# 48<sup>th</sup> ANNUAL REPORT 2019-20





Vasantrao Naik Marathwada Krishi Vidyapeeth Parbhani - 431 402 (Maharashtra)

### **GLIMPSES**



22<sup>nd</sup> National Conference of Maharashtra Society of Agricultural Economics

Dr. Ashok Dalwai, Chief Executive Officer, National Rainfed Area Authority, New Delhi, Dr. Ashok Dhawan, Hon.Vice-Chancellor, Shri. Pasha Patel, President, APC, GOM, Dr. D.N. Gokhale, Dr. D.P. Waskar, Dr. D.B. Deosarkar



### PoCRA Workshop

Dr. Ashok Dhawan, Hon.Vice-Chancellor, Dr. Vilas Bhale, Hon.Vice-Chancellor, Dr.PDKV, Akola, Shri. Vikaschandra Rastogi, Project Director, PoCRA, Mumbai, Dr. G. Ravindra Chary, Director, ICAR-CRIDA, Hyderabad, Dr. Pradeep Ingole, Director Extension Education



### International Workshop on Digital Agriculture

Dr. Ashok Dhawan, Hon.Vice-Chancellor, Shri. Avinash Shirode, National Space Society (USA), Dr. Siva Balasundaram, University of Putra, Malaysia, Dr. D.N. Gokhale, Dr. D.P. Waskar, Dr. U.M. Khodke, Dr. G.U. Shinde

# 48<sup>th</sup> ANNUAL REPORT 2019-20



Vasantrao Naik Marathwada Krishi Vidyapeeth Parbhani - 431 402 (Maharashtra)

# 48<sup>th</sup> ANNUAL REPORT 2019-20

## **Annual Report Editorial Committee**

Dr. Dattaprasad Waskar
Dr. Madan Pendke
: Director of Research
: Research Editor

Dr. Ashok Jadhav
Dr. Gajendra Londhe
Dr. Digambar Perke

Dy. Director Research (Crops)
Dy. Director Research (AHDS)
Dy. Director Research (Ag. Econ.)

## **Published By**

Shri. Ranjeet Patil Registrar, VNMKV, Parbhani

### Printed at

Omkar Graphics Parbhani



**Dr. Ashok Dhawan**Vice-Chancellor
Vasantrao Naik Marathwada Krishi Vidyapeeth
Parbhani

# **PREFACE**

I have a great pleasure in presenting 48<sup>th</sup> Annual Report of Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani. The significant contributions of the University in the field of education, research and extension during 2019-20 are presented in concise form.

VNMKV is focusing to enhance the farmer's income through many interventions based on the basic and applied research. VNMKV is functioning in all the eight domain districts of Marathwada region through dissemination of modern technologies. Based on the agro-climatic conditions, farmer's need of the region and focusing the climate vulnerability, the University has developed many new varieties of various field and horticultural crops with reference to high production potential & quality aspects. New farm implements are designed. The University has made significant contributions in the field of Natural Resource Management. University has signed MoU with MAHABEEJ for conversation of cotton varieties in to Bt and decision has been taken for the demonstrations on the University Farm. In near future, Bt cotton varieties will be available to farming community. The large amount of seed was distributed to the farmers during University Foundation Day i.e. on 18<sup>th</sup> May.

Education in VNMKV is continuously monitored and reoriented with international collaborations wherever possible to meet the local needs. University is taking efforts to develop self-confidence in the students and innovative thinking to meet the national and global challenges. Students participated in tree plantation programme and 'Swachchha Bharat Abhiyan' through NSS programme, the sports meet and cultural events were organized for the students during this period.

University is actively involved in the transfer of improved and advanced technologies to farming community through a very effective extension system and demonstrations on farmers' fields were also organized. University organized the farmers rallies on 18<sup>th</sup> May, 17<sup>th</sup> September and 3<sup>rd</sup> January and crop specific advices were given to the farming community.

I express my sincere thanks to Government of Maharashtra, Government of India, Indian Council of Agricultural Research, New Delhi and other National / International Funding Agencies for their generous support. I would like to place on record the efforts taken by all my university colleagues without whose tireless efforts, the achievements of Vasantrao Naik Marathwada Krishi Vidyapeeth would not have been possible.

I wish to compliment Dr. D.P. Waskar, Director of Research & his team and Dr. D.B. Deosarkar, Director of Extension Education for bringing out this document in presentable form. I am sure that all our stakeholders would be benefited by the information given in this annual report.

Ashok S. Dhawan Vice-Chancellor



**Shri. Bhagat Singh Koshyari** Hon. Chancellor & Governor of Maharashtra



**Shri. Uddhav Balasaheb Thackeray** Hon. Chief Minister of Maharashtra



**Shri. Dadaji Bhuse** Hon. Agril. Minister of Maharashtra



**Shri. Vishwajeet Kadam** Hon. Agril. Minister (State) of Maharashtra



**Shri. Haribhau Jawale** Hon. Vice Chairman, MCAER, Pune



**Dr. Ashok S. Dhawan** Hon.Vice Chancellor, VNMKV, Parbhani

Executive Council Members 2019-20 Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani

Sr. No.	Name	Address	
1	Dr. Ashok S. Dhawan	Vice Chancellor, VNMKV, Parbhani	Chairman
2	Shri.Satish Bhanudasrao Chavan	Member of Legislative Council Plot No. 10 Supriya, Jyoti Nagar, New Osmanpura, Aurangabad- 431 005	Member
3	Shri. Vinayak Mete	Member of Legislative Council, Tukai Niwas, Tirupati Nagar, Barshi Road, Beed	Member
4	Dr.Rahul Patil	Member of Legislative Assembly Torna, House no 138, Near Swami Samarth Temple, Shiwaji Nagar, Parbhani	Member
5	Shri. Santosh Danawe	Member of Legislative Assembly Shiwaji Nagar, New Bhokardan, Dist. Jalna	Member
6	Dr.S.T.Borikar	102, Amogh Building, Saraswati Nagar, Parbhani	Member
7	Director Agriculture (Extension and Training)	Commissionerate of Agriculture, Central Building, Pune	Member
8	Divisional Assistant Commissioner (Animal Husbandry)	Khadkeshwar, Pune	Member
9	Director ( Horticulture)	Govt. of Maharashtra, Narvir Tanaji Wadi, Shiwaji Nagar, Pune	Member
10	Chief Conservator	Chief Conservation of Forest, Osmanpura, Aurangabad	Member
11	Divisional Deputy Commissioner (Fisheries)	Office of the Fisheries, Govt. of Maharashtra, Near Collector Office, Aurangabad	Member
12	Divisional Dairy Development Officer	Office of the Divisional Dairy Development Jalna Road Aurangabad	Member
13	Dr.P.G. Patil	Director, ICAR-CIRCOT, Matunga, Mumbai	Member
14	Sh. Limbajirao Bhosale	Progressive Farmer	Member
15	Sh. Ajay Vijayrao Gavhane	Progressive Farmer	Member
16	Sh. Balajirao Ramrao Desai	Progressive Farmer	Member
17	Sh.Sharad Sakharamji Hiwale	Progressive Farmer	Member
18	Sau. Pavitrabai Satyawan Surwase		
19	Dr.Adititai Subhashchandra Sarda	itai Subhashchandra Sarda Agricultural Entrepreneur	
20	Dr. D.N. Gokhale	Director of Instruction and Dean, VNMKV, Parbhani	Member
21	Dr. D.P. Waskar	D.P. Waskar Director of Research, VNMKV, Parbhani	
22	Shri. N.S. Rathod	Comptroller, VNMKV, Parbhani	Invited Member
23	Shri. Ranjeet Patil	Registrar, VNMKV, Parbhani	Member secretary

# **Content**

Sr.No.	Particulars	Page No.
1	Introduction	1
2	Education	3
3	University Library	12
4	Student Welfare	14
5	Research	17
6	Research findings 2019	20
7	Organization of Seminar / Workshop / Trainings	31
8	Memorandum of Understanding (MoU)	37
9	Seed Production	39
10	Planting material developed and sale	40
11	Product testing details	42
12	Awards / recognitions	43
13	Extension Education	47
14	Agricultural Technology Information Centre (ATIC	) 51
15	University Administration	55
16	University Finance	61
17	University Engineer	64

# INTRODUCTION

Vasantrao Naik Marathwada Krishi Vidyapeeth was established on 18th May, 1972 by the Government of Maharashtra to fulfil the needs of Agricultural education, aspirations of the people of Marathwada region and to cater the needs of farmers leading to comprehensive agricultural development of eight districts of Marathwada region. This is one of the four Agricultural Universities in the state of Maharashtra. The entire region has rural setting. The objectives of the University include education in agriculture and allied sciences, research based on regional needs and technology transfer.

Marathwada region of Maharashtra state is comprised of 8 districts. The region lies between 17° 35' to 20° 40' N latitude and 74° 40' to 78° 16' E longitude. The altitude ranges between 300 to 900 m above mean sea level. The total geographical area of the region is 64.5 lakh ha with 57 lakh ha suitable for agriculture. However, net sown area is only 75 per cent of the total geographical area. The climate of Marathwada experience wide inter district and intra district variability. The region receives annual rainfall in the range of 500 to 1100 mm and comes under assured rainfall zone (60%), moderately high rainfall zone (20%) and scarcity zone (20%). The agricultural production in Marathwada region of Maharashtra State is limited primarily by erratic nature of the monsoon rains. The soils in the region are deep black, medium black, coarse and shallow The major crops grown in the area are cotton, soybean, pigeonpea and sorghum.

Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani imparts education leading to undergraduate and post graduate degree programmes under the faculties of Agriculture, Food Technology, Agricultural Engineering, Community Science, Agricultural Business Management and Agricultural Biotechnology. Agricultural colleges which are located at Parbhani, Latur, Ambajogai, Badnapur, Osmanabad and Golegaon. Agricultural Engineering, Food Technology and Community Science Colleges are located at Parbhani. Vilasrao Deshmukh College of Agricultural Biotechnology is located at Latur while Post Graduate Institute of Agril. Business Management is located at Chakur. The University has extended affiliation to 43 private non granted colleges. As per the V<sup>th</sup> Dean's Committee's recommendation, this university has launched six Experiential Learning Projects in Food Processing, Human Development, Dairy Science, Horticulture and Soil Science to provide hands on experiences for developing professionalism in UG students.

Four Krishi Vigyan Kendras located at Aurangabad, Tuljapur, Khamgaon and Badnapur are under the direct control of the University to demonstrate the various improved and advanced agricultural and allied technologies on farmers field for its wide scale adoption. The KVKs also impart training programmes to farmers on various agricultural practices for enhancing the crop productivity and impart knowledge on rainwater conservation and and its reutilization.

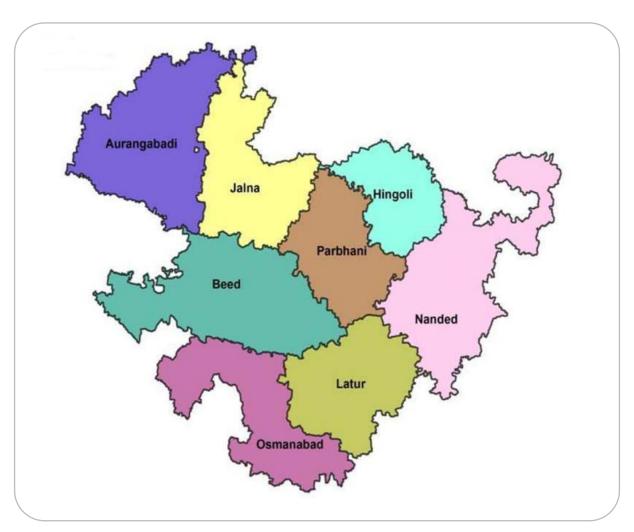
There are 9 constituent and 24 private Agricultural Technical Schools in which two years Marathi medium Agri. Tech. diploma is running. Private non aided28 Agricultural Polytechnics are running in which three years semi English Diploma in Agricultural Technology is running.

University draws financial support from the State Government, ICAR (Plan and Non- plan) and other funding agencies. The University has entered into MoU with reputed institutes like ICRISAT, Hyderabad; NIPHM, Hyderabad, CICR, Nagpur; IIMR, Hyderabad; ISRO, Bangalore; IARI, New Delhi; NCIPM, New Delhi; TERI, Mumbai, BARC, Mumbai; CRIDA, Hyderabad; National Research Development Corporation,

New Delhi, National Bureau for Plant Genetic Resources, New Delhi, Mahyco, Jalna; Barwale Research Foundation, Hyderabad; CCMB, Hyderabad for funding Post Graduate Research, patenting, bio-technological applications, etc. The university also entered into MoU with Maharashtra State Seed Corporation (MAHABEEJ), Akola for seed production of various crops and its varieties. Similarly, university has made MoA with some industries for manufacturing of farm implements which were developed by the University. VNMKV has 3906 ha land being utilized for research, higher and lower education and seed production programmes. The central farm has four major blocks with 1893 ha land.

The VNMKV is a accredited University and placed in 'B' grade. The constituent UG, PG and Ph.D. programmes in various faculties are accredited by Peer Review Team of ICAR New Delhi for next five years.

The 48<sup>th</sup> Annual Report of Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani includes the information on education, research and extension education activities carried out during 1<sup>st</sup> April, 2019 to 31<sup>st</sup> March, 2020.



Jurisdiction of VNMKV, Parbhani in Maharashtra

# **EDUCATION**

Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani is imparting education in the following under graduate and post graduate programmes.

### A) Under-graduate Degree Programme

- 1. B.Sc. (Agri.)
- 2. B.Sc. (Hort.)
- 3. B.Sc. (Community Science)
- 4. B.Sc. (Agril. Bio-Tech.)
- 5. B.Sc. (Agri.Business Management)
- 6. B.Tech. (Agril.Engineering)
- 7. B.Tech. (Food Technology)

### B) Post-graduate Degree Programme

- 1. M.Sc. (Agri)
- 2. M.Sc. (Hort)
- 3. M.Sc. (Community Science)
- 4. M.Sc. (Agril. Bio-Tech.)
- 5. M.Tech. (Agril. Engineering)
- 6. M.Tech. (Food Technology)
- 7. M.BA(Agri.)
- 8. Ph.D. (Agri.)
- 9. Ph.D. (Community Science)
- 10. Ph.D. (Agril. Engineering)
- 11. Ph.D. (Food Technology)





### **Under-graduate / Post Graduate degree programme**

During the report period, number of students admitted and passed out for various UG and PG/Ph.D. programmes are as under:

# **Constituent Colleges**

Sr.	Name of the College	Year of	Studentintake Capacity		
No.		Est.	UG	PG	Ph.D.
1	College of Agriculture, Parbhani	1956	210	134	33
2	College of Agriculture, Latur	1987	94	108	
3	College of Agriculture, Osmanabad	2000	60	-	-
4	College of Agriculture, Ambajogai	2000	60	-	-
5	College of Agriculture, Badnapur	2000	60	36	-
6	College of Agriculture, Golegaon		60	-	-
7	College of Horticulture, Parbhani	1984	40	-	-
8	College of Food Technology, Parbhani	1976	64	15	05
9	College of Agril. Eng g.& Tech . Parbhani	1986	64	08	04
10	College of Community Science, Parbhani	1976	40	12	02
11	Vilasrao Deshmukh College of Agri Biotechnology, Latur	2006	40	08	-
12	Post Graduate Institute of Agri. Business Management, Chakur  2009		-	35	-
	Total		792	356	42





# **Non Granted Affiliated Colleges (Agriculture)**

Sr. No.	Name of the College	Year of Est.	Student intake Capacity UG
1	College of Agriculture, Naigaon Bazar, Dist. Nanded	2002-03	60 + 60
2	Aditya College of Agriculture, Beed	2002-03	60 + 60 + 60
3	Dadasaheb Patil College of Agriculture, Dahegaon, Tq. Vaijapur, Dist. Aurangabad	2002-03	60 + 60
4	Rajiv Gandhi College of Agriculture, Parbhani	2002 -03	60 + 60

_	Chlodronti Cholm Dhulo Amboodhan Collogo of Amirelton Arti	2004 05	60 + 60
5	Chhatrapti Shahu Phule Ambaedkar College of Agriculture, Asti	2004-05	60 + 60
6	College of Agriculture, Kanchanwadi, Aurangabad	2006-07	60 + 60 + 60
7	College of Agriculture, Kharpudi, Jalna	2008-09	60 + 60
8	College of Agriculture, Dongarshelki tanda, Udgir, Dist. Latur	2008-09	60 + 60
9	College of Agriculture, Nehrunagar Nagalgaon Tq. Khandhar,	2008-09	60 + 60
10	College of Agriculture, Tondapur, Post Waranaga Phata Dist. Hingoli	2008-09	60 + 60
11	College of Agriculture, Georai Tanda, Aurangabad	2008-09	60 + 60
12	Netaji Subhashchandra Bose College of Agriculture, Markhel, Dist. Nanded	2010-11	60 + 60
13	College of Agriculture, Selu, Dist. Parbhani	2010-11	60 + 60
14	College of Agriculture, Pathri, Dist. Parbhani		60 + 60
15	College of Agriculture, Khandala, Tq. Vaijapur, Dist. Aurangabad		60 + 60
16	Late Ambadasrao Warpudkar College of Agriculture, Warpud, Dist. Parbhani		60
17	Mahatma Gandhi Mission College of Agriculture, Gandheli, Aurangabad	2012-13	60 + 60
18	College of Agriculture, Navha, Tq. & Dist. Jalna	2014-15	60
19	KSK College of Agriculture, Rajuri Navgan, Beed		60
20	College of Agriculture, Alni Gadhpati, Osmanabad		60
21	College of Agriculture, Pathri. Tq. Phulambri. Dist. Aurangabad	2015-16	60
		Total	2340

## **Non Granted Affiliated Colleges (Food Technology)**

Sr. No.	Name of the College		Student intake Capacity UG
1	College of Food Technology, Rajuri Navgan Dist. Beed	2004-05	40 + 40
2	Aditya College of Food Technology, Beed	2004-05	40 + 40
3	Rajiv Gandhi College of Food Technology, Parbhani	2004-05	
4	QEENS College of Food Technology, Aurang abad	2006-07	40 + 40
5	College of Food Technology, Naigaon Dist. Nanded	2008-09	40 + 40
6	Mahatma Gandhi Mission College of Food Technology, Aurangabad	2008-09	40 + 40
7	College of Food Technology, Loni, Tq. Udgir, Dist Latur		40 + 40
8	MIT College of Food Technology, Aundha Nagnath, Dist. Hingoli		40
9	MIT College of Food Technology, Aurangabad 20		40
10	College of Food Technology, Georai Tanda, Aurangabad	2014-15	40
11	College of Food Technology, Nehru nagar Nagalgaon, Tq. Kandhar, Dist. Nanded	2015-16	40
12	College of Food Technology, Ashti, Dist. Beed		40
13	Loknete Gopinathrao Munde College of Food Technology, Lodga, Tq. Ausa Dist. Latur		40
		Total	860

### Non Granted Affiliated Colleges (Agriculture Bio-Technology)

Sr. No.	Name of the College	Year of Est.	Student intake Capacity
140.		ESt.	UG
1	Mahatma Gandhi College of Agricultural Bio-Technology, Pokharni, Dist. Nanded	2004-05	40 + 40
2	College of Agricultural Bio -Technology, Gaorai Tanda, Aurangabad		40 + 40
3	Mahatma Gandhi Mission College of Agricultural Bio-Technology, Gandheli, Aurangabad	2004-05	40 + 40
4	Aditya College of Agricultural Bio-Technology, Telgaon Road, Beed	2008-09	40 + 40
5	College of Agricultural Bio -Technology, Hatta, Tq. Basmat	2008-09	40 + 40
		Total	400

### Non Granted Affiliated Colleges (Agriculture Business Management)

Sr. No.	Name of the College	Year of Est.	Student intake Capacity UG
1	Post Graduate Institute of Agricultural Business Management, Latur	2004-05	40 + 40
		Total	80

### Non Granted Affiliated Colleges (Agricultural Engineering & Technology)

Sr. No.	Name of the College	Year of Est.	Student intake Capacity UG
1	Aditya College of Agricultural Engineering & Technology, Beed	2004-05	40 + 40
2	Sir Chhoturam College of Agricultural Engineering & Technology, Lodga, Dist. Latur	2014-15	40 + 40
5	5 College of Agricultural Engineering & Technology, Nehrunagar, Nagfalgaon, Dist. Nanded		40
		Total	200

### Faculty wise number of students completed the degrees during 2019-20

Sr.No.	Course Name	No. of students			
Ph.D. C	Ph.D. Courses				
1	Ph. D. (Agri.)	43			
2	Ph. D. (Home Science)	03			
3	Ph. D. (Food Tech.)	03			
4	Ph. D. (Agril. Engg.)	03			
	Total A	52			

PG Cor	PG Courses			
1	M.Sc. (Agri.)	225		
2	M.Sc. (Hort.)	35		
3	M.Sc. (Home Science)	11		
4	M.Tech. (Food Tech.)	17		
5	M.Tech. (Agril. Engg.)	08		
6	M.B.A. (Agril.Business Management)	24		
7	M.Sc. (Agri. Bio. Tech.)	13		
	Total B			
U.G.Co	U.G.Courses			
1	B.Sc. (Agri.)	2041		
2	B.Sc. (Hort.)	26		
3	B.Sc. (Home Science)	26		
4	B.Sc. (Agril Bio . Tech.)	301		
5	B.Tech. (Food Tech.)	551		
6	B.Tech. (Agril.Engg)	149		
7	B.B.A. (Agri.)	51		
	Total C	3145		
	Grand Total: A+ B+ C	3530		





Felicitation of Students for the Achievements





Practical Training to Students (RAWE)



Practical Training to Students (RAWE)



Yoga Day



Welcome Programme of First Year Students



**Books Exhibition for Students** 



NSS Camp



Special Guidance for Employment



Students Training Programme



Training to Women Farmer









Inter University Employee Sports Meet - 2020



Teachers Empowerment Programme



Training to Women Farmer

### **Lower Agricultural Education**

There are 9 constituent and 24 private Agricultural Technical Schools in which two years Marathi medium Agri. Tech. diploma is running. Private non aided28 Agricultural Polytechnics are running in which three years semi English Diploma in Agricultural Technology is running. The annual intake of the schools is 3660. The students passed 10<sup>th</sup> standard are qualified to apply for it. These schools provide trained manpower for gross root work. Total 46841 students have completed this diploma course.

### Number of candidates admitted and passed out during the year 2019-20

Sr. No.	Course	No. of students admitted	No. of students passed out in diploma/ Certificate Course
1	Agriculture Technical diploma	2576	462
2	Diploma in Agriculture Technology (Polytechnic)	138	344
3	Mali Training Certificate Course	37	34

### Centre of Excellence on Digital Farming at VNMKV

ICAR, New Delhi sanctioned Centre for Advanced Agricultural Science and Technology (CAAST) on Digital Farming solutions for Enhancing Productivity by Robots, Drones and AGVs under NAHEP to VNMKV, Parbhani. World Bank and Govt. of India provided funds of Rs. 18.00 Crores for the project for the next 3 years. The project was inaugurated on 4<sup>th</sup> September 2019 at the auspicious hands of Dr. P.K. Ghosh, National Coordinator (CAAST), NAHEP, ICAR, New Delhi. The function was presided over by Hon. Vice Chancellor Dr. A.S. Dhawan, Dr. Prabhat Kumar, National Coordinator (M&E), NAHEP, Dr. V.K. Tiwari, IIT, Kharagpur and Dr. Amit Arora, IIT, Pawai. Dr. Gopal Shinde is a Principal Investigator for this project.



### **University Library**

The University Library building is situated at center place in University campus. This library provides Library and information services to five colleges and all research centers in the campus. This is the single library to support the entire teaching, research and extension activities under this university and organizing a sound library complex on the main campus and linking it with outside research stations, colleges and lower education, also networking local and national network for information resources. Presently, this library is providing information network and CAB-CD ROM, Agris, FSTA CD ROM, EBSCO's Academic search premier CD-ROM database facility and openj-gate, cera.jccc.in, indiastat.com service for information services.

### **Reading material**

(a) Books : 87591
(b) Back volumes of periodicals : 17142
(c) Theses, dissertations : 9016
Total collection : 113749

### **Journals**

(a) Journals subscribed : 33
 (b) Journals on gratis : 105
 Total journals : 138

### **Library Membership**

(a) Students : 3654
 (b) Teaching and Other staff : 536
 (c) Temporary members : 230
 Total Library Members : 4420

### e-Resources

Cera e-journals: 3162

J-gate agricultural and biological sciences e journals: 2880

Diva enterprises e-journals: 100

Subscribed e-books: 70 I-scholar e-journals: 17 Total e-journals: 6142

Indiaagristat.com-website providing statistical information

### Following Databases are available in the University Library:

### **CAB-CD ROM (Coverage: 1989-2012)**

• It is equivalent of CAB Abstracts, covers all aspects of agriculture, forestry and allied disciplines. The database contains over 4 million bibliographic records with abstracts in English from papers originally published in 74 languages. Eighty per cent of the Agriculture literature is covered by the CD.

### **AGRIS (Coverage: 1999-2000)**

Covers all aspects of agricultural science and technology with 135 participating countries and 24 regional/international centers, AGRIS is based on the world's most extensive network for the compilation of bibliographic data. The network is coordinated by the Food and Agriculture Organization (F.A.O.) of the U.N.

### **Computerized documentation and Information Service:**

In the University Library at present, there are three Servers, 21 PCs, Nine printers, three scanners and Commonwealth Agricultural Bureaux CD-ROM database, AgrisCD-ROM database, Food Science and Technology Abstracts CD-ROM database, EBSCO Academic search premier CD-ROM database, Ph.D. Thesis database and JCC and cera.jccc.in, krishiprabha, openj-gate, Indiastat.com databases are available. Indices and Abstracts can be provided on Agriculture and related subjects by these databases. Full text papers are also available in some of the above databases. Researchers are provided documentation and information service by these databases. Subject-wise Indices and Abstracts are provided by printing on printer.

Two 5 KVA UPS and one 10 KVA areavailable for back-up at the time electricity breakup. Training DVDs procured are helpful for students / faculty members.

Apart from this, internet, e-mail, OPAC, document delivery service, prevalent information dissemination service and other network services are made available to library members. For internet, intranet, CD-ROM browsing services are available at free of cost for the all readers. Daily on an average 100 readers use all the above mentioned information services. For computerizing the library services i.e. circulation, cataloguing etc, SLIM-21 software has been purchased and work on the software has been started and connected with all components of RFID

### **Digital Library Section:**

University Librarian has purchased Digital library solution server for creating Digital library and to provide the facility to the users throughout the campus. Digital library section also provides Audio Visual Facility to the library users, university librarian purchased 76 training programme DVD's from national education and information films ltd., Mumbai.



### Students' Welfare

The Students Welfare Office is one of the constituent office working under VNMKV, Parbhani with a prime object for overall development of University Students. This office is mainly engaged in overall development of University students and organizing Programmes like Sports meet, Youth festival and National Service Scheme to develop sports skills and platform for talent in cultural and leadership in students.

- **Gymnasium :** For good health of the students, well equipped gymnasium is available in this office. The instruments like single station gym along with 31 machineries and weight lifting instruments are provided in gymnasium hall.
- **Play Grounds:** In University sports complex, outdoor and indoor ground facilities for the students are available for Inter collegiate Sports Meet for students.
- Outdoor games facilities: Two basketball courts, one 400 X 10 M running track, 4 play grounds of Volleyball, Kho-Kho and Kabaddi are available in the sports complex.
- Indoor games facilities: Two Wooden Badminton courts and 4 Table tennis tables are available.
- Youth Festival: Foryouth festival, cultural hall along with all necessary facilities are available.
- Sports Meet Organization:

In 2019-20 Inter Collegiate tournaments for various games were organized for selection of University teams for various games to represent the University in Inter University Tournament.

• West Zone Inter University Tournament:

The following V.N.M.K.V. teams have participated during 2019-20 in West Zone Inter University tournaments held at different universities.

Sr. No.	Sports Meet	<b>University Name</b>	Men	Women	Total
1.	Wood ball	Chandigarh University, Mohali (Panjab)	02		02
2.	Archery	Kalinga Institute of Industrial Technology, Bhuvneshwar (Odisa)	03		03
3.	Badminton	S.R.T. University, Nanded	06		06

### Woodball Tournament VNMKV, Parbhani win Silver Medal.

### Krida Mahotsav 2019

The Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani teams participated in Kabaddi (Men/Women), Kho-Kho (Men), Volleyball (Men/Women), Basketball (Men), Handball (Men) in Maharashtra State Inter University Sports Meet Krida Mahotsav-2019 held at Punyashlok Aahilayabai Holkar Solapur University, Solapur during 26<sup>th</sup> Dec. to 30<sup>th</sup>Dec., 2019. The University contingent of 84 Players.

Sr.No.	Name of the Games	Men	Women	Total
1	Kabaddi	12	12	24
2	Volley Ball	12	12	24
3	Kho-Kho	12	-	12
4	Baskeball	12	-	12
5	Handball	12	-	12
	Total	60	24	60

### **Youth Festival**

Inter Collegiate Youth Festival was conducted for selection of university teams to represent the university teams in various inter university youth festival. The university contingent of 09 members has participated in Maharashtra State Inter University youth festival "*Indradhanushya*" held at Gondwana University, Gadchiroli during 02/12/2019 to 06/12/2019. The University contingent of 09 Participants, 2 Team Managers. The VNMKV, Parbhani win the Rangoli- Gold Medal in *Indradhanushya* Youth Festival-2019. The West Zone Inter University Youth Festival was organized during 27/12/2019 to 31/12/2019 at UKA Tarsadia University, Bardoli Dist. Surat.

### All India Inter Agril. University Youth Festival

The university contingent of 27 Participants, 02 Team Manager and 05 accompanists has participated in All India Inter Agril. University Youth Festival held at **Indira Gandhi Krishi Vishwa Vidyalaya, Raipur,** (**Chhattisgarh**)during 08/02/2020 to 12/02/2020.University team got 1. Poster Making - Gold Medal 2. Rangoli -Gold Medal 3. Cartooning - Silver Medal, 4. Mime –Gold Medal 5. One Act Play -Silver Medal Overall runner in Theater and Fine Art Compitations.

### All India Inter Agril. University Sports Meet

The university contingent of 40 Participants accompanists has participated in All India Inter Agril. University Sports Meet held at **Sri. Venkateswara Veterinary University**, **Tirupati (Andhra Pradesh)** during 01/03/2020 to 05/03/2020.

### Kabaddi-Silver Medal

### Avishkar

The university contingent of 08 members and 01 team managers has participated in research festival organized by **Mumbai University**, **Mumbai** during 28/01/2020 to 31/01/2020.

### **National Service Scheme**

During 2018-19, 50 units of NSS with strength of 2800 volunteers were allotted to different 50 colleges. The NSS volunteers of different units have done social works and have organized special camp. One of the Students Shri. Yashdeep Urade participated in Republic Day March Pass of President of India.

### **Celebration of Jayanti**

To develop idealism in the mind of students, this office has organized different *Jayanti* Programmes at University level. This office has celebrated the *Jayanti* Programme of *Chatrapti Shivaji Maharaj* on 19<sup>th</sup> February, 2020.

### Felicitation of University students

In order to inspire the University students, this office has organized the felicitation of students in presence of Dr. Ashok Dhawan Hon. Vice Chancellor VNMKV, Parbhani on 16.08.2019.

# RESEARCH

The following research centers / stations / schemes are functioning in the jurisdiction of Marathwada region for conducting crop oriented research work as per agro-climatic zones.

Sr. No	Name of Research Centre / Scheme	Place	District
1.	Cotton Research Station, Mahboob Baugh Farm	Parbhani	Parbhani
2.	Regional Sugarcane Research Station	Basmatnagar	Hingoli
3.	Agriculture Research Station	Tuljapur	Osmanabad
4.	Bajra Research Station	Vaijapur	Aurangabad
5.	Fruit Research Station, Himayatbagh	Aurangabad	Aurangabad
6.	Agriculture Research Station	Badnapur	Jalna
7.	Cotton Research Station	Nanded	Nanded
8.	Banana Research Station	Nanded	Nanded
9.	Custard Apple Research Station	Ambajogai	Beed
10.	Taluka Seed Farm	Ambajogai	Beed
11.	Oilseeds Research Sub-Station	Ambajogai	Beed
12.	Water Management Research Station	Khamgaon	Beed
13.	Sweet Orange Research Station	Badnapur	Jalna
14.	Agriculture Research Station	Udgir	Latur
15.	Sorghum Research Station	Parbhani	Parbhani
16.	Seed Processing Plant	Parbhani	Parbhani
17.	Oilseeds Research Station	Latur	Latur

Similarly, following 23 All India Coordinated Research Projects are functioning in the University jurisdiction for conducting relevant research works under various crops and resource management

Sr. No	Name of AICRP	Place	District
1.	All India Co-ordinated Sorghum Improvement Project	Parbhani	Parbhani
2.	All India Network Project on Soil Biodiversity-Bio fertilizer (BNF)	Parbhani	Parbhani
3.	AICRP on Water Management	Parbhani	Parbhani
4.	AICRP on Soybean	Parbhani	Parbhani
5.	AICRP on Community Science	Parbhani	Parbhani
6.	AICRP on Long Term Fertilizer Experiment	Parbhani	Parbhani
7.	AICRP on Utilization of Animal Energy with Enhanced System Efficiency (UAE)	Parbhani	Parbhani

8.	AICRP on Arid Legumes	Parbhani	Parbhani
9.	AICRP on Arid Zone Fruits (Custard apple)	Ambajogai	Beed
10.	AICRP on Agricultural Meteorology	Parbhani	Parbhani
11.	AICRP on Oilseeds (Safflower)	Parbhani	Parbhani
12.	AICRP on Dryland Agriculture	Parbhani	Parbhani
13.	AICRP on Chickpea	Badnapur	Jalna
14.	AICRP on Pigeonpea	Badnapur	Jalna
15.	All India Co-ordinated Pearl Millet Improvement Project	Vaijapur	Aurangabad
16.	All India Coordinated Cotton Improvement Project	Nanded	Nanded
17.	AICRP on Sunflower	Latur	Latur
18.	AICRP on Breeder Seed Production	Parbhani	Parbhani
19.	AICRP on Rice	Tuljapur	Tuljapur
20.	AICRP on Integrated Farming Systems	Parbhani	Parbhani
21.	AICRP on MullaRP	Badnapur	Badnapur
22	AICRP on Vegetable Improvement	Parbhani	Parbhani
23	AICRP on Biological Nitrogen Fixation	Parbhani	Parbhani

### Climate

### Rainfall-2019:

The normal and actual rainfall of all 8 domain districts of Marathwada region along with per cent deviation is as below

Sr.No.	District	Normal Rainfall, mm	Actual Rainfall, mm	% Deviation
1	Aurangabad	623.5	628.7	0.8
2	Jalna	634.1	586.7	-7.5
3	Beed	605.4	459.2	-24.1
4	Latur	725.3	516.0	-28.9
5	Osmanabad	675.4	448.0	-33.7
6	Nanded	882.8	821.9	-6.9
7	Parbhani	721.6	595.9	-17.4
8	Hingoli	838.5	748.1	-10.8
Region Avg.		713.3	600.6	-15.8

The onset of SW Monsoon was observed in  $25^{th}$  Meteorological week in the Marathwada region. The highest rainfall 821.9 mm was recorded in Nanded district and lowest in 448.0 in Osmanabad district. The rainfall deviation during the month of June to September ranged between 0.8 % to - 33.7 %. The withdrawal of monsoon was observed  $42^{th}$  meteorological weeks in all the districts of Marathwada region.

The sowing of *Kharif* crops was initiated after receiving sufficient sowing rains during third week of June. The germination was satisfactory but due to early and mid term dry spells in the month of July and August adversely affected crop growth. The incidence of whitefly and sucking pest in cotton was reported. Also sucking pest and pod borer was turned in Green gram, Black gram and Pigeon pea, respectively. The rainfall recorded during the month of September and October adversely affected harvesting of *kharif* crops but helped for timely sowing of *rabi* crops.

### Agro-advisory through Gramin Krishi Mausam Sewa (GKMS)

- "Gramin Krishi Mausam Sewa (GKMS)" Scheme is working under VNMKV, Parbhani. District Agro-met Advisory Bulletin is regularly preparing on every Tuesday and Friday for all eight districts of Marathwada region of Maharashtra.
- 1. 105 AAS bulletins were prepared for all 08 districts and disseminated to the farmers by direct contact and through mass media communication during the financial year 2019-2020.
- 2. The Agromet Advisory Bulletin is broadcasting daily on all India Radio of Aurangabad, Parbhani, Nanded, Beed and Osmanabad for respective district.
- 3. The same Agromet Advisory Bulletins are disseminated to all farmers club through KVK's of Marathwada region.
- 4. It is also sent through SMS on farmers cellphone by KVK, Aurangabad, Agril. Met. Center, KVK Kharpudi (Dist. Jalna), KVK Tondapur (Dist. Hingoli).
- 5. AAB is also available on IMD WEBSITE (www.imdagrimet.gov.in) and on VNMKV, Parbhani Website www.mkv2.mah.nic.in or http://www.vnmkv.ac.in.
- 6. AAB is also disseminated to the farmers by Whats app, SMS by mkisan, SMS by Mahindra Kisan and Reliance foundation etc.
- 7. Total 12, 50,751 numbers of SMS were sent to the farmers during last year.

### **Research Findings-2019**

Mahatma Phule Krishi Vidyapeeth, Rahuri, Dist. Ahmednagar hosted the Joint Agricultural Research Committee Meeting (JOINT AGRESCO) in the month of May 2019. The details of crop varieties and implement released along with specific recommendations on production technology, rain water management, value addition based on research work are as under,

### Release of Variety:

### Parbhani Super Moti: (SPV 2407)

A dual purpose *rabi* sorghum variety "Parbhani super Moti (SPV 2407)" recorded higher grain and fodder yield over the national and local checks. It was found moderately tolerant to shoot fly, stem borer and charcoal rot. Hence, the variety "Parbhani Super Moti (SPV 2407)" is recommended for cultivation in Marathwada region.

### **Implements Released:**

- 1. VNMKV developed bullock drawn MPTC for planter cum solar sprayer is recommended for planting, seed covering, fertilizer application, inter culture operations and spraying of insecticide or pesticide.
- 2. VNMKV developed bullock drawn mulch laying machine is recommended for making bed (Width 90-120 cm, height 12-15 cm), laying and covering of plastic mulch.
- 3. VNMKV developed Bullock drawn cotton planter cum fertilizer drill is recommended for planting of cotton, fertilizer application, marking and covering of seed simultaneously.
- 4. VNMKV developed Bullock Drawn Turmeric Interculture cum earthing up Implement is recommended for inter-culturing and simultaneously earthing up in turmeric crop.
- 5. VNMKV developed tractor operated Rotary interculturing tools is recommended for wide spaced grown crops.
- 6. VNMKV developed Mini-Manual Boom Sprayer (MMBS) is recommended for spraying in all crops
- 7. VNMKV developed High Temperature Short Time (HTST) type puffing cum popping machine (capacity 40 to 50 kg/hr) is recommended for the production of *kharmure* (soybean, peanuts), *Phutane* (Bengal gram). Sorghum pops and popcorn.

### **Agronomy**

- 1. For obtaining higher yield and net profit, planting of pigeon pea on Broad Bed Furrows (BBF) at 1.5m with two row on the bed at 90 cm along with foliar application of Mepiquat chloride @100 ppm at 50 % flowering and integrated nutrient management with 5 tonnes of FYM ha<sup>-1</sup>, seed treatment of each *Rhizobium* and PSB@ 100ml / 10 kg of seed along with 50% RDF(12.5 : 25: 12.5 NPK kg/ha) is recommended for Marathwada region.
- 2. For maximizing productivity and net monetary returns, sowing of chickpea either on ridges and furrows or broad bed furrows (BBF) along with protective irrigations (60 mm depth) at branching and pod development stage are recommended.

# Variety and Implements Released





Rabi Sorghum: Parbhani Super Moti: (SPV 2407)



Bullock Drawn Plant cum Solar Sprayer



Bullock Drawn Mulch Laying Machine



Bullock Drawn Cotton Planter cum Fertilizer Drill



Bullock Drawn Turmeric Interculture cum Earthing up Implement

# **Implements Released**



Tractor Operated Rotary Interculturing Tool



Mini Manual Boom Sprayer







Puffing cum Popping Machine

### Crop

- 3. Recommendation of forewarning model for extension workers and scientists to forewarn peak leaf hopper infestation on *Kharif* groundnut crop and age of the groundnut crop (DAS) at peak leaf hopper infestation for Marathwada region.
  - A) Model for peak leaf hopper infestation on groundnut crop
  - (Y) = 30.42999 + 0.34890 \* Z41
  - B) Model for age of groundnut crop at peak infestation of leaf hopper
  - $(Y) = 54.8567 + 0.00388 \times Z151 + 0.11952 \times Z231 + 0.00496 \times Z230$

Where,

Z41 = 4-Evening humidity, 1-Weighted interaction: Weighted interaction of leaf hopper& evening relative humidity

Z151 = 1-Max. temperature, 5-Rainfall, 1-Weighted interaction : Weighted interaction of maximum temperature & Rainfall

Z231 = 2-Min. Temperature, 3-Morning humidity, 1- Weighted interaction:

Weighted interaction of minimum temperature & morning relative humidity

Z230 = 2-Min. Temperature, 3-Morning humidity, 0-Unweighted interaction:

Unweighted interaction of minimum temperature and morning relative humidity

- (1 = Max. temperature, 2= Min. Temperature, 3= Morning humidity, 4 = Evening humidity, 5 = Rainfall & last 0, 1 represents unweighted, weighted interactions respectively)
- \* Weights being correlation coefficients between variable to forecast and weather variable taken one or two in 27<sup>th</sup> to 32<sup>nd</sup> SMW.
- 4. Recommendation of forewarning model for extension workers and scientists to forewarn peak leaf miner infestation on *kharif* groundnut crop and age of groundnut crop (DAS) at peak leaf miner infestation for Marathwada region.
  - A) Model for peak Leaf miner infestation on groundnut crop
  - $(Y) = 31.67182 + 0.01079 \times Z121 + 0.00865 \times 131 + 0.00208 \times Z251.$
  - B) Model for age of groundnut crop age at peak infestation of leaf miner
  - $(Y) = 33.75243 + 0.0769 \times Z131$

Where.

Z121 = 1- Max. temperature, 2- Min, temperature, 1- Weighted interaction

: Weighted interaction of max. temperature & min. temperature

Z131 = 1- Max. temperature, 3- Morning humidity, 1- Weighted interaction

: Weighted interaction of maximum temperature & morning relative humidity.

Z251 = 2- Min. temperature, 5- Rainfall, 1- Weighted interaction

- : Weighted interaction of Min. temperature and Rainfall
- \* Weights being correlation coefficients between variable to forecast and weather variable taken two or one at a time in 27<sup>th</sup> to 32<sup>nd</sup> SMW.

5. For achieving higher productivity and monetary returns, soil application of *Trichoderma viride* @ 2.5 kg/ha through FYM (Tv-TNAU), seed treatment with *Pseudomonas fluorescence* (CICR) @ 10 g/kg of seed and foliar spray of copper oxychloride 0.3% + Streptocycline 0.01% is recommended after 45 DAS for management of wilt / root rot, bacterial blight, alternaria and grey mildew disease incidence in Bt cotton.

### **Agri. Engineering:**

- 6. Rainfall Intensity constants be estimated every after 5 years for Aurangabad, Buldhana and Parbhani, respectively every after 10 years for Akola and every after 15 years for Amravati stations.
- 7. The reference evapotranspiration estimated by Penman Monteith (FAO-56) method in table 1 is recommended for irrigation planning and scheduling.

MW	ETo (mm/day)	MW	ETo (mm/day)	MW	ETo (mm/day)	MW	ETo (mm/day)
1	4.2	14	9.2	27	5.7	40	4.3
2	4.4	15	9.5	28	5.1	41	4.5
3	4.7	16	10.3	29	5.0	42	4.9
4	4.9	17	10.5	30	4.7	43	4.9
5	5.3	18	11.5	31	4.4	44	5.0
6	5.6	19	11.8	32	4.4	45	4.8
7	6.0	20	12.0	33	4.4	46	4.6
8	6.4	21	12.6	34	4.3	47	4.4
9	7.1	22	11.7	35	4.2	48	4.0
10	7.4	23	9.3	36	4.3	49	4.3
11	7.7	24	7.7	37	4.4	50	4.2
12	8.5	25	6.9	38	4.5	51	4.2
13	8.7	26	6.3	39	4.2	52	4.1

8. The crop coefficients given in table 1 and 2 are recommended for estimation of water requirement of *Bt* Cotton, Pigeon pea, Soybean, Safflower, Wheat and Gram under Parbhani Condition and alternative these polynomial equations given in table 3 are recommended for estimation of water requirement.

Table 1: Crop Coefficients for Bt Cotton, Pigeon pea and Soybean for the week after Planting/sowing

Bt. Cotton		Pigeon pea				Soybean		
		Modified			Modified	M	Soybe	Modified
MW	WAP	Ke	MW	WAP	Kc	W	WAS	Kc
25	0	0.59	25	0	0.59	26	0	0.63
26	1	0.62	26	1	0.62	27	1	0.62
27	2	0.62	27	2	0.62	28	2	0.62
28	3	0.62	28	3	0.62	29	3	0.63
29	4	0.54	29	4	0.65	30	4	0.71
30	5	0.61	30	5	0.67	31	5	0.85
31	6	0.7	31	6	0.68	32	6	1.02
32	7	0.81	32	7	0.73	33	7	1.2
33	8	0.9	33	8	0.78	34	8	1.26
34	9	0.99	34	9	0.82	35	9	1.26
35	10	1.07	35	10	0.89	36	10	1.16
36	11	1.14	36	11	0.95	37	11	0.93
37	12	1.21	37	12	1.03	38	12	0.63
38	13	1.23	38	13	1.07	39	13	0.50
39	14	1.26	39	14	1.13			
40	15	1.3	40	15	1.20			
41	16	1.31	41	16	1.23			
42	17	1.32	42	17	1.26			
43	18	1.3	43	18	1.25			
44	19	1.28	44	19	1.22			
45	20	1.23	45	20	1.15			
46	21	1.17	46	21	1.05			
47	22	1.1	47	22	0.92			
48	23	1.04	48	23	0.77			
49	24	0.98	49	24	0.63			
50	25	0.92	50	25	0.33			
51	26	0.87	51	26	0.23			
52	27	0.82	$MW : \overline{N}$	leteorologica	al week:			
1	28	0.76		Veeks after p	_			
2	29	0.76	WAS: V	Veeks after s	owing			
3	30	0.79						

Table 2: Crop coefficient for Safflower, Wheat and Gram for the week after planting / sowing

	Safflowe	r		Whea	t	Gram		
MW	WAS	Modified Kc	MW	WAS	Modified Kc	MW	WAS	Modified Kc
43	0	0.62	48	0	0.60	43	0	0.62
44	1	0.62	49	1	0.60	44	1	0.62
45	2	0.61	50	2	0.76	45	2	0.61
46	3	0.60	51	3	0.90	46	3	0.54
47	4	0.45	52	4	1.03	47	4	0.64
48	5	0.52	1	5	1.09	48	5	0.74
49	6	0.61	2	6	1.15	49	6	0.87
50	7	0.71	3	7	1.18	50	7	1.01
51	8	0.83	4	8	1.22	51	8	1.1
52	9	0.95	5	9	1.25	52	9	1.13
1	10	1.03	6	10	1.29	1	10	0.99
2	11	1.11	7	11	1.30	2	11	0.94
3	12	1.15	8	12	1.28	3	12	0.71
4	13	1.14	9	13	1.20	4	13	0.46
5	14	1.07	10	14	1.02	5	14	0.35
6	15	0.96	11	15	0.76	6	15	0.35
7	16	0.79	12	16	0.33			
8	17	0.48	13	17	0.15			
9	18	0.31	14	18	0.14			
10	19	0.20	MW: M	leteorologica (	ıl Week;	_		
11	20	0.18	WAS	S: Weeks afte	er sowing			

Table 3: Crop wise Polynomial equations for deriving crop coefficient

Sr. No.	Crop	Polynomial Equation			
1	Bt. Cotton	$Y = 0.303 (t/T)^5 + 17.54(t/T)^4 + 36.01 (t/T)^3 + 21.52(t/T)^2 - 2.620(t/T) + 0.651$			
2	Pigeon Pea	$Y = 14.03(t/T)^5 - 38.73(t/T)^4 + 30.72(t/T)^3 - 7.368(t/T)^2 + 0.964(t/T) + 0.583$			
3	Soybean	$Y = 35.84 (t/T)^5 - 84.10(t/T)^4 + 61.29(t/T)^3 - 14.04(t/T)^2 + 0.953(t/T) + 0.616$			
4	Safflower	$Y = 57.66(t/T)^5 - 130.9(t/T)^4 + 93.58(t/T)^3 - 21.82(t/T)^2 + 1.156(t/T) + 0.615$			
5	Wheat	$Y = 10.39(t/T)^5 - 29.20(t/T)^4 + 25.15(t/T)^3 - 10.06(t/T)^2 + 3.294(t/T) + 0.515$			
6	Gram	$Y = 39.50(t/T)^5 - 84.53(t/T)^4 + 53.90(t/T)^3 - 9.204(t/T)^2 + 0.055(t/T) + 0.631$			
Here: Y:	Here: Y: Crop Coefficient, t = Days after sowing / planting, T = Crop Period				

### **Food Technology:**

- 9. It is recommended that good quality watermelon rind candy can be prepared by using 2% CaCl<sub>2</sub> with different flavours and dried in cabinet dryer at 50°C temperature for 6 h time.
- 10. It is recommended that good quality acceptable probiotic *Shrikh and* can be prepared by adding 0.75 per cent Psyllium husk and 2 per cent lactic acid bacteria.
- 11. Good quality of nutra *laddu* prepared by using linseed (40%), popped amaranth (20%), jaggrey (30%), honey (10%) and guar gum (0.3%) is recommended.
- 12. For the preparation of good quality, fresh turmeric rhizome-based orange RTS beverage, the addition of 10 percent fresh turmeric rhizome juice in 90 per cent orange juice is recommended.
- 13. The use of bael fruit pulp and aonla fruit pulp in 50:50 proportions with addition of 30 per cent sugar and 0.5 per cent citric acid is recommended for the preparation of good quality mixed fruit leather. The aluminium foil packaging is recommended for its better storage.
- 14. For the preparation of good quality, acceptable natural jamun bar, utilization of only pulp is recommended. The shelf life of prepared jamun bar was six months with packaging in aluminium foil at room temperature.
- 15. Nutritious, green coloured fenugreek noodles prepared with addition of 30g fenugreek puree per 100g of refined wheat flour is recommended.
- 16. The antinutritional factor Saponin, in Quinoa seeds can be significantly reduced by soaking the seeds in 2% citric acid solution for overnight. Cookies can be prepared by using 40% Quinoa flour with better nutritional and sensorial properties.

### **Home Science**

- 17. VNMKV prepared folder on Growth quotient assessment of children & its multiple benefits and the School age children's developmental milestones check list are recommended for parents, teachers and child care professionals to make use it for care and development of school age children.
- 18. It is recommended that VNMKV Parbhani developed *Lentflaxmix* utilizing lentil 38%, flax seeds 25%, groundnuts 12%, gingelly seeds 7%, cumin seeds1%, coriander1%, cooking oil 16% and salt and *Kastapuri* prepared with wheat flour 38%, barnyard millet flour 22%, bengal gram dal flour 20%, omum 0.5%, drumstick leaves powder 1.5%, cooking oil 18% and salt had low glyceamic index value. Hence, these snacks can be used by the diabetic subjects.
- 19. It is recommended that deoild coconut meal can be utilized for preparation of value added bakery products viz. Cookies and *Nankatai*. There is increase in the protein, minerals, fiber, calcium and iron content in Cookies with 20 per cent and in *Nankatai* with 35 per cent in corporation of deoild coconut meal. Hence, these products will be beneficial for growing children, adolescents, pregnant women, lactating mothers, old people and underweight individuals.
- 20. VNMKV developed Low Glycemic Index products viz Mix Pulse Roll (GI 36.96), Millet Namkeen (GI 34.53), Millet Mix (GI 30.22), Multigrain Roti (GI 39.77) and *Khichadi* (GI 40.90) are recommended in the daily diet plan of diabetic people.
- 21. It is recommended that VNMKV, Parbhani developed Pearl Pop snack consumed 50g daily for a period of 60 days will be helpful to increase the level of haemoglobin.
- 22. VNMKV low cost technology basket consisting of seven technologies (viz. digging tool, earthing up tool, finger guards, new *khurpi*, hand wears, wooden rake & fertilizer bag) is recommended for drudgery mitigation of farm women in turmeric production system.

- 23. VNMKV developed sapling carrier is recommended for transplanting with hand lever operated transplanter for drudgery reduction of the farm women.
- 24. It is recommended that eco-friendly; multipurpose textile fibers can be extracted from dry corn husk.

### **Soil Science**

25. It is recommended that very shallow soils (20-25 cm), silty clay loam, underlined by medium hard to hard murrum layer soils (Entisols) are to be selected for higher production of custard apple.

### **Dry land Agriculture**

26. The value of exponent 'm' in Modified Universal Soil Loss Equation (MUSLE) for Parbhani station is recommended as 0.50. On this basis, the following VNMKV developed model (equation) is recommended for estimation of soil loss from small agricultural fields.

$$S = 11.8 (Q \times q)^{0.50} KLSCP$$

### **Extension Education**

- 27. It is recommended that extension functionaries such state department of agriculture, University's extension system, KVKs etc. should create awareness among the farmers about use of various mobile apps developed by VNMKV, Parbhani.
- 28. The favourable attitude among agricultural students towards entrepreneurship can be converted into successful entrepreneur by organising various courses, training, hands-on training, seminars and workshops etc by inviting agribusiness practitioners, other professionals. Establishment of business Incubation centre at University level is recommended.
- 29. It is recommended that through various extension agencies viz. State Agriculture Department State Agricultural Universities, *Krishi Vigyan Kendra* etc. training to be organized on use of Soil health card and as per recommendations how to calculate fertilizer doses for effective use of soil health card.
- 30. Construction of farm pond had increased in sustainable crop productivity, protective irrigation and initiation in cultivation of horticultural crop. It is recommended that various extension agency viz. State department of Agriculture, Universities and *Krishi Vigyan Kendra* to make efforts for horizontal spread of construction of farm pond among farmers.

### **Economics**

- 31. In Parbhani and Latur markets, short run disequilibrium in chickpea prices was observed, so it is recommended that to attain the short run equilibrium in chickpea prices quick and live price dissemination system may be developed by Agricultural produce Market Committee.
- 32. It is recommended that the efforts may be made to disseminate improved pigeon pea production technology through extension agencies to improve the productivity levels particularly in Parbhani and Nanded districts.

## **Technologies Recomended**



Pigeon Pea Planting on BBF



Spraying in Bt Cotton



Gram Sowing on BBF



Watermelon Candy



Probiotic Shrikhand

## **Technologies Recomended**



Nutra Laddu using Linseed, Popped Amaranth, Jaggery, Honey and Guar Gum



Turmeric Rhizome based Orange Beverage



Mixed Fruit Leather



Nutritious Fenugreek Noodles



Mixed Pulse Roll



Sapling Carrier for Transplanting

### Organization of Seminar / Workshop / Training

#### 1. ICAR Short Course:

All India Coordinated Research Project on Dryland Agriculture, VNMKV, Parbhani organized a ICAR short course on **Doubling Farmers Income through Integrated Farming System Approach** sponsored by the Indian Council of Agricultural Research, New Delhi during November 18-27, 2019 at Parbhani. Around 25 Scientists/ Professors, officers from State Agricultural Universities and KVK's participated in this course from all over India. During the course, training was imparted to the scientists and Academic staff on Integrated Farming System approach for its further dissemination on farmers field. The training programme was inaugurated at the hands of Dr. Ashok Dhawan, Hon. Vice Chancellor, in presence of Dr. D.P. Waskar, Director of Research, Dr. D.N.Gokhale, DI & Dean, Dr.U.M.Khodke, Associate Dean & Principal. The training programme was organized by Dr.W.N.Narkhede, Chief Scientist and Dr. M.S. Pendke, Agril. Engineer, AICRP for Dryland Agriculture, VNMKV, Parbhani.



#### 2. Annual Group Meet of AICRP on Arid Legume

The annual group meeting of scientists of All India Coordinated Research Project on Arid Legume was organized at VNMKV Parbhani during November 19-20,2019. During the annual group meeting, scientist presented the research work carried out at respective centres of AICRP. The annual group meet programme was inaugurated at the hands of Dr. Ashok Dhawan, Hon. Vice Chancellor in presence of Dr. D.P. Waskar, Director of Research, Dr. K.K.Sharma, Director, Dr. Niranjan Prasad, Project Coordinator. The programme was organized by Dr.Arvind Sawate, Associate Dean & Principal and Dr. Rajesh Kshirsagar, Professor, College of Food Technology, VNMKV, Parbhani. Significant recommendations were given during the meeting. Also the future technical programme was discussed in length for further implementation.



#### 3. Training programmes on Organic Farming

Organic Farming Research and Training Centre was established in the University during 2017 with a aim to develop package of practices for organic crop production and also to conduct training programmes for farmers to impart scientific knowledge to farmers. Two training programmes were conducted in the University during November 28-30, December 1-3, 2019. More than 100 farmers participated in these training programmes. The training programme was inaugurated at the hands of Dr. Ashok Dhawan, Hon. Vice Chancellor, in presence of Dr. D.P. Waskar, Director of Research, Dr. D.N. Gokhale, DI & Dean, VNMKV, Parbhani. The training programme was organized by Dr. A.K. Gore, Officer In-Charge, Organic Farming Research and Training Centre, VNMKV, Parbhani.



#### 4. Cenetary function of Cotton Research Centre, Mahboob Baugh, Parbhani

Cotton Research Station, Mahboob Baugh Farm, Parbhani was established in 1918 by erstwhile *Nizam* Government. This research station was established with a view of research and extension of *desi* cotton. In 1972, this research station came under the administrative control of Marathwada Krishi Vidyapeeth, Parbhani. Before establishment of University, *desi* cotton varieties viz. Gaorani 12, Gaorani 22 and Gaorani 46 etc. were released by this research station. After establishment of the University, 10 *desi* cotton varieties were developed and released by this research station. This research station has achieved success in increasing boll size and fibre length of *desi* cotton through interspecific hybridization of *desi* and american cotton. This is the first research station in the country which has developed *desi* cotton variety PA 402 through interspecific hybridization. This research station has developed different long staple *desi* cotton varieties having fibre properties like american cotton. Similarly, it has developed Improved *desi* cotton production technology.

In the year 2018, Cotton Research Station, Mahboob Baugh Farm, Parbhani completed 100 years of its establishment. This is the first research station which has completed centenary under Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani. On account of completing 100 years of establishment, the Centenary Celebration programme was arranged on 07/12/2019 under the chairmanship of Dr. A.S. Dhawan, Hon'ble Vice Chancellor, VNMKV, Parbhani at Cotton Research Station, Mahboob Baugh Farm, Parbhani. For this Centenary Celebration programme, Dr. B.M. Khadi, Former Director, Central Institute for Cotton Research, Nagpur, Dr.D.R. Bapat, Ex. Director of Research, Mahatma Phule Krishi Vidyapeeth, Rahuri, Dr. S.T. Borikar, Executive Council Member, VNMKV, Parbhani and Dr. D.P. Waskar, Director of Research, VNMKV, Parbhani were present for the function. Farmers, Scientists, Officers and entrepreneurs were also present in large numbers for the event. Guest lectures, exhibition and field visits were arranged during this event. Varieties released by this University and other universities, desi cotton trials and seed production programme of different varieties were demonstrated during the field visit.



## Cenetary function of Cotton Research Centre , Mahboob Baugh, Parbhani













#### 5. 22<sup>nd</sup> National Conference of Maharashtra Society of Agricultural Economics

Department of Agricultural Economics, College of Agriculture, VNMKV, Parbhani and Maharashtra Society of Agricultural Economics organised 22<sup>nd</sup> National Conference of Maharashtra Society of Agricultural Economics during 21-22 December, 2019 on emerging issues in the subject of agricultural economics *viz:* doubling farmers income by 2022; socio-economic indicators for agricultural development; impact assessment of improved production technologies, marketing and pricing of agricultural commodities, marketing reforms etc. The

Conference was inaugurated at the auspicious hand of Dr. Ashok Dalwai, (IAS) Chief Executive Officer, National Rainfed Area Authority, Ministry of Agricultural and Farmers Welfare, Government of India. Dr. A. S. Dhawan Hon. Vice-Chancellor, VNMKV, Parbhani was the President of the function and Shri. Pasha Patel, Hon. President, APC Cell, GOM was the Guest of Honour. In all 197 delegates from Gujrat, Madhya Pradesh, Andhra Pradesh, Telengana, Karnataka and Maharashtra participated in the conference. Dr. Ashok Dalwai, (IAS) Chief Executive Officer, National Rainfed Area Authority, Ministry of Agricultural and Farmers Welfare, Government of India and Dr. K.C. Gummagolmath, Director(M&E), MANAGE, Hyderabad delivered lead lectures on the conference themes.



#### 6. Workshop on Empowerment of Rural Women

College of Community Science, VNMKV, Parbhani organised a workshop on Empowerment of Rural Women during February 28-29, 2020 at Parbhani. Dr. Ashok Dhawan, Hon. Vice chancellor, VNMKV inaugurated the function. Dr.V.D. Patil, DI & Dean was the Chief Guest of the function. Many technologies developed for reducing the drudgery of farm women were demonstrated to the participants during the workshop. Former Associate Dean & Principal, Dr. Shamala Harode, Dr. Snehalata Reddy, Dr. Rohinidevi Vadlamudi graced the function.

#### 7. International Workshop on Digital Agriculture

International Workshop on 'Digital Farming Practices by Agribots, Agri-drones adn Agri-AGVs' was organised at Vasantrao Naik Marathwada Agricultural University, Parbhani during 13<sup>th</sup> to 15<sup>th</sup> March by Center of Excellence for Advanced Agricultural Science and Technology (CAAST) under the National Agricultural Higher Education Projects (NAHEP).Dr. Siva Balasundaram, Professor of Agriculture Technology, Department of University of Putra, Malaysia expressed his views and said that world agriculture is moving from precision agriculture towards digital agriculture. The vast majority of farmers in India are marginal and small landholder, so this digital technology could be economically viable to small landholder. Today, youngsters are moving away from agriculture, but digital agriculture has the power to attract young people, he said.

The inaugural function was presided by the Vice-Chancellor Dr Ashok Dhawan and the Chief Guest was Mr. Avinash Shirode, National Space Society (USA) - Space Ambassador, whereas Director of Instruction Dr D N Gokhale, Director of Research Dr D P Waskar, IIT, Kharagpur Prof R Machavaram, Prof. A K Deb, Principal Dr. U N Khodke, and Principal Investigator of the Project Dr. G U Shinde were present on the dais.

Mr. Avinash Shirode said that in view of today's global climate change and diminishing of natural resources, human beings will migrate to the space in the future, NASA will soon launch a mission to colonize the moon and implement space farming concept in space. The Agriculture University should think about research on space farming.

In Presidential speech, Vice-chancellor Dr Ashok Dhawan said, digital technologies may reduce drudgery of farmers in the farm operation. This project will help the university faculty, students to understand digital farming technology and digital agriculture research will be a big boost in near future.









### Memorandum of Understanding (MoU)

1. A tri-party Memorandum of Agreement (MoA) was signed among VNMKV, Parbhani, ICAR-Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad and M/S Rohit Industries, Pune on October 23, 2019 for commercial production of 5 row BBF planter developed by VNMKV, Parbhani. Dr. Ashok Dhawan, Hon. Vice Chancellor, Dr. B. Venkateswarlu, Former Vice-Chancellor, Dr.D.P.Waskar, Director of Research, VNMKV, Parbhani, Dr. G. Ravindra Chary, Director (Actg.) CRIDA Hyderabad, Dr. U.M.Khodke, Associate Dean & principal, College of Agril.Engg. VNMKV, Parbhani, Dr. Smita Solanki, Research Engineer, AICRP on utilization of Animal Energy, VNMKV, Parbhani, Dr. M.S. Pendke, Research Editor, VNMKV, Parbhani, Sh. Rohit Kadam, Managing Director and Shri. Sachin Kawade from Rohit Industries Pune were present for the function.



2. A Memorandum of Understanding (MoU) was signed between VNMKV and ICAR-National Institute of Abiotic Stress Management (NIASM) Baramati on January 17, 2020 for conducting advanced research work on abiotic stress management of various crops of Marathwada region through PG and Ph.D. student research work. Dr. Ashok Dhawan, Hon. Vice Chancellor, Dr. D.P. Waskar, Director of Research, VNMKV, Parbhani, Dr. Jagdish Rane Chary, Director (Actg.) NIASM, Baramati, Dr. A.S.Jadhav, Dy. Director Research, Dr. M.S. Pendke, Research Editor, VNMKV, Parbhani, and scientists & staff of the NIASM were present for the function.



3. A Memorandum of Understanding (MoU) was signed between VNMKV and Maharashtra State Seeds Corporation (MAHABEEJ), Akola on March 11, 2020 for conversion of cotton varieties NHH-250 and NHH-715 into BG-2 and its further seed production. Dr. Ashok Dhawan, Hon. Vice Chancellor, Dr. D.P. Waskar, Director of Research, VNMKV, Parbhani, Sh. Anil Bhandari (IAS), Managing Director, Mahabeej, Akola, Sh. Fundkar, Manager Production & Sh. Khiste from Mahabeej, Akola, Dr. Khijar Baig, I/C, Cotton Research Centre, Nanded, Dr. Dinesh Patil, Dr. Shivaji Telang, Dr. Arun Gaikwad, Dr.M.S.Pendke, Research Editor, VNMKV, Parbhani, were present for the function.







## **Seed Production Programme and receipts 2019-20**

Sr.No.	Crop	Class of Seed	Quantity (Qtls)	Total (Qtls)	
I		SEED PRODUCTI	ION		
A	Kharif				
1.	Soybean	Breeder	1980.82	3197.70	
		Foundation	498.00		
		Truthful	33.58		
		Certified	685.30		
2.	Tur	Breeder	199.77	1091.24	
		Foundation	46.00		
		Truthful	875.47		
3.	Mung	Breeder	32.42	164.72	
		Truthful	132.30		
4.	Udid	Breeder	4.75	04.75	
5.	Jowar	Breeder	13.22	235.62	
		Truthful	222.40		
6.	Bajra	Breeder	18.45	18.45	
	,	Total <i>Kharif</i>		4712.48	
В		Rabi			
1.	Rabi Sorghum	Breeder	62.82	165.25	
		Truthful	88.83		
		foundation	13.60		
2.	Chickpea	Breeder	207.85	519.96	
		Truthful	137.69		
		foundation	146.92		
		Certified	27.50		
3.	Safflower	Breeder	249.14	1131.00	
		Truthful	372.00		
		foundation	113.96		
		Certified	395.90		
4.	Wheat	Breeder	55.52	178.89	
		foundation	87.02		
		Certified	36.35		
		foundation	08.30	11.30	
		Certified	03.00	22100	
6	Linseed	Breeder	02.50	17.52	
3		foundation	06.00	1102	
		Truthful	09.02		
		Total Rabi	07.02	2023.92	
		Total (Kharif + Rabi)		6736.40	
II		RECEIPT		0/30.70	
11		A) Kharif	Rs. 1,83,94,125/-		
		B)Rabi	Rs. 25,24,424/-		
		Total	Rs. 2,06,18,549/-		
		Total	13. 4,00,10,349/-		

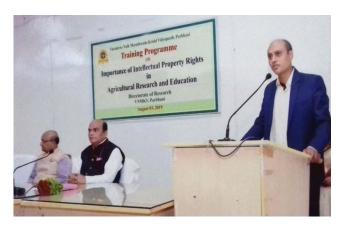
## Planting material developed and sold during 2019-2020

Sr. No.	Name of the Fruit crop	Number of Grafts/Layer/ Seedlings sold	Receipt in Rs.
1	Mango var. Kesar	3005	1,80,300/-
2	Sapota var. Kalipatti	1294	90,580/-
3	Guava Layers var. Sardar	6439	3,21,950/-
4	Pomegranate var. Bhagwa and Ganesh	2669	93,415/-
5	Tamarind var. Partishthan and Ajintha	3270	1,96,200/-
6	Kagzi Lime	1094	27,350/-
7	Seedless Lemon	773	23,190/-
8	Custard apple	5052	2,02,080/-
9	Hanumanphal	155	6,200/-
10	Jamun	462	27,720/-
11	Fig Layers var. Dinkar	302	10,570/-
12	Aonla var. NA-7	40	1,600/-
13	Jamun Seedlings	573	14,325/-
14	Aonla Seedlings	71	1,775-
15	Tamarind Seedlings	420	10,500/-
16	Custard apple Seedlings	23	575/-
17	Other Seedlings	6876	1,71,900/-
18	Ornamental Seedlings	887	44,350/-
19	Karwand Grafts	500	25,000/-
20	Auction of Rangpurlime Fruit& others		1,06,535/-
	Sale of Planting Material net receipt of Rs		15,56,115/-
	Supply on credit to EGS & University Dept.	Planting material	5,51,965/-
	Total CNS Net & Credit Receipt		21,08,480/-
	TMCProject, Central Nursery Sch	neme,VNMKV,Parbhani	
21	Mosambi Newceller	5700	4,56,000/-
22	Santra Nagpur	1932	1,53,660/-
23	Kagzi Lime In Poly bags	19156	3,98,365/-
24	Kagzil Lime without bags		
25	Rangpurlime Seedlings	277	6,810/-
	TMC Project Net Total Receipt (B)		10,14,835/-
	Total Receipt (A+B)		31,23,315





Pink Bollworm Management Workshop at CRS, Nanded





Prof. Ganesh Hingmire interacting with University Scientists and Professors on Intellectual Property Rights

## **Product testing details 2019-20**

Year	Name of Crop	Name of Research Station	No. of Hybrids/ Varieties for testing
2019-20	Bt. Cotton	Cotton Research Station, Nanded	08
	Bt. Cotton	Cotton Research Scheme, Parbhani	01
	Vegetable	Horticulture Research Station (Vegetable), Parbhani	172
	Pigeon pea	Agriculture Research Station, Badnapur	02
	Green Gram	Agriculture Research Station, Badnapur	05
	Black Gram	Agriculture Research Station, Badnapur	03
	Soybean	Soybean Research Scheme, Parbhani	10
	Sorghum	Sorghum Research Station, Parbhani	05
	Sorghum	Agriculture Research Station, Somnathpur	03
	Wheat	Wheat and Maize Research Unit, Parbhani	14
	Maize	National Agriculture Research Project, Aurangabad	59
	Pearl millet	National Agriculture Research Project, Aurangabad	13
	Sunflower	Oil seeds Research Station, Latur	01
		Total	296
		Testing fees received (Rs.)	1,60,00,000/-

Year	Name of Crop	Name of Research Station	No. of Products for testing	
2019-20	Cotton	Cotton Research Station, Nanded	04	
	Chilli	Horticulture Research Station (Vegetable), Parbhani	02	
	Chilli	Dept. of Agril. Entomology, Parbhani	01	
	Groundnut	Oil seeds Research Station, Latur	01	
	Pigeon pea	Agriculture Research Station, Badnapur	15	
	Chick pea	Agriculture Research Station, Badnapur	02	
	Soybean	Soybean Research Scheme, Parbhani	02	
	Soybean	Dept. of Agronomy, Parbhani	01	
	Maize	Dept. of Agril. Entomology, Parbhani	02	
	Tomato	Safflower Research Scheme, Parbhani	01	
	Pomegranate	Horticulture Research Station (Pomology), Parbhani	01	
		Total	32	
	Testing fees received (Rs.)			
	Total Testin g Fees Receipt (Rs.)			

#### Awards Received by the Centre/Scheme/Scientists

#### 1. ICAR-Vasantrao Naik Award - 2018 to AICRP for Dryland Agriculture

Indian Council of Agricultural Research, New Delhi has bestowed Vasantrao Naik National Award 2018 to All India Coordinated Research Project for Dryland Agriculture, VNMKV, Parbhani. Award was given at the auspicious hands of Dr. Trilochan Mohapatra, Secretary DARE and Director General, ICAR, New Delhi on the occasion of 91<sup>st</sup> Foundation Day of ICAR on 16<sup>th</sup> July, 2019. Dr. B.V. Asewar, Dr. M.S. Pendke, Prof. S.B. Choulwar, Dr. A.K. Gore, Dr. G.K. Gaikwad, Dr. M.W. Suryawanshi, Dr. P.H. Gaurkhede and Dr. G. Ravindra Chary received the award. Dr. Ashok S. Dhawan, Hon. Vice Chancellor and Dr. D.P. Waskar, Director of Research, VNMKV, Parbhani were present on this occasion.



#### 2. Best User Profile Registration Award - Central library

VNMKV library had received Best User Profile Registration Award (Western Region) in December 2019 for the highest number of Users registration on CeRA. The award was given by Indian Council Of Agricultural Research, New Delhi- ICAR-CeRA. Dr. Santosh Kadam, Officer In-Charge, University Library, VNMKV, Parbhani received this award.



#### 3. Award of Excellence 2018 to Agrometeorological Field Unit of VNMKV

13<sup>th</sup> National Annual Review Meeting of *Gramin Krishi Mausam Sewa* Centres in the country was held during 18<sup>th</sup> to 20<sup>th</sup> December, 2019 at Rajmata Vijayaraje Sindhiya Agricultural University, Gwalior (M.P.). An Excellence Centre Award was given to VNMKV *Gramin Krishi Mausam Sewa* Centre at the auspicious hands of Dr. M.Mohapatra, Director, India Meteorological Department in the meeting. Dr. K.K. Dakhore, Officer In-Charge, AICRP on Agro Meteorology, VNMKV, Parbhani received the award.



#### 4. Best Presentation Award to KVK, Tuljapur:

*Krishi Vigyan Kendra*, Tuljapur, Dist. Osmanabad received Best Presentation Award in CFLD Zonal Review Workshop on Zone VIII arranged by ATARI, Pune at KVK, Kolhapur during 10-11 December, 2019. Award was given at the auspicious hands of Hon. Dr. K.Narayan Gouda, Ex-Vice Chancellor, UAS, Bengaluru. Er. Sachin Suryawanshi, Programme Coordinator received the award. Dr.Lakhan Singh, Director, ATARI Pune, Dr. D.B. Deosarkar, Director of Extension Education, VNMKV, Parbhani were present on this occasion.



#### 5. Dr. D.B. Deosarkar received Professional Excellence Award:

Dr. D. B. Deosarkar, Director of Extension Education, VNMKV, Parbhani received Professional Excellence Award for research contribution in cotton in the National Conference on Cotton which was held at Orissa University Agriculture and Technology, Bhubaneshwar during January 22-24, 2020. The said award was given at the hands of Dr. R.K. Agrawal, Hon. Vice chancellor, OUAT, Bhubaneshwar in presence of Dr. N.S. Rathore, Hon. Vice Chancellor, MPUAT, Udaipur.



## **Important Events**





Dedication of NHH - 44 Bt (BG II) Cotton Variety for Cultivation





Mechanization Day





University in Services of Tribal Farmers - Wai, Tq.Kalamnuri, Dist. Hingoli

## **EXTENSION EDUCATION**

Directorate of Extension Education carries extension activities with the help of Extension Education Unit, Regional Agricultural Extension Education Centres (4), *Krishi Vigyan Kendras* (4) and Agricultural Technology Information Centre. Colleges and Research Stations under the university also organized and actively participated in the different extension activities. The objective was to disseminate the recent agricultural technologies to the farmers' fields and collect feedbacks.

Extension Education Unit was established in the year 1975-76. Directorate of Extension Education was established *under Training and Visit Scheme* of Agricultural Extension in the year 1981-82. In 2003, the Offices of the Extension Agronomist were strengthened and four Regional Agricultural Extension Education Centres (RAEECs) were established at Parbhani, Aurangabad, Ambajogaiand Latur. *Agricultural Technology Information Centre (ATIC) a* single window delivery system for seeds, planting materials, bio-fertilizers, bio-pesticides, agricultural implements, and publications, etc. *was established* at VNMKV, Parbhani 0n 1/1/2000. Marathwada region has 12 *Krishi Vigyan Kendras* (KVK). Out of these, 4 *Krishi Vigyan Kendra* at Aurangabad (1983), Tuljapur (2000),Khamgaon (2010) and Badnapur (2018) were established under university, where as remaining 8 KVKs run by the NGOs.3

These extension centres organized various extension activities viz. monthly district workshops, training programmes, workshops, field visits, diagnostic team visits, farmers rallies, field days, exhibition, group discussion, plant protection campaigns, AIR and TV programmes, publications, press publicity, ICT based activities, etc. for benefit of farmers, women, youths, entrepreneurs, officers and extension workers, FPOs and SHGs, etc. FLD and OFT were also organized on KVK farm for assessment and refinement of technologies.

#### **Extension Education Activities conducted during 2019-20**

- Monthly District Workshop (MDW): Monthly District Workshops were organized by RAEECs to provide technical support to officers and extension workers of the State Department of Agriculture. Monthly messages were given to guide the farmers about solution on field problems. Field visits were also organized during these workshops. 90 MDWs were organized and 4635 officers and progressive farmers participated in these workshops during 2019-20.
- Field Visit/Diagnostic Team Visit: University Scientists organized 1365 field visits/ diagnostic field visits
  to the farmers' fields, assess field problems and suggested solution to the field problems of 26745 farmers
  on the spot during 2019-20.
- 3. Farmers' Rally:On the eve of University Foundation Day, *Kharif* Farmers' Rally was organized on 18<sup>th</sup> May 2019 at Parbhani campus; on the eve of Marathwada *Mukti Sangram Din*, *Rabi* Farmers' Rally was organized on September 17, 2019 at College of Agriculture, Latur and on the eve of *Kranti Jyoti Savitribai Phule Jayanti*, Women Farmers' Rally was organized on 3<sup>rd</sup> January 2020 at Parbhani, Extension Centers, Colleges and Research Stations also organized farmers rallies in respective districts in the Marathwada region. University scientists also delivered lectures in the rallies organized by State Department of Agriculture and developmental departments and NGOs. Total 165 farmers rallies were organized in which 48790 farmers, women, entrepreneurs, extension personnel and students participated in these rallies during 2019-20.

- 4. Training programmes :Directorate of Extension Education through its centers organized 412 training programmes for different clientele groups. 17100 farmers, farmwomen, youths, entrepreneurs, extension functionaries NGOs, and Self-help Groups members were trained in these training programmes during 2019-20.
- 5. Action Plan Workshop for KVK staff: The Directorate of Extension Education & ICAR, ATARI, Pune jointly organized Action Plan Workshop for KVKs of the region during 5th & 6th March, 2020. Total 90 Programme Coordinators and Subject Matter Specialists from 12 KVKs of the region participated in the workshop and presented their action plans. The Directorof Extension Education, VNMKV, Parbhani and experts from different subjects has given valuable suggestions in the workshop.
- 6. Exhibitions: The Directorate of Extension Education organized exhibitions on the occasion of farmers rallies at university campus. Colleges, Research Stations, Extension Centres & KVKs also organized exhibitions in respective districts. University also participated in 38 exhibitions organized at State and National level. More than 6 lakh farmers took the benefit of these exhibitions during 2019-20.
- 7. Group Discussion: Total 465 group discussions were organized for a group of farmers, women farmers, youths, entrepreneurs etc. having common interest in particular aspect of agriculture and allied sciences. Total 7600 farmers were participated in these group discussions during 2019-20.
- 8. Field day: To demonstrate the worthiness of the innovations on agricultural technologies 28 Field Days were organized at the farms of the progressive farmers, trial fields, and demonstration sites. Total 5650 farmers participated in these field days during 2019-20.
- 9. Vidyapeeth Apalya Dari, Tantradnyan Shetawari: Special campaign "Vidyapeeth Apalya Dari, Tantradnyan Shetawari" was implemented with the objective to educate farmers on crop production technologies and to solve the problems of farmers on the spot. Teams of university scientists visited around 300 villages diagnose field problems and suggested remedial measures to 11900 farmers on the spot during reporting year.
- 10. Plant protection campaign for Pink bollworm control in cotton: Special plant protection campaign for management Pink Bollworm in Cotton was implemented in the Kharif 2019. University scientists organized 244 programmes/visits and guided farmers about Pink bollworm management during Kharif 2019. 10975 farmers got benefit of this campaign.
- 11. Plant protection campaign for Fall Army Worm control in Maize: Special plant protection campaign for management Fall Army Worm in Maize was implemented in the Kharif 2019. University scientists organized 190 programmes/visits and guided farmers about Fall Army Worm management during Kharif 2019. Around 13170 farmers got benefit of this campaign.
- 12. All India Radio & *Doordarshan* Programme: In order to enable wider and faster reach to the farmers with enhanced quality of learning this Directorate has broadcasted 265 programmes on All India Radio & 74 programmes were telecasted on Doordarshan and private TV channels during 2019-20.
- 13. Publications: This Directorate has published Krishi Dainandani, University Calendar, Sheti Bhati Magazine, Booklets and folders containing information on crop technologies developed by the university. These publications were sold/distributed amongst the farmers, students and extension workers.
- 14. Use of ICT tools: SMS facility for the farmers is in operation at ATIC, Parbhani. Messages on the modern agricultural technologies and solutions to the problems faced by the farmers were given on the

- Mobile Phone under this facility. Touch Screen facility for the benefit of farming community is available at Agricultural Technology Information Centre, Parbhani. Information on agriculture and allied fields is available to the farmers by simply touching the screen. ICT tools like You Tube, Blog, Twitter, WhatsApp etc. were also used for technology transfer.
- 15. Press Publicity: The technical information on modern agricultural technologies, day to day ongoing programmes and activities of various units were published through leading newspapers of the region. Besides this, bulletins and notes on seminars, trainings, workshops, farmers' rallies, field days, highlight of extension and research projects were formulated and released through newspaper.
- 16. Telephone Help Line: This Directorate has been provided technical information to the farmers through Telephone Help Lines. More than 5000 Farmers asked questions on telephone about the cultivation practices of the various crops, pest and diseases control, dry land, fruit & vegetable technologies as well as other income generating enterprises during 2019-20.
- 17. World Soil Health Day: KVKs and extension centres celebrated World Soil Health Day on 5<sup>th</sup> December 2019. Soil health awareness programmes were organized on this occasion. Soil Health Cards were distributed to the farmers on this occasion



## Farmers Rallies



Shri. Eknath Dawale, Principal Secreatary Agri., Govt. of Maharashtra addressing on 18<sup>th</sup> May, 2019 in *Kharif* Farmers Rally



Dr. Ashok Dhawan, Hon. Vice-Chancellor addressing on 18<sup>th</sup> May, 2019 in *Kharif* Farmers Rally



Shri. Amit Deshmukh, Hon.Minister, Medical Education & Culture, Govt. of Maharashtra addressing on 17<sup>th</sup> September, 2019 in *Rabi* Farmers Rally



Smt. Ujjwalatai Rathod, President, Zilla Parishad, Parbhani addressing on 3<sup>rd</sup> January, 2020 in Women Farmers Rally



Dr. Ashok Dhawan, Hon. Vice-Chancellor addressing on 3<sup>rd</sup> January, 2020 in Women Farmers Rally



Dr. D.B. Deosarkar, Director Extension Education addressing on 3<sup>rd</sup> January, 2020 in Women Farmers Rally

# Regional Agricultural Extension Education Center & Agricultural Technology Information Centre (ATIC)

The Agricultural Technology Information Center (ATIC) is single window delivery dissemination and supporting system for various innovative and farm worthy techniques, technical advice, diagnostic services & input supply.

#### Extension Activities carried at ATIC And RAEEC Parbhani

#### **Field Visits:**

Every Month, district workshop is followed by the field visit on 3<sup>rd</sup> Wednesday and Friday of every month in Parbhani district and Hingoli district, respectively. During 2019-2020, in all 36 field visits were carried out in Parbhani (23) & Hingoli (11) districts.

#### Diagnostic field visit:

In addition to regular field visits as and when required diagnostic visits were carried out in both the districts. The problems were observed and suggestions were offered by diagnostic teams of RAEEC. In all 12, diagnostic field visits were carried out as per the requirement in both the districts.

#### **Trainings:**

The special training programs for the Officers of Agriculture Department in addition, to farmers training on various subjects were organized & lectures were delivered by ATIC Scientists. In all, 36, training programs were conducted during 2019-2020.

#### **Exhibitions:**

Permanent museum is established in the Central Hall of Agricultural Technology Information Centre. Seeds, Charts, Food products and laminations of different varieties and production technologies of crops recently developed by VNMKV, Parbhani are displayed. Total 1,04,874 farmers have visited the centre since 2000. In all, 1892farmers had visited and taken benefit of this service in the year 2019-2020. During the year, about 07 exhibitions were organized at various locations, including the places of fair in the region.

#### Krishi Mahiti Wahini:

The Telephone Helpline is started with effect from 7<sup>th</sup> October, 2000. The Technical officers are available on phone number i.e. 02452-229000 for answering queries of farmers on every day in office timing. Name, Address and Questions of the farmers are recorded in the register and providing concern Specialists mobile number if required. Total 32,757 farmers have been benefitted through this service since 2000. In all, 2,429 farmers have been benefitted in the year 2019-20.

#### Farmer's queries in person (diagnosis and counseling):

This centre provided diagnostic services to the farmers who brought the infested plant materials, soil samples and water samples. Total 63 farmers were benefitted through this service during the year 2019-2020.

#### **Information Technology Lab:**

Information Technology Laboratory has been established in 2013 with ten multimedia devices and internet connectivity. The farmers can avail the facility of e-information and send their queries.

**Sale of Publications at ATIC:** Publication on Agril. material plays important role in extension of agril. technologies, therefore, various publications published by university are sold at ATIC. In all Rs. 96,890/-university publication were sold during 2019-2020.

#### **Innovative Activities:**

# «Vidyapeeth Aaplya Dari: Special plant protection programme"-An innovative Extension Programme of VNMKV, Parbhani

The innovative extension program i.e., *Vidyapeeth Aapalya Dari*: Special plant protection programme was implemented during 2019-2020. It was implemented in Parbhani & Hingoli districts during September- 2019 to October-2019 in 52 Villages with following objectives.

During this year the special emphasis was given on plant protection major emphasis particularly on Pink Bollworm Eradication and relevant technology generated by University on dry land agriculture. Especially the BBF technology for effective "Rainwater harvesting" and "*In situ* soil moisture conservation". Pink Bollworm Eradication programme has resulted in controlling the pest, maximizing the yield and stabilizing the crop productivity. In Parbhani & Hingoli districts the program was run during September-October 2019. The structure of the program was informal with having meetings, question-answer, field visit, group discussion and farmers rally etc.

#### Cotton Furdad Eradication Campaign:

Eradication *furdad* is an effective control measure in cotton to control the cotton pink boll worm. For this purpose 23 programme were organized in Parbhani and Hingoli district for creating awareness about eradication of *furdad*.

#### **PPP Model**

Transfer of technology is one of the important mandates of the university. With the due course of time agriculture has become complex and need of precision extension has become a great need of the farmers particularly in rainfed agriculture. In view to cover more area and quick transfer of need based technology various Government & NGO and private sectors/firms are significantly contributing. In this context, ATIC centre has initiated few innovative programs jointly with Reliance foundation for transfer of technology.

#### **Voice Messages**

During the year 2019-2020 under PPP Model the ATIC centre has commensurate the Voice SMS service in collaboration with Reliance foundation. This service is effective for even illiterate farmers. The farmers have benefited through this service. The brief & accurate 654 need based voice messages on various important aspects like Pest and Disease Management, Fertilizer Management, Micronutrient Management, Irrigation Scheduling, etc., are being sent to the 211895 farmers.

#### Dial-out/Audio/Video Conferencing

The ATIC has started the audio conferencing facility for farmers in coordination with Reliance Foundation for the farmers. In this the farmers from particular village can contact in a group by audio conferencing and ask their queries in person to the university scientist who are together in the conference hall of ATIC and can get answer from this scientist. In all 06 Dial-out/Audio and 01 video conferences were conducted during the year 2019-2020.

## Extension Education activities executed for the year 2019-2020:

Sr. No.	Title of activities	No. of Activities Executed (2019-20)	
1.	Monthly district workshop	13	
2.	Field visits	36	
3.	Diagnostic team visits	12	
4.	Farmer's rally	19	
	Training	36	
5.	Farmers training programs	24	
	Officers training program	12	
6.	Exhibition (Participation)	07	
7.	Krishi Mahiti Wahini - Telephone calls	2429	
8.	Farmers queries solutions - in person at ATIC	63	
9.	Monthly message	24 (12x2)	
10.	Publication Sale	1014 Publications (Rs. 96890 /-)	
11.	Voice SMS to farmers	654 (211895 Farmers)	
12.	Audio/Video Conferencing	07	
13.	Plant Protection Campaign (VADTS)	52 Villages	
14.	Research Articles	01	
15.	Popular Articles	14	
16.	News	83	
17.	Programs Broadcasted / Telecasted (Radio talk - 03 and TV Shows 04)	07	



## **University at Door Step of Farmers**













## **University Administration**

#### **University Officers**

As per Maharashtra Agricultural Universities Act, 1983(14) and statue, 1990, following are the Executive, Academic and Other Officers of Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani during the year 2019-20.

#### A) Executive Officers

1	Chancellor	Hon. Shri. Bhagat Singh Koshyari
2	Pro-Chancellor	Hon. Shri. Dadaji Bhuse
3	Vice-Chancellor	Hon. Dr. Ashok S. Dhawan

#### **B)** Academic Officers

1	Director of Instruction & Dean	Dr. D.N. Gokhale
2	Director of Research	Dr. D.P. Waskar
3	Director of Extension Education	Dr. D.B. Deosarkar
4	Associate Dean & Principal, COA, Parbhani	Dr. D.N. Gokhale
5	Associate Dean & Principal, COA, Latur	Dr. B.M. Thombre
6	Associate Dean & Principal, COA, Ambajogai	Dr. A.V. Gutte
7	Associate Dean & Principal, COA, Badnapur	Dr. G.M.Waghmare
8	Associate Dean & Principal, COA, Osmanabad	Dr. R.D. Ahire
9	Associate Dean & Principal, COA, Golegaon	Dr. D.B. Deosarkar
10	Associate Dean & Principal, College of Agril. Engg. & Tech.Parbhani	Dr. U.M. Khodke
11	Associate Dean & Principal, College of Food Tech., Parbhani	Dr. A.R. Sawate
12	Associate Dean & Principal, College of Community Science, Parbhani	Dr. J.P. Zend
13	Associate Dean & Principal, Vilasrao Deshmukh College of Agril. Biotechnology, Latur	Dr. B.S. Indulkar
14	Post Graduate Institute of Agril. Business Management, Chakur	Prof. H.B. Patil
15	College of Horticulture, Parbhani	Dr. T.B. Tambe
16	Associate Dean, Instructions, Parbhani	Dr. D.N. Dhutraj

## C) Heads of the Department

Agriculture			
1	Department of Agronomy	Dr. B.V. Asewar	
2	Department of Soil Science & Agril. Chemistry	Dr. Syed Ismail	
3	Department of Plant Pathology	Dr. K.T. Apet	
4	Department of Agril. Entomology	Dr. S.D. Bantewad	
5	Department of Extension Education	Dr. R.P. Kadam	
6	Department of Agri. Botany	Dr. J.E. Jahgirdar	
7	Department of Agril. Economics	Dr. K.V. Deshmukh	
8	Department of Horticulture	Dr. G.M. Waghmare	
9	Department of Animal Husbandry and Dairy Science	Dr. G.K. Londhe	
10	Department of Agril. Engineering	Dr. A.S. Kadale	
11	Department of Agril. Meteorology	Dr. M.G. Jadhav	
Food	Technology		
12	Department of Food Microbiology	Prof. H.B. Deshpande	
13	Department of Food Engineering	Dr. R.B. Khirsagar	
14	Department of Food Business Management	Prof. D.R. More	
Comn	nunity Science		
15	Department of Human Development and Studies	Dr. Jaya Bangale	
16	Department of Textile and Apparel Designing	Prof. Medha Umrikar	
17	Department of Resource Management and Consumer Science	Dr.J.P. Zend	
18	Department of Food Science and Nutrition	Dr. Asha Arya	
19	Department of Community Science Extension and Communication Management	Dr. S.G. Puri	
Agric	ultural Engineering		
20	Department of Irrigation & Drainage Engineering	Dr. H.W.Awari	
21	Department of Soil & Water Conservation Engineering	Prof. B.W.Bhuibhar	
22	Department of Agril. Process Engineering	Dr.S.U.Khodke	
23	Department of Farm Power & Machinery	Dr. S.N.Solanki	
24	Department of Electrical a & Other Energy Sources	Dr. R.T.Ramteke	

### D) Other Officers

1	Registrar	Sh. Ranjeet Patil
2	Comptroller	Sh. N.S.Rathod
3	University Engineer	Sh.Gaurishankar Swami
4	Student's Welfare Officer	Dr. M.S. Deshmukh
5	Deputy Registrar (Exam)	Dr. G. A. Bhalerao
6	Deputy Registrar (Academic)	Sh. P.K.Kale
7	Assistant Registrar ( Academic )	Sh. P.M. Patil
8	Librarian	Sh. S.D. Kadam

## Vacancy position as on 31.3.2020

## **ABSTRACT**

Sr. No.	Group	Sanctioned post	Filled in post	Vacant post
1	A	598	350	248
2	В	169	81	88
Filled post of Section Officer by deputation from Govt.		2	2	00
3	С	729	434	295
4 D		1386	718	668
Total		2884	1585	1299

### Group -A

Sr. No.	Name of the Post	Sanctioned Post	Filled in Post	Vacant Post
1	Directors (Education, Extension and Research)	03	01	02
2	Associate Dean & Principal	12	02	10
3	Head of the Department	10	10	00
4	Professor	44	24	20
5	Associate Professor	183	94	89
6	Assistant Professor	284	175	109
7	Programme Co-coordinator	04	03	03
8	Subject Matter Specialist	24	23	01
9	Administrative post	34	18	16
	Total	598	350	248

## **Group B**

Sr. No.	Name of the Post	Sanctioned Post	Filled in Post	Vacant Post
1	Senior Research Assistant -Agri	67	27	40
2	Senior Research Assistant–Agri Engg	01	00	01
3	Senior Research Assistant-Biotech	04	00	04
4	Senior Research Assistant-Food Tech	06	03	03
5	Veterinary Officer	01	00	01
6	K.V.K.Programme AssttLaboratory Technician	04	03	01
7	K.V.K.Programme AssttComputer	04	01	03
8	K.V.K.Programme AssttField Manager	04	03	01
9	Section Officer	25	16	9
10	Assistant Section Officer	25	13	12
11	Assistant (Assistant Superintendent)	03	03	00
12	Stenographer	21	12	09
13	Technical Asstt. (Lib)	04	00	04
	Total	169	81	88

## **Group C**

Sr.No.	Name of the Cadres	Sanctioned post	Filled in post	Vac ant post
1	Computer Operator/Computer Programmer	2	00	02
2	Senior Clerk	66	36	30
3	Steno-typist	4	2	2
4	Jr.Stenogropher (Grade – III) KVK	3	2	1
5	Computer Operator	1	0	1
6	Junior Clerk	157	104	53
7	Library Asstt.	6	2	4
8	Reprographic Asstt.	1	0	1
9	Compounder	2	1	1
10	Junior Research Assistant	74	30	44
11	Junior Engineer	6	3	3
12	Foreman Supervisor	1	00	01
13	Supervisor Home-Science	1	0	1
14	Draftsman	1	1	0
15	Senior Mechanic	2	1	1
16	Junior Mechanic	1	1	0
17	Tractor Driver	5	0	5

18	Truck Driver	4	3	1
19	Driver	42	20	22
20	K.V.K.Driver	8	5	3
21	Agrilcultural Assistant	281	205	76
22	Agricultural Assistant (Bio -Tech)	2	0	2
23	Agricultural Assistant (Engineering)	2	0	2
24	Laboratory Assistant	15	2	13
25	Fieldman (Technical Instructor)	1	1	0
26	Electrician	8	4	4
27	Carpenter	3	3	0
28	Artists	2	2	0
29	Sub-Overseer/Tech.Asstt.	5	1	4
30	Computer	1	0	1
31	Montesory Teacher (Home.Sci.)	1	0	1
32	Laboratory Assistant (Home Sci.)	5	0	5
33	Telephone Operator	2	0	2
34	Plumber	4	2	2
35	Mistry	1	0	1
36	Boiler Assistant (Tech.)	1	0	1
37	Welder	1	1	0
38	Turner	1	0	1
39	Fitter	2	0	2
40	Audio Visual Operator	2	1	1
41	Computer operator	1	1	0
	Total	729	434	295

## **Group- D**

Sr.No.	Name of the Cadres	Sanctioned post	Filled in post	Vacant post
1	Lab. Boy	54	50	04
2	Labour	938	514	424
3	Watchman	149	53	96
4	Peon	110	37	73
5	Grazer	6	1	5
6	Attendant	9	3	6
7	Milker	4	1	3
8	Messenger	1	1	0
9	Book Bearer	1	0	1
10	Mistry	1	0	1

11	Dresser	1	0	1
12	Farash	1	1	0
13	Sweeper	27	18	9
14	Mali	19	13	6
15	Library Attendant	5	3	2
16	Laboratory Attendant	4	3	1
17	Cook	1	0	1
18	Jamadar	5	3	2
19	Rukhi / Walmiki	4	3	1
	Total	1386	718	668

**Universities Authorities Meetings:** The meetings of the various bodies of the University authorities such as Executive council, Academic Council, Agricultural Research Council, Extension Council Faculties and Board of Studies were conducted time to time during the period of report.

**Executive Council**: During the period of report, total 4 meetings of the executive council were conducted.

Academic Council: Two meetings of the academic council were conducted during the period of report.

**Agril. Research Council**: One meeting of the Agril. Research Council was conducted during the period of report.

**Extension Council**: One meeting of the Executive Council was conducted during the period of report.

**Educational Faculties**: Faculty meetings were conducted in all the faculties of agriculture and allied sciences during the period of report.

**Board of Studies**: Regular meetings of Board of Studies were conducted in all agriculture and allied sciences during the period of report.

## **University Finance**

#### MAU 2019 20

#### REVENUE INCOME

Group Summary 1-Apr-2019 to 31-Mar-2020

Particulars		ng Balance
	Debit	Credit
ANIMAL HUSBANDRY RECEIPTS		8,53,292.0
Sale of Fym(Senkhat)		4,944.0
Sale of Milk & Milk Produce		6,62,208.00
Sale of Poultry Products		1,86,140.00
CAPITAL RECEIPTS		12,38,764.00
Sale of Books & Periodicals		8,095.00
Sale of Capitals (Assets)		2,000.00
Sale of Furniture/tools/dead Stock (Auction)		8,58,502.00
Sale of Live Stock		3,70,167.00
EDUCATIONAL RECEIPTS		13,78,85,793.00
Admission / Regi. Fees		4,88,850.00
Bonafide Fees		
Convocation Fees		1,90,724.00
		3,70,000.00
Electricity Charges ( Student)		78,29,543.00
Eligibility Fees		16,17,140.00
Enrolment Fees		20,71,958.00
Examination Fee 25%		38,87,024.50
Examination Fees 75%		5,11,46,576.50
Fine & Dues		1,22,088.00
Grade Card Fees		9,79,779.00
Grivance Fees		3,400.00
Hostel Room Rent		62,65,522.00
Identity Card Fees		1,32,090.00
Insurance Charges From Student		2,83,450.00
Library Fee		35,52,357.00
Marklist & Provisional Certificate Fees		500.00
Medical Examination Fees		7,59,779.00
Migration Fees		1,42,810.00
ODC PDC Fees / Verification		29,83,670.00
ONline Educaiton Fees		
1950 M FO		3,21,900.00
Other Educational Receipts		1,83,22,429.00
Recheking	V/	6,35,330.00
Registration Fees (Income)	• .	24,38,016.00
Re-Recognition/Proceesing Fee Prvt School		3,800.00
Re-Recognition / Proceesing Fees Pvt Colleges		5,90,200.00
Revolution Fees		21,700.00
Sale of Prospectus		5,12,580.00
Transfer Certificate Fees		33,400.00
Tution Fees		3,21,23,877.00
Verification		55,300.00
FARM RECEIPTS		14,49,595.00
Sale of Cotton Lint		2,54,982.00
Sale of Fodder		2,13,420.00
Sale of Grain		520.00
Sale of Other Farm Produce		8,37,046.00
Sale Of Sugarcane		1,43,627.00
GENERAL REVENUE RECEIPTS		3,10,24,563.00
Application Forms		10,23,410.00
Carried Over	S <del></del>	17,24,52,007.00

Particulars	Page 2 Closing Balance	
	Debit Credit	
Brought Forward	17,24,52,007.00	
Bank Interest Received	2,07,96,071.00	
Consultancy /soil Testing/service & Inspection Char	24,000.00	
Hire Charges of Vehicle & Machinary (Income)	45,725.00	
Institutional Charges (Income)	2,77,670.00	
Insurance Claim (Receipt)	12,580.00	
Other General Receipts	76,44,677.00	
Rent of Buildings	4,73,572.00	
Rest House Charges	4,05,708.00	
Sale of Publication & Written Articles	17,330.00	
Sale of Stationery / Cloth	1,133.00	
Sale of Tender Forms	1,53,623.00	
Soil Testing Charges	7,616.00	
Testing Product Fees	40,500.00	
University Library Receipts	81,878.0	
Water Tax Received	19,070.00	
HORTICULTURE RECEIPT	45,09,917.00	
Sale of Horticulture Produce	27,07,800.00	
Sale of Plants / Nursery	18,02,117.00	
SEED RECEIPTS	2,74,009.00	
Sale of Seed	2,17,226.0	
Cala of Coadling	50 700 00	

Assistant Comptroller Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani

56,783.00

17,72,35,933.00

#### MAU 2019 20

#### REVENUE INCOME

Group Summary 1-Apr-2019 to 31-Mar-2020

	Pa	
Particulars	Closing Balance	
	Debit Credit	
ANIMAL HUSBANDRY RECEIPTS	8,53,29	
CAPITAL RECEIPTS	12,38,764.00	
EDUCATIONAL RECEIPTS	13,78,85,793.00	
FARM RECEIPTS	14,49,595.0	
GENERAL REVENUE RECEIPTS	3,10,24,56	
HORTICULTURE RECEIPT	45,09,917.00	
SEED RECEIPTS	2,74,009	
Grand Total	17.72.35.93	

Assistant Comptroller Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani

Sale of Seed Sale of Seedling

**Grand Total** 

#### MAU 2019 20

Expenses Group Summary 1-Apr-2019 to 31-Mar-2020

Particulars	Closing B	AN EXPERIMENTAL PROPERTY OF THE PROPERTY OF TH	
	Debit	Credit	
Contingency	36,75,69,397.00	17,70,473.00	
HOSPITALITY EXPENSES	21,41,455.00		
MAINTAINCAE	7,48,45,665.00		
MATERIAL & SUPPLIERS	3,59,21,800.00		
MOTOR VEHICLES ( FUNCTIONAL)	1,00,54,443.00		
OFFICE EXPENSES RECURRING	14,69,64,360.00	17,70,473.00	
PROFESSIONAL & SPECIAL SERVICES	7,47,73,733.00	TO DESCRIPTION OF THE SHOP	
PUBLICATION	31,303.00		
RENT , RATE & TAXES	31,94,866.00		
STIPEND & SCHOLARSHIP	1,96,41,772.00		
PENSION & GRATUITY	90,28,09,808.00		
Basic Pension	50.08.95.146.00		
Commutation of Pension	5,97,93,999.00		
Encashment of Leave	8,85,55,307.00		
Gratuity	3,77,75,865.00		
Pension Arrears.	7,01,90,890.00		
Pension Releif	14,55,98,601.00		
SALARIES	98,51,95,001.00		
7th Pay Diffrance	1,35,612.00		
CLA & Other Allowance	34,64,105.00		
Contratual Salary	1,67,32,522.00		
Conveyance Allowance	90,88,375.00		
Dearness Allowance	56,11,65,781,00		
Grade Pay	6.49.16.735.00		
House Rent Allowance	3,24,84,100.00		
Medical Reimbursement	65,92,074.00		
NPS Govt.Share	1,97,836.00		
Over Time	6,51,338.00		
Pay of Establishment	14,83,54,446.00		
Pay of Officers	14,10,22,755.00		
Washing Allowance	3,89,322.00		
TRAVEL EXPENSES	48,51,598.00		
T.A. to External Examiner	13.990.00		
T.A. to Staff Member	48,37,608.00		
WAGES & FIELD OPERATION	37,60,865.00		
Field Operation	37,49,372.00		
Labour Wages	11,493.00		
Grand Total	2,26,41,86,669.00	17,70,473.00	

Assistant Comptroller Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani

## **University Engineer**

## **Major Infrastructural work**

S.No.	Name of work	Construction Year	Remarks
1	College of Agriculture building at Golegaon Tq. Aundha Dist. Hingoli for Vasantrao Naik Marathwada Agricultural University, Parbhani	2015-16	Work in progress in final stage
2	Construction of girls hostel building at Parbhani for VNMKV Parbhani	2019-20	Work in progress
3	Repairs and renovation of Badminton hall at Parbhani for VNMKV Parbhani (Student Welfare Office)	2019-20	Work in progress
4	Repairs and extension of auditorium hall at Parbhani for VNMKV, Parbhani (Near Student Welfare Office)	2019-20	Work in progress
5	Construction of safflower seed storage godown at Seed Processing Unit, VNMKV, Parbhani	2019-20	Work in progress
6	Proposed construction of soybean seed storage godown at Latur	2019-20	Work in progress
7	Additional work of Seed Storage and Seed Processing plant at ARS Badnapur, Dist. Jalna for VNMKV Parbhani	2019-20	Work in progress
8	Construction of Biomix unit at VNMKV, Parbhani	2019-20	Work in progress
9	Providing and fixing aluminium partition and flooring to NAHEP centre at Central Museum under VNMKV Parbhani	2019-20	Work in progress
10	Construction of KVK building at Badnapur, Dist. Jalna for VNMKV, Parbhani	2019-20	Work in progress
11	Construction of ESR for water supply in Sector-II Campus at VNMKV, Parbhani	2019-20	Work in progress
12	Establishment of skill development training center for SC beneficiaries at College of Agriculture, Latur under VNMKV, Parbhani	2019-20	Work in progress

### Memorandum of Understanding (MoU)



Dr. Ashok Dhawan, Hon. Vice-Chancellor, Dr. B. Venkateswarlu, Former Vice-Chancellor, Dr. G. Ravindra Chary, Director, ICAR-CRIDA, Hyderabad, Dr. D.P. Waskar, Director of Research, Dr. U.M. Khodke, Dr. Smita Solanki, Shri. Rohit Kadam, Rohit Industries, Pune during Tri-party Agreement



Dr. Ashok Dhawan, Hon.Vice-Chancellor, Dr. Jagdish Rane, Director, ICAR-NIASM, Baramati, Dr. D.P. Waskar, Director of Research during signing of MoU



Dr. Ashok Dhawan, Hon.Vice-Chancellor, Shri. Anil Bhandari, Managing Director, MAHABEEJ, Akola, Dr. D.P. Waskar, Director of Research, Dr. Prafulla Lahane, General Manager, MAHABEEJ & Dr. K.S. Baig, Cotton Specialist during signing of MoU

## Green Campus - Clean Campus









# Vasantrao Naik Marathwada Krishi Vidyapeeth Parbhani - 431 402



www.vnmkv.ac.in



www.facebook.com/vnmkv



www.twitter.com/vnmkv



www.youtube/user/vnmkv



www.promkvparbhani.blogspot.in