggery powder



Cattle Project, Central Campus, Rahuri (1971)



Khillar Cow



Phule Triveni Cow



Gir Cow



Visit of Dr. Annasaheb Shinde, Minister of Agriculture, Govt. of India



Khillar Flock



Loose Housing System



Jersey x Gir



Phule Triveni Bull

Sheep Improvement Project (1992) and Goat Improvement Project (2002), Central Campus, Rahuri



Sangamneri Goat



Sangamneri Buck



Osmanabadi Goat



Osmanabadi Buck



Deccani Sheep



Shri. Sadik Ali,
Hon'ble Governor



Shri. Vilasrao Deshmukh
Hon'ble Chief Minister



Dr. K. P. Viswanatha,
Hon'ble Vice Chancellor



Grazing (Deccani Sheep)



Grazing (Osmanabadi Goat)



Sangamneri Goat with Seven Kids



Farm Implements and Machinery (1975)



Tractor Operated Check basin former



Tractor Operated Medicinal Nut Sheller



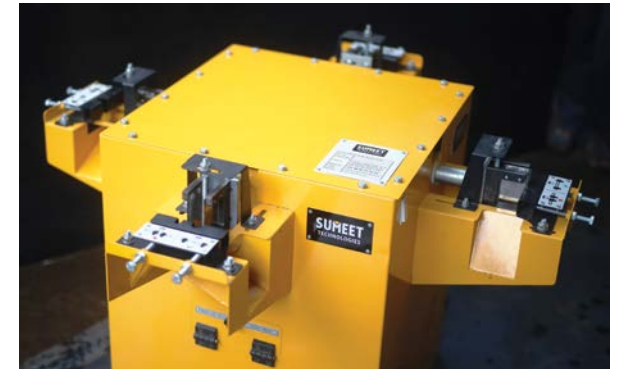
Manually Operated Drumstick Harvester



Power Operated Phule Medicinal Nut Sheller



Visit of His Excellency Shri. C. Vidyasagar Rao, Hon'ble Governor of Maharashtra along with Shri. Nitin Gadkari, Minister for Road Transport & Highways, GOI



Power Operated Phule Sugarcane Sett Cutter



Tractor Operated Jyoti Multicrop Planter



Bullock Drawn Phule Multipurpose Sheti Yantra



Tractor Operated Phule Mole plough

MPKV an Institution of Excellence: Nostalgia

Dr. D. G. Bhapkar

Former Director of Research, MPKV, Rahuri



I took over the charge of Director of Research on 1st April 1981 and continued up to August 1985 after which I joined as Adviser, Maharashtra Council of Agriculture Research and Education (MCAER) at Pune and continued up to my retirement till December 1987. Later, although, retired, I was not tired, I continued working in private sector. During my tenure as Director of Research it will be too egoistic to claim, I have done this and that. What I did was only beacon light to my associate workers.

During this period, there was acute paucity of funds, zero – budget idea was worked out to assist new research projects. First and foremost priority was to prepare 250-300 research proposal which were sent to ICAR and thus, yielded over three crore rupees.

In Agronomy, ginger crop was introduced at Rahuri campus, and technology for preparation of dried ginger as in South India. In Botany, one of my Ph.D student, worked on Pigeonpea yielded new strains. Research in Jaggery making was done by at RSJRS, Kolhapur. Research work to improve cane strains and use of intercrops in sugarcane like potatoes and maize was initiated at CSRS, Padegaon, where as, planting cane on hill slopes to save water at Kolhapur. Also evolved a thresher for sunflower heads and separating seeds. A book on cultivation cost of crops was brought out. Solar water heaters were installed at GTC- Manjari. In Animal husbandry, a novel method of producing prototypes of goats was carried out. Cultivation of fresh sweet water prones (Kolambi) was initiated. In Entomology, research was carried out on method of multiplying earth worm species. Irrigation projects were prepared to increase income. In Solapur, outstanding dryland farming research have been done. Similarly, established massive plantation of fruit crops on 500 acres and contributed significantly in developing various agro-techniques.

Memories about, Good milk house, Meat, fresh vegetables and fruits, bakery products initiated. Krishi Vigyan Sahakari Path Sanstha was established with the help of colleagues. Untainted support continued from steno Shri. Sarode was indeed helpful. Safe and timely driving of Shri. Makasare and Shri. Shelar, maintained me carefree during travel.

My vision about MPKV is to establish intimate relationship with farmers in general. So on and on as it will continue but at 90 years of my age I must rest. My memories in Marathi

तुझे जेव्हा जेव्हा सहज मजला दर्शन घडे ।

स्मृतींच्या पूर्तीचे फलक पुढती राहती खडे,

हृदयी भारावुनी गुणगुणत मी त्यांत रमतो ।

तुला वंदन करतो !



Noble laureate Dr. Norman E. Borlaug during visit to ARS, Niphad, discussing with Dr. A. K. Kolhe (Wheat Specialist), Dr. D. G. Bhapkar (DOR, MPKV, Rahuri) and Dr. R. A. Sangave (Wheat Breeder)



Accomplishments of Research in MPKV

Dr. D. R. Bapat

**Former Director of Research, MPKV, Rahuri
President, MACS-ARI, Pune-411004, Maharashtra**



In 1968, Maharashtra Agricultural University was established initially with headquarter at Mumbai and later on at Agriculture College, Pune. In 1969, finally it was shifted to Rahuri. The name of the university was changed and renamed as Mahatma Phule Agriculture University to honor the great social reformer of Maharashtra. Maharashtra state has nine agro-climatic zones of which four fall in the jurisdiction of MPKV, Rahuri, viz 1. Drought-prone zone, 2. Sub-mountain zone, 3. Plain Zone and 4. Hilly zone. Most of the area in these zones is rainfed (which also includes largest drought-prone area in India- one third of the total state area of which 80% area falls under MPKV jurisdiction).

In the university, major thrust was given on three wings viz, Agri. Education, Agri. Research and Agri. Extension Education which included 18 disciplines of Agri. Research and 9 of Animal Husbandry. At that time, there were 5 main centers and 20 sub-centers under University jurisdiction. About 137 projects were operating of which 88, were funded by State Govt., 39 were financed by ICAR, New Delhi, two by Govt. of India and eight projects by other sources.

During my tenure as a Sr. Scientist, Head Dept. of Botany and Director of Research more stress was given on technology suited for Green Revolution, hence emphasis was given on plant type especially the dwarfs, to exploit heterosis hybrids and high yielding varieties (including composites, synthetics, mutants and the like). With this change it was necessary to develop suitable agronomic practices/ production technology to attain higher yield levels. Market performance, storage requirements and quality aspects were also kept in mind. Following account of activities will help to understand the research achievements during my tenure.

Plant breeding is the technology which has the practical purpose of producing material objects – varieties or cultivars – which offer advantages over pre-existing varieties in terms of absolute yield, stability of yield, agronomic convenience or in the quality of the marketable produce.

In Maharashtra, In spite of availability of improved and high yielding varieties in almost all the crops, the expected increase and stability in the production at higher level could not be achieved barring one or two crops during my tenure, mainly because of uncertain and inadequate rains received in rainfed areas of the state, temperature fluctuations, crop duration coupled with rainfall rhythms etc.

The university had released following crop varieties for general cultivation

In Sorghum, early hybrid CSH-6, medium duration varieties CSH-9, 11, SPV-462 were released for *kharif*, where as two early hybrids CSH 8R and CSH 12R were released for *rabi* season. In case of pearl millet improved synthetics, composites varieties like ICM-7703, ICTP 8203, RHR-1 were released. In Rice varieties like Jaya, Indrayani, Pavana, Darna and Kundalika were released which gave higher yields. In wheat, durum wheats such as N-59, N-5749 and one bread wheat variety NI 5479 highly resistance to drought and heat was released, which still today gives good grain yield in adverse drought conditions. Under irrigated conditions, HD 2189 was the most popular wheat variety. Major pulses varieties, of Tur viz, Pragati and Vishakha, in Mung (Jalgaon-781), udid (Shindkhed-1-1), Kulthi (Sina and Man,) were released. In case of gram three varieties were released (Chafa, Vikas and Vishwas). In oilseeds, Groundnut variety Phule Pragati was released for *kharif*. In Sunflower (Surya) Safflower (Tara and Bhima) were released Linseed

(S-36, C-429), Soybean (MACS 13,) and Castor (Aruna and Girija) were released during this tenure. In cotton hybrids like D.C.H 32, Hybrid cotton 4, Hybrid cotton 6 were released along with high yielding varieties like Y-1, Jyoti and SRT-1. Sampada, Sanjivani, Co 419 and CO 740 were the sugarcane varieties released during this time.

Increase in area, production and productivity of Sorghum and Bajara

A continuous growth was observed in area under cultivation of sorghum hybrids in Maharashtra till 1992 due to release of CSH 4, 5, 6 and 9. About 80 to 90% of area under *kharif* sorghum was covered by sorghum hybrid varieties. Due to this increase in area, production of *kharif* sorghum was increased from 13 lakh tonnes (1973-74) to 50 lakh tonnes (1992), with productivity of 18 q/ha. This was a record production and productivity under rainfed cultivation.



CSH8R- First Rabi Jowar Hybrid- female and male lines, derivatives of Indian and exotic sorghum lines. Tolerant to Shoot fly with high yield

Similarly, in pearl millet the production was increased from 3 lakh tonnes to 18 lakh tonnes due to coverage under hybrids and high yielding composites. This was again a case of record production. These two crops are mostly grown under rainfed cultivation and in light to medium type of soils. So it could be a case of green revolution under rainfed condition and hence laudable. These two crops also withstand change in climatic conditions.

Pilot projects

During the period of 1975 to 1980, field demonstrations of sorghum, gram and wheat varieties were carried out on 50,000 to 1, 00,000 hectares under pilot projects in Maharashtra state. These demonstrations have shown that productivity of can be increased by 2 - 4 fold, provided that farmers follow timely package of practices, guidance by the experts and proper irrigation management (Table 1). Demonstrations under pilot project have proved that the targeted production and productivity could be achieved through team work of researchers, farmers, agricultural extension workers, administrators and policy makers.

Table. Demonstration of yield improvement under Pilot Projects

Crop	Yield at State-level (q/ha)	Yield in pilot projects (q/ha)	Area under pilot project (ha)
Kharif Sorghum (rainfed)	12-15	27	1 lakh/year (average of 1975-80)
Rabi Sorghum	5-7.5	20-25	10000 ha Rainfed + irrigated (1985-86)
Wheat	11-18	18-20	50000 ha/year (average of 1975-80)
Gram	5-9	18-20	Irrigated 30000 ha (1990-91)



Development of 3 way crosses cow breed “Phule Triveni” at MPKV

During the tenure, the data of cow breed development work generated over different lactations was analysed crosswise, lactationwise and groupwise. It was observed that inbreeding depression was nearer to zero or in some cases in positive direction in some groups. Such groups were intermated and upgraded. This became the basis for development of ‘Triveni’ breed.

Sweet lime improvement program

In Horticultural, about 400 plants of Mosambi (mostly nucellar scion grafted on Rangpur lime) were grown and their per plant record in respect of agronomical traits were recorded. A huge but neatly recorded data for 20/10 years was available. Since there was lot of plant to plant variation, selection of plants having high mean yield with low CV was practised. 3 to 4 plants met these requirements used for further perpetuation in the nursery.

Chilli improvement programme at Gadhinglaj

This center was entrusted with the work of *rainfed* chilli breeding especially local Sankeswari variety. This variety (Dry chillies) fetches highest price in the market due to its slenderness, medium pungency, red colour and the like. In order to improve yield and its resistance to virus diseases, the breeding programme involved bi-parental mating to break linkages. The result was a high yielding variety ‘Sai’ was released.

Future directions

- The larger realizable yield gaps in many rainfed crops, gives opportunities to increase yield through rainwater harvesting, soil health improvement, crop diversification and effective dissemination of technologies give a hope that future requirement of food can be met provided appropriate inputs as above are made available at appropriate time.

- Additionally, following suggestions need to be included in future programmes-
- Stable Bt-cotton hybrid/variety with appropriate duration based on soil-type, rainfall pattern etc.
- There is need to increase area and productivity under pulses/oilseeds/nutraceutical cereals.
- Area under sugarcane and maize has substantially increased. These crops need a lot of irrigation water, high doses of fertilizers and other inputs. This could be reduced by following microirrigation systems and practices developed by 100 t/ha sugarcane clubs, this will help to reduce area.
- The water saved could be used as supplementary irrigation to crops referred in 2., above, wherever possible.
- In Maharashtra's Agril universities and their affiliated agriculture colleges have adopted three nearby villages to test/demonstrate new technologies on farmers field. If socio economic survey in these villages has not been done the same may be got done to identify small and marginal farmers; on farms of such farmers, cropping systems/farming systems developed at concerned research station in the region be tested even by giving subsidy to know their effectiveness to change the economic status of farmers. This program may be taken as pilot project. This may help to reduce poverty and will help to know the economic up gradation due to above interventions. The Agril extension and agril economic departments of university may be entrusted to supervise such projects. The other university experts may be involved to achieve targets.

Memories of MPKV, Rahuri

Dr. S. S. Mehetre

Former Director of Research, MPKV, Rahuri



It given me immense pleasure to memorise the research work carried out during 2007 to 2011, when I was Director of Reseach of Mahatma Phule Krishi Vidyapeeth, Rahuri.

In field crops, 15 varities had been released. Phule Vasudha , Phule Anuradha , Phule Revati and Phule Panchami of rabi soghum, Phule Samruddhi of rice. Rajarshi hybrid of maize grain, Phule Pandhari of cowpea, Phule G-0517 of chickpea, JL-501 of Groundnut, Phule Raviraj of Sunflower, SSF-658 , SSF-708 of Safflower, Phule Karala of Niger, JLT -408 of Sesamum and Phule Kartiki of Amaranthus. Three varities in cash crops , Phule -265 and Co 92005 of sugarcane and Phule 688 of Cotton were released. Two varities of fruit crops, Phule Mosambi of sweet orange and Phule Sharbati of Acid lime. Three varities in Vegetable Crops, Phule Suruchi of Dolichus bean, Phule Priya of Pea and Phule Baswant of Garlic were released. 18 varieties of field crops had been registered under PPV & FRA. For protecting the contribution of individual scientist and promoting scientist for patenting the technology, IPR cell was established in University. The training programme on IPR and Patentable Issues in Agricultural in collaboration with NRDC, New Delhi was organized on 8-9th May, 2008 also Organized National debate on “Protection of Extent Variety with Special Reference to Varieties of Common Knowledge” on 16.4.2004.

Six MoUs had been signed for collaborative research of which Krishidhan Seeds Ltd., Jalna and Bejo Sheetal Seeds Pvt. Ltd., Jalna for comercilisationof university release varities, Mahindra & Mahindra Ltd. Farm Equipment Sector, Mumbai , for farm implement research and development, Jain Irrigation Systems Ltd., Jalgaon for research in irrigation water management are important.

Initiation has been taken for the NAIP project on “Value chain in Tomato processing – Development of strong linkages between farmers and food park through ‘Modern Cluster Initiatives’, NAIP project on Bioprospecting of genes and allele mining for abiotic stress tolerance, A network project on “Mitigating the bacterial blight disease of Pomegranate involving partner such as BAIF Development Research Foundation, All India Food Processors’ association and Agri Food Park Shirwal, NRC, Solapur and UAS, Dharwad. 26 Projects from National Horticulture Mission Project and 24 Ad hoc projects have been implemented during the period.

Established State Level Biotechnology Centre under which Bt brinjal trials are conducted also eestablished Plant Health Diagnostic Centre for the biotic stress management.

During the tenure Rs. 474.53 lakhs Revenue Receipt were generated through the product testing trials, Rs. 93.24 lakhs through MLTs and LSTs of Bt Cotton Trials, through MoUs with sugar factories for safe disposal of Post biomethanted spentwash Rs. 136.96 lakhs were generated and Rs 1607.13 lakhs through sale of seed, Saplings, biofertilizer, bioinsecticide, etc.

During the period, 3 National Symposia, 7 National seminars, one Brainstorming workshop, 6 Annual Group Meeting of All India Co-ordinated Research Projects and 8 Workshops of All India Coordinated Research Projects were organized.

The result of the work ultimately reflected in different awards, AICRP on Chickpea, MPKV, Rahuri received “Best Centre Performance Award-2006” by India Institute of Pulses Research, Kanpur, AICRP on Post Harvest Technology RS & JRS, Kolhapur Awarded “Best Performing Centre 2008-09” , Seed production programme of MPKV, Rahuri rated as the Excellent by ICAR for the year 2008-09, Bajra Research Scheme, Dhule received “Best AICRP Centre Award" for the year 2009-10.



Research of Mahatma Phule Krishi Vidyapeeth, Rahuri

Dr. Sharad Ramrao Gadakh

Director of Research, MPKV, Rahuri



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 in 1969 to College of Agriculture, Pune. In the year 1969 (two) and later on in 1972 (two), four agricultural universities were established. Mahatma Phule Krishi Vidyapeeth, Rahuri is one of them established in 1969 for the Western Maharashtra having jurisdiction spread over ten districts viz., Jalgaon, Nandurbar, Dhule, Nasik, Ahmendagar, Pune, Solapur, Satara, Sangli and Kolhapur. The University is named after the great social reformer Mahatma Jyotiba Phule.

After the establishment of the Mahatma Phule Krishi Vidyapeeth, the research stations were transferred under the control of the MPKV in its jurisdiction. Separate Directorate of Research was established in the year 1981 for the review and monitoring of research activities.

Location and climate

Geographically the Central Campus of Mahatma Phule Krishi Vidyapeeth, Rahuri is situated 33 km away from Ahmednagar on Ahmednagar-Manmad state Highway No. 14. It lies between 19° 48' N and 19° 57' N Latitude and between 74° 32' E and 76° 19' Longitude and at altitude of 657 meters above mean sea level.

This area falls in the semi-arid tropics with an annual rainfall ranging from 317 and 619 mm. About 80 % of the average annual rainfall is received during the months of October and November and practically negligible rains received during summer, cropping is therefore, not possible unless good irrigation facilities are available.

The university has the unique distinction of experiencing extreme conditions of farming. Nearly 80 per cent of the drought prone area in the State is under the jurisdiction of the university and as such dry land farming is a major consideration for research and extension purposes. The university has to cater to the needs of both, dryland farming and management of irrigation water. The university shoulders the responsibility of education in agriculture and related fields, research to identify suitable improved practices for better crop production and maintaining the soil fertility and extension education.

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

Research Station	Lead Function (s)	Verification Function (s)
A. Western Ghat Zone		
1. Igatpuri (ZARS)	Rice, Niger, Silviculture, Soil Water Conservation Engineering	Ragi, Beans, Rainfed fruits, Plantation 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 (ZARS)	Maize, Small Millets, Pandharpuri Buffaloe, Horticultural Systems, Sugarcane,	Grasses, Rainfed fruits & Vegetables, Soybean, Groundnut, Organic Farming in Vegetables
2. RSJRS, Kolhapur	Sugarcane, Jaggery	Sugarcane based Cropping System

3. Gadhinglaj	Organic farming, Basmati Rice	Sorghum (K), Pulses, Chilli, and Oilseeds
4. Karad	INM for Cropping Systems	Pulses, Maize, Kharif Sorghum, Soybean, Sunflower, Groundnut,
5. Vadgaon Maval	Rice	Rice based Cropping System.
C. Plain Zone		
1. Ganeshkhind, Pune (ZARS)	Fruits, Vegetables, Flowers, Rajmah Bean, Spices, Plantation Crops, AICRP on Potato	Pulses, Oilseeds and Wheat
2. Digraj	Turmeric, Soybean, Groundnut Betelvine, Problematic Soils	Kharif Sorghum, Pulses Sugarcane, Sugar beet,
3. Niphad (State Level)	Wheat, Wheat based Cropping Systems	Pearl millet, Pulses and Oilseeds
4. P. Baswant	Grapes, Onion and Garlic	Pomegranate and Vegetables
D. Scarcity Zone		
1. Solapur (State Level) (ZARS)	Soils, Dryland farming, Safflower Agrometeorology, Sunflower	Pearl millet, Pulses, Sorghum (R)
2. Mohol	Sorghum (R)	Pulses and Oilseeds
3. Jeur	Organic Farming System	Rabi Sorghum, Pulses
4. Pandharpur	Pulses, Oilseeds	Arid Zone Fruit Crops
5. Chas	--	Dry farming, Pearl millet, Pulses (K), Sorghum (R)
6. Padegaon (State Level)	Sugarcane, Sugarcane based Farming & Cropping System	Sugar beet

7. Rahuri	Sorghum, Pulses, Irrigated Cotton, Forages, Grasses, Groundnut (S), Fruits, Vegetables, Cropping System, Water Management, Organic Farming, IPM, Biotechnology, PHT, Farm Machinery, STCR, Cattle, Goat, Sheep, Seed technology, Jute and Under utilised crops	--
8. Kopargaon	Sunflower	Pearl millet, Pulses, Soybean, Cotton and Wheat
9. Shrirampur	Citrus	--
10. Dhule	Dry farming, Pearl millet, Grasses	Sorghum (K), Pulses, Oilseeds, Rainfed Cotton, Arid Zone Fruit Crops
11. Jadhavwadi (Pune)	Fig and Custard apple	Fig and custard apple
12. Lakhmapur	Pomegranate	Pomegranate
E. Central Plateau Zone		
1. Jalgaon (State Level)	Oilseeds, Banana and Betelvine, Rainfed Cotton	Pulses, Sorghum (K), Soybean, Sunflower

Achievements

Taking into consideration the availability of land, water and weather conditions and other existing resources, the university has concentrated its efforts to develop suitable technologies for dryland agriculture, irrigated farming as well as hi-tech agriculture. The university has focused its attention on location specific and need based research activities. Organic



farming, crop diversification, development of transgenic and export oriented quality production and post harvest handling and process engineering are the priority areas for the next decade.

During the last 50 years, the University has developed more than 255 improved varieties/ hybrids, more than 1471 crop production technologies and 35 different types of Farm Implements and Machineries Also registered pure breeds of –Khillar cattle, Osmanabadi & Sangamneri goat, Deccani sheep and Pandharpuri buffalo with NBAGR, Karnal, and Phule Triveni cattle breed.

Impact of Research

MPKV, Rahuri doing research on more than 120 crops out of which released varieties in 66 crops. The contribution of MPKV research in 8 major crops contributes Rs. 95000 crores to the economy of Maharashtra.

Sugarcane – Phule 0265 and CO 86032 are the two milestone sugarcane varieties of MPKV, Rahuri which contribute more than 75 % of the total sugarcane cultivation area in Maharashtra state. Sugarcane variety Phule 0265 was released in 2007 for Maharashtra state. Since release of Phule 265, almost 30 to 35 % area under sugarcane crop from Maharashtra state has come under this variety. In spite of the scarcity situation the average sugarcane productivity increased by 16.81 t/ha and reached to 87.14 t/ha. and contributed revenue of Rs. 5295.95 crores in Maharashtra state since 2008-09. This variety has brought revolutionary changes in the lives of farmers and made farmers rich and prosperous in the true sense. The variety Phule 0265 and Co-86032 has contributed more than Rs. 40209 to the sugarcane grower of the state.

Chickpea - MPKV, Rahuri has developed 13 chickpea varieties which are resistant to *Fusarium* wilt and drought tolerant with a high yield potential covers an area of 18.20 lakh hectares, with 16.22 lakh tons production and of 8.91 q/ha productivity. Every year the demand for the seed of *Vijay*, *Vishal*, *Virat*, *Vihar*, *Digvijay* and *Kripa* is increasing from the major chickpea growing states. In Maharashtra state 37 percent area of chickpea is

under MPKV release varieties with gross return of Rs 13423 for last 38 years. There is also highest indent for nucleus and breeder seed of MPKV varieties contributes 14.75 per cent at national level.

Sorghum - MPKV, Rahuri developed varieties on the basis of soil types viz., *Phule Anuradha* for shallow soil, *Phule Suchitra* for medium soil and *Phule Vasudha* for deep soil of rainfed condition while *Phule Revati* for protective irrigation. During 2015-16, 25 per cent (6.5 lakh ha) area of total *rabi* sorghum area in Maharashtra (26 lakhs ha) was under MPKV's varieties. Among these, *Phule Revati* covered 10 % area, *Phule Vasudha* 9 % and other two varieties (*Phule Anuradha*, *Phule Suchitra*) contributed 6% of total *rabi* sorghum area of Maharashtra and contributed Rs 8482 crores gross return in last 11 years.

Pearl Millet - MPKV Rahuri released 7 Bajara varieties (*Shradha*, *Saburi*, *Shanti*, *Dhanshakti*, *Phule Aadishakti*, *Phule Mahashakti*, *MH2114*) Out of these *Dhanshakti* variety is adopted over 10 % area in the state and contributed Rs. 220 crore since its release in 2012-18.

Paddy - MPKV Rahuri has released 10 varieties of Paddy. Out of these *Indrayani* variety is highly adopted in Western Maharashtra on 70 % paddy growing area and contributed Rs. 25789 crore in last 15 years.

Onion – N-2-4-1, *Phule Samarth*, *Basewant 780* are the popular onion released by MPKV, Rahuri. The large scale seed production is undertaken by university and private seed companies 40 % area under onion is covered by *Phule Samadhan* and *Baswant 780* contributes Rs 7565 crores in last 15 years.

Pomegranate – MPKV, Rahuri released highly popular pomegranate varieties viz. *Ganesh*, *Mridula*, *Arakta*, *Bhagwa* and *Phule Bhagwa Super*. 95 % of the total area of the Pomegranate in the state is under MPKV released variety *Phule Bhagwa* and contributes Rs 21427 crore since its release (2003).

Acid lime - MPKV, Rahuri has developed two varieties Phule Sharbati and Sai Sharbati. Sai Sharbati are predominant varieties occupying 65 % area of the state contributed Rs. 935 crore since its release (1995).

Seed Production

In addition to the above, Every year the university is implementing massive Seed Production Programme was implemented with production of 33 thousand quintals seed and 12 lakh nursery grafts/plantlets by MPKV, Rahuri and 49 thousand quintals seed and 15.50 lakh nursery grafts/plantlets production has been planned during the year 2017-18.

By considering the contribution of university in the areas of education, research and extension, the ICAR, New Delhi has awarded this university by Best Agriculture University “Sardar Patel Award” 2002. As well as in the Central Budget of 2008-09 of Government of India has honored this university by providing “Rs.100 crores”.

Vision /Action Plan for Doubling Farmers Income (2022)

- 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

- Production Enhancement of dryland agriculture system in Western Maharashtra
- Abiotic stress, climate change and application of biotechnology in crop improvement.
- Seed production and planning material production programme on University as well as Farmers Participatory Seed Production programme.
- Development of suitable genotypes for suitable intercropping in relation to climate change.
- Establishment of State level Gene Bank, collection, conservation, characterization and utilization of their genetic make-up for crop improvement through conventional breeding as well as plant biotechnology for nutritional importance, disease and pest resistance.



Dr. S. R. Gadakh (DOR, MPKV, Rahuri) with Dr. K. V. Prabhu (Chairperson PPV & FRA, New Delhi) and Dr. K. P. Viswanatha (Vice Chancellor, MPKV, Rahuri) at Sorghum Project during Rabi Crop Day 2019

EXTENSION

EXTENSION
EDUCATION



EXTENSION EDUCATION

National Demonstration Scheme

With the introduction of the Training and Visit system of Extension in the Department of Agriculture, the post of Director of Extension was initiated in 1981 and has been occupied by Dr. Y.B. Joshi, Dr. B.B. Patil, Dr. T.S. Khuspe, Dr. S.S. Thorat, Dr. S.N. Desai, Prof. L.R. Kanawade and Dr. G. K. Sawant. The present Director of Extension Education is Dr. K.D. Kokate. The extension activities at different colleges, research stations and schools are coordinated by the Director of Extension Education. The Staff of the Department of Extension Education at the colleges and the extension Agronomists under T&V System and the Extension Education units at the colleges form the core of extension workers devoted fully to the extension work. Other teachers and the scientists also work as extension workers to disseminate knowledge generated in the agricultural technology. Usually the farmers' rallies at the various research stations are organized every year. Training programmes are also conducted for the extension workers of the Department of Agriculture. Monthly District Workshops are organized on the campus of the university in the respective district. The scientists interact with the agency to give appropriate guidance.

Extension

Genesis

- The activities of the Agricultural Extension Department were being carried out in three Agricultural Colleges at Pune, Dhule and Kolhapur. A separate department was established at the Central Campus, Rahuri for carrying out extension education activities.
- The subject of Agricultural Extension was introduced in four year B.Sc. (Agri.) degree course at the College of Agriculture, Pune in the year 1955, as one of the subject. It was granted the status of a full-fledged university subject from June, 1956.

- The Indian Council of Agricultural Research, New Delhi initiated an All India Coordinated Project on National Demonstration on major food crops to demonstrate the techniques involved by the research scientists on the cultivators fields. The project work initially commenced in 1970-71 in Kolhapur. The project was shifted to Dhule and then to Satara.
- The main objective of the scheme was to demonstrate to the farmers convincingly the production potentials of every unit area of land by using hybrid/high yielding varieties of crops, adoption of multiple cropping programme, improved package of practices such as adequate seed rate, spacing for getting optimum plant population, balanced use of fertilizers, effective water management practices, plant protection measures and other agronomic practices. Each year about one hundred demonstrations were held in three seasons on crop sequences using improved technology and high yielding varieties. There was provision of subsidy @ Rs. 500/- per acre to meet critical input costs. The findings of demonstrations conducted on farmers fields indicated increase in production in case of various crops. The participating farmers were greatly benefitted by such transfer of improved technology.

Lab to land Programme

- ICAR, New Delhi initiated a project viz., Lab to Land during the Golden Jubilee year in 1979-80 for transfer of technology to small and marginal farmers and landless labourers i.e. the weaker section of the rural community.
- The programme was implemented in phases with a total of five phases. The programme of work included the socio-economic upliftment of the rural poor. The programme also included an effective feed back mechanism through the involvement of



scientists in the programme for improving the technology to suit the requirement of the farming community. Since 1979-80 under this programme 1000 farm families were involved in each year for the first three years with 15 technology transfer centres. There after 200 families were included in each year till 1989-90. An amount of Rs. 59/- per family per year was provided by the ICAR, New Delhi for supply of critical inputs *viz.*, seed, seedlings, fertilizers, implements and plant protection appliances etc.

- The Lab to Land programme provided a very important tool in transfer of technology and its adoption. Among impact points the important ones were adoption of alternate crop of sunflower, rabi sorghum and intercropping, double cropping to improve net returns. The farmers were convinced about improved practices *viz.*, improved seed, biofertilizer, ferti-seed drill, horticultural tree, kitchen gardening etc. In the year 1993 both NDS and L to L programmes have been closed and merged into Krishi Vigyan Kendra.

Training and Visit system

After the introduction of Training and Visit system of Extension in the State of Maharashtra in 1981 the Agricultural Universities have been assigned the training component of the system. For this purpose a post of Director of Extension Education along with five Extension Agronomists at various regions have been created for undertaking training and coordination work with the T & V component of the Agricultural Department. Two posts of Assistant Professors have also been created for conducting Induction Instant Training. The staff are involved in organizing Monthly District Workshops, refresher courses, seminar cum workshops, crop production technology training classes, preseasonal training courses, farmers rallies and minikit trials through extension functionaries. The system since its introduction has produced rewarding results by way of increasing technical competence and skills among extension workers. Also the training component has a major share in increasing the agricultural production.





College Extension Blocks

A block of 50 to 60 villages are attached to the Extension Wings of the each of the three constituent Agricultural Colleges. These blocks are treated as field laboratories for the students for field extension work. A separate unit headed by Extension Training Officer is provided for carrying out the development activities in the block. The unit organizes educational programmes for farmers by holding meetings, group discussions, arranging film shows and exhibitions, organizing youth clubs and Bal Vikas Mandals, study tours, seminars and conducting demonstrations. In addition to the above services, the development activities such as supply of improved seeds of important major crops, fruit plants, insecticides and fungicides were also undertaken. The College Extension Blocks were established with following objectives.

1. To serve as an Extension Education laboratory to the under graduate and post graduate students.
2. To test the technology generated by the University on the farmers field by using various extension teaching methods.
3. To provide the improved seeds of paddy, sorghum, wheat, gram, etc. and grafts of important fruit crops on No Profit No Loss basis.
4. To help the farmers, women and rural youth for entrepreneurship development in dairy, poultry, goat, fishery, piggery etc. to uplift their socio- economic status
5. To provide feedback to the University scientists.

College of Agriculture, Pune

Extension Wing was attached to the College of Agriculture, Poona in the year 1954 and instruction in Agricultural Extension commenced in the year 1955. A Development Block of 127 villages from Bhore, Velha and Haveli tahsils of Pune district was attached to the extension wing in the year 1955.



With the help of field staff various extension activities viz., distribution of seed of improved varieties of all crops, grafts of fruit crops, organization of farmers-scientists discussions, field visits, farmers rallies, agricultural exhibitions, farmers educational tours, conducting method demonstrations, result demonstrations, frontline demonstrations and with the help of Livestock Supervisor the activities viz; supply of day old chicks, cattle vaccination, providing veterinary services etc. are also undertaken.

Villages under block

College Development Block comprises four circles viz., Bhore, Nasarapur-I, Nasarapur-II and Ambavane in three tahsils. The circlewise number of villages are shown in the following table. Presently two circle offices are in working condition and one Agril. Assistant is covering about 20 villages from College Development Block.



Tahsilwise villages in each Circle

Sr. No.	Name of Tahsil	Name of Circle	No. of villages
1.	Bhor	Bhor	47
2.	Bhor	Nasrapur-1	26
3.	Bhor and Haveli	Nasrapur-2	28
4.	Bhor and Velha	Ambavne	26
Total			127

College of Agriculture, Dhule

A development block of 59 villages in Dhule Taluka has been selected by the Extension Wing of the Agricultural College, Dhule to serve as a field laboratory for practical training in Agricultural Extension.

The field staff of the block consists of one Extension Training officer, one Agricultural Supervisor and eight Agricultural Assistants. This staff looks after the development work of the block, and on this account it helps the teaching staff of the Extension Wing in organizing and conducting extension practicals and extension training camps of the students of the College.

The wing has established a non-official body known as 'Agricultural Production Committee.' There are 15 members in this Committee, and the Principal is the Ex-officio chairman. The agricultural development programme of the block is prepared every year by the Extension Wing in consultation with the members of the Agricultural production Committee of the block. The members of the committee meet at different places in the block, every quarter year to review the progress of work done by the development during the quarter and to consider the implementation of the coming programme.

During the year 1961-62, the preliminary village survey work of the selected 59 villages was carried out, and the development work of the extension block was started from April, 1962. This development block





now serves as a good field laboratory for the students of this College to study the extension practices and to attempt and evolve new techniques of the college of Extension. The block also offers opportunity to the teaching staff of the college belonging to other branches of Agricultural Science to come in close contact with village conditions, thereby facilitation and obtaining first hand information on agricultural problems in the fields of cultivators and exploring solutions.

College of Agriculture, Kolhapur

Extension wing of the College of Agriculture, Kolhapur established in 1963-64 is an integral part of the college which performs all the three functions viz., teaching, research and extension education.

The college development block was attached to extension wing in the year 1968. Previously it had 62 villages from Karveer tahshil of Kolhapur district and divided into eight circles, where eight Agricultural





Assistants are placed to disseminate the agricultural technology to farmers. The extension programmes in the college development block are planned and implemented under the guidance and the directives of the Professor of Extension Education. The block serves as a laboratory for providing scientific and supervised training in the subject of Agricultural Extension to the students of the College of Agriculture, Kolhapur.

After transfer of technology in Karveer tahsil, the College Development Block (CDB) was shifted to Hatkanangle tahsil in 1998 as per Executive Council Resolution No.5 dt. 27/4/1998 in 44 newly selected villages which are grouped together into eight circles. In 2001, other circles were established in Radhanagari and Bhudhargad tahsil of Kolhapur district with 18 new villages.

Tahsilwise and circlewise list of villages

Sr. No.	Tahsil	Name of Circles	Name of Villages
1	Hatkanangale	Alte (5)	Alte, Kumbhoj, Nej, Hingangaon, Majale
		Sajani (10)	Khotwadi, Hatkanagale, Sajani, Korochi, Tilwani, Kabnoor, Mangaon, Managaonwadi, Rui, Tardal
		Wathar (7)	Wathar, Chavare, Ghunki, Kini, Bhadole, Pargaon, Kasbe Vadgaon
2	Hatkanangale	Nagaon (6)	Nagaon, Mauje Vadgaon, Top, Sambhapoor, Kasarwadi, Minche
		Padli (6)	Padli, Padli-darvesh, Ambap, Ambapwadi, Manpadale, Talsande
		Male (9)	Male, Malewadi, Rukadi, Atigre, Herle, Chokak, Gadnudshingi, Halondi, Male Mudshingi
3	Bhudargad	Gargoti (8)	Gargoti, Salpewadi, Shindewadi, Fanaswadi, Ambavane, Hanbarwadi, Kalnakwadi, Khanapur
4	Radhanagari	Turumbe (10)	Turambe, Kapileshwar, Arjunwada, Titave, Kasarwad, Mangoli, Aknur, Admapur, Waghapur, Chandre



Communication Centre

A Communication Centre was established in May 1982 with the financial assistance of the ICAR, New Delhi for five years. It was envisaged in the project planning that the activities be undertaken with the State resources after five years. The centre was established for effective use of mass media in transfer of technology. The Public Relation Unit of the Communication Centre entertains farmers' visitors and other dignitaries. The University has a printing press for printing farm literature. The unit produced literature for farmers and extension workers such as folders, booklets, magazines, Krishi Darshini (Diary), Shri Sugi, a farm magazine. News letter, MPKV Happenings, publicity of news items, organize exhibitions and broadcasting of agricultural programmes through All India Radio, Doordarshan and other electronic media.



Agricultural Technology Information Centre (ATIC)

The National Agricultural Technology Project (NATP) provided funds to establish Agricultural Technology Information Centre (ATIC), single window delivery dissemination and supporting system in 2001 at MPKV, Rahuri.

The extension activities like field visits, replying the queries of the farmers and other stakeholders, diagnostic services in coordination with the other departments of University are being performed by the ATIC.

Farmers visiting 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 been 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.

Krishi Vigyan Kendras (KVK)

At present there are 17 KVKs in the jurisdiction of MPKV, Rahuri out of which 4 are University KVKs and 13 are NGO KVKs.

KVK, Dhule

Krishi Vigyan Kendra, Dhule, one of the oldest KVKs of Maharashtra has been consistently engaged in disseminating the agricultural technologies to farmers, ever since its inception in the year 1983. Besides the mandatory activities, KVK, Dhule is being



considered for implementing RKVY Farmers FIRST, Seed Hub Project, Cluster FLD and Soil Health Card Scheme since past 2-3 years. RKVY Farmers FIRST has extended recommended technologies in Irrigated Bt Cotton which is a major crop of the district. Some of the significant technologies demonstrated during previous five years and recommended for large scale adoption in the district include IPM in Bt Cotton with horizontal spread over an area of 100 ha, ICM & IPM in Gram (area 104 ha), Bahar Management, INM & PHT in Pomegranate-Bhagwa (area 50 ha), Bajra-Dhanshakti ICTP-8203Fe (area 60 ha), IWM in Cotton (area 60 ha), Production and management Technology of Onion-Phule Samartha (area 25 ha), Use of Bio Pesticides for controlling onion thrips (area 70 ha) etc. KVK has gained popularity in Khandesh region and as a token of recognition KVK was conferred with 2 state level awards in 2015-16.



KVK, Mohol

Krishi Vigyan Kendra, Mohol established in July, 2011 under administrative control of Mahatma Phule Krishi Vidyapeeth, Rahuri for the 6 tahsils in Solapur district i.e. Mohol, Pandharpur, Malshiras, Madha, Sangola and Karmala for implementing various agricultural activities as per the needs of farmers of different localities. KVK also function in various crop production technical trainings, crop demonstrations and on farm trials and organizes training to the rural youth for self-employment and working as extension functions for a new agricultural production technologies. Foundation stone ceremony of administrative building and farmers hostel of Krishi Vigyan Kendra, Mohol, Dist. Solapur was organized on 25th March, 2012.





KVK, Jalgaon

Krishi Vigyan Kendra, Mamurabad Farm, Jalgaon was established on 1st January, 2011 under MPKV Rahuri, foundation stone was laid on 7th April, 2012. Krishi Vigyan Kendra (KVK) Mamurabad Farm covers 8 tahsils of Jalgaon district (Parola, Amalner, Chalisgaon, Bhadgaon, Pachora, Jalgaon, Erandol, Dharangaon). Total area under KVK is 23.79 ha, of which 5.79 ha under building and canal. Infrastructure available at KVK are Silage making unit, Dal Mill, Chaff Cutter, Fruit Grader, Banana Ripening Chamber, Mobile Soil Testing Van (through Manav Vikas Mission) and Farmers Hostel.



KVK, Borgaon

Krishi Vigyan Kendra, Borgaon, Tal. Dist. Satara, Maharashtra has been established in the year 2010 under the jurisdiction of Mahatma Phule Krishi Vidyapeeth, Rahuri. KVK, Borgaon is located near Pune-Bangalore Highway (NH-4) 14 kms. away on the Southern side of Satara city. The pre-dominant crops of this area are Sugarcane, Turmeric, Ginger and Rabi Jowar. The majority of livestock population is local breed. Land is fragmented and land holding is very small. Satara district comprises of total 11 tahsils out of which 6 tahsils viz., Satara, Phaltan, Wai, Mahabaleshwar, Jaoli, Khandala comes under the jurisdiction of Krishi Vigyan Kendra, Borgaon. The total geographical area of KVK, Borgaon jurisdiction is 431684 ha. There is lot of variation in agro-climatic condition of each tahsil.



Regional and District Extension Centres

To test and transfer the improved technology from time to time in adjoining areas of respective research and educational institutes, three RECs are started at the constituent colleges viz., Pune, Dhule and Kolhapur and one at Central Campus, MPKV, Rahuri. Regional Extension Centre consists of four SMS in the subject of Agronomy, Animal Husbandary, Horticulture and Plant Protection. The activities of each REC are governed by Extension Agronomist at regional level which is technically controlled by Director of Extension Education. To carry out extension education activities effectively and efficiently, five District Extension Centres (DECs) have been started at different research stations viz., Jalgaon, Padegaon (Satara), Solapur, Digraj (Sangli) and Niphad (Nashik). No separate staff is provided for DECs.

The staff under the RECs and DECs undertakes activities relating to transfer of technology in the adjacent areas. 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 Centre and District Extension Centre are provided a 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.

Farmers-Scientists Forum

The basic idea of formulating the Farmers-Scientists Forum (FSF) is to demonstrate and to educate the farmers about the technology generated by the university at different locations. The concept was put forward by the then Vice Chancellor Dr. R. B. Deshmukh and it has got a tremendous response from the farmers. Besides, operational problems in adoption of these technologies were identified and accordingly the technology was refined, updated so that it will be accepted and farmers will be empowered with the technology. The member farmers of these Farmers-Scientists Forums were developed as a model for the village and thus, these farmers would serve as farm-leaders to disseminate the technology to other farmers in the area. Since the scientists involved in technology transfer, they will get first hand information about the feedback of the technology, which will help the scientists for refinement, and also to plan need based research programme.



Moreover, these farmers are expected to be the partner in conducting research and thus, participatory research model is being promoted through Farmers-Scientists Forum. Total 43 Farmers-Scientists Forums are established in the jurisdiction of the University and 1650 farmers have been registered as members. The FSF was inaugurated during October 11, 2005 in the Agro-Technology Week organized in the university.

Agro-Technology Week, 2005

The Agro-Technology Week, 2005, a mega event was organized at the Central Campus, Rahuri during 10th to 14th October, 2005. The main objective behind organizing this event was to demonstrate the farm technologies generated by the University to the farming community of the region. The Agro-Technology Week had important components like the Live Demonstrations on an area of 100 acres farm demonstrating more than 100 varieties of different crops and technologies, visit to the University Research Farms on 1600 acre area, Agro-Technology



Exhibition comprising of 241 pre-fabricated stalls and technical sessions on Horticulture and Dairy. The event was inaugurated at the hands of Late Vilasrao Deshmukh, former Chief Minister of Maharashtra in presence of Shri. Balasaheb Thorat, former Minister of Agriculture, M.S. and other dignitaries. The concluding programme was organized in presence of Shri. Sharad Pawar, former Union Minister of Agriculture, Govt. of India. The Agro-Technology Week organized at the MPKV, Rahuri had a grand success in terms of technology dissemination to the farmers. More than three lakh farmers from the state and surrounding states participated in this event.

International Hi-Tech Agro Week-2007

An International Hi-Tech Agro Week-2007 was organized at the College of Agriculture, Pune during November 17-21, 2007. This mega event was organized by MPKV, Rahuri in collaboration with Sakal Papers Ltd., Pune. The event was inaugurated by Prof. Mohammad





Yunis, Noble laureate from Bangladesh. Shri. Sharad Pawar, Union Minister of Agriculture, Govt. of India and other dignitaries were present for the function. The event comprised of an international exhibition, seminars of various topics and live demonstrations on an area of 135 acres of college farm. The event evoked tremendous response as more than five lakh farmers and stakeholders including residents of Pune district participated. This exemplary event was organized in public-private partnership mode.

Vanmahotsav (Massive Tree Plantation Programme)

Vanmahotsav, a massive tree plantation programme was launched by the University on the occasion of birth anniversary of Late Vasant Naik, Former Chief Minister of Maharashtra State. Various saplings of different species are planted at the central campus and the jurisdiction of the University comprising of ten districts.





Tree plantation at the hands of great social workers Shri. Annasaheb Hajare and late Mohan Dharia (1992)



This include planting of saplings of dryland horticultural crops like mango, tamarind, custard apple, pomegranate, guava, aonla and jamun; medicinal and aromatic plants like mehndi, behda, arjunetc; eco-friendly trees like raintree, peltoforum, cassia, bougainvillea etc. The University scientists, officers, staff and students participate in this Vanmahotsav programme. The programme is being implemented in a planned, well organized manner.

MAGOVA (Retrospection) programme

A programme on MAGOVA (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. This unique programme has later been encompassed with review of administrative, finance and development work.

Kisan Aadhar Sammelan 2017

A mega event of Kisan Aadhar Sammelan-2017 under the New India Manthan: Sankalp Se Siddhi, Unnat Sheti: Samruddha Shetkari was organized at the Mahatma Phule Krishi Vidyapeeth, Rahuri during September 25-29, 2017 in collaboration with Department of Agriculture, M.S. and Agriculture Technology Management Agency (ATMA), Ahmednagar. The event comprised of Live Crop Demonstrations, Agriculture Exhibition and Farmers-Scientists Interactions. The Kisan Aadhar Sammelan-2017 was inaugurated at the hands of late Pandurang Fundkar, Minister of Agriculture and Horticulture, M.S. and Pro



Chancellor, MPKV, Rahuri on 27th September, 2017. Shri. Mahadeo Jankar, Minister of Animal Husbandry, Dairy Development and Fishery Development, M. S. inaugurated the Animal Exhibition on the first day of event on 25th September, 2017.

Farmers-Scientists interactions were organized during the Kisan Aadhar Sammelan-2017. 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.

Crop demonstrations on over 100 acres were organized for the benefit of farmers during the Kisan Aadhar Sammelan-2017. It included demonstrations on cereals, pulses, oilseeds, forage, vegetables, flowers



and cash crops. In all demonstrations of 44 crops and 129 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. Major attraction of this event was the Integrated Farming System model on farmers field of Shri. Chandrakant Adsure and Shri. Uttam Adsure.

An Agriculture Exhibition was organized during the Kisan Aadhar Sammelan-2017. It included 100 stalls. Both the Government organizations and private companies showcased 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

A mega event of Kisan Aadhar Sammelan-2018 with the moto on Doubling of farmers income by 2022 was organized in the university 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. The Kisan Aadhar Sammelan-2018 was inaugurated at the auspicious hands of Shri. Chandrakant (Dada) Patil, 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. Large number of farmers, extension workers and students visited this event.





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. 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.

An Agriculture Exhibition was organized during the Kisan Aadhar Sammelan-2018. It included 124 stalls. Both the Government organizations and private companies showcased their technologies in the exhibition.

Training Programmes

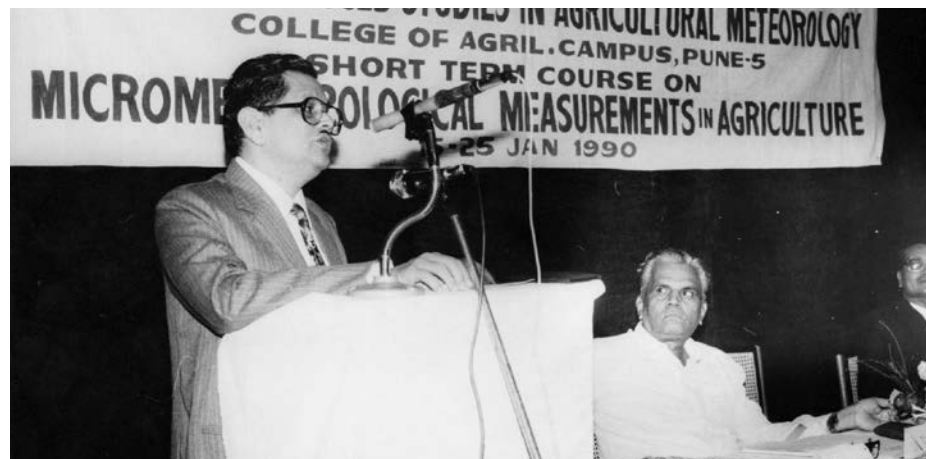
Training programmes are arranged for the benefit of the farmers, extension workers and officers engaged in the agriculture development



activities in the Zilla Parishads and the State Department of Agriculture. Short duration courses are also conducted to train the extension workers, students and staff on specific problems.

Demonstrations

In order to make the cultivators aware of the utility of improved package of practices, result demonstrations on important crops like





jowar, bajra, paddy, wheat, groundnut, muhg and cotton are conducted in the university jurisdiction. Besides national demonstrations and multiple cropping demonstrations, minikittraials of method demonstration and equal number of result demonstrations on the utility of improved package of practices have been conducted so far.

Campaigns

Various campaigns are organized for the control of sorghum midgefly, rodents, blast disease of paddy and rust disease of wheat and for the



destruction of the parthenium weed, control of white grub and rhizome rot of ginger, fallworm of maize, pink bollworm of cotton, white grub of sugarcane, oily spot of pomegranate etc. Contingent crop planning is regularly advised to the farmers on eve of hailstorm, delayed monsoon and cold wave.

Meetings, Film shows, Field days, Exhibitions

A number of meetings with farmers and village level extension workers were conducted at various places in the University jurisdiction. The staff of the constituent Agricultural colleges and Gram Sevak Training Centers arranged film shows on agricultural topic in the villages in the jurisdiction of the University.

The Agricultural Colleges and agricultural research station organized field days to appraise the farmers with the research work being conducted in the university and improved package of practices. Tours of the farmers





to the places of agricultural importance within and outside the State were arranged. The various institutes of the university arranged exhibitions for the benefit of the farming community at large.

Development in the Associate Villages

Six project affected villages near the main campus of the university have been associated with the university for agricultural development. In all seven gohar gas plants have been installed in these villages. Ninety families were adopted for rendering assistance in crop and livestock improvement. The bench mark survey in respect of their present socio-economic condition has been conducted and alternate farm plans have been suggested. About 85 hectares of land has been leveled. The cross breed cows have been supplied to the cultivations of these villages and two cooperative milk collection societies have been established. Group discussions were held with the farmers on cultivation of forage crops, livestock feeding and management of animals.

Publications

Publication form an important medium of the University for the diffusion of Knowledge. This includes research papers, popular articles, news releases, leaflets, pamphlets and participation in radio and television programmes. Communication centre is involved in bringing about various publications. Publications like Krishi Darshani, Shri Sugi, MPKV Calender are popular among the farmers. Mobile Apps like Phule Krishi Darshani, Phule Jal, Phule Irrigation Scheduler and various crop DVDs and short video clips on agricultural technologies are available.





महात्मा फुले कृषि विद्यापीठाच्या प्रांगणातील तीन दशके



डॉ. गजानन सावंत

निवृत्त संचालक, विस्तार शिक्षण
महात्मा फुले कृषि विद्यापीठ, राहुरी

महात्मा फुले कृषि विद्यापीठाच्या अंगणातील तीन दशकांचा आढावा म्हणजे एक सुंदर, सुवासिक फुलांचा आकर्षक गुच्छ म्हणावा लागेल. साठच्या दशकात १९६९ मध्ये महात्मा फुले कृषि विद्यापीठाची स्थापना झाली. पहिले कुलगुरू डॉ. हरिश्चंद्र पाटील यांच्या मार्गदर्शनाखाली विद्यापीठ आपले बस्तान मांडत होते. त्यानंतर आलेले कुलगुरू डॉ. एम.एस. पवार यांनी विद्यापीठाचा पाया घातला. त्यांच्या कडक शिस्तीचा व उत्कृष्ट प्रशासनाचा अनुभव विद्यापीठाला आला आणि सगळे सुरळीत झाले. ऊचगाव जवळील माळरानावर विद्यापीठाचा पसारा मांडला जात होता. त्यांच्याच काळात कोल्हापूर कृषि महाविद्यालयाच्या कुटुंबात सहाय्यक प्राध्यापक म्हणून हजर झालो. प्राचार्य पी. सी. एस. दुदुसकर यांच्या हाताखाली काम करण्याचा अनुभव आला. प्रा. एस. ओ. पाटील माझे वरिष्ठ अधिकारी होते. त्यावेळी कृषि विस्तार शिक्षणासाठी उंदीर, ग्लोरीसिडीया अशा विविध विषयांवर केलेल्या घडीपुस्तिकांमुळे लेखनाची आवड निर्माण झाली. आणि त्या वेळीच्या विस्तार शिक्षण विभागाचे प्रमुख डॉ. सुधाकर थोरात आणि शेतकरी मासिकाचे संपादक श्री. आ. बा. पाटील यांची शाबासकीची थाप पाठीवर मिळाली. प्राचार्य दुदुसकरांची शिस्त म्हणजे केवळ विद्यार्थ्यांना वर्गात शिकविण्यापुरते मास्तर होऊ नये तर त्याला मार्गदर्शक व्हावे अशा विचाराने प्रेरित होऊन शिक्षकी पेशाचे व्रत घेतले. त्याच काळात कृषि विस्ताराचा एक नवीन मार्ग म्हणजे छाया नाट्य (Shadow play) जन्माला आले. तत्कालीन भारताच्या पंतप्रधान इंदिरा गांधी यांच्या २० कलमी कार्यक्रमावर आधारित “चंदन तुला जायचे पुढे” हे छाया नाट्य निर्माण झाले. या छायानाट्याचे जवळ जवळ २२ प्रयोग केले. त्यामध्ये प्रमुख मान्यवर कुलगुरू डॉ. एम. एस. पवार, राज्यमंत्री रत्नाप्पा आण्णा कुंभार यांचा उल्लेख करावा लागेल. इंग्रजीच्या प्राध्यापिका परचुरे मॅडम, मराठीचे प्राध्यापक यशवंत भिमाले आणि माझ्या विभागातील प्राध्यापक, सहकारी, विद्यार्थी यांचे सहकार्य मिळाले.

कोल्हापूर कृषि महाविद्यालयात दोन-अडीच वर्षांची नोकरी करून राहुरीला आलो ते शेवटपर्यंत म्हणजे सेवा निवृत्तीच्या काळापर्यंत म्हणजे तीस वर्षांचा काळ राहुरीतच विद्यापीठाच्या सेवेत व्यतीत केला. त्यावेळी कुलगुरू डॉ. पवार साहेब होते. त्यावेळी कुलगुरूंनी बऱ्याच म्हणजे जवळ जवळ सर्व स्टॉफला इंग्रजी भाषेच्या प्रशिक्षणासाठी कार्यक्रम आखला व राबविला. डॉ. एस. एस. थोरात साहेब विस्तार शिक्षण विभागाचे प्रमुख होते. त्यांचे एकटाकी लिखाणाचे सौंदर्य अप्रूप होते. त्यांचे इंग्रजी भाषेवरील प्रभुत्व, लिखाणाची आवड लिखाण कौशल्य कला या त्यांच्या गुणांमुळे डॉ. थोरात कुलगुरूंचे आवडते बनले होते. मी त्यांचा एक सहकारी होते. डॉ. सुधाकर थोरात माझे गुरुजी. त्यांचा आदर्श पुढे ठेवून राहुरीच्या पदव्युत्तर महाविद्यालयात विद्यार्थ्यांना शिकविण्याचे



काम पाच-सहा वर्षे केले. त्यावेळी विद्यापीठाच्या बेसिक सायन्सेस, फॅकल्टी ऑफ अॅग्रीकल्चर, अॅग्री इंजिनियरिंग इमारतीच्या उद्घाटनासाठी समारंभासाठी प्रमुख पाहुणे म्हणून मा. यशवंतराव चव्हाण आले होते. त्या दिमागदार सोहळा कार्यक्रमाची आठवण आजही मनात ताजी आहे. त्यानंतर आलेले कुलगुरू डॉ. आत्माराम भैरव जोशी मोठे आंतरराष्ट्रीय कीर्तीचे संशोधक होते. संशोधन कार्यात त्यांनी विद्यापीठाला गतिमान केले. वर्ष १९७९ साली स्वखर्चाने, स्वप्रयत्नावर भारतीय कृषि संशोधन संस्थेत पी.एच.डी. चा अभ्यास करण्यासाठी हजर झालो. दिल्लीच्या कृषि विस्तार विभागात डॉ. पी. एम. माथुर, डॉ. एस. एन. सिंग, डॉ. वाय. पी. सिंग यांच्या मार्गदर्शनाखाली कृषि जाहिराती सारखा नव्या विषयावर प्रबंध लिहून पी.एच.डी. मिळविली. १९८२ डिसेंबरमध्ये राहुरीला कृषि विद्यापीठावर जनता संपर्क अधिकारी म्हणून रुजू झालो.

त्यावेळी महात्मा फुले कृषि विद्यापीठाची धुरा डॉ. दत्ताजीराव साळुंखे यांच्याकडे होती. त्यांना एक तडफदार कुलगुरू म्हणून सगळे बोलत असत. संशोधन करा, पेपर लिहा, प्रसिद्ध करा असा त्यांचा मंत्र होता. त्यांना लिखाणाची खूप आवड होती. तरुण शास्त्रज्ञांना ते प्रोत्साहित करीत होते. त्यांच्या काळात क्रांतिसिंह नाना पाटील व्हेटर्नरी कॉलेज, शिरवळ, कॉलेज ऑफ होर्टीकल्चर पुणे, फुड सायन्स अँड टेक्नोलॉजी विभाग, इंटरफॅकल्टी डिपार्टमेंट ऑफ वॉटर मॅनेजमेंट हे विभाग सुरू झाले. विद्यापीठातील आणि या विभागातील शेकडो प्राध्यापकांना अमेरिका, इस्रायेल यांसारख्या परदेशात व भारतातील संशोधन केंद्रावर छोट्या मोठ्या प्रशिक्षणासाठी पाठविले गेले. विद्यापीठाचा स्टाफ उच्च दर्जाचा असला पाहिजे असा त्यांचा आग्रह होता. त्यांच्याच काळात झपाटल्यासारखा लिहित होतो. त्यामुळेच विद्यापीठाची कृषि उपक्रमाबाबत रोज वृत्तपत्रात लेख प्रसिद्ध होत. माझे सहकारी आणि इतर अनेक प्राध्यापकांनाही लिखाणाची आवड निर्माण झाली. आणि ते लिहू लागले. कुलगुरू डॉ. दत्ताजीराव साळुंखे यांच्या बरोबर प्रिंट मिडिया या विषयावर एक पुस्तक लिहिले आणि ये गव्हर्नमेंट ऑफ इंडियाच्या कृषि खात्याने प्रसिद्ध केल. कुलगुरू डॉ. साळुंखे साहेब अमेरिकेतील विद्यापीठात प्राध्यापक, संशोधक, विद्यार्थी म्हणून अनेक वर्षे होते. त्यामुळे त्यांना जातीने सर्वत्र म्हणजे सर्वत्र लायब्ररी पासून शेतापर्यंत, शेतातील पिकापासून प्रयोगशाळेपर्यंत, शेतकऱ्यांच्या गोठ्यात, होस्टेलपासून स्टाफ क्वार्टरपर्यंत, क्लासरूमपासून प्राध्यापकांच्या केबिन पर्यंत त्यांचा सारखा संचार



असायचा. तू काम करतोय, संशोधन पूर्ण झाले का ? पेपर लिहिलास का ? चांगल्या रेप्यूटेड जर्नलमध्ये प्रसिद्ध केलास का ? संशोधन नुसते थेसिस मध्ये राहून चालत नाही. आमटी शिळी झाली तर चव लागते का ? त्यामुळे ते PUBLISH or PERISH अशा विचाराचे होते. त्यांच्या प्रेरणेमुळे विद्यापीठाने एक रिसर्च जर्नल पण सुरू केले होते. विद्यापीठातील काही प्राध्यापकांनी त्यांच्या बरोबर बऱ्याच पुस्तकांचे लिखाण केले. अमेरिकेतील प्रसिद्ध प्रकाशकांनी त्यांची पुस्तके प्रसिद्ध केल्यामुळे महात्मा फुले कृषि विद्यापीठाला जगात नावं मिळाले. या प्राध्यापक पेशाच्या संशोधन वृत्तीच्या कुलगुरूंना विद्यापीठ राहुरी भारतात एक नंबर आणायचे होते. ते कडक स्वभावाचे, धडपड्यावृत्तीचे, कष्टाळू तर होतेच पण प्रेमळ स्वभावाचे होते. त्यांचा काळ मनाला मोठी उभारी देऊन गेला. विद्यापीठ कामाला लागले. त्यांच्या काळात प्रसार माध्यमे विद्यापीठातील संशोधन माहिती मोठ्या प्रमाणात प्रसिद्ध करीत होते. त्यांच्याच काळात प्रा. टी. एस. खुस्फे, प्रा. एम.डी. पवार, डॉ. हनुमंतराव भोईटे सारखे प्राध्यापक प्रसारण केंद्राची धुरा सांभाळत होते. याच काळात विद्यापीठाचे मुद्रणालय सुरू झाले आणि विद्यापीठाची प्रकाशने उदा.



याच काळात भारताचे कृषि मंत्री मा. शरद पवार यांची विद्यापीठाच्या पदवीदान समारंभास प्रमुख पाहुणे म्हणून झालेली भेट, भारताचे माजी कृषि मंत्री मा. सुब्रमण्यम, केंद्रीय कृषि राज्य मंत्री मा. आण्णासाहेब शिंदे, मा. आप्पासाहेब पवार अशा अनेक नामवंत मान्यवरांच्या भेटी विद्यापीठाला दिल्या. त्यांचे मार्गदर्शन विद्यापीठाला उपयोगी ठरल्या. याच काळात मला प्राध्यापक म्हणून कृषि विस्तार शिक्षण विभागात काम करण्याची संधी मिळाली. प्रा. तुकाराम खुस्ते, डॉ. लक्ष्मणराव कांबळे या विभाग प्रमुखांनी काम करण्याची भरपूर संधी दिली. डॉ. शंकरराव मगर (अधिष्ठाता, कृषि), डॉ. राजाराम देशमुख (संचालक, संशोधन), प्रा. लहानू कानवडे (संचालक, विस्तार) यांनी शिक्षण, संशोधन व विस्तार कार्य फॅकल्टी, बोर्ड ऑफ स्टडीज, अकॅडमीक सभा, संशोधन सभा, विस्तार प्रशिक्षण, विस्तार कार्य असे विविध कार्य केले. विविध विषयांवर लेख, प्रकाशने, संपर्क माध्यमांचे कार्यक्रम केले. कृषि जाहिरातीवर संशोधन करण्यास वेळ मिळाला. छापील माध्यमांच्या विषयात मोठे संशोधन केले. कृषि पत्रकारिता, छापील माध्यमे यांचा व्यासंग वाढला.

कृषि विभाग प्रमुख विस्तार म्हणून मी १९९५-९६ साली पदभार स्वीकारला आणि छापील माध्यमे, कृषि पत्रकारिता विषयात संशोधन प्रकल्प, प्रशिक्षण वर्ग, ग्रामीण पत्रकारिता असे उपक्रम, प्रकल्प कार्यान्वित केले. कुलगुरू डॉ. योगेंद्र नेरकर कुलगुरूंच्या मार्गदर्शनाखाली व प्रेरणेने बहिःस्थ कृषि व्याख्यानमाला अभिनव प्रयोग सुरू केला. शेतकऱ्यांच्या शेतावर विद्यापीठाचे शास्त्रज्ञ व प्रत्यक्ष प्रश्न भेदासाविलेले शेतकरी एकत्र सायंकाळी भेटू लागले. प्रश्नांवर चर्चा अशा सायंकाळ रात्रीपर्यंत झडू लागल्या. शेतकऱ्यांचे प्रश्न गावातच, शेतकऱ्यांच्या शेतातच सुटू लागले. शेती व इतर क्षेत्रातील विचारवंत, शास्त्रज्ञ, समाजसेवक, कलावंत, लेखक राजकारणी यांचे विचार ऐकण्यास मिळावेत म्हणून कृषि व्याख्यानमाला दरवर्षी नवरात्राच्या १० दिवस भरवली जात असे. समाजसेवक भाऊसाहेब थोरात, रावसाहेब शिंदे, विचारवंत रावसाहेब कसबे, साहित्यिक रा. रं. बोराडे, लेखक विश्वास पाटील, माजी सहकार मंत्री एन. डी. पाटील, जेष्ठ वृत्तसंपादक अनंत दीक्षित, विजयकुमार कुवळेकर, डॉ. सुधा कांकरिया, अर्थ तज्ञ सुलभा ब्रम्हे, शेतीतज्ञ आप्पासाहेब पवार, विश्वास पाटील (जळगाव) अशा नामवंतांचे विचार ऐकण्याची मोठी संधी विद्यापीठातील प्राध्यापक, शास्त्रज्ञ, विद्यार्थी यांना मिळाली आणि

ज्ञानाची कवाडे आणखी मोठी झाली; उघडली गेली. याच काळात कृषि टेक्नोलॉजी पार्क निर्माण केला गेला. या कृषि टेक्नोलॉजी पार्कमध्ये बायो टेक्नोलॉजी, पी.एच.टी. लॅब, टिश्युकल्चर, कृषि संग्रहालय, बायो पेस्टीसाईड, पॉलीहाउस, इरिगेशन मॅनेजमेंट कॅफेटेरीया, बेकरी युनिट, यंत्रे व अवजारे असे विविध प्रकल्प एकाच ठिकाणी शेतकरी व विद्यार्थी यांना पहावयास मिळाले. कृषि टेक्नोलॉजी पार्कची स्थापना व उद्घाटन महाराष्ट्राचे राज्यपाल अलेक्झांडर यांचे हस्ते झाले. प्रत्येक स्टाफने एक तरी संशोधन प्रकल्प तयार करावा, अनुदान मिळवावे असा आग्रह कुलगुरूंनी धरला. त्यामुळे मोठ्या संख्येने संशोधन प्रकल्प विद्यापीठात आले. कृषि विद्यापीठाच्या कार्यावर एक लघुचित्रपट निर्माते राम गबाले यांनी केला तो याच काळात.

संचालक विस्तार शिक्षण म्हणून माझी निवड कुलगुरू डॉ. सुभाष पुरी यांच्या काळात झाली आणि विस्तार कार्याची पूर्ण जबाबदारी माझ्याकडे आली. डॉ. पुरी साहेबांच्याकडे असलेला कृषि विस्ताराचा मोठा अनुभव मला उपयोगी पडला. त्यांचे कृषि विस्ताराचे स्वप्न पुरे केले. कृषि तंत्रज्ञान माहिती केंद्राची माहितीपूर्ण वास्तू, कृषि ज्ञानाचा पुरेपूर अनुभव दृक-श्राव्य माध्यमातून देणारी वास्तू साकार करण्यास माझा हातभार लागला. ॲटिक म्हणजे विद्यापीठाचा आरसा ठरला. डॉ. पुरी साहेबांच्या काळात विद्यापीठाच्या विविध समित्यांवर काम करण्याची संधी मिळाली. ॲटिकच्या प्रांगणातील विविध फोटो, जिवंत नमुने, मॉडेल्स, वॉटरशेड मॉडेल्स, वॉटर मॅनेजमेंट कॅफेटेरीया, व्ही.डी. ओ. कॉन्फरन्स बियाणे पुस्तक-प्रकाशने विक्री, फोन एन सल्ला, जन संपर्क पिकावरील फिरती प्रयोगशाळा आजही विस्तार कामांची साक्ष देतात. कुलगुरू डॉ. पुरी साहेबांच्या कल्पना आम्ही त्यांचे सहकारी साक्षात आकारीत होतो. कुलगुरू डॉ. पुरी साहेबांनी रिजनल एक्सटेंशन सर्विस, डीस्ट्रीक्ट एक्सटेंशन सर्विस सारखी कृषि विस्तार यंत्रणा राबविली, यशस्वी केली. त्यांचा बहिःस्थ व्याख्यानमालेतील सहभाग, कृषि व्याख्यानमालेतील आशीर्वाद मोलाचे होते. त्यांच्याच काळात शेती शाळांच्या विकासासाठी दिलेले लक्ष, अनुदान पाठपुरावा मोठा अभिनंदनीय ठरतो. निम्नस्तरीय कृषि शिक्षणाकडे लक्ष देण्याची गरज प्रतिपादन करून, गंभीरपणे कार्यवाहीही केली. त्यांच्या काळात शेती शाळा मान्यतेच्या कार्यात त्यांनी दिलेले मार्गदर्शन, योगदान निम्न कृषि शिक्षणाला वेगळ्या उंचीवर घेऊन गेले. डॉ. सुभाष पुरी काळात विद्यापीठाला सरदार पटेल सर्वोत्तम कृषि विद्यापीठ अवार्ड मिळाले. सरांची आणि सर्व स्टाफची मान उंच



झाली. सर अवार्ड घेऊन विद्यापीठात आले तेव्हा सरांची जंगी मिरवणूक काढून सरांचे स्वागत, गौरव समारंभ साजरा केला. सरांनी जुन्याचे सोने केले. मुळानगरच्या जुन्या वसाहतीतील उपयुक्त साहित्यातून काही नवी शेड, इमारती उभ्या केल्या. तेव्हा सरांच्या हातातले कौशल्य समजले. राहुरी कॅम्पसवर होस्टेल्स, शेतकरी निवास, स्टाफ क्वार्टर्स, प्रयोगशाळा बांधल्या. सर्व स्टाफचे सांस्कृतिक, शैक्षणिक कार्यक्रम भरविण्याची प्रथा सुरू केली. विद्यापीठाचे प्रसार माध्यमांच्या बरोबर चांगले संबंध होते त्यामुळे विद्यापीठाची प्रतिमा सर्वदा चांगली होती. सरांच्या काळात भाजीपाला तंत्रज्ञान प्रकल्प, फुले ड्रिक्स, संकरीत गाई, जैविक कीड नियंत्रण अशा विविध प्रकल्पांमुळे विद्यापीठाला गौरवाचे नाव मिळवून दिले. विद्यापीठ प्रगतीच्या शिखरावर असताना डिसेंबर २००३ मध्ये मी सेवानिवृत्त झालो. महात्मा फुले कृषि विद्यापीठाच्या तीस वर्षांच्या काळात खूप मोठ्या मान्यवरांच्या हाताखाली काम केले, त्यांचे मार्गदर्शन मिळाले, आभाळाएवढ्या उंचीचे कुलगुरू, आंतरराष्ट्रीय कीर्तीच्या शास्त्रज्ञांच्या बरोबर काम करण्याची संधी मिळाली. सहकाऱ्यांना मार्गदर्शन करता आले. निवृत्तीनंतरच्या काळात अनेक चांगला घटना आजही आठवतात. तो विद्यापीठाचा सुवर्णकाळ होता असेच म्हणावेसे वाटते.



MPKV Outreach Programmes : Glimpses of Learning Experiences

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I have a special association with the Mahatma Phule Krishi Vidyapeeth, Rahuri, a premier agricultural university of Maharashtra. It dates back to 1978, when I completed my graduation from the historical College of Agriculture, Pune, one of the constituent colleges of MPKV,

Rahuri. Later I did my post graduation and Ph. D. from NDRI, Karnal. Thereafter, I joined the Agriculture Research Service (ARS) of ICAR and served at Jodhpur, Simla. But my bonding with the Mahatma Phule Krishi Vidyapeeth continued as I have joined the university services as a Professor of Agriculture Extension at College of Agriculture, Dhule in 1994. I served there upto 1996, as I was selected as a Head, Department of Extension Education at Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli and further as a Director of Extension Education in 2001. Again I could serve MPKV as a Director of Extension Education from 2005. Subsequently due to manifold innovative imitatives for implementation of technology application, I was selected to the highest position of Deputy Director General (Agricultural Extension), ICAR, New Delhi in 2009. Fortunately, during my tenure as DDG (AE), ICAR this university established three additional KVKs under the jurisdiction of MPKV, Rahuri at Mohol (Solapur), Borgaon (Satara) and Mamurabad Farm (Jalgaon) in the year 2011-12. Through this article, I am sharing my experiences and memories of this great university.

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, the 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), Communication Centre (01), Regional Extension Centres (04), District Extension Centres (05), Krishi Vigyan Kendras (17) and College Extension Blocks (03) performs this pivotal activity by organizing on campus and off campus extension programmes *viz.*, Training programmes, FLDs, Farmers Rallies, Field Visits, Diagnostic Team Visits, On Farm Trials, Exhibitions, Field days etc. for transfer of technologies and collecting feed back.

Some of the innovative extension activities initiated by the university during my serving period are discussed below.

Farmer-Scientist e-Dialogue Activity

The Farmer-Scientist e-Dialogue activity was inaugurated at the Agricultural Technology Information Centre (ATIC) of Mahatma Phule Krishi Vidyapeeth, Rahuri on the occasion of Republic Day, 26th January, 2006. In the first phase seven villages were linked to the University, while, in the next phase forty villages were linked in collaboration with the N-logue Communications. The farmers of these villages got an opportunity to have face-to-face interaction with the University scientists through the Chirag Service Centres (Kiosks). Scientists guided



the farmers especially on the pest, diseases of crops by using as per the samples on the monitor shown in front of web-camera by the farmers. This service was available in a week from Monday to Friday from 14.00 to 17.00 hrs. for the farmers.

Farmers-Scientists Forum

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. The concept was put forward by the then Vice Chancellor Dr. R. B. Deshmukh and it has got a tremendous response from the farmers. Besides, operational problems in adoption of these technologies were identified and accordingly the technology was refined, updated so that it will be accepted and farmers will be empowered with the technology. The member farmers of these Farmers-Scientists Forums were developed as a model for the village and thus, these farmers would serve as farm-leaders to disseminate the technology



to other farmers in the area. Since the scientists involved in technology transfer, they will get first hand information about the feedback of the technology, which will help the scientists for refinement, and also to plan need based research programme. Moreover, these farmers are expected to be the partner in conducting research and thus, participatory research model is being promoted through Farmers-Scientists Forum. Total 42 Farmers-Scientists Forums are established in the jurisdiction of the University and 1650 farmers have been registered as members. The FSF was inaugurated during October 11, 2005 in the Agro-Technology Week organized in the university.

Historical Agro-Technology Week, 2005

The Agro-Technology Week, 2005, a mega event was organized at the Central Campus, Rahuri during 10th to 14th October, 2005. The main objective behind organizing this event was to demonstrate the farm technologies generated by the University to the farming community of



the region. The Agro-Technology Week had important components like the Live Demonstrations on an area of 100 acres farm demonstrating more than 100 varieties of different crops and technologies, visit to the University Research Farms on 1600 acre area, Agro-Technology Exhibition comprising of 241 pre-fabricated stalls and technical sessions on Horticulture and Dairy. The event was inaugurated at the hands of Late Vilasrao Deshmukh, former Chief Minister of Maharashtra in presence of Shri. Balasaheb Thorat, former Minister of Agriculture, M.S. and other dignitaries. The concluding programme was organized in presence of Shri. Sharad Pawar, former Union Minister of Agriculture, Govt. of India. The Agro-Technology week organized at the MPKV, Rahuri had a grand success in terms of technology dissemination to the farmers. More than three lakh farmers from the state and surrounding states participated in this event.

International Hi-Tech Agro Week-2007

An International Hi-Tech Agro Week-2007 was organized at the College of Agriculture, Pune during November 17-21, 2007. This mega event was organized by MPKV, Rahuri in collaboration with Sakal Papers Ltd., Pune. The event was inaugurated by Prof. Mohammad Yunis, Noble laureate from Bangladesh. Shri. Sharad Pawar, Hon'ble Union Minister of Agriculture, Govt. of India and other dignitaries were present for the function. The event comprised of an international exhibition, seminars of various topics and live demonstrations on an area of 135 acres of college farm. The event evoked tremendous response as more than five lakh farmers and stakeholders including residents of Pune district participated. This exemplary event was organized in public-private partnership mode.

Mahapic Kharif training programme

Large numbers of Mahapic kharif-2007 training programmes were organized in the jurisdiction of MPKV, Rahuri. These trainings were

aimed to reduce the knowledge deficit and yield gap in agriculture. Districtwise teams were formed for conducting need based training programmes on kharif crops and horticultural crops in coordination with the State Department of Agriculture, M. S. In total 7277 taluka level agril. officers, farmer organizers and progressive farmers were benefited through these trainings programme.

National level Awards to members of Farmer-Scientist Forum

MPKV is making efforts for getting recognition to the achievements of the farmers at national level. The members of the Farmer-Scientist forum, Shri. Sursingrao Pawar (Dist. Ahmednagar) was awarded the Jagjivanram Kisan Award, while, Shri. Vishwasrao Patil (Dist. Jalgaon) was conferred the N. G. Ranga Award for diversified farming by the ICAR, New Delhi. The University recommended the names of the farmers for ICAR awards and they received the same. Shri. Pawar had adopted university technologies on his farm, while, Shri. Patil has a rich experience of organic farming.

Vanmahotsav (Massive Tree Plantation Programme)

Vanmahotsav, a massive tree plantation programme was launched by the University since 2006 on the occasion of birth anniversary of Late Vasantao Naik, Former Chief Minister of Maharashtra State. Various saplings of different species are planted at the central campus and the jurisdiction of the University comprising of ten districts. This include planting of saplings of dryland horticultural crops like mango, tamarind, custard apple, pomegranate, guava, aonla and jamun; medicinal and aromatic plants like mehndi, behda, arjun etc; eco-friendly trees like raintree, peltorum, cassia, bougainvillea etc. The University scientists, officers, staff and students participate in this Vanmahotsav programme. The programme is being implemented in a planned, well-organized manner.



Immediate response to farmers issues

MPKV, Rahuri is on the forefront in addressing the various sensitive issues confronted by the farmers. Farmers-Scientists meetings are



organized and university scientists guide the farmers on control of oily spot and wilt diseases, value addition of pomegranate and other issues. Diagnostic team visits are also conducted by the scientists working at Agril. Technology Information Centre and Regional Extension Centres. The KVK SMS also regularly guide the farmers. MPKV scientists visit the farmers fields and advise them on upcoming problems.

MAGOVA (Retrospection) programme

A programme on MAGOVA (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. During MAGOVA-2016, Phule Krishi Darshani, a mobile app has been launched for the benefit of farmers and other stakeholders.

Implementation of Government of India's programmes

Implemented Government of India's programmes viz., New India Manthan-Sankalp Se Siddhi, Swacha Bharat Abhiyan, Jaljagruti Abhiyan, promotion of bamboo cultivation along with handicraft and art, nutri cereals and Skill India focusing on youth including students so as to inculcate entrepreneurship for self-employment. Similarly, Govt. of Maharashtra's Unnat Sheti-Sammurudha Shetkari Abhiyan was meticulously planned for Kharif 2017 and 2018 in the jurisdiction of MPKV, Rahuri.

Tribal Sub Plan (TSP)

The two projects were sanctioned for up-liftment of the tribal people at Nandurbar district under Tribal Sub Plan (TSP). The project entitled 'Empowerment of Tribal Community of Nandurbar District of Maharashtra State through Vocational Training, Demonstrations and Value Addition' at Regional Extension Centre, Dhule, while, Empowerment



of Tribal Community of Nandurbar District of Maharashtra State through Vocational Training, Demonstrations' at College of Agriculture, Nandurbar. Through this TSP project, demonstrations on onion production technology were organized on 400 acre area in tribal belt.

The University is implementing various activities in the Hon'ble Governor adopted village Bhagdari in Nandurbar district. The Regional Extension Center, Dhule has conducted the PRA and report of the same has been submitted. Further, based on the PRA survey action plan was prepared and emphasis has been given on integrated farming system approach i.e. afforestation-tree plantation (Mango, Sapota, Cashew-6000), quality fodder production (Phule Jaywant -10000 sets) and backyard poultry (Satpuda breed- 4000).

Farmer's Participatory Action Research Programme

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 the 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.

Rashtriya Krishi Vikas Yojana-Transfer of Integrated Crop Management Technologies developed by MPKV, Rahuri

In order to achieve 4% growth rate in agriculture, the project entitled Transfer of Integrated Crop Management Technologies developed by MPKV, Rahuri was sanctioned to the Directorate of Extension Education under the



Rashtriya Krishi Vikas Yojana (RKVY) for the year 2011-14 with total financial outlay of Rs. 7.31 crore. The project was implemented in 10 districts of university jurisdiction through Regional/District Extension Centers, KVK and Agril. Research Station, Niphad. 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 are also taken for implementing the project effectively. Baseline survey of project areas and soil testing of selected farmers has been completed. The technology demonstrations includes Sugarcane + Potato intercropping in Ahmednagar district, Sugarcane intercropping in Pune and Satara districts, Control of white grub and sugarcane production in Kolhapur district, reclamation of saline soil in Sangli district, summer groundnut production technology in Jalgaon district, wheat production technology in Nasik district and Gram production technology in Dhule, Nandurbar and Solapur districts. In all 6187 technology demonstrations, 107 farmers training, 40 officers training and 27 farmers rallies were organized



through RKVY intervention in MPKV jurisdiction through this project.

Climate Change Knowledge Network-Indian Agriculture (CCKN-IA) project

Climate Change Knowledge Network-Indian Agriculture (CCKN-IA) has initiated this process of developing “block level contingency crop plans” in all its implementing states kick starting from Maharashtra. This initiative is first of its kind that has never, ever been put into practice by any other institution except CCKN-IA program in India. 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. This may be the first step to address the pressing need for developing the micro-level plans. In this planning process various stakeholders are involved at State and National Level. GIZ along with national level partners, specifically National Institute for Agricultural Extension Management (MANAGE) has been pursuing this. Central Research Institute for Dryland Agriculture (CRIDA) agreed to support this initiative and provide their experiences and expertise. At the state level particularly in Maharashtra the MPKV, Rahuri took lead with support from Department of Agriculture. In this climate change scenario timely and valid agro climatic technology management information is necessary at the block level. This could be possible in partnership mode involving public, private and non government organizations. The present experience of developing Block Level Contingency Plan (BLCPs) is unique and now in the process of implementation for climate smart agriculture for the benefit of farming community which need to be upscaled within the state and outside the state.

Farmer FIRST project under RKVY

The project entitled Farmer FIRST with budget outlay of Rs



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

ICAR Farmer FIRST programme

The project entitled “Socio-economic Empowerment of Farmers through Farming System Interventions for Sustainable Agriculture Development in Ahmednagar District” under ICAR Farmer FIRST Programme is being implemented by the university since 2016-17. The project focuses on the Integrated Farming System (IFS) modules and is being implemented in Chinchvihire and Kangar villages of Ahmednagar district. Around 750 farm families are involved in this programme. The various IFS components include pulses and cereals production technologies, horticultural crops along with dairy management, farm pond fishery, goatry and backyard poultry. This would lead to increasing crop productivity and income. Dr. A. K. Singh, Deputy Director General (Agril. Extension), Dr. V.P. Chahal, Assistant Director General (Agril.

Extension) and other dignitaries visited Chinchvihire village of ICAR Farmer FIRST programme and applauded the efforts of our university. Further, farmer participants from the project village participated in national seminar at ICAR-NAARM, Hyderabad, Farmers Innovative Meet at Baramati and presented different extension activities of the project. This technology application approach need to be out scaled and up scaled for the benefit of both research and extension system.

Kisan Aadhar Sammelan

Mega events of Kisan Aadhar Sammelan were organized at MPKV, Rahuri during 2017 and 2018. The Kisan Aadhar Sammelan -2017 was organized with the moto on Sankalp Se Siddhhi, Unnat Sheti Samrudha Shetkari. The Kisan Aadhar Sammelan-2017 organized during September 25-29, 2017 comprised of Live Crop Demonstrations, Agriculture Exhibition and Farmers-Scientists Interactions. Similarly, the Kisan Aadhar Sammelan-2018 was organized focusing on Doubling of farmers income by 2022. The event was organized at the MPKV, Rahuri during October 15-18, 2018. Both the events were organized in collaboration with Department of Agriculture, M.S. and Agriculture Technology Management Agency (ATMA), Ahmednagar. Live Crop Demonstrations on 100 acre area, Agriculture Exhibition of 124 stalls, Animal exhibition and Farmers-Scientists Interactions were the attractions of this event. Thousands of farmers visited these events. Further, this event was also organized at the constituent colleges and research stations.

With these learning experiences which provided me lot of happiness while working with all my university colleagues, superiors and all stakeholders including farmers. The University is making concerted extension efforts for the upliftment of farming community. I wish my best compliments for the Golden Jubilee celebrations of this great university.





New India Manthan: Sankalp Se Siddhi, Unnat Sheti: Samruddha Shetkari

Kisan Aadhar Sammelan - 2017

September 25-29, 2017



Doubling of farmers income by 2022
Kisan Aadhar Sammelan - 2018
 October 15-18, 2018





MAGOVA (Retrospection)



NEWS PAPER COVERAGE

अनार से किसानों के आर्थिक स्तर में...

कृषि क्षेत्रात नव्याने संशोधन गरजेचे...

पदवी प्रदान समारंभ - कृषि विद्यापीठात बोटुतना केंद्रीय मंत्री भडकरी बांधे मत इथेनाॅल उत्पादन ठरेल

कृषि तंत्रज्ञानासाठी शेतकऱ्यांनी स्मार्ट व्हावे

गथा, विस्तार शिक्षण संचालक
रण कोकाटे, संशोधन संचालक
द गडाख, अधिष्ठाता डॉ.

कीर्ती जमदाडे, कुलसचिव डॉ. वि.
पवार, नियंत्रक विजय कोते, तह

विद्यापीठ परिसरात सीत

सर्व कर्मचारी त्यांच्याबरोबर
चित्र आहे.

चालक कीर्ती जमल
पवार, नियं

कुलसचिव डॉ. दिलीप होते.
विजय कोते, तहसीलदार विद्यापीठ परिसर

अधिकारी पंडित लोणारे आतां नोटाव्यत होते.
विद्यापीठ परिसरात सीताफळ, ग्रॉन कॅम्पस' उपक्रमासा सर्व कर्मचारी त्यांच्याबर् चित्र आहे.



Prestigious Awards to MPKV



Sardar Patel Best Institution Award 2002



All India ICAR-JRF 2009 Third Position



Priyadarshani Award 1992



Recognition Award for land mark groundnut variety Phule Pragati 2017



Appreciation Award for registration of maximum number of extant varieties with PPV& FRA, New Delhi 2016



Dalimb Ratna Award 2017

Economic Impact of MPKV Varieties

Crop	Variety (Duration)	Gross Returns (₹ crores)	Gross Returns (₹ crores/year)
Sugarcane	CO 86032 (1995 to 2017)	34913	1587
	COM 265 (2008 to 2017)	5296	588
	Sub - total	40209	2175
Pomegranate	Bhagwa and Phule Bhagwa Super (2004 to 2017)	21427	974
Chickpea	Vikas, Vishwas, Vijay, Digvijay and Vikram (1980 to 2017)	13423	353
Rabi Sorghum	Phule Vasudha, Phule Revati and Phule Suchitra (2007 to 2017)	8482	771
Onion	Phule Samarth and Baswant 780 (2003 to 2017)	7565	533
Paddy	Indrayani and Samrudhi (2003 to 2017)	2578	172
Acid Lime	Sai Sharbati and Phule Sharbati (1995 to 2017)	935	41
Pearl millet	Dhanshakti (2012 to 2017)	220	31
Grand Total		94,839	5050

EPILOGUE

This is the fifty years of glorious journey of Mahatma Phule Krishi Vidyapeeth, Rahuri. It is the effort of past and present Vice Chancellors, Directors, officers, staff and students. The university has made a spectacular progress in achieving its mandatory goals of education, research and extension over the last fifty years.

MPKV has developed competent human resource and skill development in the field of agriculture and allied sectors. Since inception, MPKV has produced 1,10,322 skilled human resources.

The university has released 255 varieties of different crops, 1471 research recommendations and technologies and 35 farm implements for the benefit of farming community. The impact of eight important crops varieties is estimated to the tune of Rs. 94,839 crores in the agricultural economy of Maharashtra.

MPKV is in the forefront for implementing innovative extension approaches and methodologies for reaching the unreached and pioneered the new concepts in implementing viz., Farmer FIRST, Farmer-Scientist Forum, Technology Week including *Kisan Aadhar Sammelan*.

In the quest to excel at international level we need to join hands and take efforts for better future of our farmers.



♦ Aerial View of PGI Farm , MPKV, Rahuri

