



ANNUAL REPORT 2023-24

MAHARASHTRA ANIMAL AND
FISHERY SCIENCES UNIVERSITY, NAGPUR



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PREFACE



Dr. N. V. Patil
Vice - Chancellor

I am delighted to present the gist of the major activities of Maharashtra Animal & Fishery Sciences University (MAFSU) in the domain of education, research and extension for the year 2023-24. With the mandate of education to create a cadre of trained manpower in the field of Veterinary and Animal Husbandry, Dairy Technology and Fisheries Science, the university is striving hard to support the development of these sector in the State thereby contributing to the national development. Besides this the University is continuously extending its expertise and at time its manpower for the actual fieldwork in these domains in the entire state.

Maharashtra Animal and Fishery Sciences University is the largest university with five Veterinary Colleges, one Post Graduate Institute of Veterinary and Animal Sciences, two Dairy Technology Colleges, two Fishery Science Colleges, one Wildlife Research and Training Centre, three Krishi Vigyan Kendras, 8 livestock farms, 2 fish farms, 2 dairy plants and 105 recognized schools offering diploma in livestock management and dairy production (LMDP).

Under Veterinary Science stream, a total of 415 students were admitted in B.V.Sc & A. H. Course, 193 in M.V.Sc Course and 8 in Ph.D during 2023-24. The number of students admitted in the B. Tech Dairy Technology were 61 while 54 students were admitted in Fishery science faculty and a total of 5719 students were admitted in LMDP diploma course in 2023-24. It is indeed a joyous moment to inform that under ICAR-NTS National Talent scholarship 10 students were awarded the junior research fellowship for pursuing Masters and Doctoral Degrees while 6 research scholars cleared the ICAR-NET examination. In this year a total of 512 students were awarded with the bachelor's degrees, 146 completed their master's and 10 research scholars completed their Ph.D degrees from the University.

Research is another satisfying area wherein a total of 17 sponsored research projects funded by various agencies and State government with a total outlay of Rs. 1896.94 lakhs are being implemented and 2 research projects worth Rs. 1734.71 lakhs were completed during 2023-24. Further, 20 Institute-Industry projects worth Rs. 58.08 Lakhs were completed and 16 ongoing projects with a grant of Rs. 92.60 Lakhs are underway and the researcher have published 362 research publications in National and International journals and the university has released 36 research recommendations and one patent was granted.

Capacity building projects worth Rs. 809.76 Lakhs sponsored by state department though various schemes are being implemented by the Directorate of Extension education. A total of 7310 trainees were trained by the university which includes the farmers, youth women and professionals. Further, the university has reached 26.71 lakhs stakeholders through its advisories and 4499 through demonstrations, workshops, field visits and farmers visiting the university campuses. Total 33



informative leaflets, 63 books, 395 popular articles in local print media, 108 radio programmes and 13 television programmes have also enriched the outreach of the university. The university faculty has treated a total of 181778 animals and 6891 diagnostics were extended for the benefit of the animal owners. The university has also adopted 30 villages under Unnat Bharat Abhiyan with a budget of 15 Lakhs for their holistic inclusive sustainable development by synergising the university expert-student and villages.

I am elated to inform you that the Red Kandhari Research and Instructional farm of College of Veterinary and Animal Sciences, Parbhani under MAFSU, Nagpur bagged the prestigious national 'Breed conservation award-2023' from ICAR-NBAGR, Karnal, Haryana. Also the State Government has recognized the College of Dairy Technology, Warud (Pusad) as a centre of excellence. The University has successfully completed the infrastructural development work worth Rs. 482.21 lakhs and is handling ongoing works worth Rs.20387.43 lakhs.

(Dr. Niteen V. Patil)



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1. EXECUTIVE SUMMARY

Maharashtra Animal & Fishery Sciences University (MAFSU) established under the State Act 1998 (MAH.XVII of 1998) on 3rd December, 2000 has its headquarter at Nagpur. The University is serving towards the sustainable management, conservation and augmentation of rich and diverse animal and fishery resources in the state.

The Maharashtra Animal and Fishery Sciences University has five Veterinary Colleges, one Post Graduate Institute of Veterinary and Animal Sciences, two Dairy Technology Colleges, two Fishery Science Colleges, one Wildlife Research and Training Centre and three Krishi Vigyan Kendras and 105 recognized schools offering diploma in livestock management and dairy production (LMDP). The University is imparting under graduate degree programmes in the stream of Veterinary Science and Animal Husbandry, Dairy Technology and Fishery Science. Masters degrees are offered in Veterinary Science, Dairy Technology while Ph.D degrees are offered for Veterinary Science students. The University faculty of Lower Education offers two years diploma course “Livestock Management and Dairy Production” for promoting entrepreneurship through its 105 diploma schools recognized by the University.

Under veterinary science stream, a total of 415 students were admitted in B.V.Sc & A. H. Course, 193 in M.V.Sc Course and 8 in Ph.D during 2023-24. The number of students admitted in the B. Tech Dairy Technology were 61 while 54 students were admitted in Fishery science faculty and a total of 5719 students are admitted in LMDP diploma course during 2023-24.

Under ICAR-NTS National Talent scholarship 10 students were awarded the junior research fellowship for pursuing Masters and Doctoral Degrees while 6 research scholars cleared the ICAR-NET examination. Apart from this, scholarships and fellowships were awarded to academically meritorious students and government provided financial assistance to economically poor and backward class students in the form of freeships.

A total of 17 sponsored research projects funded by agencies like ICAR, ICMR, DBT, State government with a total outlay of Rs. 1896.94 lakhs are being implemented and 2 research projects worth Rs. 1734.71 lakhs were completed during 2023-24. The 20 Institute _industry projects worth Rs. 58.08 Lakhs were sponsored by private agencies and 16 ongoing projects with a grants of Rs. 92.60 Lakhs are reflecting the dynamic collaboration between the veterinary institutes and the industry for the advancement of the science and technology in this domain.

The significant achievements from the ICAR, New Delhi sponsored project on centre of excellence for advanced research on animal food safety include the strengthening of laboratory facilities and creation of virtual classroom which helped in extending the developments of several protocols, standard operating procedures. The centre conducted 62 national trainings, 32 international trainings, 3 national quizzes and 3 short visits benefitting 12,762 participants and collaborated with 17 national and 5 international Higher Education Institutes /University. Similarly, RSGTC, Mumbai sponsored project exhibited the salient achievements like development of bio-functional fermented milk products enriched with bioactive peptides and milk protein derived Alpha-glucoside DDP-IV and ACE-I inhibitory peptides from indigenous cow milk could be used as



ingredients for functional foods, nutraceuticals and pharmaceutical applications for management of Type 2 Diabetes and Hypertension.

Significant findings from these researches along with the research conducted by staff and students have helped to bring 362 research publications in National and International journals and the university has released 36 research recommendations and one patent was granted Patent No. 437845 for "Chondroitin Sulphate from Buffalo Cartilage" to MAFSU, Nagpur from 07/07/2023.

The university is having 9 livestock farms in the constituent colleges as the instructional farms for practical experiences for the students, demonstration unit for trainees and conducting the applied research. The farms have a total of 1257 farm animals viz. 483 cattle, 218 buffaloes, 138 sheep and 418 goats. These farms also have 5613 poultry birds in five poultry farms. These farms with an aim of conservation of region specific livestock breeds have produced a total of 3982.74 MT of fodder which includes 3669.34 MT of green fodder and 313.40 MT of dry fodder. Total revenue of 115.05 lakhs were generated through the sale of milk, eggs, fodder, animals and farm produce like compost and grains.

The Directorate of Extension is running projects worth 809.76 Lakhs in collaboration with the National Dairy Development Board (NDDB), Anand, Gujarat, Mahila Vikas Arthik Vikas Mahamandal (MAVIM), Mumbai, SMART Cell, Department of Animal Husbandry, Government of Maharashtra and Department of Animal Husbandry and Dairying, Government of India for training of dairy farmers, pashusakhis, field veterinarians and unemployed youth. In three Micro Training Centres (MTCs) at Nagpur, Wardha and Amravati a total of 1692 farmers were trained through 73 trainings, 779 MAVIM sponsored pashusakhis were trained through 26 trainings, 125 pashusakhis and 24 field veterinarians sponsored through SMART project, 8 infertility camps and awareness campaigns were organized in which 992 infertility cases were treated and 2080 farmers were guided on latest dairy farming technologies in the DAHD, GOI sponsored grants.

During 2023-24, University has conducted 83 trainings for 3389 farmers and 46 trainings for 3921 professionals. In this year, a total of 33 workshops and seminars were organized wherein 4364 farmers were benefited while 37 workshop and seminars were organized for the professional wherein a total of 3866 professionals were involved. The University has disseminated a total of 35 advisories reaching-out to 26,71,830 farmers across the state through the M-Kisan portal. Total 264 demonstrations were conducted for showcasing the established technologies and a total of 11080 farmers were benefitted and another 25 demonstrations were also organized for 711 professional. The University have organized a Agri Education Fair 2023 and participated in 31 exhibitions organized by various agencies and have participated in 18 livestock shows wherein 103 experts have rendered their services as experts for livestock judging. A total of 3969 farmers visited to Institutes of MAFSU and 131 faculty members also visited the field during 2023-24.

The University faculty have published 33 informative leaflets, 63 books, 395 popular articles in local print media. This rich information base is available for the students, farmers and field functionaries through the University library and from the libraries in all the constituent colleges of the University. Electronic Mass Medias like radio and television serves as the most effective outreach medium for the transfer of technologies. Through 108 radio programmes and 13 television programmes on animal husbandry, dairy technology, poultry and fisheries sectors, scientific information and technologies were disseminated for all the stakeholders across the State.



Unnat Bharat Abhiyan, the flagship programmes of the Govt. of India is also being implemented in true spirit and the University has made a provision of Rs. 50,000/- per village from the revenue receipt for overall development of the selected 30 adopted villages where activities related with improvement of animal husbandry sector were carried out through different programs and special NSS residential camps for the students.

As an important facilitative service by the University, a total of 1,81,778 animal cases were treated wherein the cases treated in hospitals are 1,62,785 while 16410 animals were treated through the 96 animal health camps and 2,583 animals were treated during the ambulatory services being provided by the colleges. Besides this the university have extended the expert services for the 19 infertility awareness campaign in collaboration with NDDB and treated 845 infertility related cases in dairy animals. The advance imaging techniques like USG were used for diagnosis of 3,532 cases while 5,505 X-Rays were processed by the experts in the hospitals. The constituent colleges have also extended the diagnostic services wherein a total of 10,649 blood samples were analyzed for CBC, 6,088 blood smears were examined, 1,787 faecal samples were examined for parasitic infestations and 10,724 biochemical estimations were carried out.

The Red Kandhari Research and Instructional farm of College of Veterinary and Animal Sciences, Parbhani under MAFSU, Nagpur bagged the prestigious national 'Breed conservation award-2023' from ICAR-National Bureau of Animal Genetics Resources, Karnal, Haryana. Also the State Government has recognized the College of Dairy Technology, Warud (Pusad) as a centre of excellence. Besides this the faculties and students of University have excelled in various fields and were awarded/felicitated by Government agencies and Non-Govt. organizations including the professional bodies of their respective fields for excellence in teaching, research and extension activities.

The University has successfully completed the infrastructural development work worth Rs. 482.21 lakhs and is handling ongoing works worth Rs.20,387.43 lakhs. The university received the funds of Rs. 22,179 Lakhs for the salary, pension, contingency, works and Mafsuarth/Maha IT and the corresponding expenditure was Rs. 22,013 Lakhs. The University received the funding of Rs. 1,485.24 lakhs from ICAR for education, AICRP, KVK and for other schemes sponsored by ICAR. A grant of Rs. 143.84 Lakhs were also received from sponsoring agencies like DST, ICMR, and other agencies while state government also provided grants of Rs. 303.6 Lakhs for implementation of projects through MAVIM and SMART projects. The university bagged Rs. 62.64 lakhs from various private agencies for small agency projects. The university has also generated a receipt of Rs. 3,382 Lakhs from the educational fees, sale of farm produce like milk, animals and compost, etc.



2. UNIVERSITY GOVERNANCE

The Maharashtra Animal and Fishery Sciences University was established through the notification dated November 17th, 2000 under the State Act No. 1998 (Mah. XVII of 1998) on 3rd December 2000 at Nagpur. The University was carved out of the four Agricultural Universities in the State by transferring five Veterinary Colleges, one Post Graduate Veterinary Institute and one Dairy Technology College. Subsequently, University established two Fishery Colleges, one Dairy Technology College, one Wildlife Research and Training Centre and three Krishi Vigyan Kendras considering the requirement and need of the State.

2.1. MAFSU MISSION

Our mission is to ensure enlightenment and empowerment of students by imparting advanced knowledge in the fields of animal, dairy and fishery sciences by adopting innovative, efficient and effective strategies. We will strive for creating rural employment, economic prosperity and well-being of the resource-poor farming community in the state through viable and vibrant research and impact maximizing extension education services and growth oriented and faculty friendly practices. We will contribute to public health research and with an ultimate aim to enrich human nutrition and welfare.

By using the latest technologies, we will make education meaningful, relevant, universally accessible, intellectually stimulating and professionally challenging.

By using the latest technologies, we will make education meaningful, relevant, universally accessible, intellectually stimulating and professionally challenging. We will create environment for conducting need based high-quality research, applying the best outreaching strategies and practices, leveraging the strength of our network of constituent colleges and affiliated institutes. We shall produce and offer well trained highly competent manpower and high-tech newer technologies for enhancing productivity, augmenting production quality and safety of the livestock products, without compromising animal welfare. This will be done through a wide range of capacity development programmes for field workers, livestock holders, dairymen and fishermen for bringing about the total metamorphosis of livestock, Dairy and Fishery sectors in the state of Maharashtra.

2.2. MANDATE OF UNIVERSITY

1. To produce knowledge bearing man power in the field of Veterinary, Animal Science, Dairy Technology and Fishery Science.
2. To develop extension methodologies modules and address policy issues in respect of animal health and productivity, service delivery in the state of Maharashtra.
3. To play a role of think tank for the department of animal husbandry, dairy development and fisheries to assist in policies monitoring and impact analysis.

2.3. OBJECTIVES OF THE INSTITUTION

1. To impart and co-ordinate education in Animal and Fishery Sciences including the post graduate education.
2. To further advancement of learning and prosecution of research in Animal Sciences and Fishery Sciences with special emphasis on need-based research relevant to field problems of



- the State and aspirations of the farmers.
3. To impart lower education in the field of Veterinary, Animal and Fishery Sciences.
 4. To organize and impart continued education, refresher's training courses and summer institutes, hold technical symposiums, seminars and workshops to bring about professional development and skill improvement of the technical personnel in the field.
 5. To hold examinations and confer such Degrees, Diplomas, Certificates and other academic distinctions as deemed fit.
 6. To undertake lab to land transfer of technology, to effectively deliver benefits of research to the rural masses, industries and other related beneficiaries in the sector in the State through appropriate extension agencies.
 7. To integrate teaching, research and extension training with an ultimate aim to promote productivity in Animal Husbandry, Dairy, Poultry and Fishery Sectors.
 8. To promote marine and inland fisheries, to preserve and upgrade wild life and zoo animals in the State.
 9. To develop brackish water and fresh water aquaculture.
 10. To develop marketing infrastructure.
 11. To formulate welfare schemes for fishermen and livestock farmers.
 12. To develop by-products technology in livestock, fisheries and dairy.
 13. To liaise and establish vital linkages with concerned Departments of Animal Husbandry, Dairy Development and Fisheries Development of the State and Union and National and International Research Institutes specialized in the field of Animal and Fishery Sciences with a view to keep abreast of the latest technology.

2.4. STATUTES AND REGULATIONS

The University is governed by following Rules and Regulations.

- **Maharashtra Act No. XVII of 1998:** Maharashtra Animal & Animal and Fishery Sciences University Act - 1998 published in Maharashtra Government gazette on Monday the 4th May, 1998 and its amendments from time to time.
- **MAFSU Statutes - 2002:** In accordance with the section 34(1) read with section 33 of the Maharashtra Animal and Fishery Sciences University Act, 1998 (Mah.XVII of 1998), the Executive Council of the University with the assent of the Chancellor of the University on 21st April 2002 (No.CS/MAFSU/STT/43/01/B (4055/1165) made statutes namely 'Maharashtra Animal and Fishery Sciences University Statutes 2002'.
- **MAFSU Accounts Code - 2007:** The University published regulations governing the University finances, accounts and audits as MAFSU Accounts Code- 2007 on 25.02.2007. The MAFSU Accounts Code defines the procedures and code of practices that are to be followed for smooth financial administration.
- **MAFSU Compendium- 2019:** The University vide order No. MAFSU/EST/2680/19 dated: 20.09.2019 published MAFSU Compendium- 2019 which delegates financial and administrative powers to head of the offices, and controlling officers for transparent, easy and quick administration.
- **MAFSU Academic Regulations for Post Graduate Degree Programme - 2023 :** The Executive Council, MAFSU in its 90th meeting held on 26.02.2023 vide resolution No.



146/2023 accorded its approval to the MAFSU Academic Regulations 2023 for Postgraduate (Masters & Doctorate) Degree Programmes as per the ICAR Restructured and Revised Syllabi of Postgraduate Programmes. The MAFSU Academic Regulations 2023 are effected from the academic year 2023-24.

- **MAFSU Academic Regulations for B. V. Sc. & A. H. Degree Course -2016:** The B.V.Sc & A. H. course offered by the constituent Veterinary Colleges of the University is governed by the Veterinary Council of India Minimum Standards of Veterinary Education (Bachelor of Veterinary Science and Animal Husbandry - Degree Course) Regulations - 2016. The University has formulated the MAFSU Academic Regulations for B. V. Sc. & A. H. Degree Course (2016) based on the MSVE 2016.
- **MAFSU Academic Regulations for Bachelor of Technology (Dairy Technology) Degree Course -2016:** The B.Tech (Dairy Technology) degree course offered by the constituent Dairy Technology colleges of the University is as per the recommendations of Fifth Deans' Committee Report of ICAR. The University has formulated MAFSU Academic Regulations for Bachelor of Technology (Dairy Technology) Degree Course (2016) as per the Fifth Dean's Committee's report.
- **MAFSU Academic Regulations for Bachelor of Fishery Science Degree Course -2016:** The B.F.Sc. degree course offered by the constituent Fishery Science colleges of the University is as per the recommendations of Fifth Deans' Committee Report of ICAR. The University has formulated MAFSU Academic Regulations for Bachelor of Fishery Science Degree Course (2016) as per the Fifth Dean's Committee's report.

2.5. UNIVERSITY AUTHORITIES

2.5.1. Executive Council

The Executive Council is the executive authority of the University. The Vice-Chancellor is the ex-officio Chairman and Registrar is ex-officio Secretary to the Executive Council.

The 91st, 92nd, 93rd, 94th and two special meetings of Executive Council were organized on 20th May 2023, 23rd July 2023, 31st Oct. 2023, 5th Feb. 2024, 1st March 2024 and 7th March 2024 respectively during the year 2023-24.



Welcome of Hon'ble Vice-Chancellor Dr. Niteen Patil during his first Executive Council Meeting

The Executive Council is comprised of the following members as on 31.03.2024

1	Dr. Niteen V. Patil Hon'ble Vice-Chancellor, MAFSU, Nagpur	Ex-Officio Chairman
2	Commissioner, Animal Husbandry M. S., Pune	Ex-Officio Member
3	Commissioner, Dairy Development M. S., Mumbai	Ex-Officio Member
4	Commissioner, Fisheries M. S., Mumbai	Ex-Officio Member
5	Commissioner, Agriculture, M.S., Pune	Ex-Officio Member
6	Conservator of Forests (Working Plan) Near Govt. Press, Zero Miles, Civil Lines, Nagpur	Ex-Officio Member



7	Shri. Nilay Naik Hon'ble MLC A/P. Gahuli, Tal. Pusad, Dist. Yavatmal	Nominated Member
8	Dr. Kiran Bhilegaonkar Principal Scientist & Station In-Charge Training & Education Centre, ICAR - IVRI, College of Agriculture Campus, Shivajinagar, Pune	Nominated Member
9	Dr. Sudhir M. Duddalwar Founder, Techno Bird Poultryies Hindustan Colony, Amravati Road, Nagpur	Nominated Member
10	Shri. Shashikant Jaykumar Khot Director & Partner, Paravesh Seafood Pvt. Ltd., Taloja, MIDC, Navi Mumbai	Nominated Member
11	Shri. Sudhir Wamanrao Dive Advisor, Swargiya Wamanrao Dive Charitable Trust Sant Gadge Nagar, Hingana Road, Nagpur	Nominated Member
12	Shri. Rajesh G. Wankhede Om Gurudev, Chandni Chowk, A/P: Sawada. Tal. Raver, Dist. Jalgaon	Nominated Member
13	Mrs. Anuradha Atul Chavan Founder Chairperson, 'Shanti Pratishthan, At. Post. Kingaon, Tal. Pholambari Dist. Ch. Sambhajinagar	Nominated Member
14	Dr. Ingle Sandip Vinayakrao Member, VCI Mauli House, Balaji Nagar, Amravati	Nominated Member
15	Dr. Bimlesh Mann Assistant Director General (EP&HS)ICAR, Krishi Anusandhan Bhawan, Pusa, New Delhi	Nominated Member
16	Dr. Samiran Panda Director & Scientist - G, National AIDS Research Institute, Pune and Head, Division of Epidemiology & Communicable Diseases; ICMR, V. Ramalingaswami Bhavan, New Delhi	Nominated Member
17	Dr. S.V. Upadhye DI & Dean, Faculty of Veterinary Science, MAFSU, Nagpur	Ex-Officio Member
18	Dr. A. U. Bhikane Dean, Faculty of Lower Education, MAFSU, Nagpur	Ex-Officio Member
19	Dr. P.G. Wasnik Dean, Faculty of Dairy Technology, MAFSU, Nagpur	Ex-Officio Member
20	Dr. S.W. Bonde Dean, Faculty of Fishery Sciences, MAFSU, Nagpur	Ex-Officio Member
21	Dr. A.U. Bhikane Director of Extension Education, MAFSU, Nagpur	Ex-Officio Member
22	Smt. Mona Thakur Registrar, MAFSU, Nagpur	Ex-Officio Secretary



2.5.2 Academic Council:

The Academic Council of the University serves as an advisory body and has the right to advise Vice-Chancellor and the Executive Council in all Academic, Research and Extension Education matters. The Vice-Chancellor is the ex-officio Chairman and Registrar is ex-officio Secretary to the Academic Council.

The 58th, 59th, 60th and 61st meetings of Academic Council were organized on 27th April 2023, 15th July 2023, 20th Oct. 2023 and 2nd Feb. 2024 during the year 2023-24.



Felicitation of Dr. Markandeya, Professor, ARGO during Academic Council meeting on occasion of his superannuation

The Academic Council is comprised of the following members.

1	Dr. Niteen V. Patil Hon'ble Vice-Chancellor, MAFSU, Nagpur	Ex-Officio Chairman
2	Dr. S.V. Upadhye DI & Dean, Faculty of Veterinary Sciences, MAFSU, Nagpur	Ex-Officio Member
3	Dr. N.V. Kurkure Director of Research, MAFSU, Nagpur	Ex-Officio Member
4	Dr. A.U. Bhikane Director of Extension Education, MAFSU, Nagpur	Ex-Officio Member
5	Dr. A.U. Bhikane Dean, Faculty of Lower Education, MAFSU, Nagpur	Ex-Officio Member
6	Dr. P.G. Wasnik Dean, Faculty of Dairy Technology, MAFSU, Nagpur	Ex-Officio Member
7	Dr. S.W. Bonde Dean, Faculty of Fishery Science, MAFSU, Nagpur	Ex-Officio Member
8	Dr. S.U. Gulavane Associate Dean, MVC, Mumbai	Ex-Officio Member
9	Dr. A.P. Somkuwar Associate Dean, NVC, Nagpur	Ex-Officio Member
10	Dr. B.W. Narladkar Associate Dean, COVAS, Parbhani	Ex-Officio Member
11	Dr. N. Z. Gaikwad Associate Dean, COVAS, Udgir, Dist. Latur	Ex-Officio Member
12	Dr. M.D. Meshram Associate Dean, KNPCVS, Shirwal, Dist. Satara	Ex-Officio Member
13	Dr. C. H. Pawshe, Associate Dean, PGIVAS, Akola	Ex-Officio Member
14	Dr. P.G. Wasnik Associate Dean, CDT, Warud (Pusad), Dist. Yavatmal	Ex-Officio Member
15	Dr. M.R. Patil Associate Dean, CDT, Udgir, Dist. Latur	Ex-Officio Member



16	Dr. S. W. Bonde Associate Dean, COFS, Nagpur	Ex-Officio Member
17	Dr. B.R. Kharatmol Associate Dean, COFS, Udgir. Dist. Latur	Ex-Officio Member
18	Dr. S.B. Banubakode Head, Department Veterinary Anatomy & Histology, NVC, Nagpur	Ex-Officio Member
19	Dr. S. D. Ingole Head, Department of Veterinary Physiology, MVC, Mumbai	Ex-Officio Member
20	Dr. S. W. Bonde Head, Department of Veterinary Biochemistry, NVC, Nagpur	Ex-Officio Member
21	Dr. A.P. Somkuwar Head, Department of Veterinary Pharmacology & Toxicology, NVC, Nagpur	Ex-Officio Member
22	Dr. B.W. Narladkar Head, Department of Veterinary Parasitology, COVAS, Parbhani	Ex-Officio Member
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25	Dr. R.J. Zende Head, Department of Veterinary Public Health, MVC, Mumbai	Ex-Officio Member
26	Dr. B. N. Ramteke Head, Department of Animal Nutrition, NVC, Nagpur	Ex-Officio Member
27	Dr. S.V. Kuralkar Head, Department of Animal Breeding and Genetics including Biostatistics, PGIVAS, Akola - 444104	Ex-Officio Member
28	Dr. J.M. Chahande Head, Department of Livestock Production and Management, NVC, Nagpur	Ex-Officio Member
29	Dr. A.A. Devanagare Head, Department of Livestock Products Technology, COVAS, Udgir, Dist - Latur	Ex-Officio Member
30	Dr. S.U. Gulavane Head, Department of Animal Reproduction, MVC, Mumbai	Ex-Officio Member
31	Dr. M.G. Thorat Head, Department of Veterinary Surgery and Radiology, PGIVAS, Akola	Ex-Officio Member
32	Dr. R.V. Gaikwad Head, Department of Clinical Veterinary Medicine including Ethics and Jurisprudence, MVC, Mumbai	Ex-Officio Member
33	Dr. M.D. Meshram Head, Department of Veterinary Epidemiology and Preventive Medicine, KNPCVS, Shirwal, Dist - Satara	Ex-Officio Member



34	Dr. D.S. Deshmukh Head, Department of Veterinary and Animal Husbandry Extension, COVAS, Parbhani	Ex-Officio Member
35	Dr. S.J. Manwar Head, Department of Poultry Science, PGIVAS, Akola	Ex-Officio Member
36	Dr. B.D. Meshram Head, Department of Dairy Technology CDT, Warud (Pusad), Dist. Yavatmal	Ex-Officio Member
37	Dr. P. G. Wasnik Head, Department of Dairy Engineering, CDT, Warud (Pusad), Dist. Yavatmal	Ex-Officio Member
38	Dr. M.R. Patil Head, Department of Dairy Chemistry, CDT, Udgir), Dist-Latur	Ex-Officio Member
39	Dr. A. R. Sarode Head, Department of Dairy Microbiology CDT, Warud (Pusad), Dist. Yavatmal	Ex-Officio Member
40	Dr. R.S. Walse Head, Department of Dairy Business Management CDT, Warud (Pusad), Dist. Yavatmal	Ex-Officio Member
41	Dr. B.R. Kharatmol Head, Department of Fisheries Resource Management (Fisheries Biology), COFS, Udgir	Ex-Officio Member
42	Dr. S. S. Belsare Head, Department of Aquaculture, COFS, Nagpur	Ex-Officio Member
43	Shri. S.A. Joshi Head, Department of Fish Processing Technology, COFS, Nagpur	Ex-Officio Member
44	Shri. A.T. Markad Head, Department of Fisheries Engineering, COFS, Udgir	Ex-Officio Member
45	Dr. P. A. Telvekar Head, Department of Fisheries Extension, Economics and Statistics, COFS, Nagpur	Ex-Officio Member
46	Dr. J. G. K. Pathan Head, Department of Aquatic Environment Management, COFS, Nagpur	Ex-Officio Member
47	Dr. R.H. Rathod Head, Department of Aquatic Animal Health Management, COFS, Nagpur	Ex-Officio Member
48	Dr. Kantharaju L. Member, VCI, 408, Vyalikaval, Bangalore, Karnataka	Ex-Officio Member
49	Smt. Mona Thakur Registrar, MAFSU, Nagpur	Ex-Officio Secretary



2.5.3. Board Of Studies (BOS)

The faculty of Veterinary Science is having Board of Studies for 18 subjects and one study group of Animal Biotechnology whereas Faculty of Dairy Technology is having Board of Studies for 6 subjects and Faculty of Fisheries is having Board of Studies for 3 subjects and study groups for 4 subjects.

During 2023-24, total 80 meetings of BOS were organized in which 72 were in various subjects under faculty of Veterinary and Animal Sciences, 04 each in Faculty of Dairy Technology and Faculty of Fishery Science.

Faculty of Veterinary and Animal Sciences

1	Veterinary Anatomy and Histology	2	Veterinary Physiology
3	Veterinary Biochemistry including Clinical Biochemistry	4	Veterinary Pharmacology and Toxicology
5	Veterinary Parasitology	6	Veterinary Microbiology
7	Veterinary Pathology	8	Veterinary Public Health
9	Animal Nutrition	10	Animal Breeding & Genetics including Biostatistics
11	Livestock Production & Management	12	Livestock Products Technology
13	Animal Reproduction, Gynaecology and Obstetrics	14	Veterinary Surgery and Radiology
15	Clinical Veterinary Medicine including Ethics and Jurisprudence	16	Veterinary Epidemiology & Preventive Medicine
17	Veterinary & Animal Husbandry Extension	18	Poultry Science

Study Group : Animal Biotechnology

Faculty of Dairy Technology

1	Dairy Technology	2	Dairy Engineering
3	Dairy Chemistry, Biochemistry and Food Technology	4	Dairy Economics, Dairy Extension and Management
5	Dairy Microbiology	6	Computer Science, Mathematics and Statistics

Faculty of Fisheries

1	Aquaculture	2	Fisheries Engineering
3	Fish Processing Technology and Microbiology (Fish Processing Technology- ICAR V Dean Report)		

- Study Groups :
- 1- Fisheries Biology (Fisheries Resource Management- ICAR V Dean Report)
 2. Fisheries Resources, Economics, Statistics and Extension Education (Fisheries Extension, Economics and Statistics- ICAR V Dean Report)
 3. Fisheries Hydrography (Aquatic Environment Management -ICAR V Dean Report)
 4. Aquatic Animal Health Management -ICAR V Dean Report)

2.5.4. Research Council

Research Council is constituted to serve as a think tank advisory body of the University and shall advice the Vice-Chancellor and Executive Council on all research matters. The Vice-Chancellor is the ex-officio Chairman and Director of Research is ex-officio Member Secretary to the Research Council.



The Research Council is comprised of following members (As on 31.03.2024)

1.	Dr. Niteen V. Patil The Hon'ble Vice Chancellor, MAFSU, Nagpur	Chairman
2.	Dr. N.V. Kurkure Director of Research, MAFSU, Nagpur	Ex-Officio Member Secretary
3.	Dr. S.V. Upadhye DI & Dean (Faculty of Veterinary Science), MAFSU, Nagpur	Ex-Officio Member
4.	Dr. A. U. Bhikane Director of Extension Education, MAFSU, Nagpur	Ex-Officio Member
5.	Dr. P.G. Wasnik Dean, Faculty of Dairy Technology, MAFSU, Nagpur	Ex-Officio Member
6.	Dr. S.W. Bonde Dean, Faculty of Fishery Science, MAFSU, Nagpur	Ex-Officio Member
7.	Commissioner, Animal Husbandry M. S., Pune	Ex-Officio Member
8.	Commissioner, Dairy Development M. S., Mumbai	Ex-Officio Member
9.	Commissioner, Fisheries M. S., Mumbai	Ex-Officio Member
10.	Commissioner, Agriculture, M.S., Pune	Ex-Officio Member
11.	Dr. S.U. Gulavane Associate Dean, MVC, Mumbai	Ex-Officio Member
12.	Dr. A.P. Somkuwar Associate Dean, NVC, Nagpur	Ex-Officio Member
13.	Dr. B.W. Narladkar Associate Dean, COVAS, Parbhani	Ex-Officio Member
14.	Dr. N.Z. Gaikwad Associate Dean, COVAS, Udgir, Dist. Latur	Ex-Officio Member
15.	Dr. M.D. Meshram Associate Dean, KNPCVS, Shirwal, Dist. Satara	Ex-Officio Member
16.	Dr. C.H. Pawashe Associate Dean, PGIVAS, Akola	Ex-Officio Member
17.	Dr. P.G. Wasnik Associate Dean, CDT, Warud (Pusad), Dist. Yavatmal	Ex-Officio Member
18.	Dr. M.R. Patil Associate Dean, CDT, Udgir, Dist. Latur	Ex-Officio Member
19.	Dr. S. W. Bonde Associate Dean, COFS, Nagpur	Ex-Officio Member
20.	Dr. B.R. Kharatmol Associate Dean, COFS, Udgir, Dist. Latur	Ex-Officio Member
21.	Director of Research, MPKV, Rahuri, Dist. Ahmadnagar	Ex-Officio Member
22.	Director of Research, Dr. PDKV, Akola	Ex-Officio Member
23.	Director of Research, BSKKV, Dapoli, Dist. Ratnagiri	Ex-Officio Member
24.	Director of Research, VNMKV, Parbhani	Ex-Officio Member
25.	Dr. V. Sridhar Senior General Manager ,NDDDB, Civil Lines, Nagpur	Nominated member



26.	Central Zoo Authority, B-1 Wing, 6th Floor, Pt. Deendayal Antyodaya Bhawan, New Delhi	Nominated member
27.	Dr. Ashok Kumar Assistant Director General (Animal Health), ICAR, Division of Animal Science, Krishi Bhavan, New Delhi	Nominated member
28.	Dr. Sanjeev Khosla Director, CSIR - Institute of Microbial Technology, Chandigarh	Nominated member
29.	Dr. Manju Rahi Director & Scientist-'G' Vector Control Research Centre, Puduchery	Nominated member
30.	Managing Director Puyashlok Ahilyadevi Mendhi & Sheli Vikas Mahamandal, Gokhale Nagar, Pune	Nominated member
31.	Dr. Shirish Nigam President, Indian Federation of Animal Health C/o E.W. Nutrition India (P) Ltd., Noida (U.P.) 201 301	Nominated member
32.	Dr. R. S. Masali C/o Compound Livestock Feed Manufacturers Association of India, Mittal Chambers, Nariman Point, Mumbai	Nominated member
33.	Board of Research and Nuclear Science (BRNS), Babha Atomic research centre, Anushakti Bhavan, Trombay	Nominated member
34.	Dr. Lokesh Kumar Narnoliya Scientist-D, Department of Bio-Technology, New Delhi	Nominated member
35.	Dr. Dinesh Tukaram Bhosale Poultry Federation of India 79, Rakshak Society, Near Rakshak Chowk, Pune	Nominated member
36.	Prof. Dr. J. B. Prajapati Chairman, Indian Dairy Association- West Zone, Andheri (East), Mumbai	Nominated member
37.	Dr. Dinesh Sawant General Manager (Agri. & AH) Maharashtra Rajya Sahakari Dudh Mahasangh Maryadit, Mumbai	Nominated member
38.	Member Secretary Vidarbha Development Board, Nagpur	Nominated member
39.	Member Secretary Marathwada Development Board, Chatrapati Sambhajnagar	Co-opt member
40.	Prof. C.G. Joshi Director, Gujarat Biotechnology Research Centre (GBRC) Government of Gujarat, Gandhinagar, Gujarat	Co-opt member
41.	Dr. S. B. Barbuddhe Director, ICAR-NMRI, Hyderabad	Co-opt member
42.	Dr. G. R. Patil Ex-Joint Director, NDRI, Karnal, Haryana	Co-opt member
43.	Dr. Narottam Prasad Sahu Joint Director, ICAR - CIFE, Mumbai	Co-opt member



2.5.5. Extension And Continuing Education Council

Extension and Continuing Education Council is constituted to serve as a think tank advisory body of the University and shall advice the Vice-Chancellor and Executive Council on all extension education matters. The Vice-Chancellor is the ex-officio Chairman and Director of Extension Education is ex-officio member Secretary to the Extension and Continuing Education Council.

The Extension and Continuing Education Council is comprised of following members as on 31.03.2024.

1	Dr. N. V. Patil Hon'ble Vice-Chancellor, MAFSU, Nagpur	Ex-Officio Chairman
2	Dr. A. U. Bhikane Director of Extension Education, MAFSU, Nagpur	Ex-Officio Member Secretary
3	Dr. N. V. Kurkure Director of Research, MAFSU, Nagpur	Ex-Officio Member
4	Dr. S. V. Upadhye DI & Dean, Faculty of Veterinary Science, MAFSU, Nagpur	Ex-Officio Member
5	Dr. A. U. Bhikane Dean, Faculty of Lower Education, MAFSU, Nagpur	Ex-Officio Member
6	Dr. P. G. Wasnik Dean, Faculty of Dairy Technology, MAFSU, Nagpur	Ex-Officio Member
7	Dr. S. W. Bonde Dean, Faculty of Fishery Science, MAFSU, Nagpur	Ex-Officio Member
8	Secretary, Rural Development, M. S. Mumbai	Ex-Officio Member
9	Commissioner, Animal Husbandry M. S., Pune	Ex-Officio Member
10	Commissioner, Dairy Development M. S., Mumbai	Ex-Officio Member
11	Commissioner, Fisheries, M. S., Mumbai	Ex-Officio Member
12	Commissioner, Agriculture, M.S., Pune	Ex-Officio Member
13	Dr. S. U. Gulavane, Associate Dean, MVC, Mumbai	Ex-Officio Member
14	Dr. A. P. Somkuwar Associate Dean, NVC, Nagpur	Ex-Officio Member
15	Dr. B. W. Narladkar Associate Dean, COVAS, Parbhani	Ex-Officio Member
16	Dr. N. Z. Gaikwad Associate Dean, COVAS, Udgir, Dist. Latur	Ex-Officio Member
17	Dr. M. D. Meshram Associate Dean, KNPCVS, Shirval, Dist. Satara	Ex-Officio Member
18	Dr. C. H. Pawshe Associate Dean, PGIVAS, Akola	Ex-Officio Member
19	Dr. S. W. Bonde Associate Dean, COFS, Nagpur	Ex-Officio Member
20	Dr. B. R. Kharatmol Associate Dean, COFS, Udgir, Dist. Latur	Ex-Officio Member
21	Dr. P. G. Wasnik Associate Dean, CDT, Warud (Pusad), Dist. Yavatmal	Ex-Officio Member



22	Dr. M. R. Patil Associate Dean, CDT, Udgir, Dist. Latur	Ex-Officio Member
23	Director of Extension Education, MPKV, Rahuri, Dist. Ahmadnagar	Ex-Officio Member
24	Director of Extension Education, Dr. PDKV, Akola	Ex-Officio Member
25	Director of Extension Education, BSKKV, Dapoli, Dist. Ratnagiri	Ex-Officio Member
26	Director of Extension Education, VNMKV, Parbhani	Ex-Officio Member
27	Dr. Ranjay K. Singh, Assistant Director General (Agri. Extension), Division of Agricultural Extension, ICAR, Pusa, New Delhi.	Nominated Member
28	Dr. V. Sridhar Senior General Manager, NDDDB, Civil Lines, Nagpur	Nominated Member
29	Mr. Manoj Jain, Programme Executive, Doordarshan Kendra, Nagpur	Nominated Member
30	Managing Director, Punyashlok Ahilyadevi Mendhi and Sheli Vikas Mahamandal, Ghokale Nagar, Pune	Nominated Member
31	Dr. R. S. Masali C/o Compound Livestock Feed Manufacturers Association of India, Nariman Point, Mumbai	Nominated Member
32	Dr. Mahesh Keshavrav Bhondge Plot No.33, Atrey Layout, Pratap nagar, Nagpur	Nominated Member
33	Dr. J. B. Prajapati Chairman, Indian Dairy Association- West Zone, Andheri (East), Mumbai	Nominated Member
34	Mrs. Kiran Umesh Mahalle, 104, Sambhaji Nagar, Amravati	Nominated Member
35	Dr. Nitin Thoke Training Coordinator, Krishi Vigyan Kendra, YCMOU, Nashik	Nominated Member
36	Prof. Rekha Sen Sharma, Director, School of Continuing Education Academic Complex, IGNOU, New Delhi	Nominated Member
37	Mr. Majidkhan Rajjak Pathan At Post. Loni Devkar, Tal. Indapur, Dist. Pune	Nominated Member
38	Shri. Ravishankar Sahasrabudhe, Ravet, Tal.Haveli Dist. Pune, Maharashtra	Nominated Member
39	Shri Ashok Dhote Gadgebaba Society, New Mankapur, Nagpur	Nominated Member
40	Shri. Ravindra Metkar Mhasala, Anjangaon Bari Road, Badnera, Dist. Amravati	Nominated Member
41.	Shri. Bhagwat Devsarkar Lingapur, Tal. Hadgaon, Dist. Nanded, Maharashtra	Nominated Member



2.6. ESTABLISHMENT

The University has 1938 sanctioned posts of Academic officers and non-teaching officers/ employees of which 670 posts were filled in and 1268 posts were vacant on 31.03.2024.

A. University Statutory Officers

The details of University Officers holding the Statutory positions as on 31st March 2024 are given in Table 2.1.

Table 2.1: Details of Officers holding statutory positions in MAFSU

Sr. No.	Name of the Position (sanctioned)	Name of the Officer	Selection Process
1.	Vice-Chancellor	Dr. Niteen V. Patil	Regular Appointment (Tenure Post)
2.	Director of Instructions	Dr. S. V. Upadhye	Additional charge
3.	Director of Research	Dr. N. V. Kurkure	Regular Appointment (Tenure Post)
4.	Director of Extension Education	Dr. A. U. Bhikane	Regular Appointment (Tenure Post)
5.	Dean, Faculty of Veterinary Science	Dr. S. V. Upadhye	Regular Appointment (Tenure Post)
6.	Dean, Faculty of Dairy Technology	Dr. P. G. Wasnik	Additional charge
7.	Dean, Faculty of Fishery Science	Dr. S. W. Bonde	Additional charge
8.	Dean, Faculty of Lower Education	Dr. A. U. Bhikane	Additional charge
9.	University Librarian	Prof. S. N. Gawande	Additional charge
10.	Registrar	Ms. Mona K. Thakur	On Deputation from State Govt.
11.	Comptroller	Mrs. Manisha Shende	On Deputation from State Govt.
12.	University Engineer	Mrs. Pratibha Wankhede	On Deputation from State Govt.
13.	Director Students Welfare	Dr. R. P. Limsay	Additional charge

B. Academic Officers

The University has 753 sanctioned posts of Academic Officers which includes the Director, Deans, Associate Deans, Professors, Associate Professors, Assistant Professors and Equivalents. Out of 753 sanctioned posts 432 are lying vacant as on 31st March 2024 (Table 2.2.)

Table 2.2. Details of sanctioned, filled in and vacant positions of Academic officers

Sr. No.	Establishment	Number of Posts		
		Sanctioned	Filled	Vacant
1.	University Head Quarter, Nagpur	13	6	7
2.	Mumbai Veterinary College, Mumbai	124	54	70
3.	Nagpur Veterinary College, Nagpur	110	57	53
4.	College of Veterinary & Animal Sciences, Parbhani	117	50	67
5.	College of Veterinary & Animal Sciences, Udgir	80	42	38
6.	KNP College of Veterinary Science, Shirwal	85	44	41
7.	Post Graduate Institute of Veterinary & Animal Sciences, Akola	51	21	30
8.	College of Dairy Technology, Warud (Pusad)	32	15	17
9.	College of Dairy Technology, Udgir, Dist. Latur	22	04	18
10.	College of Fishery Science, Nagpur	35	10	25
11.	College of Fishery Science, Udgir	35	08	27
12.	Cattle Breeding Farm, Igatpuri	04	01	03



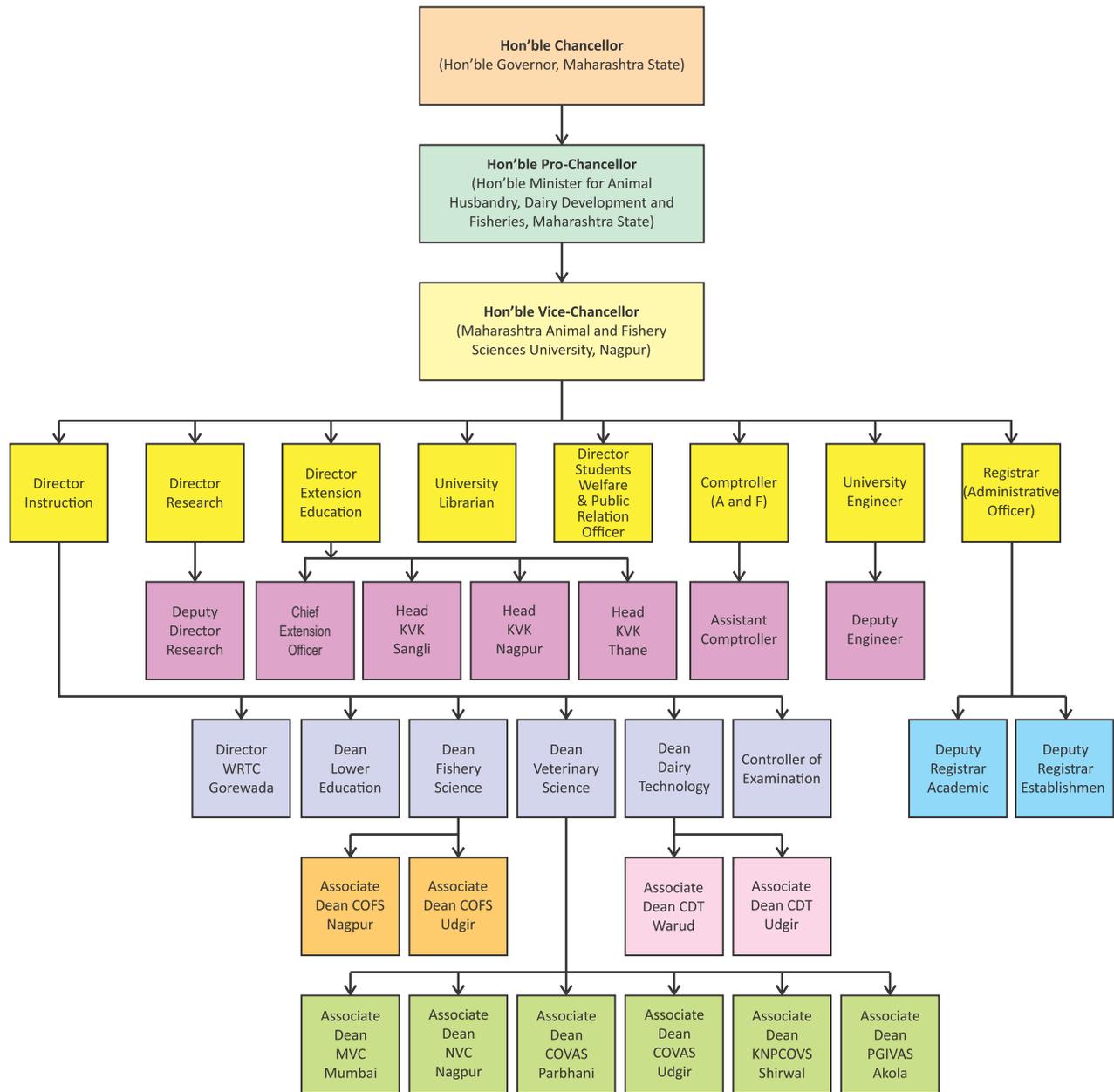
13.	Cattle Breeding Farm, Nagpur	04	03	01
14.	Cattle Breeding Farm, Udgir	04	01	03
15.	Cattle Breeding Farm, Borgaon Manju (Akola)	04	01	03
16.	University Sub-Centre, Udgir	03	01	02
17.	Wildlife Research and Training Centre, Gorewada	09	03	06
18.	Krishi Vigyan Kendra, Sangli	07	00	07
19.	Krishi Vigyan Kendra, Nagpur	07	00	07
20.	Krishi Vigyan Kendra, Thane	07	00	07
	Total	753	321	432

C. Non-Teaching Officers / Employees

The non-teaching officers/ staff includes ministerial staff and the professionals in supporting activities of college laboratories, farms, WRTC and KVKs. The University has the sanctioned posts of 1185 non-teaching supporting staff where 349 posts are filled in as on 31st March 2024(Table 2.3).

Table 2.3. Details of sanctioned, filled in and vacant positions of non-teaching posts in the University

Sr. No.	Establishment	Number of Posts		
		Sanctioned	Filled	Vacant
1.	University Head Quarter, Nagpur	146	61	85
2.	Mumbai Veterinary College, Mumbai	184	65	119
3.	Nagpur Veterinary College, Nagpur	128	55	73
4.	College of Veterinary & Animal Sciences, Parbhani	139	26	113
5.	College of Veterinary & Animal Sciences, Udgir	105	24	81
6.	KNP College of Veterinary Science, Shirwal	129	50	79
7.	Post Graduate Institute of Veterinary & Animal Sciences, Akola	68	23	45
8.	College of Dairy Technology, Warud (Pusad)	48	14	34
9.	College of Dairy Technology, Udgir, Dist. Latur	27	02	25
10.	College of Fishery Science, Nagpur	36	11	25
11.	College of Fishery Science, Udgir, Dist. Latur	31	04	27
12.	Cattle Breeding Farm, Igatpuri	23	03	20
13.	Cattle Breeding Farm, Nagpur	27	02	25
14.	Cattle Breeding Farm, Udgir	24	01	23
15.	Cattle Breeding Farm, Borgaon Manju (Akola)	22	04	18
16.	University Sub-Centre, Udgir	14	03	11
17.	Wildlife Research and Training Centre, Gorewada	07	01	06
18.	Krishi Vigyan Kendra, Sangli	09	00	09
19.	Krishi Vigyan Kendra, Nagpur	09	00	09
20.	Krishi Vigyan Kendra, Thane	09	00	09
	Total	1185	349	836



Administrative Set up of MAFSU



2.7. SUPPORTING UNITS

2.7.1. University Level Supporting Units

- Board of Examination
- Grievance Committee for the University Employees
- University Employees Welfare Committee
- Students Welfare Committee
- Standing Committee for Finance, Budget, Development and Planning
- Works Committee
- Legal Committee
- Special cell for Scheduled Castes and Scheduled Tribes
- Library and Information Center
- Ombuds person

2.7.2. College Level Supporting Units

- Advisory Council of Associate Deans of Constituent Colleges
- Committee for Prevention of Sexual Harassment of Women at workplace
- Institute Ethics Committee for experiments on animals
- Farm Advisory Committee
- Antiragging Cell
- Internal Quality Assurance System
- Institutional Biosafety Committee
- Student Grievance Redressal Cell

2.8. CONSTITUENT COLLEGES/ INSTITUTES

The University has five Veterinary colleges, one Postgraduate Veterinary institute, two each Dairy Technology and Fishery Colleges, one WRTC and three KVKs (Table 2.4)

Table 2.4: Details of the constituent institutes, their year of establishment & courses offered by them.

Sr. No.	Name of College	Year of Establishment	Courses offered/activities
1.	Mumbai Veterinary College, Mumbai	1886	B.V.Sc. & A. H., M.V.Sc., Ph. D.
2.	Nagpur Veterinary College, Nagpur	1958	B.V.Sc. & A. H., M.V.Sc., Ph. D.
3.	College of Veterinary and Animal Sciences, Parbhani	1972	B.V.Sc. & A. H., M.V.Sc., Ph. D.
4.	College of Veterinary and Animal Sciences, Udgir	1987	B.V.Sc. & A. H., M.V.Sc., Ph. D.
5.	Krantisinh Nana Patil College of Veterinary Science, Shirwal	1988	B.V.Sc. & A. H., M.V.Sc., Ph. D.
6.	Post Graduate Institute of Veterinary and Animal Sciences, Akola	1969	M.V.Sc., Ph. D.
7.	College of Dairy Technology, Warud	1992	B. Tech. (Dairy Technology), M.Tech.
8.	College of Dairy Technology, Udgir	2008	B. Tech. (Dairy Technology)
9.	College of Fishery Science, Nagpur	2006	B.F.Sc.
10.	College of Fishery Science, Udgir	2007	B.F.Sc.



11.	Wildlife Research & Training Centre, Gorewada, Nagpur	2015	Research & Extension
12.	Krishi Vigyan Kendra, Tadsar, Tal. Kadegaon, Dist. Sangli	2019	Research & Extension
13.	Krishi Vigyan Kendra, Dudhburdi, Tal. Kalmeshwar, Dist. Nagpur	2020	Research & Extension
14.	Krishi Vigyan Kendra, Nagaon Tal. Murbad, Dist. Thane	2021	Research & Extension

2.9. WEBSITE

The website of the University and constituent colleges are restructured and the websites of WRTC and KVKs are newly designed to suit the need of all the stakeholders including the farming community. All the new websites are dynamic and has the latest features like search optimization, office management system and modern outlook. Apart from all information related with the education, research and extension, it has some unique features like extension literature in the form of posters, leaflets with QR code for the farmers on various issues from animal husbandry including poultry, dairy technology and fisheries. It also has success stories of farmers, advisory for the farmers and information related with animal husbandry, dairy technology and fisheries in the form of frequently asked questions. It also has University publications like MAFSU VARTA, MAFSU Diary, MAFSU Annual Reports and MAFSU Calendar. All institutes of MAFSU are linked with the University website.

The websites domains of the University and its constituent institutes are given below:

- | | | |
|-----|---|--|
| 1. | MAFSU University | : www.mafsu.ac.in |
| 2. | Mumbai Veterinary College, Mumbai | : www.mvcmafsu.ac.in |
| 3. | Nagpur Veterinary College, Nagpur | : www.nvcmafsu.ac.in |
| 4. | College of Veterinary and Animal Science, Parbhani | : www.covaspbnmafsu.ac.in |
| 5. | College of Veterinary and Animal Science, Udgir | : www.covasudgmafsu.ac.in |
| 6. | KNP Veterinary College, Shriwal | : www.knpvcsmafsu.ac.in |
| 7. | PG Institute of Veterinary & Animal Sciences, Akola | : www.covasaklmafsu.ac.in |
| 8. | Dairy Technology College, Warud (Pusad) | : www.cdtwarudmafsu.ac.in |
| 9. | College of Dairy Technology, Udgir | : www.cdtudgmafsu.ac.in |
| 10. | College of Fishery Science, Nagpur | : www.cofsngpmafsu.ac.in |
| 11. | College of Fishery Science, Udgir | : www.cofsudgmafsu.ac.in |
| 12. | Wildlife Research and Training Centre, Gorewada, Nagpur | : www.wrtcmafsu.ac.in |
| 13. | Krishi Vigyan Kendra, Sangli | : www.sangli2.kvk8.in |
| 14. | Krishi Vigyan Kendra, Nagpur | : www.nagpur2.kvk8.in |
| 15. | Krishi Vigyan Kendra, Thane | : www.thane.kvk8.in |





3. EDUCATION

3.1. HIGHER EDUCATION

The Maharashtra Animal and Fishery Science University is having three faculties namely Veterinary Science and Animal Husbandry, Fishery Sciences and Dairy Technology with ten constituent colleges at different locations of the Maharashtra state. The five veterinary colleges are Mumbai Veterinary College, Mumbai, Nagpur Veterinary College, Nagpur, College of Veterinary and Animal Sciences, Parbhani, College of Veterinary and Animal Sciences, Udgir and Kranti Sinh Nana Patil College of Veterinary Science, Shirwal one postgraduate institute of veterinary and animal science at Akola, two dairy technology colleges viz. College of Dairy Technology, Warud, Dist Yeotmal and College of Dairy Technology, Udgir, Dist. Latur and two fishery colleges viz. College of Fishery Science, Nagpur and College of Fishery Science, Udgir, Dist. Latur.

3.1.1 Courses Offered

Maharashtra Animal and Fishery Sciences University is imparting five and half years degree as Bachelor of Veterinary Science and Animal Husbandry (B.V.Sc&A.H.), as per the minimum standards of Veterinary Education - 2016 (MSVE-2016) prescribed by the Veterinary Council of India, New Delhi.

Two years master's degree as Master of Veterinary Science (M.V. Sc.) in all the disciplines of Veterinary and Animal Sciences, as per the guidelines prescribed by the Indian Council of Agricultural Research, New Delhi. Doctoral Degree (Ph.D.) of three years duration for regular candidate as per guidelines prescribed by Indian Council of Agricultural Research, New Delhi and of four years duration for in-service MAFSU employees is offered in many disciplines in the constituent colleges.

Four years degree programme as Bachelor of Dairy Technology {B.Tech.(DT)} is being imparted through Dairy Technology colleges and four years degree programme as Bachelor of Fishery Science (B.F.Sc) through Fishery Science Colleges of the University, as per the recommendations of V Dean's Committee Report approved by Indian Council of Agricultural Research, New Delhi.

3.1.2 Skill Based Training

The students pursuing degrees are getting hands on training through internship training programme, fisheries industrial and rural work experience programme and in-plant training being implemented by various faculties. This has created a dynamic system of education to train students and mould them into self-employers and entrepreneurs and develop their capacities both in terms of knowledge and skills as per the changing needs of society.

The university is emphasizing to make it more skill-learning-based, problem solving and self exploratory so as to inculcate the spirit of entrepreneurship and business-approach to services so that they can respond to emerging challenges of market. The educational avenues are open not only for students of India but also for foreign nationals and NRIs.



3.1.3. Eligibility, Intake Capacity and Admissions

1. Bachelor of Veterinary Science & Animal Husbandry (B.V.Sc. & A.H.)

Candidates who have passed XII Standard (10 + 2) with minimum 50% marks for Unreserved category and 47.50% marks for reserved category in Physics, Chemistry, Biology or Biotechnology and English taken together and have appeared for National Eligibility Cum Entrance Test NEET (UG) of respective admission year conducted by National Testing Agency, New Delhi are eligible for admissions to Bachelor of Veterinary Science and Animal Husbandry (B.V.Sc & A.H.) degree course.

The student intake capacity for Bachelor of Veterinary Science & Animal Husbandry (B.V.Sc & A.H.) degree course for the year 2023-24 was 410.

Total 415 (Intake capacity - 410+over and above-05, Total -415) students were admitted in which 260 were male candidates and 155 were the female candidates.

In the Mumbai Veterinary College total 111 students were admitted whereas in Nagpur Veterinary College, Nagpur 87 students were admitted. In College of Veterinary and Animal Sciences, Parbhani, College of Veterinary and Animal Sciences, Udgir and Kranti Sinh Nana Patil College of Veterinary Science, Shirwal a total of 85, 65 and 67 students were admitted, respectively (Table 3.1).

2. Bachelor of Technology (Dairy Technology) [B. Tech (DT)]

Candidates who have passed XII Standard (10 + 2) with 50% marks for unreserved category and 40% marks for reserved category in Physics, Chemistry, Mathematics and English taken together are eligible for admission to Bachelor of Technology (Dairy Technology) degree course. Further, the candidates should have also appeared for MHT-CET conducted by State CET Cell, Mumbai.

The student intake capacity for Bachelor of Technology (Dairy Technology) [B. Tech (DT)] in two colleges of Dairy Technology, at Warud and Udgir was 66 during the year 2023-24.

In the year 2023-24 total 61 students were admitted for B. Tech (DT) degree course from which 41 were males and 20 were females. In the College of Dairy Technology, Warud total 32 students were admitted whereas in the College of Dairy Technology, Udgir 29 students were admitted (Table 3.1).

3. Bachelor of Fishery Science (B.F.Sc.)

Candidates who have passed XII Standard (10 + 2) with 50% marks for unreserved category and 40% marks for reserved category in Physics, Chemistry, Biology and English taken together are eligible for admission to Bachelor of Fishery Science (B.F.Sc.) degree course. Further, the candidates should have also appeared for MHT-CET conducted by State CET Cell, Mumbai.

For the degree course of Bachelor of Fishery Science (B.F.Sc.) the student intake capacity in two colleges at Nagpur and Udgir was 66 during the year 2023-24.

In Bachelor of Fishery Science (B.F.Sc.) degree course total 54 students were admitted from which 28 were males and 26 were females. In the College of Fishery Science, Nagpur 26 students were admitted whereas in College of Fishery Science, Udgir 28 students were admitted (Table 3.1).



Table 3.1 Faculty and college-wise student intake capacity and admissions for undergraduate degree courses during 2023-24

Sr. No.	Name of College	Intake capacity	No. of Admitted Students		
			Male	Female	Total
Bachelor of Veterinary Science & Animal Husbandry (B.V.Sc. & A.H.)					
1.	MVC, Mumbai	106	60	51	111
2.	NVC, Nagpur	84	53	34	87
3.	COVAS, Parbhani	86	55	30	85
4.	COVAS, Udgir	67	46	19	65
5.	KNPCVS, Shirwal	67	46	21	67
Total		410	260	155	415
Bachelor of Technology (Dairy Technology) [B. Tech (DT)]					
1.	CDT, Warud	33	19	13	32
2.	CDT, Udgir	33	22	07	29
Total		66	41	20	61
Bachelor of Fishery Science (B.F.Sc.)					
1.	COFS, Nagpur	33	15	11	26
2.	COFS, Udgir	33	13	15	28
Total		66	28	26	54
Grand Total		542	329	201	530

4. Master of Veterinary Science (M.V.Sc.)

The candidates who have passed B.V.Sc & A.H. with CGPA 6.00 for unreserved category and 5.50 for constitutionally reserved category in 10.00 point scale are eligible for admission to M.V.Sc. degree course. Admissions are based on ICAR-PG Entrance Examination Merit in concerned group of subject in All India Entrance Examination (AIEEA) of respective year conducted by NTA, New Delhi.

The student intake capacity for Master of Veterinary Science degree course in 6 Veterinary Colleges is 250. The total number of students admitted in the year 2023-24 is 193 in which 113 were males and 80 were females. The total students admitted in the constituent colleges for M.V.Sc (Master of Veterinary Science) degree programme were 47, 31, 32, 24, 32 and 27 in MVC, Mumbai, NVC, Nagpur, COVAS, Parbhani, COVAS, Udgir, KNPCVS, Shirwal and PGIVAS, Akola, respectively.

Table 3.2. Student intake capacity and admissions for M.V.Sc. degree course for the year 2023-24

Sr. No.	Name of College	Intake capacity	No. of Admitted Students		
			Male	Female	Total
1.	MVC, Mumbai	51	26	21	47
2.	NVC, Nagpur	44	11	20	31
3.	COVAS, Parbhani	45	21	11	32
4.	COVAS, Udgir	32	18	06	24
5.	KNPCVS, Shirwal	43	21	11	32
6.	PGIVAS, Akola	35	16	11	27
Total		250	113	80	193



5. Doctor of Philosophy in Veterinary Science (Ph. D.)

All the desirous candidates (Regular and In-service) must have passed M.V.Sc. degree course with CGPA 7.00 and 6.50 in 10.00 point scale for Unreserved and Reserved Category, respectively. Admissions are based on ICAR-PG Entrance Examination Merit in concerned subject in the All India Competitive Examination for admission for Doctoral Degree Programme (AICE-JRF/SRF (Ph.D.) of respective year conducted by NTA, New Delhi.

The intake capacity of Ph.D. Degree programme is 67, 28 & 10 seats for University quota, ICAR quota and NRI/FN/PIO (over& above) quota, respectively. Doctor of Philosophy in Veterinary Science (Ph.D.) is offered in 16 departments.

In the year 2023-24 total 8 students were admitted in the university with with 4 seats each in Mumbai Veterinary College, Mumbai and Nagpur Veterinary College, Nagpur.

3.1.4 Students passed out

1. Undergraduate Students

During the year 2023-24, total 512 undergraduate students including 338 males and 174 females from different streams passed out from University wherein 399 students were from Veterinary Faculty (B.V.Sc & A.H.), 66 students from Dairy Technology Faculty (B. Tech.) and 47 students from Fishery Science Faculty (B.F.Sc.).(Table 3.3).

Table 3.3 Faculty and college-wise undergraduate students passed out during 2023-24

Sr. No.	Name of College	No. of Students passed out		
		Male	Female	Total
Bachelor of Veterinary Science & Animal Husbandry				
1.	MVC, Mumbai	70	48	118
2.	NVC, Nagpur	61	25	86
3.	COVAS, Parbhani	55	22	77
4.	COVAS, Udgir	34	21	55
5.	KNPCVS, Shirwal	43	20	63
Total		263	136	399
Bachelor of Technology (Dairy Technology) [B. Tech (DT)]				
1.	CDT, Warud	24	09	33
2.	CDT, Udgir	24	09	33
Total		48	18	66
Bachelor of Fishery Science (B.F.Sc.)				
1.	COFS, Nagpur	10	16	26
2.	COFS, Udgir	17	04	21
Total		27	20	47
Grand Total		338	174	512

2. Post-graduate students

A total of 145 students completed their M.V.Sc., out of which 82 were males and 63 were females while one female student completed Masters degree in Dairy Technology during 2023-24 (Table 3.4).

**Table 3.4 Faculty and College-wise Post Undergraduate Students passed out during 2023-24**

Sr. No.	Name of College	No. of Students passed out		
		Male	Female	Total
Master of Veterinary Science (M.V.Sc.)				
1.	MVC, Mumbai	18	16	34
2.	NVC, Nagpur	10	10	20
3.	COVAS, Parbhani	16	12	28
4.	COVAS, Udgir	02	08	10
5.	KNPCVS, Shirwal	19	08	27
6.	PGIVAS, Akola	17	09	26
Total		82	63	145
Master of Technology (Dairy Technology) [M. Tech (DT)]				
1.	CDT, Warud	00	01	01
Total		00	01	01
Grand Total		82	64	146

3. Doctoral Students

In the year 2023-24, a total of 10 students completed their Ph. D. from 5 constituent veterinary colleges of MAFSU (Table 3.5).

Table 3.5 Doctoral (Ph. D.) Students passed out during 2023-24

Sr. No.	Name of College	No. of Students passed out		
		Male	Female	Total
1.	MVC, Mumbai	02	00	02
2.	NVC, Nagpur	04	00	04
3.	COVAS, Parbhani	01	00	01
4.	KNPCVS, Shirwal	01	00	01
5.	PGIVAS, Akola	02	00	02
Total		10	00	10

3.1.5. Facilities For Students

The various facilities available in constituent colleges for students are as follows

1. Classrooms

The University has 61 well-furnished and equipped classrooms in 10 constituent colleges for the undergraduate students of which 37 are traditional classrooms and 24 smart classrooms.

Smart classrooms are designed to prepare students for the digital age by encouraging collaboration, creativity, and critical thinking skills. Smart classrooms create a blended learning environment that's more engaging and comprehensible. These classrooms provide the facility of multimedia learning experiences, such as animations, videos, and interactive practice exercises. Smart classrooms encourage personalized instruction and collaborative learning.



SMART Classroom, KNPCVS, Shirwal



SMART Classroom, NVC, Nagpur

2. Laboratory Facilities

The constituent colleges have well equipped laboratory facilities for imparting hands-on skill for the undergraduate, postgraduate and doctoral students. The state of art laboratories have the advance facilities like automated blood analyser, biochemistry analyzer, urine analyzer, rapid identification of bacteria based on proteomic principles using MALDI TOF MS, RT-PCR, FAT, HD Microphotography, Lyophilisation of bacterial cultures, plant extracts/antibacterial components for research projects of students.

These art laboratories also have the basic facilities for routine analysis of milk, blood, urine, fecal samples, fodder and feed samples, soil and water samples. These laboratories also provide the services to the farmers such as brucella testing using RBPT, Antibiotic Sensitivity Test for Mastitis (Bacterial and fungal), pus from chronic wounds and other infectious conditions in animals.



Pathology Laboratory, NVC, .Nagpur



Central Instrumentation Facility, KNPCVS, Shirwal



VPH laboratory at NVC, Nagpur



Microbiology laboratory at COVAS, Udgir



3. Veterinary Clinical Complex Facilities

The Veterinary Clinical Complex (VCC) is the essential and largest academic component of the university. This clinical complex is managed with the most modern clinical and academic facilities keeping in view of the norms of Veterinary Council of India (VCI). The Undergraduate and Post Graduate programme at College of Veterinary and Animal Sciences includes basic and applied training in handling of clinical cases and to undertake diagnostic techniques, evaluation and interpretation of laboratory results, correlating them with clinical findings for correct diagnosis, treatment and prediction of prognosis.

The VCC in conjunction with clinical departments is well equipped with a Large and Small Animal Medicine Clinic, a Large and Small Animal Surgical Clinic, Artificial Insemination and Infertility Clinic, a Wildlife Medicine facility, a Diagnostic Laboratory facility with various instruments like fully automated blood analyzer, Biochemistry analyzer and Urine analyzer. The advance diagnostic, therapeutic and operation theater facilities include various instruments like Doppler Ultrasonography, Electrocardiography, Endoscopy, Laparoscopy, Radiography, C Arm, Ultrasonography, Pulse oximeter, Digital BP Apparatus, Vital Sign Patient Monitor, Ophthalmoscope and Otoscope.



VCC, MVC, Mumbai



Small Animal surgery unit NVC, Nagpur



Large Animal Clinic, VCC, COVAS, Parbhani



Expert performing Patellar Desmotomy Large Animal Clinic, VCC, COVAS, Parbhani



VCC, COVAS, Udgir



VCC, PGIVAS, Akola



Expert performing Rumenotomy at Large Animal Clinic, VCC, COVAS, Parbhani



Small Animal Surgery unit
KNPCVS, Shirwal

4. Library Facilities

University Library and Information Centre was established in 2001 at head quarter with mission to acquire information resources, organize and make it available for users and preserve for future. University Library rendering the services and disseminating the information to Five Veterinary College, Two Colleges of Fishery Science, Two Colleges of Dairy Technology and One Post Graduate Institute of Veterinary Science through cloud based Library Management System- KOHA LMS.

The University Library has total built up area of 3261.51 m² with 1118.6 m², 1071.24 m² and 1074.67m² on ground, first and second floor, respectively. The Library building has spacious reading facility with every floor with stacking area where readers can consult publication under open access system. separate reading rooms for students and staff are available and the reading room facility for students remains open 24 x 7 for all the 365 days in a year.

Library offers full text book support to the students in their course programme through various services such as book bank and reference book. RFID based publications are available with the facilities to issue through the electronic database and a separate facility of drop box for returning the book is also available.

Entire collection of thesis are digitized and uploaded on ICAR repository portal i.e., "KRISHIKOSH". Consortium for e-Resources in Agriculture facility is available in University Library. The University Library provides access to a multiple of resources through services such as Grammarly, My LOFT, CeRA, Krishikosh, Ideal, e-books, e-Journals, Open Access Journals, Databases, and access to library book through online Opac for browsing the library collection, etc. The university library also houses the separate facility for Bio-Informatics application in Veterinary, Dairy & Fishery.



Central Library facility is available at MAFSU headquarter, Nagpur which furnishes the need of faculty and students of Nagpur Veterinary College, Nagpur and College of Fishery Science, Nagpur . The other eight constituent colleges have their separate college libraries.

University Library is having 36,187 Print books, with sufficient numbers of relevant textbooks including 1024 e-books, 50 Print Journals, 52 e-Journals, 8,903 PG and Ph.D. dissertations and bound volumes related to Animal Science, Fisheries and Dairy Technology.

The Libraries of Constituent colleges of university are having 53,778 print books, 12 print journals and 3,683 thesis and bound volumes.



University Library Building, MAFSU, Nagpur



Entrance view of University Library



Reading hall of University Library



University and other publications display at University Library



Library facilities at CDT, Udgir



Library facilities at COVAS, Parbhani

5. Hostel Facilities

Majority of students pursuing degrees in all the constituent colleges of University are belonging to places other than the location of colleges. The University is making all efforts to provide accommodation to boys and girl students of different constituent colleges and also to enhance capacities of existing hostels. Total 19 hostels are established in the university, out of which 8 boys hostel with 483 rooms and 11 girls hostel with 256 rooms are available at different colleges. This hostel facility is utilized by 952 boys and 551 girl's students.

The hostels are having various facilities such as dining hall, T.V. room, cooler with RO water purifier system, water heater system for hot water, various sports equipments. Nagpur veterinary College has also one fully furnished hostel for International Students. Each and every room is well furnished with cupboard, individual beds, chairs and table. In addition a common room that have seating facilities with a telephone for the inmates is also provided in the hostels. Almost all hostels are covered under Wi-Fi Internet and CCTV Camera connectivity.



Table 3.6 Number of boys and girl students accommodated in Hostels

Sr. No.	Name of College	Boys Hostel		Girls Hostel	
		No of Rooms	No of Student	No of Rooms	No of Student
1.	MVC, Mumbai	101	198	44	123
2.	NVC, Nagpur campus	118	223	63	153
3.	COVAS, Parbhani	121	230	62	116
4.	COVAS, Udgir campus	56	112	47	53
5.	KNPCVS, Shirwal	78	160	22	55
6.	PGIVAS, Akola	-	-	10	20
7.	CDT, Warud	09	29	08	16
	Total	483	952	256	551



Girls Hostel
at Udgir campus of the University



Girls Hostel
at COVAS, Parbhani



Girls Hostel
at KNPCVS, Shirwal



Girls Hostel at NVC, Nagpur



Boys Hostel at NVC, Nagpur



Girls Hostel at PGIVAS, Akola

6. Sports and Gymkhana

Although this university runs professional degree courses, an appropriate attention have been provided to inculcate sports culture amongst the students. For this purpose, every college has Sports officer/ Assistant Professor (Physical Education)/ teacher who looks after the guidance for sports and organization of sports events in the college. Most of the colleges have spacious playgrounds and facilities for both indoor and outdoor sports and well equipped Gymnasium. Inter-Collegiate competitions for various games like Chess, Table-tennis, Badminton, Kabbadi, Volleyball, Basketball, Kho-kho, Cricket are regularly organized and the selected students from Inter Collegiate competitions are nominated for Inter-University competitions.



Glimpses of sport activities in the colleges



Gymnasium in the constituent colleges

3.1.6. Eleventh Convocation of the University



Maharashtra Animal and Fishery Sciences University, Nagpur conducted its 11th convocation on 13th February, 2024. In this convocation, degrees were conferred and medals were awarded to the graduates of Veterinary, Dairy Technology and Fisheries for the academic year 2021-22, 2022-23 and veterinary graduates for the year 2023-2024 also.

A total of 1769 candidates including 1340 graduates, 399 post-graduates and 30 doctoral candidates received the degrees. Apart from this, 72 gold medals, 23 silver medals and 03 emeritus awards with a cash prize of Rs. 25000/- each were awarded to the students for their outstanding academic performance in this convocation. Out of 95 medals and 03 cash prizes, 28 medals and all three cash prize were grabbed by the girl students.

University toppers at graduate level from Veterinary faculty namely Mr. Chaple Prajwal Suresh from Nagpur Veterinary College, Nagpur received 4 gold and 3 silver medals for the year 2021-22, Ms Khemani Kanishka Kaushik from Mumbai Veterinary College, Mumbai received 5 gold medals and 1 cash prize for the year 2022-23 and Mr. Vyavahare Pranav Prasad from KNP College of Veterinary Science, Shirwal received 2 gold and 3 silver medals for the year 2023-24. Further, Ms. Gulati Mahima Vinod Kumar graduated from Mumbai Veterinary College, Mumbai received 3 gold medals and 1 cash prize for the year 2021-22, Mr. Sontakke Abhinav Surendra graduated from Nagpur Veterinary College, Nagpur received 2 gold and 3 silver medals for the year 2022-23 and Ms. Dudhe Manasvi Atul from Nagpur Veterinary College, Nagpur received 1 gold and 2 silver medals for the year 2023-24.



Maharashtra Animal and Fishery Sciences University Gold Medal for securing the highest C.G.P.A. at Post-Graduate level was bestowed to Ms. Adey Khushboo Surat Singh from Nagpur Veterinary College, Nagpur for the year 2021-22 and Supreet Kumar Sagar from College of Veterinary & Animal Sciences, Udgir for the year 2022-23.

Maharashtra Animal and Fishery Sciences University Gold Medal for securing the highest C.G.P.A. at Bachelor of Technology (Dairy Technology) degree programme was received by Mr. Rathod Aniket Ramesh and Mr. Dhore Akshay Sopan from College of Dairy Technology, Warud for the year 2021-22 and 2022-23, respectively. Maharashtra Animal and Fishery Sciences University, Gold Medal for securing the highest C.G.P.A. at Bachelor of Fishery Sciences (B.F.Sc.) degree programme of the University was awarded to Mr. Ade Prathamesh Jagdeo from College of Fishery Science, Nagpur and Ms. Bhalke Rutuja Rajendra from College of Fishery Science, Udgir for the year 2021-22 and 2022-23, respectively.

3.2. LOWER EDUCATION

University is imparting two year Livestock Management and Dairy Production (LMDP) diploma course in Marathi language for SSC passed domicile students of Maharashtra through recognized Schools. The admission for this course is done entirely through online mode and this diploma course is initiated to inculcate the self-employment for the rural youth in the animal husbandry sector and to create the semi-technical supporting manpower for this sector. The University granted recognition to 105 schools during the year 2023-24. In all 5719 students were on roll while 3902 students passed out in the year 2023-24.

Table 3.7. : Co-ordinating centre wise Schools, Intake Capacity, Admissions and Pass out students

Sr. No.	Sub Centers	No. of Schools	Intake Capacity/ Male/Female			No. of Admitted/ Male/Female			Total Passed		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	MVC, Mumbai	21	840	420	1260	1119	61	1180	806	42	848
2	NVC, Nagpur	05	200	100	300	238	33	271	225	31	256
3	COVAS, Parbhani	21	840	420	1260	1073	78	1151	654	45	699
4	COVAS, Udgir	13	520	260	780	665	38	703	491	29	520
5	KNPCVS, Shirwal	25	1000	500	1500	1459	30	1489	750	25	775
6	PGIVAS, Akola	13	520	260	780	520	34	554	406	37	443
7	CDT, Warud(P)	07	280	140	420	344	27	371	332	29	361
Total		105	4200	2100	6300	5418	301	5719	3664	238	3902

3.3. CAPACITY BUILDING OF FACULTY AND STAFF

Efforts are always on to train the faculties in their area of interest as a part of human resource development. The young faculties are always encouraged to participate in the seminars, conferences, training programmes not only in the country but abroad too. In this year, 208 faculty members attended the trainings while 167 faculty members participated in the Conferences / Symposia/ Workshops / Seminars / Webinars.



Table 3.8. : Details of participation of faculty member in HRD programmes

Sr. No.	Name of College	Number of faculty undergone training	Number of faculty participated in Conference/Symposium/ Workshop /Seminar/ Webinar etc.	Total
1	MVC, Mumbai	33	37	70
2	NVC, Nagpur	22	26	48
3	COVAS, Parbhani	41	14	55
4	COVAS, Udgir	35	29	64
5	KNPCVS, Shirwal	39	21	60
6	PGIVAS, Akola	11	20	31
7	CDT, Warud	09	07	16
8	CDT, Udgir	12	03	15
9	COFS, Nagpur	03	05	08
10	COFS, Udgir.	01	03	04
11	WRTC, Gorewada	02	02	04
TOTAL		208	167	375

Twenty one faculty members from MAFSU, Nagpur completed International Faculty Training Program at various universities across USA, Italy, Australia, UK, South Korea, Mexico and Thailand during March 2023 to December 2023 under NAHEP CAAST Project. Dr. S. D. Ingole, Dr. V. M. Vaidya, Dr J.G. Gudewar, Dr. V. H. Shukla, Dr. R. P. Naringrekar, Dr. G. P. Bharkad, Dr. S. M. Jawale, Dr. M. P. Kaore, Dr. S. V. Bharucha, Dr. R. R. Pharande, Dr. G. M. Chigure, Dr. C. S. Mote, Dr. B. P. Kamdi, Dr. P. R. Suryawanshi, Dr. M. M. Vaidya, Dr. M. B. Gupta, Dr. R. N. Waghmare Dr. S. N. Rindhe, Dr. K. S. Rathod, Dr. S. N. Jadhav , and Dr. V. S. Dhaygude attended the International trainings under NAHEP-CAAST Project implemented at MVC, Mumbai.



Dr. B. P. Kamdi, at Adelaide, Australia



Dr. G. M. Chigure, at Queretaro, Mexico



Dr. S. N. Jadhav and Dr. K. S. Rathod at Pathumthani, Thailand



Dr. V. M. Vaidya, at Pennsylvania, USA



Dr. S. M. Jawale
at Florida, USA



Dr. M. P. Kaore
at Florida, USA



Dr. S. N. Rindhe,
at Seoul, Republic of Korea



Dr. M. B. Gupta
at Melbourne, Australia



Dr. C. S. Mote
at Adelaide, Australia



Dr J.G. Gudewar
at Oklahoma, United States



Dr. G. P. Bharkad
at North Dakota ,USA



Dr. S. V. Bharucha
at Texas, USA



Dr. V. H. Shukla
at Pennsylvania, USA



Dr. R. P. Naringrekar
at Palermo, Italy



Dr. V. S. Dhaygude
at Palermo, Italy



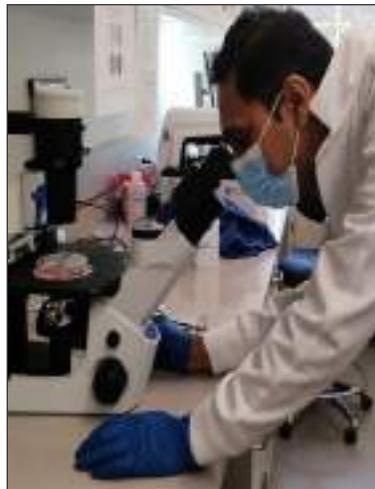
Dr. P. R. Suryawanshi
at Leicestershire, UK



Dr. S. D. Ingole
at Pennsylvania, USA



Dr. M. M. Vaidya
at Melbourne, Australia



Dr. R. R. Pharande
at Texas, USA



Dr. R. N. Waghmare
at Leicestershire, UK





4. STUDENTS DEVELOPMENT

The Directorate of Students Welfare plays an important role in the overall development of students through organization and participation in various co-curricular activities like sports and games, cultural events and research competitions. Directorate meticulously works towards showcasing the potential of the students which created a treasure of talents and resulted in enthusiastic participation of the University in various all India Level Competitions.

4.1. STUDENT COUNSELLING

University has mechanism for counselling and guidance of all students of the college. The counselling and guidance of the students starts with the orientation programme of the respective degree on the day first of the college. Group of 8-10 students are allocated to one faculty for complete duration of degree. Councillor/ Advisor conduct regular meeting with the students at least once in a month as well as when needed. The college has set up a counselling system for the aspirant students particularly from rural areas to educate them regarding veterinary education by highlighting the prospects and scope of veterinary education. Further, a college level admission committee is constituted during the admission process that guides the aspiring students for their admissions in this college. Counsellor addresses all types of queries of the students at his/her level and if required the matter is discussed with Associate Dean of the constituent College to the full satisfaction of the student. All the activities of the students are brought to the notice of the parents of the students through various communication channels.

4.2. SCHOLARSHIPS/ FELLOWSHIPS

Various scholarships/ fellowships given to students are VJNT- GOI Scholarship, ST-GOI Scholarship, SC-GOI Scholarship, OBC-GOI Scholarship, VJNT- GOI Freeship, ST-GOI Freeship, SC-GOI Freeship, OBC-GOI Freeship, SBC-GOI Freeship, NTS, Rajarshi Chhatrapati Shahu Maharaj Shikshan Shulkh Shishyavrutti Yojna (EBC), Dr. Panjabrao Deshmukh Vasatigruha Nirvah Bhatta Yojna (MAFSU).

In the university total 419 students received scholarship under Rajashree Shahu Maharaj Shikshan Shulka Pratipurti Yojna in which 354 were Undergraduate students and 65 were post graduate students. Under Dr. Panjabrao Deshmukh Vastigruha Nirvah Bhatta Yojna, 194 undergraduate and 47 post graduate students received the scholarship in the year 2023-24.

4.3. STUDENTS PERFORMANCE IN ALL INDIA ENTRANCE EXAMINATION

The students of the University appeared in All India Entrance Examination for Admission to Post Graduation Programme-2023-24(AIEEA-PG, 2023-24) conducted by Indian Council of Agricultural Research (ICAR), New Delhi. The students namely Mr. Hrishikesh D. Tekade, Ms. Sunita K. Lanje and Mr. Vivek Chandapure from Nagpur Veterinary College, Nagpur excelled with 1st, 2nd and 9th the all India rank in Animal Science group. The students from the College of Dairy Technology, Warud (Pusad) also excelled in the aforesaid examination. The students namely Mr. Akshay Dhore & Ms. Saya Deshmukh CDT, Warud College secured all India rank 2nd and 3rd in the major subject group of Dairy Science, respectively. Total 12 students (9 from Dairy Science & 3 from Dairy Technology group) from CDT, Warud were qualified the AIEEA-PG entrance 2023-24 examination.

During the Academic Year 2023-24, Junior Research Fellowship was awarded to 10 students from constituent colleges of the University and 6 students cleared NET examination.



AIEEA-PG toppers with Associate Dean, NVC, Nagpur



Felicitation of AIEEA-PG qualified students at CDT, Warud

4.4. STUDENTS PLACEMENT CELL

The Placement Cell plays a crucial role in locating job opportunities for Under Graduate and Post Graduates passing out from the college by keeping in touch with reputed firms and industrial establishments. The Placement Cell operates round the year to facilitate contacts between companies and graduates. The number of students placed through the campus interviews is continuously rising. On invitation, many reputed industries visit the constituent colleges of MAFSU to conduct interviews. Our campus recruitment programme starts after the completion of the Internship training programme for undergraduates and Final Semester for Postgraduates. The on-campus recruitment programme keeps continuing till the end of the course, and at the same time students are also facilitated and guided for off-campus Interviews.



Fig. 4.3 Campus interview at COVAS, Udgir

The University has an excellent placement record with top-notch organizations in Private dairy and poultry farms, Pharmaceuticals, NGOs, Banking sector, Dairy and Food Processing, and Semi Government organizations with a strong and supportive alumni network holding prime positions in reputed companies. Organize’s workshops on soft skill, personality development, Group discussions (GDs) and personal interviews (PIs) for grooming the students for prospective careers. Colleges also organize guest lectures by renowned professionals and entrepreneurs to guide students on the choice of the right careers. Placement cell committee also appraises students of various career opportunities through notices, display of advertisements and networking with various employment agencies.



Organization of guest lecture at NVC, Nagpur



From the faculty of Veterinary Science total 491 students have the placement under various organization during the year 2023-24. Total 67 dairy technology students and 56 Fishery Science students were received the job in various sectors.

Table 4.1. Students Placement Profile status during 2023-24

Sr. No.	Name of College	Govt. Service	Private Industry	Self-employed	NGO's & Other Institutions	Higher Education	Students preparing for competitive examinations	Total
Faculty of Veterinary Science								
1	MVC, Mumbai	07	11	02	01	13	01	35
2	NVC, Nagpur	13	23	-	-	-	-	36
3	COVAS, Parbhani	123	09	33	02	53	-	220
4	COVAS, Udgir	11	23	0	0	43	02	79
5	KNPCVS, Shirwal	17	24	01	00	56	00	98
6	PGIVAS, Akola	19	04	-	-	-	-	23
	Total	190	94	36	03	165	03	491
Faculty of Dairy Technology								
7	CDT, Warud	-	12	-	13	09	-	34
8	CDT, Udgir	-	26	01	03	02	01	33
	Total	-	38	01	16	11	01	67
Faculty of Fishery Science								
9	COFS, Nagpur	14	04	-	-	11	-	29
10	COFS, Udgir	-	05	-	-	05	17	27
	Total	14	09	-	-	16	17	56
	Grand Total	204	141	37	19	192	21	614

4.5. SPORTS AND CULTURAL ACTIVITIES

At University head quarter Office of the Director of Student's Welfare is functional and monitoring overall student's welfare, sports and cultural activities of students in all constituent colleges. At every college Student's Welfare Unit is headed by the Assistant Director, Students' Welfare and supported by Chairman Gymkhana and Sports Officer/Assistant Professor (Physical Education). Most of the colleges have spacious playgrounds and facilities for both indoor and outdoor sports. The Assistant Professor (Physical Education)/Sports Officer of the college provides the necessary coaching to the students for preparation for different sports events. Every college has also created facilities of musical instruments and the students make adequate use of this facility too. A well equipped Gymnasium is available in the colleges. The facilities developed and environment created helps to develop proficiency in the area of their interest.

Ten students participated in the Maharashtra State Inter University Research Convention "Avishkar", 38 students participated in Inter University Cultural Festival "Indradhanushya" and 102 students in Inter University Sports Meet "Krida Mahotsav" which were organized by Office of the Hon'ble Governor, Maharashtra State and Chancellor of the University. In All India West Zone Inter University- Cricket matches 2023, total 15 students participated. In all, 165 students participated in different competitions, sports, cultural research competitions of which 110 were boys and 55 were girls.

The facilities created at college level is thus safeguarding the interest of the students in the field of sports and helping them to achieving excellence in the sports and allied activities.



Table 4.2. Details of participation of students in National/State level sports, research and cultural events during 2023-24.

Sr. No.	Event	Date	No of Participants			Host Institute
			Male	Female	Total	
1.	Avishkar 2023-24	12.01.2024 to 15.01.2024	10	00	10	Maharashtra University of Health Sciences, Nashik
2.	Krida Mahotsav 2023-24	12.01.2024 to 16.01.2024	34	34	68	Rashtrasant Tukdoji Maharaj University, Nagpur
3.	Krida Mahotsav 2023-24	03.02.2024 to 07.02.2024	29	05	34	Dr. Babasaheb Ambedkar Technological University, Lonere
4.	Cricket 2023-24 (M)	18.02.2024 to 26.02.2024	15	00	15	Kaviyitri Bahinabai Chaudhari North Maharashtra University, Jalgaon
5.	Indradhanushya	11.03.2024 to 15.03.2024	22	16	38	Dr. Babasaheb Ambedkar Marathwada University, Sambhajinagar
			110	55	165	

4.6. NSS ACTIVITIES

1. NSS Strength allocated and Actual students enrolled for NSS

- NSS Strength allocated under Regular Activities by State Govt. for the Year : 1000
- Total No. of Colleges in University having NSS: 09
- Total No. of NSS units in University : 13
- Actual Enrolment during the Year: Male 602, Female 336, Total 938
- Category wise Enrolment: SC 114, ST 65, OBC 303, Minority 28, Others 428
- NSS Strength allocated under Special Activities by State Govt. for the Year : 500
- No. of participants in Special Camp : Male 277, Female 128, Total 405
- No. of NSS Special Camp organized during the year:08

Table 4.3 College-wise NSS Strength allocated and actual students enrolled for NSS

Sr. No.	Name of the College	Allocated Strength	Number of Students Enrolled		
			Male	Female	Total
1.	NVC, Nagpur	75	50	16	66
2.	MVC, Mumbai	225	118	94	212
3.	COVAS, Parbhani	150	100	62	162
4.	COVAS, Udgir	125	84	36	120
5.	KNPCVS, Shirwal	150	88	40	128
6.	CDT, Warud	75	43	17	60
7.	CDT, Udgir	65	44	16	60
8.	COFS, Nagpur	75	43	27	70
9.	COFS, Udgir	60	32	28	60
Total		1,000	602	336	938

2. College-wise Special Camps organized under NSS

Eight Constituent colleges of MAFSU organized Special NSS Camps during Jan-March 2024. Total 401 NSS volunteers participated in these camps.

Special Camps forms an integral part of National Service Scheme. It has special appeal to the youth as it provides unique opportunities to the students for group-living, collective experience sharing and constant interaction with community. Special Camps are organized generally on various developmental issues of national importance and thrust is given to transfer the MAFSU technologies for the benefits of the farming community. Various NSS units of MAFSU University adopt a village or group of villages for intensive social development, where special camps are being organized every year to create tangible and durable community assets.

Several activities were carried out during special camp like health checkup, treatment of ailing animals and vaccinations of animals, minor surgeries of farm animals, deworming and ecoparasite control campaign and spraying of animal sheds, school students education on hygiene, Swachh Bharat Swasth Bharat, Cleanliness Drive, Beti Bachao Beti Padhao Abhiyan, Saksharta Abhiyan, Awareness through street play, Awareness rally on various social problems, Health Check-up Camp, Blood Group Testing Camp, HIV AIDS awareness Program, literacy survey, Vasundhara campaign (tree plantation), drive for clean milk production, were conducted by the NSS unit of the colleges. During special NSS Camps Volunteers created awareness among villagers about E-governance schemes, safe and clean drinking water and health hygiene. Practical demonstrations on preparation of Panner and Khoa, workshop on importance of balanced diet and use of milk and milk based products for human nutrition and personal hygiene were organized.



NSS volunteers of MVC, Mumbai ready for vaccination



Drinking water tank for animals cleaned by NSS volunteers of NVC, Nagpur



Animal Health Vaccination cum Guidance to the farmers by NSS Volunteers of NVC, Nagpur



Dr. Niteen Patil, Hon'ble Vice- Chancellor addressing the gathering during inauguration of NSS Special Camp organized by COVAS, Parbhani



Spraying of animal sheds
by NSS volunteers of COVAS, Udgir



Inauguration of animal health camp
organized by KNPCVS, Shirwal



Health Check-up Camp by CDT,
Warud



guidance to the students and farmers
by CDT Udgir

Table 4.4 Details of college-wise NSS special camps organized

Sr. No.	Name of the College	No of Volunteers	Dates of Special Camp	Place of Camp
1.	MVC, Mumbai	92	07.02.2024 to 13.02.2024	Kosbad, Tq. Dahanu, Dist. Palghar
2.	NVC, Nagpur	29	15.02.2024 to 21.02.2024	Kaniyadol, Tq. Kalmeshwar, Dist. Nagpur
3.	COVAS, Parbhani	75	18.03.2024 to 24.03.2024	Sayala Khating, Tq. Dist. Parbhani
4.	COVAS, Udgir	60	24.03.2024 to 30.03.2024	Pimpri, Tq. Udgir, Dist. Latur
5.	KNPCVS, Shirwal	64	05.02.2024 to 11.02.2024	Morve, Tq. Khandala, Dist. Satara
6.	CDT, Warud	27	09.02.2024 to 15.02.2024	Sawangi, Tq. Pusad, Dist. Yavatmal
7.	CDT, Udgir	24	10.03.2024 to 16.03.2024	Ghonsi, Tq. Jalkot, Dist. Latur
8.	COFS, Udgir	30	22.02.2024 to 28.02.2024	Haibatpur, Tq. Udgir, Dist. Latur
	Total	401		



3. Regular activities organized under NSS

Constituent colleges of MAFSU organized 159 activities like Blood Donation Camps, Tree plantation, Self Defense Training for Girls, Health Camps/Dental, Awareness Programmes / Rallies / campaigns / Swachhata Abhiyan and Shramdan Programme during 2023-24. Total 3,992 students were involved in various activities organized under NSS, out of which 2,764 were male students and 1, 228 were females.

Table 4.5 Regular activities organized under NSS

Sr. No.	Activity	No of activities organized	No. of NSS Volunteers involved		
			Male	Female	Total
1	Blood Donation Camps	06	169	38	207
2	Tree plantation	07	464	241	705
3	Self Defense Training for Girls	01	-	23	23
4	Health Camps/Dental	12	530	222	752
5	Awareness Programmes/ Rallies/ campaigns/ Swachhata Abhiyan	101	1256	538	1794
6	Shramdan Programme	32	345	166	511
	Total	159	2,764	1,228	3,992



Blood donation camp organized by the COFS, Nagpur



Tree Plantation at CDT, Warud campus

4.7. NCC ACTIVITIES

1(MAH) Remount and Veterinary Squadron, NCC Unit, Nagpur is the only Remount and Veterinary (Equestrian) unit in entire Maharashtra and was established in 2004 at Nagpur Veterinary College Nagpur. Its riding school is located on lush green area beside the air force HQ Nagpur. The unit is raised to inculcate not only the values of unity and discipline in the minds of the students of the college but also to develop their character, leadership, secular outlook and selfless service to nation.

The duration of the course is of 3 years, in which 'B' and 'C' Certificates are awarded to the students after successful completion of training and camps. The unit is providing the excellent opportunity to the students for equestrian training and also to participate in different camps at National level. The cadets of this unit represent the Maharashtra NCC directorate in the republic day camp (RDC) held every year at New Delhi. So far this unit grabbed Dr RoopJyoti Sharma trophy, 8 Silver and 7 Bronze medals in equestrian events of RDC. The cadets of this unit also participate in



mountaineering course and one of the cadets scaled mount Bharatkunta peak at a height of 21,576 ft in Gangotri region.

The unit is also regularly organizing various camps like tree plantation, blood donation, cleanliness drive, animal treatment, polio vaccination and awareness campaign on pollution, anti-dowry, save water, corruption and social nuisance, save environment etc. The passed out cadets from this unit have joined the various positions in the armed forces.



Plantation at 1 Maharashtra Remount and Veterinary Squadron, NCC Unit, Nagpur

The 1 Maharashtra Remount and Veterinary Squadron, NCC Unit, NVC Nagpur, has demonstrated commendable performance in various NCC certifications and camps during 2023-24. A total of 124 cadets successfully passed the certification exams, with 64 cadets earning the "B" Certificate and 60 cadets obtaining the "C" Certificate. The squadron not only focuses on academic achievements but also encourages active participation in camps, Out of the 124 cadets who attended the Combined Annual Training Camp at Mankapur Sports Complex, Nagpur, 73 were male and 51 were female. During the camp, a range of activities were conducted, including training sessions on drill, weapon handling, stable management, and various aspects of personality development. Additionally, lectures were organized on career opportunities in the Indian Armed Forces and the Remount & Veterinary Corps. Other important topics covered included national integration, social awareness, community development, health and hygiene, first aid, and time management.

1 Mah R & V Sqn NCC Unit at Nagpur Veterinary College, MAFSU celebrated International Yoga Day on 21st June 2023 in a unique manner at Horse Riding School, Seminary Hills, Nagpur as well as Futala Lake to spread awareness among the people about the benefits of practising Yoga for good health and mind. More than 100 cadets of 1 Mah R & V Sqn NCC Unit participated in International Yoga Day with zeal and enthusiasm. The yoga on Horseback on standing and cantering was unique and admired by everyone.



Cadets of 1 Mah R & V Sqn NCC Performing Yoga on Horse back



Celebration of Independence Day at 1 Mah R & V Sqn NCC Unit, Nagpur





5. RESEARCH

5.1. EXTRAMURAL RESEARCH PROJECTS

In the year 2023-24, the University was engaged in significant extramural research activities. Two projects were completed, with a total funding of Rs. 1734.71 lakh. Mumbai Veterinary College and College of Dairy Technology, Warud, each completed one project.

The University is currently managing 17 ongoing research projects with a combined financial commitment of Rs. 1896.94 lakh. Nagpur Veterinary College leads with six projects (Rs. 812.72 lakh), followed by Mumbai Veterinary College with four projects (Rs. 776.81 lakh). Other notable contributions include the College of Veterinary & Animal Sciences, Udgir (two projects, Rs. 75.96 lakh) and KNP College of Veterinary Science, Shirwal (one project, Rs. 46.42 lakh). Additionally, Post Graduate Institute of Veterinary & Animal Sciences, Akola; College of Dairy Technology, Udgir, College of Fishery Science, Nagpur, and Wildlife Research & Training Centre, Gorewada are each managing one project.

This active research engagement highlights the University's dedication to advancing Veterinary, Dairy Technology and Fishery sciences. The details of institute wise number of completed and ongoing extramural research projects are given in Table 5.1.

Table 5.1 Institute wise Completed and Ongoing Extramural Research Projects (2023-24)

Sr. No.	Name of the College	Completed		Ongoing	
		No of Projects	Rs. (Lakh)	No of Projects	Rs. (Lakh)
1	MVC, Mumbai	01	1698.00	04	776.81
2	NVC, Nagpur	NIL	NIL	06	812.72
3	COVAS, Udgir	NIL	NIL	02	75.96
4	KNPCVS, Shirwal	NIL	NIL	01	46.42
5	PGIVAS, Akola	NIL	NIL	01	21.00
6	CDT, Warud	01	36.71	NIL	NIL
7	CDT, Udgir	NIL	NIL	01	42.82
8	CoFS, Nagpur	NIL	NIL	01	58.01
9	WRTC, Gorewada	NIL	NIL	01	63.20
	Total	02	1734.71	17	1896.94

5.1.1 Completed Extramural Research Projects

The University completed two extramural research projects with a total funding of Rs. 1734.71 lakh in the financial year 2023-24. The list of completed research projects is given below in Table 5.2



Table 5.2 Institute and Funding Agency wise Details of Completed Extramural Research Projects (2023-24)

Sr. No.	Title of the Project	Principal Investigator	Funding Agency	Total Cost Rs.(Lakh)
1	Centre of Excellence for Advanced Research on Animal Food Safety	Dr. R. J. Zende MVC, Mumbai	ICAR, New Delhi	1698.00
2	Preparation of functional fermented milk enriched with bioactive peptides obtained from the milk of indigenous cows breeds of Vidharbha and Marathwada region of Maharashtra	Dr. P. S. Patil CDT, Warud (Pusad)	RGSTC, Mumbai	36.71
			Total	1734.71

Salient Achievements of the Completed Extramural Research Projects

The salient achievements of the completed extramural research projects of the University during the year 2023-24 are as follows.

1. Centre of Excellence for Advanced Research on Animal Food Safety

- The existing laboratory facilities at the WRRL have been upgraded under the NAHEP-CAAST-MAFSU project titled 'Centre of Excellence for Advanced Research on Animal Food Safety'. This includes the installation of a Clean Room with a Class III Biosafety Cabinet, Anaerobic Work Station, Chemical Residue Testing Laboratory, Nutrition Laboratory, Molecular Laboratory, and a Virtual Classroom. These facilities are actively utilized by postgraduate and doctoral students, faculty members, and industry personnel for conducting high-quality research and continuing education in the field of food safety.
- The Centre has developed various protocols and Standard Operating Procedures (SoPs) for microbiological analysis, chemical residue testing, and nutritional analysis of food products of animal origin.
- In terms of capacity-building, the Centre has conducted 62 national training programs, 3 national-level quizzes, 32 international training programs, and 3 short visits, benefiting a total of 12,762 participants. This includes 7,284 students, 3,990 faculty members, 493 industry professionals, 777 field veterinarians, 195 scientists, as well as lab personnel and farmers, who have enhanced their skills and knowledge through these initiatives.
- Additionally, infrastructure improvements have been made, such as the repair of a training hall with a 50-person capacity, the beautification and maintenance of the MVC campus garden in Parel, Mumbai, and the repair of restrooms for female students and staff. LED streetlights were also installed to ensure safety, and the Students International Hostel and guesthouse, as well as the Sensory Evaluation Laboratory, have been renovated.
- The MAFSU Centre has established collaborative partnerships with 17 national and 5 international Higher Education Institutions (HEIs)/universities. MoUs have been signed with Penn State University (USA), Texas Tech University (USA), Washington State University (USA), The Experimental Zooprohylactic Institute in Palermo (Italy), and the University of Veterinary Medicine and Pharmacy in Košice (Slovakia). Additionally, industrial collaborations were formalized through MoUs with M/s Vista Processed Foods Pvt. Ltd., Taloja, and the Poultry Breeders Coordination Association (PBCA), Pune.



Signing of MoUs at Penn State University, USA



Visit to Central Instrumentation Laboratory, Texas Tech University, Lubbock



International Training Programme for Faculty at Penn State



Student Engagement Conclave -2023



Hands on Training program for P.G. students



National Training Programme for Faculty



Agri Education Fair-2023



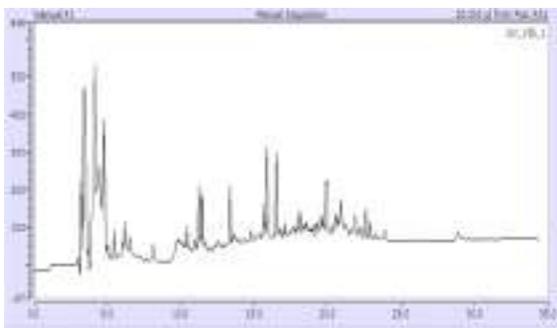
Dr. Bhakti and Dr. Mandakranta
in University of Pittsburgh, USA



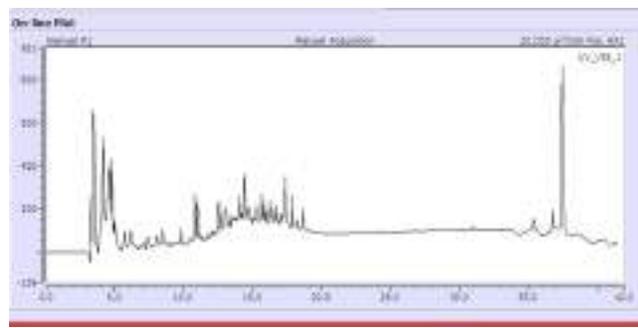
Dr. Piyush, Dr. Rohit and Dr. Mohini
in Maejo University, Chiang Mai, Thailand,

2. Preparation of Functional Fermented Milk Enriched with Bioactive Peptides obtained from the Milk of Indigenous Cow Breeds of Vidarbha and Marathwada Region of Maharashtra

- A biofunctional fermented milk product enriched with bioactive peptides was successfully developed.
- A bioprocess was established for the production of bioactive peptides that exhibit Alpha-glucosidase, DPP-IV, and ACE-I inhibitory activities.
- *Lactobacillus helveticus* NCDC 288 and *Lactobacillus acidophilus* NCDC 15 were identified as the most effective cultures for producing these bioactive peptides.
- The 3 kDa permeate fractions of milk fermented with these lactic cultures demonstrated the highest levels of Alpha-glucosidase, DPP-IV, and ACE-I inhibitory activities.
- Ultra-filtration of the fermentate significantly enhanced the enzyme inhibitory properties of the peptides.
- The peptides were purified using reverse-phase HPLC (RP-HPLC) and their sequences were determined through LC-MS/MS analysis.
- Milk protein-derived Alpha-glucosidase DPP-IV and ACE-I inhibitory peptides from Indigenous cow milk could be used as ingredients for functional foods, nutraceutical, and pharmaceutical applications for management of T2D and hypertension.



HPLC profile of peptides in 3 kDa permeate of
Gaolao skim milk fermentate with *L. helveticus*
NCDC 292



HPLC profile of peptides in 3 kDa permeate of
Deoni skim milk fermentate with *L. acidophilus*
NCDC 15



5.1.2 Ongoing Extramural Research Projects

During the year 2023-24, the University had a total of 17 ongoing extramural projects with a total funding of Rs. 1896.94 lakh. The list of ongoing extramural research projects is given in Table 5.3.

Table 5.3 Institute and Funding Agency wise details of Ongoing Extramural Research Projects. (2023-24)

Sr. No.	Title of the Project	Principal Investigator	Funding Agency	Total Cost Rs.(Lakh)
Mumbai Veterinary College, Mumbai				
1	Monitoring of Pesticide Residue at National Level	Dr. R. J. Zende	ICAR, New Delhi	451.66
2	All India Co-ordinated Research Project on "Post Harvest Engineering and Technology"	Dr. R. J. Zende	ICAR, New Delhi	121.73
3	Intramacrophage Targeted Nanoparticulate Drug Delivery System for Brucellosis	Dr. R.S. Gandge	ICMR, New Delhi	81.51
4	The All India Network Program on Livestock and Poultry Products Safety	Dr. S. S. Sole	ICAR, New Delhi	121.91
			Total	776.81
Nagpur Veterinary College, Nagpur				
5	Pathogenomics and host pathogen interaction of Brucella infection	Dr.M S. Hedau	ICMR, New Delhi	84.29
6	Epidemiological Study on Q fever and Development of Cost-Effective Diagnostics for Diagnosis of Coxiellosis in Human and Animals	Dr. S. V. Shinde	ICMR, New Delhi	85.81
7	Establishment of Consortium for One Health to address Zoonotic and transboundary diseases in India, including the Northeast region	Dr. N. V. Kurkure	DBT, New Delhi	113.27
8	Centre for food safety and quality evaluation of foods of animal origin	Dr. S. P. Chaudhari	NLM, ICAR, New Delhi	138.14
9	Conservation & multiplication of indigenous cattle breeds through Ovum Pick-up (OPU) and in vitro embryo production (IVEP)	Dr. M. S. Patil	Rashtriya Gokul Mission, GoI, New Delhi	297.14
10	Development of e-Extension Modules for Capacity Building in Livestock Farming	Cooperating Centre PI Dr. S.P. Landge	NASF, ICAR, New Delhi	94.07
			Total	812.72



College of Veterinary and Animal Sciences, Udgir				
11	Artificial Intelligence in breed identification and live body weight prediction in cattle breeds of Maharashtra	Dr. V.B. Dongre	RGSTC, Mumbai.	39.90
12	Empowerment of rural women from aspirational Osmanabad district through poultry rearing for sustainable livelihood	Dr. R.C. Kulkarni	DBT, New Delhi	36.06
			Total	75.96
Krantisinh Nana Patil College of Veterinary Science, Shirwal				
13	Surveillance of antimicrobial resistance at animal human interface in the context of one health	Dr R. P. Kolhe	ICMR, New Delhi	46.42
			Total	46.42
Post Graduate Institute of Veterinary and Animal Sciences, Akola				
14	ICAR-NBAGR Network Project on Animal Genetics Resources	Dr. S. V. Kuralkar	ICAR-NBAGR	21.00
			Total	21.00
College of Dairy Technology, Udgir				
15	Fortification of selected indigenous dairy products with omega 3 fatty acids using microcapsules of flaxseed oil powder: a novel approach for promoting health and wellbeing of consumer	Dr. M. R. Patil	RGSTC, Mumbai	42.82
			Total	42.82
College of Fishery Science, Nagpur				
16	Development of organized fish seed production, culture and marketing to ensure sustainable livelihood opportunities in aquaculture in Gadchiroli district	Dr. P. A. Telvekar	STRC, Gondwana University, Gadchiroli	58.01
			Total	58.01
Wildlife Research and Training Centre, Nagpur				
17	Establishment of a Consortium for One Health to address Zoonotic and transboundary diseases in India, including the Northeast region	Dr. S. V. Upadhye	DBT, New Delhi	63.20
			Total	63.20
			Grand Total (Lakh)	1896.94

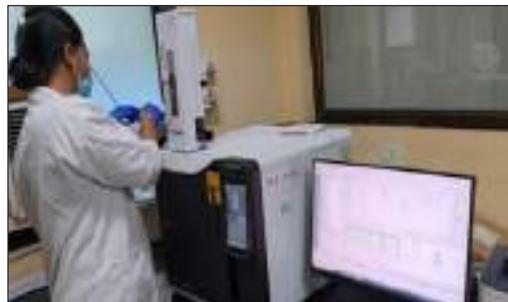


Salient Achievements of the Ongoing Extramural Research Projects

The salient achievements of the ongoing extramural research projects of the University during the year 2023-24 are mentioned below.

1. The Monitoring of Pesticide Residue at National Level

- A total of 48 fish and marine samples were collected from various local markets in and around Mumbai city to monitor and quantify the presence of 12 specific pesticide residues viz., Alpha HCH, Beta HCH, Gamma HCH (Lindane), Delta HCH, Aldrin, Alpha Endosulfan, Beta Endosulfan, Endosulfan Sulfate, P,P'- DDE, P,P'-DDD, P,P'- DDT, and Chlorpyrifos.
- The analysis of samples using advanced techniques such as LCMS/MS, GC, and GCMS/MS revealed that none of the 48 samples contained detectable levels of the pesticide residues under study.



Analysis of fish and marine samples

2. The All India Co-ordinated Research Project on "Post Harvest Engineering and Technology

- Developed standardized and applied process protocol for preparing pet biscuits and kibbles using buffalo meat powder.
- Standardized the process for preparing chicken meat powder.
- Standardized the process protocol for synthesizing gold nanoparticles using the sodium borohydride method of reduction.



Gold Nanoparticle by Sodium borohydride method of Reduction



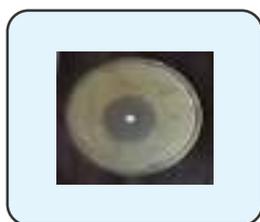
Kibbles from Buffalo Meat Powder



Pet Biscuits from Buffalo Meat Powder

3. The Intramacrophage Targeted Nanoparticulate Drug Delivery System for Brucellosis

- Developing and optimization of the nano drug delivery system for oxytetracycline hydrochloride, focusing on formulations F14, F27 and F50, ensuring optimal size, drug loading, and stability.
- Completion of thermodynamic affinity parameters, analytical method development, and characterization of the designed Nanoparticulate Drug Delivery System (NPDDS).
- Evaluation of nano formulations (F50 and F27) against plain oxytetracycline hydrochloride (OTC-HCL):



In vitro antibacterial activity and cytotoxicity.



In vitro efficacy using the murine RAW 264.7 cell line.



In vivo efficacy against Brucella abortus 544 strains in mice.



4. The All India Network Program on Livestock and Poultry Products Safety

- SCSP (Schedule Caste Sub Plan) funds were utilized for welfare activities targeting the SC community, including the distribution of water purifiers, mineral mixture and gumboots to 30 beneficiaries from lower-income SC families.
- Sample collection was completed as per the sampling plan and meat samples from buffalo and chicken were analyzed.
- Total 10 buffalo meat samples were tested for antibiotics, including Sulphamethazine and Sulphadoxine. Whereas 8 poultry meat samples were analyzed for pesticides such as Acephate, Chlorpyrifos, Phoratesulphone, Phoratesulphoxide, Phenthoate and Profenophos.
- No pesticide or antibiotic residues were detected in the samples, including sulphonamides, organochlorines, and organophosphate pesticides.



Activities conducted under the AINP on Livestock and Poultry Products Safety

5. Pathogenomics and Host Pathogen Interaction of Brucella infection

- A total of 890 serum samples and 209 vaginal swabs were collected for sero-prevalence study from different regions of Maharashtra. Out of which 765 from cattle, 90 samples from buffaloes and 35 samples from goat were screened by different serological tests and indicated seroprevalence of 10.29, 6.67 and 2.08 % in cattle, buffaloes and goats, respectively.
- Four Brucella abortus isolates have been isolated from cattle.
- Transcriptomic study in cell line model has been carried out and analysis is in progress.



Sample collection from animal



6. The Epidemiological Study on Q Fever and Development of Cost-Effective Diagnostics for Diagnosis of Coxiellosis in Humans and Animals

- Screening of 1,286 animal samples, of which 648 tested positive for Q fever using molecular assays.
- Screening of 718 human samples, of which 356 tested positive for Q fever using molecular techniques.



Collection of animal samples

7. Establishment of Consortium for One Health to Address Zoonotic and Itransboundary Diseases in India, including the Northeast region

- The animals (large and small ruminants) were screened from the four states including Maharashtra, Madhya Pradesh, Chhattisgarh and Goa.
- The serological and molecular tests were applied for analysing the prevalence.
- The overall prevalence of Q fever was observed to the tune of 43.80% followed by LSD (5.74%); cryptosporidiosis (4.16%) and brucellosis (3.28%) while none was reported positive for TB.
- Among the pig population studied, 1.29% turned positive by ELISA for cysticercosis.
- The foods of animal origin (milk and meat) revealed positivity of 26.14% for *Salmonella* Spp. while 3.75% for *Listeria monocytogenes*.



Collection of human and animal samples



Celebration of World Zoonoses Day 2023
at Gondia



Celebration of 113th
Animal Husbandary Day at Nimalai

8. The Centre for Food Safety and Quality Evaluation of Foods of Animal Origin.

- Renovation of the laboratory has been completed so as to accommodate HPLC.
- 100 samples of animal-origin foods were processed.

9. The Conservation and Multiplication of Indigenous Cattle Breeds through Ovum Pick-Up (OPU) and In Vitro Embryo Production (IVEP)

- A total of 555 embryos were produced, out of these, 387 embryos were transferred.
- A total of 61 cows became pregnant. So far, 32 calves have been born.



IVF - ETT Produced Sahiwal Calves



10. Development of e-Extension Modules for Capacity Building in Livestock Farming

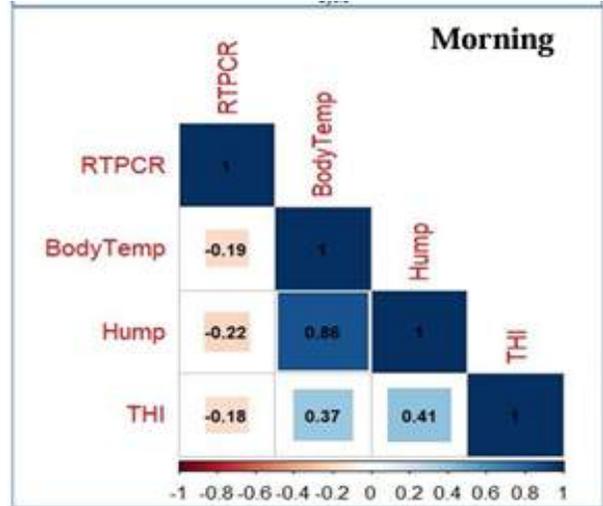
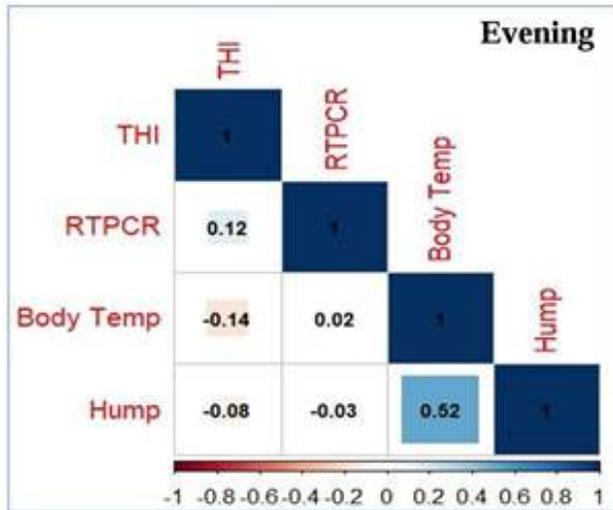
- Participation of the multi-stakeholders i.e. PashuSakhi's, Farmers and LDOs in giving prompt responses on their need for information.
- Developed content for website prepared under the project
- Developed content for video module on loose housing system in dairy farming.
- Developed content for mobile application on goat farming.
- Developed content for mobile application on backyard poultry farming.



Need Analysis Workshops

11. Intelligence in Breed Identification and Live Body Weight Prediction in Cattle Breeds of Maharashtra

- **Breed Coverage and Adaptability Study:** The project focuses on five cattle breeds of Maharashtra (Deoni, Red Kandhari, Gaolao, Khillar, Dangi) for breed identification, live body weight prediction, and adaptability assessment using infrared thermal imaging. The study on Deoni cattle has been completed in the first year.
- **AI-based Breed Identification:** A total of 1,450 digital images of Deoni cattle were processed using CNN and other advanced techniques. The breed identification accuracy reached 96.0% on the training dataset and 61.8% on the test dataset. Work on other breeds is ongoing, with expected improvements by expanding the dataset. These findings will aid in preventing indiscriminate breeding.
- **HSP70 Gene Study:** A genetic study on the HSP70 gene, involved in thermoregulation, showed no significant differences between AA and BB genotypes in rectal temperature and respiration rate. The gene expression study indicated a negative correlation between HSP70 expression and morning body temperature, suggesting Deoni cattle are well adapted to local climatic conditions.



Correlation of body surface temperature with THI and HSP 70 gene expression (During Evening)



3D Image Analysis recording



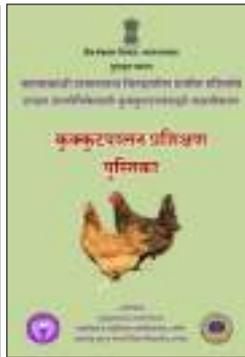
Infrared Thermal Imaging

12. Empowerment of rural women from aspirational Osmanabad district through poultry rearing for sustainable livelihood

- A baseline survey was conducted in four purposively selected tahsils of Osmanabad.
- A total of 100 beneficiaries were selected for the project.
- A feed unit was purchased and installed to provide necessary input support.
- Improved poultry chicks have been booked for institutional rearing and will be distributed to the beneficiaries.
- A training manual has been prepared as a resource material to support the beneficiaries.



Purchase & installation of Feed Unit



Training Manual

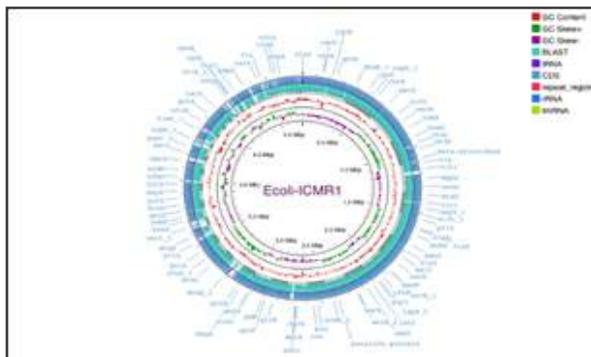


Survey at villages

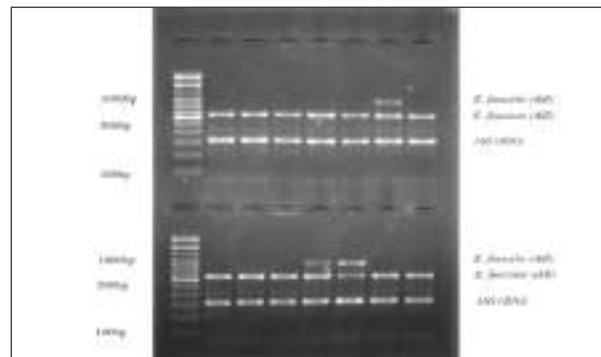


13. The Surveillance of Antimicrobial Resistance at Animal-Human Interface in the Context of One Health project

- Phenotypic antimicrobial resistance (AMR) studies revealed multidrug-resistant (MDR) strains prevalent in animals and retail foods of animal origin. ESBL-positive isolates of *E. coli* were predominantly found in cattle feces.
- Detection of AMR genes in bacterial isolates showed the widespread prevalence of the blaTEM gene and TetA gene in *E. coli*, *Salmonella*, *S. aureus*, and *Enterococci*, regardless of the isolation source.
- MecA-positive *S. aureus* was isolated from bovine raw milk samples.
- Whole genome sequencing of *E. coli* and *Enterococcus faecalis* has been completed. Metagenomic analysis of pooled samples from cattle, buffalo, goat, poultry, human, milk, water, and cattle shed floors was also completed. The analysis revealed higher resistance to tetracycline, vancomycin, and fluoroquinolone antibiotics.



Circular map of WGS of *E. coli* isolate



Detection of *E. faecalis* and *E. faecium*

14. The ICAR-NBAGR Network Project on Animal Genetics Resources

- The proposal for the registration of Khamgaon Cattle and Gaolao (Belona) Buffalo is currently under review by ICAR-NBAGR, Karnal.
- The Khamgaon Cattle is a local breed found in Buldhana and neighboring districts of the Western Vidarbha region of Maharashtra. The predominant coat color of Khamgaon cattle ranges from light to dark brown (chocolate) with white spots, giving them a mottled appearance. Unique characteristics of the Khamgaon breed include chocolate-colored muzzles, eyelids, horns, and hooves. The average daily lactation milk yield, total lactation milk yield, lactation length, fat percentage, and SNF percentage were recorded as 1.55 ± 0.03 kg, 403.82 ± 9.16 kg, $282.05 \pm$ days, $4.53 \pm 0.07\%$, and $8.21 \pm 0.06\%$, respectively. Khamgaon bullocks are highly valued for their draft power in agricultural activities and transportation, particularly during the hot summer months.



Khamgaon Bullock pair



Khamgaon Female



- The Gaolao (Belona) Buffalo is an indigenous germplasm found in the Yavatmal district, located in the Western Vidarbha region of Maharashtra. The buffaloes have a predominantly black coat with irregular white patches extending from the forehead to the muzzle. Their tails reach the hocks and have white tail switches. All buffaloes exhibit wall eyes. The forehead is broad between the horns and slightly bulging, with a markedly long face tapering towards the muzzle. The medium-sized horns curve backward and upward, tapering to a point, giving them a 'sickle-shaped' appearance. The average daily lactation milk yield, total lactation milk yield, lactation length, fat percentage, and SNF percentage were found to be 4.84 ± 0.02 kg, 1248.12 ± 6.15 kg, 261.03 ± 0.44 days, $8.19 \pm 0.06\%$, and $8.98 \pm 0.03\%$, respectively.
- Ongoing efforts are focused on the characterization of Melghati buffalo and Umarda cattle breeds.



Male Belona Buffalo



Female Belona Buffalo

15. Fortification of Selected Indigenous Dairy Products with Omega 3 Fatty Acids using Microcapsules of Flaxseed Oil Powder: A novel approach for promoting health and wellbeing of consumers.

- Optimized the manufacturing process for developing flaxseed oil microcapsules.
- Refined the process parameters for fortifying selected indigenous dairy products with flaxseed oil microcapsules.
- Successfully fortified dairy products such as Shrikhand, Lassi, Kulfi, Pedha and Santra Burfi with microencapsulated omega-3 powder, ensuring they meet the recommended daily allowance for alpha-linolenic acid.
- Established a laboratory equipped with advanced instruments like a rheometer and high-speed shear mixer, facilitating various research experiments and practical sessions for undergraduate students.



Omega 3 fortified Pedha



Omega 3 fortified Shrikhand



16. Development of Organized Fish Seed Production, Culture and Marketing to Ensure Sustainable Livelihood Opportunities in Aquaculture in Gadchiroli District

- Installed two FRP portable carp hatcheries along with overhead tanks in Shrinivaspur (Tal. Chamorshi) and Italcheru (Tal. Aheri) in Gadchiroli district in June 2023.
- Produced 65 lakh Indian Major Carp fish spawn between July and August 2024 using the installed FRP hatcheries, distributing the fish seed to 20 fish farmers for rearing.
- A production of 20 lakh common carp fish seed at hatcheries located in Shrinivaspur (Tal. Chamorshi), Dhamditola (Tal. Kurkheda), and Jamnara (Tal. Korchi) in Gadchiroli district, distributing the seed to 24 fish farmers for rearing in December 2024.
- Provided a Portable Fish Vending Unit to Mr. Rakesh Sharma, a fish vendor in the Gadchiroli town, to support live and fresh fish sales during 2023-24.
- Formed Fish Farmers Interest Groups (FIG) in Chamorshi, Mulchera, and Etapalli blocks of Dist. Gadchiroli, involving 92 fish farmers to promote organized fish farming and marketing during 2023-24.



IMC fish breeding at Dhamdi Tola, Tal. Kurkheda, Dist. Gadchiroli



IMC fish breeding at Jamnara, Tal. Korchi, Dist. Gadchiroli



Indian Major Carps Fish seed distribution to FIG members



Installation of FRP Portable Carp Hatchery at Italcheru, Tal. Aheri



17. Establishment of a Consortium for One Health to Address Zoonotic and Transboundary Diseases in India, including the Northeast region

- The total 1,418 wildlife samples were collected from different states viz., Maharashtra (1,363), Karnataka (2), Gujarat (6), Kerala (1), Madhya Pradesh (34) and Jharkhand (12).
- A total of 1,198 samples were tested for various zoonotic diseases, including Brucellosis, Q Fever, Cysticercosis, Listeriosis, Cryptosporiasis, and Japanese Encephalitis. Of these, 3 samples tested positive for Cysticercosis, while no positive cases were detected for the other diseases.



Sample collection from wild animals

5.2 POST GRADUATE RESEARCH PROJECTS

5.2.1 College wise completed PG Research Projects

In the year 2023-24, a total of 202 postgraduate (PG) research projects were completed across the university. This includes 196 master's projects and 6 doctoral projects. The information regarding college-wise completed PG research projects is given in Table 5.4

Table 5.4 College wise completed PG Research Projects

Sr. No.	Name of College	No. of PG Research Projects completed		
		Masters	Doctoral	Total
1	MVC, Mumbai	41	00	41
2	NVC, Nagpur	33	03	36
3	COVAS, Parbhani	41	02	36
4	COVAS, Udgir	22	00	22
5	KNPCVS, Shirwal	30	00	30
6	PGIVAS, Akola	29	01	30
	Total	196	6	202

5.2.2 Department wise completed PG Research Projects

The Faculty of Veterinary Science completed 202 postgraduate (PG) research projects, comprising 196 MVSc and 6 PhD projects in the academic year 2023-24. Major contributions came from Veterinary Surgery and Radiology (24 MVSc), Animal Nutrition (16 MVSc, 1 PhD), Veterinary Pathology (15 MVSc, 1 PhD), and Animal Genetics and Breeding (14 MVSc). Other significant departments include Veterinary Microbiology and Biotechnology (13 MVSc), Veterinary Parasitology (11 MVSc, 1 PhD), and Livestock Products Technology (9 MVSc, 2 PhD). This extensive research activity highlights the faculty's dedication to advancing veterinary science. The information pertaining to Department wise completed PG Research Projects of Faculty of Veterinary Science is given in Table 5.5.

**Table 5.5 Department wise completed PG Research Projects -Faculty of Veterinary Science (Nos.)**

Sr. No.	Name of Department	No. of Projects Completed	
		M.V.Sc.	Ph.D
1	Veterinary Anatomy, Histology and Embryology	4	0
2	Veterinary Physiology	6	0
3	Veterinary Biochemistry	6	1
4	Veterinary Pharmacology & Toxicology	12	0
5	Veterinary Parasitology	11	1
6	Veterinary Microbiology and Biotechnology	13	0
7	Veterinary Pathology	15	1
8	Veterinary Public Health	11	0
9	Animal Nutrition	16	1
10	Animal Genetics Breeding	14	0
11	Department of Livestock Production and Management	12	0
12	Livestock Products Technology	9	2
13	Animal Reproduction, Gynaecology and Obstetrics	11	0
14	Veterinary Surgery and Radiology	24	0
15	Clinical Veterinary Medicine including Ethics and Jurisprudence	10	0
16	Veterinary Epidemiology and Preventive Medicine	4	0
17	Veterinary & Animal Husbandry Extension	5	0
18	Department of Poultry Science	13	0
Total		196	6

5.3. PRIVATE AGENCY PROJECTS - INSTITUTE-INDUSTRY COLLABORATION

In the year 2023-24, the University was engaged in 20 completed and 16 ongoing private agency projects, with financial allocations of Rs. 58.08 lakh and Rs. 92.60 lakh, respectively. The information pertaining to college-wise private agency projects is given in Table 5.6.

The constituent veterinary colleges of MAFSU have achieved significant milestones through completed institute-industry collaborations with various esteemed private agencies. These collaborations have included research projects funded by renowned organizations such as Treibacher Industrie AG, Austria & Chemet India, Ar-Ex Laboratories Pvt. Ltd., Mumbai, and Mankind Pharma Ltd., New Delhi. Other notable partners include the Central Ayurveda Research Institute (CARI), Bengaluru, Saife Vet Med, New Delhi, and Vetoquinol India Animal Health Pvt. Ltd., Mumbai. Additionally, projects have been funded by Techna India Pvt. Ltd., New Delhi, M/s Ayurved Ltd., Baddi, HP, M/s E-N Rich, Sangamner, Maharashtra, and M/s Regen Biocorps AHI (Pvt. Ltd.), Vadodara. Further research has involved Hindustan Feeds Pvt. Ltd., Satara, and Rakesh Pharmaceutical, Kalol, Dist: Gandhinagar. Intas Pharmaceuticals Ltd., Ahmedabad, Gujarat, has also been a key contributor to these collaborative efforts. These partnerships underscore the active role of veterinary colleges in advancing research and innovation in the field.

The ongoing institute-industry collaborations involving private agencies are making notable progress across various research initiatives. Current projects are supported by prominent organizations such as Cargill Provimi Animal Nutrition India Pvt. Ltd., Ayurved Ltd. from Himachal Pradesh, and M/s Carus Laboratories Pvt. Ltd., Karnal, Haryana. Additionally, projects are underway with Kemin Industries South Asia Pvt. Ltd., Chennai, Aussan Laboratories India Pvt. Ltd., Pune, and Green Vision Life Sciences Pvt. Ltd., Pune. These partnerships reflect a dynamic and continuing engagement between veterinary institutions and leading industry players in advancing animal science and health research.



Table 5.6 Private Agency Projects - Institute-Industry Collaboration

Sr. No.	Name of the College	No. of completed agency Projects	Rs. (Lakh)	No. of ongoing agency Projects	Rs. (Lakh)
1	MVC, Mumbai	2	6.51	Nil	Nil
2	NVC, Nagpur	05	26.08	07	33.01
3	COVAS, Parbhani	3	7.78	5	23.22
4	COVAS, Udgir	2	2.31	1	1.89
5	KNPCVS, Shirwal	02	4.78	02	6.48
6	PGIVAS, Akola	05	10.62	01	28
Total		20	58.08	16	92.60

5.4 RESEARCH RECOMMENDATIONS

The University Headquarters hosted the 21st Joint Animal Science Research Council Meeting from October 4th to 7th, 2023. Presided over by Dr. N.V. Patil, Hon'ble Vice Chancellor, the meeting served as a platform for comprehensive reviews and discussions of the diverse research activities conducted by the University's constituent colleges during the year 2022-23.

The meeting thoroughly reviewed the progress of completed and ongoing research projects, with particular emphasis on critical areas related to Veterinary Science, Dairy Technology and the Fisheries sector. A total of 346 completed projects (322 intramural and 24 extramural), 114 ongoing extramural projects, and 279 proposed intramural projects were discussed. These deliberations resulted in 36 recommendations aimed at benefiting various stakeholders across the sectors, which are categorized as follows:

- **Category 1:** Recommendations for Industry (Feed/Fodder/Livestock/Dairy/Fisheries), Livestock Farms, and Farmers - 12 recommendations.
- **Category 2:** Recommendations for Veterinary Clinicians, Practitioners, and Dispensaries - 13 recommendations.
- **Category 3:** Recommendations for Academicians, Researchers, Diagnostics, and Pharmaceutical Companies - 11 recommendations.

Every year, the University publishes these recommendations, which are valuable for farmers, industries, Veterinary clinicians, academicians, scientists both on the University website and in the form of a booklet.



21st Joint Animal Science Research Council Meeting



Publication of Research Recommendations booklet



5.4.1 Recommendations for Industry (Feed/Fodder/Livestock/Dairy/Fisheries), Livestock farms and Farmers

- 1 Project Title :** **Scale-up and techno-economic feasibility studies on complete feed for animals using ozonated cotton stalk as roughage**

Investigators : A.P. Dhok

Name of the College : Nagpur Veterinary College, Nagpur

Recommendatin :

 - It is recommended to use cotton stalk as a sole roughage source in pelleted complete feed of goats under stall-fed conditions for profitable goat farming.
 - Ozone treatment of cotton stalk for 4 hrs under 5 LPM pressure is recommended for improving the nutritive value and its utilization in ruminants.
 - Use of ozone treated cotton stalk in pelleted complete feed yields more body weight gain and profit under intensive rearing for commercial goat farming.

- 2 Project Title :** **Studies on utilization of rice distillers dried grains with solubles in broiler chicken**

Investigators : Roshan Werulakar and A.P. Dhok

Name of the College : Nagpur Veterinary College, Nagpur

Recommendatin : It is recommended to include 15 percent good quality rice DDGS in broiler diet supplemented with 300 g protease enzyme (10000 EPU) per ton of feed for economical broiler production.

- 3 Project Title :** **Influence of Increasing Broilers Slaughter Weight on Meat Quality and Economics**

Investigators : G.K. Nagre, M.M. Kadam, D.B. Bhaisare and K.S. Rathod

Name of the College : Nagpur Veterinary College, Nagpur

Recommendatin : It is recommended that, the broiler birds should be liquidated at 2.1 to 2.2 kg live weight to optimize meat palatability, bird welfare and economic productivity.

- 4 Project Title :** **Effect of rice distiller's dried grains with soluble in diets on production performance and egg quality in layers**

Investigators : A.C. Adkine, K. K. Khose, M. G. Nikam, G.R. Gangane, V. K. Munde and R. N. Waghmare

Name of the College : College of Veterinary and Animal Sciences, Parbhani

Recommendatin : For economic egg production, it is recommended to include up to 15% rice distiller's dried grains with soluble (rDDGS) in layer diet on iso-caloric and iso-nitrogenous basis by replacing soybean meal without affecting the production performance and egg quality parameters.



- 5 Project Title :** **Effect of short periods of incubation during egg storage (SPIDES) on hatchability of broiler breeder eggs**
- Investigators :** B.A. Dhotre, A.S. Kadam and V. D. Lonkar
- Name of the College :** Krantisinh Nana Patil College of Veterinary Science, Shirwal.
- Recommendation :** It is recommended to expose broiler breeder hatching eggs to incubation temperature of 37.5°C and 55 to 60% relative humidity for 2 hrs on 5th and 10th day during 15 days storage period for better hatchability, embryonic survivability, healthy chick production and chick quality.
- 6 Project Title :** **Studies on dietary calcium requirement during extended laying cycle in commercial layers**
- Investigators :** A.K. Shinde, V.D. Lonkar, A.S. Kadam, V.S. Dhaygude, S.M. Agivale and S.M. Bhalerao.
- Name of the College :** Krantisinh Nana Patil College of Veterinary Science, Shirwal
- Recommendatin :** In commercial layers, it is recommended to use 4.0% dietary Ca (65% coarser and 35% fine form) in extended laying cycle (81-100 weeks) to improve egg production and reduce egg defects without affecting egg qualities.
- 7 Project Title :** **Effect of dietary addition of betaine on performance of broilers fed with diets with reduction in methionine and choline**
- Investigators :** Ashish Kumar, R. C. Kulkarni, N. Z. Gaikwad, S. P. Awandkar, N.V. Khode and S. G. Chavhan
- Name of the College :** College of Veterinary & Animal Sciences, Udgir
- Recommendatin :** It is recommended that 0.05% dietary level of Betaine hydrochloride with 20% reduction in Methionine and Choline significantly improves growth performance, livability, immunity, and carcass traits of broiler chickens.
- 8 Project Title :** **Utilization of popped black sorghum on performance of broilers**
- Investigators :** Nilesh Lawate, M.R. Wade, S.J. Manwar, S.V. Kuralkar, S.W. Hajare and R.S. Ingole
- Name of the College :** Postgraduate Institute of Veterinary and Animal Sciences, Akola
- Recommendatin :** For profitable broiler production, it is recommended to use mycotoxin free 20% popped black sorghum encountered in unseasonal rain in the diet of broiler chickens for comparable body weight and feed conversion ratio to standard basal diet.
- 9 Project Title :** **Quality assessment of chitosan and cinnamon essential Oil nanoparticles coated chicken sausages**
- Investigators :** Neelagiri Shreya Rao, V. H. Shukla, R.J. Zende, S. D. Ingole, D. N. Desai, R. R. Pharande
- Name of the College :** Mumbai Veterinary College, Mumbai.



- Recommendatin** : Edible coating of nanoemulsions of 0.3% chitosan incorporated with 0.3% cinnamon essential oil could be successfully used to enhance the quality and shelf-life of chicken sausages by 15 days than control at refrigeration temperature.
- 10 Project Title** : **Development of Kulfi with Natural Sweetening and Flavoring Ingredients**
- Investigators** : Vyawahare Shivani and B. D. Meshram
- Name of the College** : College of Dairy Technology, Warud (Pusad)
- Recommendatin** : It is recommended to incorporate Orange Peel Powder @ 3% in sweetened kulfi mix to enhance the flavor and keeping quality for minimum period of 60 days at 10°C in polyethylene terephthalate (PET).
- 11 Project Title** : **Development of Misti dahi with honey as sweetener**
- Investigators** : H. M. Gawande, P. S. Patil, P. G. Wasnik, A. V. Dhotre, M. R. Patil
- Name of the College** : College of Dairy Technology, Warud (Pusad) and College of Dairy Technology, Udgir
- Recommendatin** : The unique combination of milk having 3% fat and 9% SNF (Solid Not Fat) with the incorporation of 12% honey and 0.1% caramel is recommended to ferment at 42°C temperature for 4-5 hours to prepare good quality Misti dahi with specific characteristics and distinctive sweetness and also to enhance its antioxidant activity and ACE-inhibitory activity.
- 12 Project Title** : **Skill development through training and demonstration of carp and production using FRP hatchery and carp seed rearing in farm ponds in Marathwada Region of Maharashtra.**
- Investigators** : S. R. Yadav, S. N. Kunjir, M. M. Girkar and S. S. Ghatge
- Name of the College** : College of Fishery Science, Udgir
- Recommendatin** : A portable FRP carp hatchery should be used for common carp seed production during the winter season along with breeding of Indian Major Carps (IMC) during monsoon season for maximizing economic returns.

5.4.2 Recommendations for Veterinary Clinicians/Practitioners/Dispensaries

- 1 Project Title** : **Pathology of experimentally induced fatty liver disease in chicken**
- Investigators** : Jayant Sukare, V. S. Dhaygude, C.S. Mote, Vijaysinh Lonkar, Uma Tumlam and Abhijit Barate
- Name of the College** : Krantisinh Nana Patil College of Veterinary Science, Shirwal
- Recommendatin** : For experimental induction of fatty liver disease model in layer chicken, it is recommended to feed protein (12.05%), high fat (13.83%), high cholesterol (2.0%) and low choline diet (765.39mg/kg feed) for 4 weeks.



- 2 Project Title : Monitoring queening in cats through Tocodynamometry**
Investigators : K. B. Latesh, N. R. Dagli, S. U. Gulavane, R. J. Chaudhari, S. M. Gaikwad, S. V. Bharucha and R. R. Rohi
Name of the College : Mumbai Veterinary college, Mumbai
Recommendatin :
- It is recommended to use [(Biparietal Diameter (BPD)mm - 23.39)/0.47] formula during 40-50 days of gestation to estimate the days before parturition in queens.
 - It is recommended to use medical or surgical interventions if during stage 2 of parturition in queen has visible abdominal and uterine contractions with a peak pressure exceeding 60 mmhg on tocodynamometer, less than 1.5 minutes of time interval between contractions and still no kitten is delivered.
- 3 Project Title : Antioxidants addition in extender and its effects on spermogram of chilled semen in canines**
Investigators : Kusumita Rao, S.M. Gaikwad, S.U. Gulavane, R.J. Chaudhari, S.D. Ingole, P.B. Hase, R.R. Pharande
Name of the College : Mumbai Veterinary College, Mumbai
Recommendatin : It is recommended to add Spirulina extract @ 10 µg/ml and Coenzyme Q-10 @ 0.5 µMol/ml in Tris semen extender for canine semen preservation at refrigeration temperature up to 72 hours.
- 4 Project Title : Laparoscopic assisted diagnosis and surgical management of intestinal obstruction in dogs**
Investigators : K. S. Adey and S. B. Akhare
Name of the College : Nagpur Veterinary College, Nagpur
Recommendatin : Laparoscopy assisted hydrostatic reduction of intussusception is recommended for the caudal segment of intussusception of fresh cases in young dogs.
- 5 Project Title : Clinical evaluation of two different anaesthetic protocol for endoscopic diagnosis and surgico-therapeutic management of upper gastrointestinal disorders in dogs**
Investigators : A. A. Ransingh and B. K. Bhadane
Name of the College : Nagpur Veterinary College, Nagpur
Recommendatin : Anaesthetic induction with Zolezapam @ 1.5 mg/kg and Tiletamine @ 1.5 mg/kg body weight i/v and maintenance with 2% Isoflurane is recommended for easy and effortless passage of flexible endoscope as it provides the excellent quality of relaxation of lower oesophageal and pyloric sphincter.
- 6 Project Title : Comparative Efficacy of Tiletamine and Zolazepam combination with Midazolam and Ketamine for abdominal Surgeries in Dogs**
Investigators : Kale Priya Datta and D. U. Lokhande
Recommendation : Mumbai Veterinary College, Mumbai



- Recommendation** : It is recommended that Tiletamine-Zolazepam @ 5 mg/kg anaesthesia produces fast induction, short duration of anaesthesia, fast recovery and excellent muscle relaxation for abdominal surgeries in dogs
- 7 Project Title** : **Evaluation of Xylazine - Tiletamine - Zolazepam anaesthesia in Horses under field Conditions**
- Investigators** : G. S. Khandekar and Nikhil A. Babar
- Name of the College** : Mumbai Veterinary College, Mumbai
- Recommendation** : Induction with tiletamine-zolazepam @ dose rate of 0.8 mg/kg body weight intravenously in premedicated horses with xylazine @ 1.1 mg/kg body weight was safe without any complications as a suitable substitute to ketamine or propofol anaesthesia recommended for gelding in horses.
- 8 Project Title** : **Clinical Evaluation of amniotic membrane graft for management of corneal ulcer in dogs.**
- Investigators** : Attar Tayyab Ismail, A. H. Ulemale, R.V. Suryawanshi, S. A. Chauhan. V. Dhaygude, and A. B. Mali,
- Name of the College** : Krantisinh Nana Patil College of Veterinary Science, Shirwal
- Recommendation** : The human dry amniotic membrane grafts are recommended for healing of deep seated non responsive corneal ulcers in dogs.
- 9 Project Title** : **To evaluate and compare zinc fluorophosphate strip and silver fluorophosphate strip for osteoinduction and fracture healing in dogs.**
- Investigators** : Devika Deshpande, V. D. Aher, H. P. Aithal, S. A. Chauhan, S. M. Agivale and V. S. Dhaygude
- Name of the College** : Krantisinh Nana Patil College of Veterinary Science, Shirwal.
- Recommendation** : Zinc fluorophosphate grafts with Locking Compression Plating (LCP) is recommended for early and superior quality of long bone healing in dogs.
- 10 Project Title** : **Thoracoscopic evaluation of thoracic structures and organ in medico-surgical affections in bovine**
- Investigators** : S. S. Pitlawar
- Name of the College** : College of Veterinary & Animal Sciences, Udgir
- Recommendation** : Thoracoscopic examination in cattle is recommended for surgical management of hydrothorax by minimally invasive method and also helped to explore thoracic structures.
- 11 Project Title** : **Optimization on port placement approaches for Laparoscopy in Buffaloes**
- Investigators** : Supreet Kumar, S.S. Pitlawar, P. S. Masare, A. D. Patil, S. G. Chavan and P. M. Ghule



Name of the College : College of Veterinary & Animal Sciences, Udgir
Recommendation : It is recommended that, the central, dorso caudal and dorso cranial ports of the left flank and the central and dorso caudal ports of the right flank laparoscope approaches for the visualization of most of the abdominal organs in buffaloes.

12 Project Title : **Radiological evaluation for potential foreign body location in thorax and its surgical management in cattle**

Investigators : G.B. Swami, S. S. Pitlawar, N. Z. Gaikwad, S. S. Ghoke, S. G. Chavan and P. M. Ghule

Name of the College : College of Veterinary & Animal Sciences, Udgir

Recommendation : It is recommended that, after obtaining two radiographs in right and left thoracic cavity, the presence of potential penetrating foreign body (PFB) is accurately located in the hemithorax of cattle.

5.4.3 Recommendations for Academicians/Researchers/Diagnostics/Pharmaceutical Companies

1 Project Title : **Standardization and validation of methods for detection of pesticide residues in animal feed, fodder, and milk using Liquid Chromatography - Tandem Mass Spectrometry (LC-MS/MS)**

Investigators : Ghazal Chawla, N.R. Karambele, S.D. Jagadale, B.N. Ramteke, R.J. Zende and V.M. Vaidya

Name of the College : Mumbai Veterinary College, Mumbai

Recommendation : Standardized multi-residue LC-MS/MS method is recommended for simultaneous detection of nineteen selected pesticide residues at a concentration of 5 µg/kg qualitatively and its quantification at a concentration of 10 µg/kg in milk, greenfodder, dry fodder and concentrate feed using Liquid Chromatography-Tandem Mass Spectrometry.

2 Project Title : **Identification of species and sex of domestic animals by PCR technique**

Investigators : Piyush Bhole and Rupali Charjan

Name of the College : Nagpur Veterinary College, Nagpur

Recommendation :

- It is recommended to use species specific primer "Cytochrome b gene" for identification of species of domestic ruminants.
- The SRY and GAPDH genes as sex specific marker in duplex PCR are recommended for identification of sex of domestic ruminants.

3 Project Title : **Application of scrotal infrared thermography for determination of seasonal effects on certain semen characteristics in bulls**

Investigators : S.D. Kharde, S.D. Ingole, S.V. Bharucha, M.P. Sawane, R.J. Zende

Name of the College : Mumbai Veterinary College, Mumbai

Recommendation : It is recommended that scrotal infra-red thermography (IRT) should



be adopted as an indirect tool to know the effect of the environment on sperm physical and quantitative characteristics.

- 4 **Project Title** : **Milk miRNA expression in buffaloes as a potential biomarker for mastitis**
Investigators : Abhishek Jadhav, S.D. Ingole, S.V. Bharucha, S.D. Kharde, R.V. Gaikwad, R.S. Deshmukh
Name of the College : Mumbai Veterinary College, Mumbai
Recommendation : It is recommended that miR-146a and miR-383 are used as diagnostic biomarkers for early detection of mastitis, even in CMT -ve samples.
- 5 **Project Title** : **Detection of selected pesticide residue in chicken meat using liquid chromatography-tandem mass spectrometry (LC-MS/MS)**
Investigators : Nair Aishwarya Sivaraman, V.M. Vaidya, and R.J. Zende
Name of the College : Mumbai Veterinary College, Mumbai
Recommendation : The standardized and validated Liquid Chromatography-Tandem Mass Spectrometry Technique is recommended for the detection up to 5 ppb and quantification up to 10 ppb of organophosphates, carbamates and pyrethroids pesticide residues in poultry meat samples.
- 6 **Project Title** : **Detection of selected heavy metal residues and its quantification in eggs using inductively coupled plasma mass spectrometry**
Investigators : Magri Bagang, V.M. Vaidya and R.J. Zende
Name of the College : Mumbai Veterinary College, Mumbai
Recommendation : The standardized Inductively Coupled Plasma Mass Spectrometry technique is recommended for the detection of heavy metals (viz. mercury, arsenic, lead and cadmium) residues up to 0.1 ppb and quantification up to 0.5 ppb in egg samples.
- 7 **Project Title** : **Detection of Canine Parvovirus in Faecal Samples of Dogs by Using Loop Mediated Isothermal Amplification (Lamp)**
Investigators : Vrushali Dhas & Shubhangi Warke
Name of the College : Nagpur Veterinary College, Nagpur
Recommendation : The standardized LAMP assay is recommended to use for the direct detection of canine parvovirus in fecal samples.
- 8 **Project Title** : **Phylogenetic Studies on fowl adenovirus serotype 11**
Investigators : S.P. Awandakar, G.M. Waghule, V.G. Chavan, R.C. Kulkarni, S.G. Chavan and M.B. Kulkarni
Name of the College : College of Veterinary & Animal Sciences, Udgir



Recommendation : It is recommended that,-

- Following primers are suitable for detection of Indian FAdV-11 by polymerase chain reaction.

Gene	Primer	
Hexon L3&4	F	5' GGGGCTGAAGTATCGCTCTC 3'
	R	5' ATGGCTTACTTCCGTACGCC 3'
Fiber	F	5' CTCCTTTCGCGTTCTCCATG 3'
	R	5' CAACCCAGGAACCGTTCAAG 3'
Penton	F	5' GGGGTTTCCTCTTCCTCCTTC 3'
	R	5' TGATAACCAACCCGCCGT 3'

- Any of the hexon gene segment (nt 1551 to 2828), fiber gene (nt 14 to 1498) and penton gene (nt 122 to 1562) is suitable for classification of Fowl adenovirus strains into five species and twelve serotypes.

9 Project Title : **Molecular phylodynamic analysis of Canine parvovirus from Maharashtra State**

Investigators : S.P. Awandakar, R.D. Sadanande, N.V. Khode, S.S. Ghoke and M.B. Kulkarni

Name of the College : College of Veterinary & Animal Sciences, Udgir

Recommendation : It is recommended that, CPV-2c strain may be incorporated in vaccine to control 'Canine parvovirus diarrhoea' outbreaks in dogs.

10 Project Title : **Detection of Theileria and Babesia spp. Infection in Dairy Cattle using Multiplex PCR**

Investigators : S.S. Talod, P.D. Pawar, P.P. Mhase, V.S. Dhaygude and A.K. Barate

Name of the College : Krantisinh Nana Patil College of Veterinary Science, Shirwal

Recommendation : It is recommended that the de novo-designed primers and developed genus multiplex PCR assay is recommended for the simultaneous detection of Theileria and Babesia spp. in cattle to save time and money.

11 Project Title : **Studies on exercise tolerance in mudhol hound with special reference to hormonal profile and myostatin gene polymorphism**

Investigators : Suraj Koujalagi, C. N. Galdhar and R. V. Gaikwad

Name of the College : Mumbai Veterinary College, Mumbai

Recommendation : Reference range of Total Thyroxine (TT4nmol/l), Total triiodothyronine (TT3, nmol/l), free thyroxine (FT4 pmol/l) and cortisol (nmol/l) in healthy mudhole hound dogs were recorded as 16.73-27.51, 0.48 to 1.38 nmol/l, 6.47-12.00 pmol/l and 24-58 nmol/l, respectively. This established range of healthy mudhol hound dogs is recommended to be used as a reference range for academicians, clinicians, and researchers.



5.5 RESEARCH PUBLICATIONS

In the year 2023-24, the faculty of the University produced a total of 362 research publications, with 292 national and 70 international papers.

5.5.1. Faculty and College wise number of Research Publications

The Faculty of Veterinary Science contributed 300 papers (265 national, 35 international). Overall, the Faculty of Dairy Technology published 29 national papers and 02 international papers, totaling 31 papers, while the Faculty of Fishery Science also published a total of 31 papers. The information pertaining to Faculty college wise number of research papers is given in Table 5.7.

Table 5.7 Faculty wise number of research publications

Sr.No.	Faculty	National	International	Total
Faculty of Veterinary Science				
1	MVC, Mumbai	36	01	37
2	NVC, Nagpur	60	14	74
3	COVAS, Parbhani	46	11	57
4	COVAS, Udgir	57	01	58
5	KNPCVS, Shirwal	39	04	43
6	PGIVAS, Akola	20	03	23
7	WRTC, Gorewada	07	01	08
Total		265	35	300
Faculty of Dairy Technology				
8	CDT, Warud	23	Nil	23
9	CDT, Udgir	06	02	08
Total		29	02	31
Faculty of Fisheries Science				
10	COFS, Nagpur	12	01	13
11	COFS, Udgir	18	Nil	18
Total		30	19	31
Grand Total		324	56	362

5.5.2 Department wise number of Research Publications

The information pertaining to Department wise number of research papers of three faculties under the University is given in Table 5.8.

Table 5.8 Department wise number of Research Publications

Sr.No.	Faculty	National	International	Total
A. Faculty of Veterinary Science				
1	Veterinary Anatomy & Histology	8	0	8
2	Veterinary Physiology	14	5	19
3	Veterinary Biochemistry	6	0	6
4	Veterinary Pharmacology & Toxicology	17	0	17
5	Veterinary Parasitology	11	3	14
6	Veterinary Microbiology	15	2	17
7	Veterinary Pathology	17	5	22
8	Veterinary Public Health	13	6	19



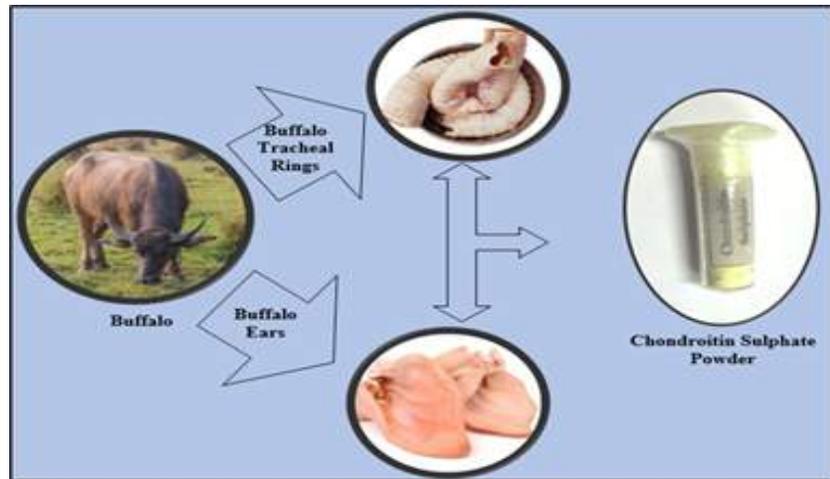
9	Animal Nutrition	10	5	15
10	Animal Genetics and Breeding	13	3	16
11	Livestock Production & Management	15	0	15
12	Livestock Products Technology	16	3	19
13	Animal Reproduction, Gynaecology & Obstetrics	28	2	30
14	Veterinary Surgery & Radiology	29	0	29
15	Veterinary Clinical Medicine, VNM and RIL	23	0	23
16	Veterinary & Animal Husbandry Extension	7	0	7
17	Poultry Science	10	0	10
18	Livestock Farm Complex	4	0	4
19	Veterinary Clinical Complex	2	0	2
20	Wildlife Research & Training Centre	7	1	8
Total		265	35	297
B. Faculty of Dairy Technology				
1	Dairy Chemistry	04	02	06
2	Dairy Technology	02	03	05
3	Dairy Engineering	02	01	03
4	Dairy Microbiology	01	05	06
5	Dairy Business Management	04	05	09
6	Student Training Dairy Plant	02	00	02
Total		15	16	31
C. Faculty of Fishery Science				
1	Fisheries Extension, Economics and Statistics	02	08	10
2	Aquatic Environment Management	02	03	05
3	Fish Processing Technology	03	00	03
4	Fisheries Engineering	04	04	08
5	Aquaculture	01	04	05
Total		12	19	31
Grand Total		292	70	362

5.6 PATENTS GRANTED

5.6.1 Process protocol for the extraction of Chondroitin Sulphate from Buffalo Cartilage

MAFSU, Nagpur has patented the process protocol for the extraction of "Chondroitin Sulphate from Buffalo Cartilage" for the treatment of diseases like osteoarthritis. The extraction and purification of chondroitin sulphate from buffalo cartilage involve rigorous processes to ensure its quality and effectiveness. The University has standardized the process protocol for extraction of "Chondroitin Sulphate from Buffalo Cartilage". This process typically involves enzymatic or chemical extraction, followed by filtration, concentration, and purification steps to obtain a purified chondroitin sulphate product into the powder form. The Patent Office, Intellectual Property India, Government of India has granted a patent (Patent No. 437845) for "Chondroitin Sulphate from Buffalo Cartilage" to MAFSU, Nagpur from 07/07/2023.

Inventors : Dr. R. J. Zende, PI & Professor, VPH, MVC, Mumbai,
 Dr. A. M. Paturkar, Co-PI & Professor, VPH
 Dr. V. M. Vaidya, Co-PI & Assistant Professor, VPH
 Dr. R. N. Waghmare, Co-PI & Assistant Professor
 Dr. Rajesh Wagh, Scientist



Pictorial representation of process protocol for the extraction of "Chondroitin Sulphate from Buffalo Cartilage

5.7 SPECIALIZED LABORATORIES

1. Radio Isotope Laboratory at Mumbai Veterinary College, Mumbai

Mumbai Veterinary College, Parel-Mumbai have established a specialized Radio isotope Laboratory as a Type -II research laboratory sponsored by the Radiological Safety Division, Atomic Energy Regulatory Board, Government of India. RIA facility is catering the services for assessment of hormonal estimations. The documented reference range of hormonal profile is used as a standard reference range by practicing clinicians across India to ascertain



Sample Processing at Radio Isotope Lab

endocrine health. Nowadays, practicing veterinarians also refers clinical cases at this facility for seeking opinions on the diagnosis and treatment of hypothyroidism, diabetes, and Cushing's syndrome. Since 2013, Fifty four (54), master's and doctorate students from MAFSU and other Universities across the country have completed their thesis research.

2. Centre for Zoonoses at Nagpur Veterinary College, Nagpur :

The department of Veterinary Public Health and Epidemiology, Nagpur Veterinary College, Nagpur has established 'Centre for Zoonoses' under Niche Area of Excellence funded by ICAR, New Delhi. The centre is equipped with ultra-modern facilities of MALDI-TOF, Vitek 2, BacT Alert, Biosafety cabinets (Class II B2 with virus burn out unit and 100% exhaust), Sonicator, ELISA test reader, PCR Machine, realtime PCR machine, Gel documentation system, automated Gram



Sample Processing at Lab



staining machine, Inverted microscope, Dark field microscope, Fluorescent microscope, CO₂ incubator, Deep freezers (-20 & -80°C) etc. It is actively conducting the research in the field of serology, molecular surveillance/epidemiology, genomics, and metagenomics of the zoonotic diseases and is also conducting work on the food safety analysis for public health significant bacteria.

3. Network Unit of the National Centre for Veterinary Type Culture (NCVTC) at College of Veterinary and Animal Sciences, Udgir

The Department of Veterinary Microbiology, COVAS, Udgir is recognized as one of the Network Units of the National Centre for Veterinary Type Culture (NCVTC), Hissar, India

This centre has facilities of Microbial Culture Collection of Veterinary & Zoonotic Importance. This culture collection houses 259 Bacterial Species, 6 Fungi collections, and 142 Animal virus/clinical specimens. The culture collection includes the bacteria of veterinary importance viz. *Pasteurella multocida*, *Rhodococcus rhodosus*, *Candida albicans*, Streptococcus species, Staphylococcus species, Clostridium, Bacillus species and multiple drug-resistant strains.



Culture Collection





6. FARM ACTIVITIES

6.1. LIVESTOCK FARMS

6.1.1. Farm Establishment and Mandate: Enhancing Livestock Conservation and Education

1. Livestock Farm Complex, Goregaon, MVC, Mumbai

Established in 1974, this farm plays a key role in providing hands-on training and practical demonstrations to B.V.Sc. & AH students, farmers, and extension para professionals. It is actively involved in research and development in goat and dairy farming, enhancing the practical learning experience for students. The farm is also dedicated to conserving the Murrah buffalo, a high-yielding dairy breed, and focuses on creating site-specific technologies to improve animal productivity and sustainable farming practices.



Goat Unit



Kokan Kanyal Goat



Murrah Buffalo



Training of Pashu Sakhi's under MAVIM Project

2. Cattle Breeding Farm and Dangi Cow Research Station, Igatpuri

Established in 1946, this farm is dedicated to the conservation and breeding of the Dangi cattle, a breed well-adapted to regions with high rainfall. The farm plays a vital role in ensuring the survival and genetic purity of the Dangi breed, which is known for its endurance in hilly and wet conditions. It also contributes to scientific research and selective breeding strategies for improving cattle performance in adverse climates.



Dangi Cattle



Sorghum Fodder

3. Livestock Farm Complex, NVC, Nagpur

Founded in 1890, Nagpur Veterinary College Nagpur farm focuses on the conservation of two important breeds: the Nagpuri buffalo, valued for its milk production and the Gaolao cow known for its draught abilities.

The farm ensures the genetic preservation of these indigenous breeds and serves as a practical demonstration center for students and researchers. The focus on these local breeds supports sustainable livestock farming in the region.



Berseem Fodder



Oat Fodder



Silage making



World Milk Day Celebration



Nagpuri Buffalo



Gaolao Cow

4. Livestock Farm Complex, COVAS, Parbhani

Established in 1972, the Livestock Farm Complex at College of Veterinary and Animal Science, Parbhani, plays a multi-functional role in the conservation of indigenous livestock breeds such as Red Kandhari cattle, Marathwadi buffalo, Osmanabadi goat and Deccani sheep. Established for both research and education, it provides training to veterinary students and serves as a demonstration unit for sustainable farming practices. The farm contributes significantly to the conservation of pure germplasm and the development of local breeds.



Red Kandhari Cattle



Silage making



5. Livestock Farm Complex, COVAS, Udgir

Founded in 1952, this farm focuses on the conservation of Deoni cattle, renowned for its dual-purpose qualities of milk and draught and also engaged in the conservation and genetic improvement of Marathawadi buffalo and Osmanabadi goats, known for their hardiness and adaptability. The farm is also involved in fodder production, which ensures sustainable livestock farming by providing quality feed. It serves as a research and training hub for veterinary students and local farmers.



Biogas Unit



Backyard Poultry



Training Hall facility



Weighing Balance

6. MAFSU-Sub-Center, Udgir

The MAFSU Sub-Center in Udgir, established in 2003, is dedicated to the conservation and genetic improvement of indigenous livestock breeds. The farm focuses on Deoni cattle, renowned for their dual-purpose utility in both milk production and draught power, as well as Marathawadi buffalo and Osmanabadi goats, known for their resilience and adaptability to local conditions. Additionally, the farm engages in fodder production to ensure a sustainable feed supply, supporting livestock farming. It also serves as a valuable training ground for veterinary students, offering hands-on experience in breed conservation and farm management practices. The MAFSU Sub Centre is well equipped to cater to the need of fodder, training to the unemployed youth and for extending facility for on farm clinical and management studies. The centre is having facilities for evaluation of fodder quality and is being used for farm trails for post graduate students.



Loose housing facility



Hightech-facility



Mega sweet fodder



Training of Women farmers

7. Livestock Farm Complex, KNPCVS, Shirwal

Established in 1992, the farm at KNPCVS, Shirwal, is engaged in the conservation and genetic improvement of Khillar cattle, Pandharpuri buffalo and Sangamneri goats. These breeds are well-adapted to the local conditions and are crucial for sustainable livestock farming in the region. The farm also serves as an educational and demonstration center, providing students with hands-on training in livestock management and conservation practices.



Sangamneri Goat



Sangamneri Kids



Silage Making



Khillar Cattle



Pig Unit

8. Livestock Farm Complex, PGIVAS, Akola

Founded in 2008-09, this farm is dedicated to the conservation of the Purnathadi buffalo, a breed known for its resilience and productivity. The farm provides comprehensive facilities for teaching, research, and extension activities, helping to promote scientific research on buffalo breeding and management. It plays an essential role in sustaining the breed while offering practical training to veterinary students.



Purnathadi Buffalo



9. Berari Goat, Deccani Sheep Research Demonstration and Training Center, Borgaon (Manju), Akola

Established in 2001, this center focuses on the conservation, research, and demonstration of Berari goats and Deccani sheep. It provides training to farmers and veterinary students, showcasing sustainable breeding and management practices. The farm also serves as a research hub, contributing to the improvement of these breeds, which are vital to the region's small ruminant farming sector.



Berari goats



Vermicompost Unit



Jowar Fodder

6.1.2. Livestock Strength

The livestock and poultry strength across the university's research and livestock farms highlights a diverse range of species:

- **Livestock:** The University maintains a total of 1,257 animals, including 483 cattle, 218 buffaloes, 138 sheep, and 418 goats. LFC, Parbhani houses the largest livestock population with 310 animals, followed by Udgir with 256 and Nagpur with 186.
- **Poultry:** A total of 5,613 poultry birds are distributed across the centers, with Parbhani leading at 2,300 birds, followed by Akola (1,360) and Nagpur (530).

Each center specializes in specific breeds and species, such as the Dangi Cow Research Station in Igatpuri focusing solely on cattle (117 animals) and the Borgaon center dedicated to goat and sheep research with 100 animals.

**Table 6.1 Livestock and poultry strength at various farms under the University**

Sr. No.	Name of Farm	Livestock Strength					
		Cattle	Buffalo	Sheep	Goat	Total	Poultry
1.	LFC, MVC, Mumbai	23	15	30	77	145	486
2.	CBF and Dangi Cow Research Station, Igatpuri	117	-	-	-	117	-
3	LFC, NVC, Nagpur	78	57	04	47	186	530
4	LFC, COVAS, Parbhani	151	25	68	66	310	2300
5	LFC, COVAS, Udgir	36	26	8	27	97	
6	MAFSU, Sub-Center, COVAS, Udgir	35	51	-	51	137	-
7	LFC, KNPCVS, Shirwal	25	23	18	43	109	937
8	LFC, PGIAS, Akola	6	28	-	-	34	1360
9	Berari Goat, Deccani Sheep Res. Center, Borgaon (Manju)	-	-	10	90	100	-
	Grand Total	483	218	138	418	1257	5613

6.1.3. Availability of Land and Fodder

The university's research and livestock farms have a total of 1,740.17 acres of land available for cultivation, grazing, and other purposes, with the largest landholding being at Udgir (799 acres) and Borgaon (310.57 acres). A significant portion of the land is dedicated to fodder production to sustain the livestock.

Across all farms, 3,669.34 metric tons (MT) of green fodder and 313.40 MT of dry fodder are produced, with a total fodder output of 3,982.74 MT. The highest fodder production occurs at Parbhani, producing 1,167 MT, followed by Udgir (889 MT) and Shirwal (593.33 MT). These farms ensure a steady supply of fodder for livestock through a combination of cultivated and grazing land, contributing to sustainable livestock management.

Table 6.2 Availability of land and fodder at various farms under the University.

Sr. No.	Name of the Fram	Land (Acres)				Fodder Production		
		Cultivation	Grazing	Any other	Total	Green	Dry	Total
1.	LFC, MVC, Mumbai	15.50	1.50	18.00	35.00	430.00	-	430.00
2.	CBF and Dangi Cow Res. Station, Igatpuri	33.00	114.00	15.00	162.00	178.24	110.67	288.91
3	LFC, NVC, Nagpur	20.08	12.72	17.20	50.00	442.50	-	442.50
4	LFC, COVAS, Parbhani	90.00	20.00	40.00	150.00	1135.00	32.00	1167.00
5	LFC, COVAS, Udgir	52.50	125.50	602	780.00	584.00	105.00	869.00
6	MAFSU-Sub-centre, Udgir	20.00	-	-	20.00	200.00	-	200.00
7	LFC, KNPCVS, Shirwal	37.18	22.00	155.42	214.60	577.60	15.73	593.33
8	LFC, PGIAS, Akola	10.00	7.00	2.00	19.00	112.00	48.00	160.00
9	Berari Goat, Deccani Sheep Res. Center, Borgaon (Manju),	5.00	269.00	41.00	310.57	10.00	2.00	12.00
	Grand Total	283.26	471.22	990.12	1740.17	3669.34	313.40	3982.74

6.1.4. Revenue Generation

The university's livestock and research farms generate substantial revenue through various activities, amounting to a total of Rs. 1.15 crores (115 lakhs). The primary sources of income include the sale of milk, animals/birds, eggs and other farm products such as fodder, seeds, and compost.

- **Sale of Milk:** The largest contributor to revenue, amounting to Rs. 58.80 lakhs, comes from the sale of milk, with Nagpur (Rs. 19.46 lakhs) and Udgir (Rs. 11.96 lakhs) being the highest earners.
- **Sale of Animals/Birds:** This activity generated Rs. 22.44 lakhs, with Udgir (Rs. 5.25 lakhs) and Igatpuri (Rs. 2.22 lakhs) leading in sales.
- **Other Income:** Additional income sources such as the sale of eggs (Rs. 11.91 lakhs), fodder, and other products like earthworms and compost (Rs. 8.97 lakhs) contribute to the farms' financial sustainability. These diverse revenue streams help sustain farm operations while supporting research, education and extension services.

Table 6.3 Information regarding revenue generation at various farms.

Sr. No.	Name	Receipt (Rs. Lakh)						Total (Rs)
		Extension Trainings	Sale of Milk	Sale of animals/ birds	Sale of eggs	Sale of fodder stumps / seed / Azolla, etc.	Any other item (Earthworm, compost, grains, etc)	
1.	LFC, MVC, Mumbai	1.70	8.60	1.54	2.97	0.01	-	14.81
2.	CBF and Dangi Cow Res. Station, Igatpuri	-	-	2.22	-	-	0.04	2.26
3	LFC, NVC, Nagpur	4.84	19.46	1.50	5.65	0.07	0.09	31.60
4	LFC, COVAS, Parbhani	-	7.59	4.25	1.46	0.04	0.60	13.94
5	LFC, COVAS, Udgir	-	4.90	2.10	-	0.41	2.80	10.21
6	MAFSU -Sub-centre, Udgir	--	7.06	3.15	-	-	2.24	12.45
7	LFC, KNPCVS, Shirwal	0.30	7.27	2.56	0.03	0.26	-	10.43
8	LFC, PGIIVAS, Akola	4.95	3.92	3.25	1.80	0.35	3.20	17.47
9	Berari Goat, Deccani Sheep Res. Center, Borgaon (Manju)	-	-	1.88	-	-	-	1.88
	Grand Total (Lakhs)	11.79	58.80	22.44	11.91	1.15	8.97	115.05



6.2. FISH FARMS

1. Fish Seed Production Centre, College Of Fishery Science, Nagpur

The Fish Seed Production Centre of College of Fishery Science, Nagpur was established in the year 2007-2008. The Centre has a circular hatchery mainly comprising of Spawning Pool (1 no.), Incubation pools (02 no.) and spawnery (01 no.) and is regularly involved in seed production of Indian Major Carps namely; Catla (*C. catla*), Rohu (*L. rohita*), and Mrigal (*C. mrigal*). Additionally, the centre has a seed rearing facility comprising of 06 Nursery ponds (1400 m²), 03 Rearing ponds (2000 m²) & 03 stocking ponds (4080 m²). The total area of the centre is 2.38 ha and the water spread area is 0.78 hectare. Seed in the form of spawn, fry, semi-fingerling and fingerling is produced in the centre.

The facilities of the centre are regularly used for providing hands'on experience to the undergraduate students of fisheries faculty as well as for student internship under the READY program. The fish seed produced is supplied to various stakeholders viz; fish farmers, fishermen (Bhoi/ Dhiwar), entrepreneurs, hobbyists and selected beneficiaries of state fisheries department. The centre is regularly visited by various schools, junior colleges and senior colleges in and around Nagpur



Fish Production activities

2. Educational Fish Farm, College of Fishery Science, Udgir

The College of Fishery Science, Udgir, Dist. Latur, Maharashtra, is equipped with a wet laboratory, four rearing ponds, and four nursery ponds. An Fiber glass Reinforced Plastic (FRP) Carp Hatchery Unit is also established through funding from the Rajiv Gandhi Science and Technology Commission (RGSTC), Mumbai. These facilities are extensively utilized for teaching, research, and extension activities.

Using these resources, the college successfully produced 2.4 lakh carp fry, which were distributed to beneficiary farmers under the RGSTC-funded project. Additionally, six training programs were conducted to promote capacity building and facilitate knowledge dissemination among stakeholders using the aforementioned facilities through the project.



FRP Carp Hatchery Unit



Carp Fry Production



6.3. DAIRY PLANTS

1. Student Training Dairy Plant (STDP), CDT, Warud

The student training dairy plant (STDP) of college of Dairy Technology Warud is having 02 Experiential Learning Unit (ELU) established in 2008 and 2020 through ICAR funding. The first ELU of milk processing and Dairy products manufacturing is having capacity of 300 LPD and second is Ice cream and candy Unit of 200 liter per batch, with storage, transportation and ETP facility

In 2023-24 STDP has successfully procured 4155 liter milk from farmers and local vendors and generated receipt of Rs. 686481/- with profit of Rs.172283/-. As per ICAR guidelines, College has distributed 50% of Profit to the students. In addition to this STDP has provided the training to 03 entrepreneurs and helped them to establish their own Dairy Plant/Business.



Student Training Dairy Plant (STDP), CDT, Warud

2. Student Training Dairy Plant (STDP), CDT, Udgir

The student training dairy plant (STDP) of college of Dairy Technology Udgir was established in 2012-13. The milk processing capacity of the plant is 50 LPH.

In financial year 2023-24 STDP has successfully arranged six months “Hands on training and experiential learning programme” for 20 students of 8th semester B.Tech (Dairy Technology) and procured 1045 liter milk from local vendors and generated receipt of Rs. 117405/- with profit of Rs.17454/- also developed orange and mango flavor paneer whey drink. In addition to this STDP has provided the training to 100 dairy farmers from latur districts with financial assistance of ATMA, Latur and guided one dairy entrepreneur for establishment of new dairy plant.



Dairy Farmers Training in STDP, Udgir



Paneer Whey Drink Developed by STDP, Udgir

7. EXTENSION

Extension is an important pillar of the University imparting farm based education. The production oriented innovative technologies developed through research are completed only when these technologies are effectively transferred to the farming communities and other end users for their benefits. Under an umbrella of the Directorate of Extension Education the work of the field extension education activities is mainly carried out through the Directorate and the constituent colleges/ institutes/ KVK's of the University. By imparting skill based trainings for strengthening the entrepreneurial activities in the rural areas, the directorate is actively involved in the training and capacity building initiatives for the professionals, farmers, women and the unemployed youth across the state. Extension is striving to bring the changes through modern technology adoption in animal husbandry, dairy technology and fisheries for sustainable development and improved productivity for the farming communities.

7.1. PROJECTS SANCTIONED

The Directorate of Extension Education is implementing the following extension based projects during the 2023-24. These projects includes the capacity building of the dairy farmers through peer learning in Micro Training Centres, capacity building of Pashusakhis and Lead Women for Empowerment of Women SHGs engaged in Goat and Poultry Farming in Maharashtra through MAVIM, Mumbai, training of Pashusakhis for the goat and poultry development in the rural areas through the SMART supported FPOs. The MAITRI trainings are specifically designed for creating a dedicated cadre of artificial insemination technicians for the rural areas. This trained human resource will act as the extension functionaries in the field and will help in disseminating the scientific technologies for the livestock farming community. Besides this, the capacity building of Animal Husbandry Officers on Good Animal Husbandry Practices for Enhancing Livestock Productivity, Animal Welfare and Food Safety is another project targeting the field veterinarians for improving animal welfare and food security issues in livestock production systems. The Director of Extension Education Dr. A. U. Bhikane is the Project Leader for all the below listed completed/ongoing projects with a budget of Rs 809.76 Lakhs.

Table 7.1- List of Completed /Ongoing Extension Projects

Sr. No.	Title of the project	Funding Agency	Project Co-ordinator	Budget Provision (In Lakhs)
1	Establishment of Micro Training Centre	NDDDB, Anand	Dr. S. P. Landge	23.87
2	Capacity building of pashusakhis and lead women for empowerment of women SHG engaged in goat and poultry farming in Maharashtra	MAVIM, Mumbai	Dr. D. S. Deshmukh	417.73
3	Skill upgradation training for pashusakhis for improving goat and poultry farming	SMART Cell Dept. of AH, Govt of Mah.	Dr. S. P. Landge	134.06
4	Capacity building of animal husbandry officers on good animal husbandry practices for enhancing livestock productivity, animal welfare and food safety	SMART Cell Dept. of AH, Govt of Maharashtra	Dr. G. J. Panchbhai	28.80
5	Project on training of multipurpose artificial insemination technician in rural India (MAITRI's)	MLDB, Nagpur	Dr. A. U. Bhikane	195.30
6	Pashudhan Jagruti Abhiyan	DAHD, GOI, New Delhi	Dr. A. U. Bhikane	10.00
			TOTAL	809.76



PROGRESS OF PROJECTS

1. Establishment of Micro Training Centres (MTCs)

The Directorate of Extension Education, MAFSU, Nagpur has established three Micro Training Centres (MTCs) at Bina, Tq. Kamptee, District, Nagpur; Jogaheti, Tq. Karanja Dist. Wardha and Kamnapur Ghusli, Tq. Dhamangaon Railway, Dist. Amravati Districts for the farmers training through farmer-farmer training modules in collaboration with NDDDB, Anand, Gujarat with a budget of Rs. 23.87 Lakhs for the training of 4320 dairy farmers. The University has provided training infrastructure like 1 Television with Speaker, 40 Chairs, 1 table, 10 Posters for each MTCs. Besides this the MTCs are provided with a Biogas unit, Milking machine and Chaff cutter. Through the concept of farmer to farmer training the dairy farmers from these selected districts will be trained by the selected progressive farmers. The notion of "Seeing is Believing and Learning by Doing" is used for implementation of these trainings where the farmers will get trained by progressive peer farmers. The three MTCs have organized 73 trainings and a total of 1692 dairy farmers were trained from start of the project.



Demonstration of Loose Housing system at MTC, Bina, Dist. Nagpur



Demonstration of Silage making at Jogahetti, Dist. Wardha



Chaff cutter unit at MTC Kamnapur Ghusli, Dist. Amravati



Trainees at MTC Jogahetti, Dist. Wardha

2. Capacity Building of Pashusakhis (MAVIM)

The University received mega project entitled "Capacity Building of Pashusakhis and Lead Women for Empowerment of Women SHGs Engaged in Goat and Poultry Farming in Maharashtra" with a budget of Rs. 4.17 crores from the Mahila Vikas Arthik Vikas Mahamandal (MAVIM), Mumbai. The idea was MAVIM's Nav Tejashwini Programme can disseminate goat farming and poultry farming related technologies/practices/concepts/ideas and recommendations by MAFSU through Pashusakhi and Lead



Women for employment generation, nutritional security and additional income source to families.

Under this project, a total of 1050 pashusakhis are to be trained for 10 days and 5 days training modules on goat farming. In addition to this a total of 470 Lead women are to be trained through 5 days training module in poultry farming during 2023-24 and 2024-25. A total of 779 pashusakhis were trained through 26 trainings conducted in six Veterinary Colleges and two KVKs during August 2023 to March 2024. These trained pashusakhis are providing services like vaccination, deworming, and first aid facilities. Also the advisory services like marketing, SHG and FPO formation will be accomplished for the goat and poultry farmers in the state.



Distribution of Trainer Kits by Dr. N. V. Patil
Hon'ble Vice-Chancellor, MAFSU, Nagpur



Demonstration of weighing of goats at KNPCVS,
Shirwal



Training to pashusakhis on identification of
healthy and sick goats at PGIVAS, Akola



Demonstration on enrichment of fodder at COVAS,
Parbhani



Visit of Pashusakhis to Goat farm organized by
KVK, Nagpur



Pashusakhis during training programme by
KVK, Thane



3. Skill Upgradation Training for Pashusakhis for improving Goat and Poultry Farming

The University received a SMART Cell, Department of Animal Husbandry, Government of Maharashtra sanctioned project entitled "Skill Upgradation Training for Pashusakhis for improving Goat and Poultry Farming with an outlay of Rs. 1.34 Crores for training of 275 Pashusakhis in the scientific management of goat and backyard poultry farming through the 15 days residential trainings in the Veterinary Colleges/ Institutes. During December 2023 to March 2024, a total of 125 Pashusakhis were trained in 5 trainings in NVC, Nagpur, COVAS, Parbhani, COVAS, Udgir, KNPCVS, Shirwal & PGIVAS, Akola. These pashusakhis will cater the needs of the goat and poultry farmers associated with the producer companies established under SMART project as well as to the livestock and poultry farmers in the state.



Mrs. Kiran Mahalle, Extension Council member with other dignitaries releasing training manual at PGIVAS, Akola



Dr. A. U. Bhikane, Director Extension Education, MAFSU while addressing pashusakhis at NVC, Nagpur



Demonstrations on preparation of value added meat products at KNPCVS, Shirwal



Visit of pashusakhis to goat farm at PGIVAS, Akola

4. Capacity Building of Animal Husbandry Officers on Good Animal Husbandry Practices.

A project entitled "Capacity Building of Animal Husbandry Officers on Good Animal Husbandry Practices for Enhancing Livestock Productivity, Animal Welfare and Food Safety" funded by the Department of Animal Husbandry Government of Maharashtra under the Hon'ble Balasaheb Thackeray Agribusiness & Rural Transformation (SMART) Project with a total budget of Rs. 28.80 Lakhs is being implemented at Post Graduate Institute of Veterinary and Animal Sciences, Akola.



As per the project objectives, the veterinarians are to be trained for improving the quality of the animal produce with an emphasis on food security and safeguarding animal welfare measures and to develop the value chain for the different animal products and link them to the market with the help of farmer producers companies created through the SMART project. A total of 150 officers of Animal Husbandry are to be trained during 5 days residential training on "Good Animal Husbandry Practices for Enhancing Livestock Productivity, Animal Welfare and Food Safety". One training was organized for 24 officers from Animal Husbandry Department during 26th February to 1st March 2024.



Officers of Animal Husbandry Department in GAHP training at PGIVAS, Akola



Visit of trainees to various laboratories at PGIVAS, Akola

5. Multipurpose Artificial Insemination Technician in Rural India

The University received the "Multipurpose Artificial Insemination Technician in Rural India" (MAITRI) training project under the Rashtriya Gokul Mission from the Maharashtra Livestock Development Board for imparting training to 630 unemployed youth from 34 districts of the State with a budget allocation of Rs.1.95 Crore. All Six Veterinary Colleges/Institute will implement these trainings in 2024-25. This module consists of three month training wherein one month residential training is conducted at College/Institute followed by two months of field work under the supervision of Livestock Development Officer.

Upon completion of this training, the MAITRI will be provided with the Artificial Insemination kit and they are expected to extend the services for Artificial Insemination and First-aid treatment under the guidance of the field veterinarians. The MAITRI are going to play an important role not only in the provision of Artificial Insemination services but also will be useful in extending the animal husbandry related extension services for the livestock farmers.

6. Pashudhan Jagruti Abhiyan

The University implemented a project entitled "Pashudhan Jagruti Abhiyaan" sponsored by the Department of Animal Husbandry and Dairying, Government of India under Rashtriya Gokul Mission for enhancing milk productivity in 4 aspirational districts of Maharashtra namely Gadchiroli, Washim, Nandurbar and Dharashiv with a total financial outlay of Rs. 10.0 Lakh.

The constituent Veterinary colleges at Mumbai, Nagpur, Udgir and Akola. During August to September 2023, a total of 8 infertility camps and awareness campaigns were organized in which 992 infertility cases were treated and 2080 farmers were guided on latest dairy farming technologies in these workshops.



Dr. N. V. Patil, Hon'ble Vice-Chancellor addressing the farmers during Awareness Workshop programme at Kurkheda, Dist. Gadchiroli



Dr. A. U. Bhikane, Director Extension Education addressing the farmers at Dalveva Dist. Shirwal



Dr. Ravindra Bambal, Deputy Commissioner, DAHD, GOI, New Delhi inaugurating the fertility camp at Kamargon Dist. Washim



Expert examining the animal for infertility

7.2. TRAININGS ORGANIZED

The University has been instrumental in making efforts for dissemination of scientific information and technology transfer through collective efforts of faculty members from veterinary science, dairy technology and fisheries in extension activities.

The University through its Constituent Colleges, Institutes and Krishi Vigyan Kendras imparts the training for the officers, professionals from the line departments as well as livestock farmers, poultry farmers and fish farmers.

7.2.1. Trainings of Farmers

Organization of training programmes for entrepreneurship development amongst unemployed youth and aspiring entrepreneurs on various aspects of animal husbandry, poultry, dairying, fisheries and value addition for products of animal origin has been a regular activity of the University.

In all 83 trainings spread across 429 days were conducted wherein 3389 aspiring entrepreneurs were trained. A total of 45 trainings were organized on goat farming, 5 on dairy farming, 9 on poultry farming, 10 on fish farming and processing 5 on milk product technology and 9 trainings on other agriculture related activities like natural farming, smart cotton production, use of glyphosate



etc. A majority of 37 trainings of 3 days duration, 21 trainings of 10 days duration, 6 trainings of 5 days duration, 13 trainings of one day duration, 3 trainings of 15 days duration, 2 trainings of 2 days duration and 1 training of 16 days duration were organized for different stakeholders.

Table 7.2. Institute wise trainings conducted for farmers

Sr. No.	Name of Institute	No. of Trainings organized	Total Duration (No. of days)	No. of Participants/ Trainees
1	MVC, Mumbai	09	26	264
2	NVC, Nagpur	16	98	494
3	COVAS, Parbhani	08	52	226
4	COVAS, Udgir	09	49	545
5	KNPCVS, Shirwal	10	70	317
6	PGIVAS, Akola	05	45	153
7	CDT, Warud	03	05	109
8	CDT, Udgir	01	03	34
9	COFS, Nagpur	06	17	164
10	COFS, Udgir	01	03	25
11	KVK, Sangli	04	08	246
12	KVK, Nagpur	07	39	549
13	KVK, Thane	04	14	263
	Total	83	429	3389

The details of representative trainings conducted for farmers are as follows-

1. Training on "Freshwater Fish Culture" by College of Fishery Sciences, Nagpur

College of Fishery Sciences, Nagpur in collaboration with Rastrasant Tukdoji Maharaj Nagpur University, Nagpur(RTMNU) organized a training on "Freshwater Fish Culture" for the farmers from adopted villages of RTMNU during 28th to 30th April, 2023 for 30 trainees at Directorate of Extension Education, MAFSU, Nagpur. The training programme was innaugrated at the hands of Dr. Subhash Chaudhari, Hon'ble Vice-Chancellor, RTMNU, Nagpur in presence of University officials.



Dr. Subhash Chaudhari, Hon'ble Vice-Chancellor, RTMNU, Nagpur addressing the trainees

2. Trainings on 'Backyard Poultry Farming' for tribal women in Melghat by PGIVAS, Akola

A special training on 'Backyard poultry farming' was organized by Department of Poultry Science, PGIVAS, Akola at Chilati Melghat for tribal women during 28th to 29th May 2023 and on 12th January 2024. A kit of 20 improved desi birds, 100 kg feed, one feeder and drinker, medicine, feed supplements were distributed to 60 tribal women at the hands of Dr. N. V. Patil, Hon'ble Vice-Chancellor. MAFSU, Nagpur.



Distribution of poultry units at the hands of Dr. N. V. Patil, Hon'ble Vice-Chancellor



3. Training on 'Pig production and Management' at KNPCVS, Shirwal

Krantisinh Nana Patil College of Veterinary Sciences , Shirwal, organized training on 'Pig production and management' from 10th to 12th October 2023. A total of 77 pig farmers and entrepreneurs from ten districts of Maharashtra participated in the training. The training program was inaugurated at the hands of Dr. A. U. Bhikane, Director Extension Education, MAFSU, Nagpur.



Participants with Chief guest and college faculty

4. Training Programmes on 'Scientific Goat Farming' at NVC, Nagpur

Department of Veterinary and Animal Husbandry Extension Education, Nagpur Veterinary College, Nagpur in collaboration with ATMA, Dist. - Wardha organized training programmes on 'Scientific Goat Farming' during 16th - 20th October, 2023 and 30th October - 3rd November, 2023. A total of 62 trainees participated in the training programmes.



Visit of Trainees to fodder farm

6. Training Program for Dairy Farmers under ATMA at COVAS, Udgir

Department of Veterinary Clinical Medicine, College of Veterinary and Animal Sciences, Udgir in collaboration with Agriculture Department, Mukhed, Dist. Nanded under Agricultural Technology Management Agency organized one day Farmers training program on 21st December 2023. A total of 105 dairy farmers from Nanded district participated in the training programme.



Publication of Training Manual

7. Capacity Building Program for FFPO by COFS, Nagpur

The capacity building program on 'Biosecurity Measures and Personal Hygiene' was organized by College of Fishery Science, Nagpur in collaboration with Marine Products Export Development Authority (MPEDA), Regional Directorate, Mumbai during 27th to 29th December 2023 for 35 members of Fish Farmers Producers Organization (FFPO) in Saoner block of Nagpur District.



Expert delivering lecturer



8. Training on 'Commercial Poultry Farming' at Nagpur Veterinary College, Nagpur

Department of Poultry Science, Nagpur Veterinary College, Nagpur organized Five days training on 'Commercial Poultry Farming' from 08th to 12th January 2024 at poultry farm and Research Center, Nagpur. A total of 39 farmers and unemployed youths from all over Maharashtra actively participated in the entrepreneurial development training program.



Demonstration of brooding management for chicks

9. Trainings on 'Dairy Business Management and Value added Dairy Products' at CDT, Udgir

College of Dairy Technology, Udgir in collaboration with Agricultural Technology Management Agency (ATMA), Latur organized a Three days training program on 'Dairy business management and Value added Dairy Products' during 4th to 6th March 2024 wherein 59 participants from Latur district were trained.



Demonstration of Paneer preparation

10. Trainings on 'Dairy Business and Milk Processing' at CDT, Warud

Training program on "Dairy Business and Dairy Milk Products' was organized by College of Dairy Technology, Warud (Pusad) for women Self-help group members under Nagar Parishad Arvi from 27th to 29th March 2024. Total 20 women participated in the training program. During this training, preparation of various milk products were demonstrated along with screening of adulteration of milk by using chemical reagents.



Demonstration of preparation of Rasgulla to SHG women

11. Training on 'Clean Milk Production' at MVC, Mumbai

Training program on 'Clean Milk Production' was organized at Mumbai Veterinary College, Mumbai on 3rd December 2023 by the Department of Livestock Product Technology in collaboration with Department of Veterinary Public Health and Instructional Livestock Farm Complex. Fifty dairymen and dairy farmers from Aarey colony, Goregaon participated in the training program.



Expert delivering lecture on clean Milk Production at MVC, Mumbai



12. Training on 'Modern Dairy Farming' by KVK, Sangli

Training program on 'Modern Dairy Farming' was organized by Krishi Vigyan Kendra, Tadsar, Tal. Kadegaon, Dist. Sangli during 19th to 21st October, 2023 at Atpadi, Dist. Sangli. Lectures on various topics including care and management, nutrition, health etc were delivered. A total of 119 farmers from Atpadi Taluka of Sangli District attended the training program.



Distribution of Certificates to trainees

13. Training on 'Commercial Goat Farming' at COVAS, Parbhani

Training on "Commercial Goat Farming" was organized during 18th to 20th April 2023 by Department of Livestock Production Management, College of Veterinary and Animal Sciences, Parbhani. Faculty members from different disciplines guided 47 farmers/unemployed youth on various facets of Commercial goat farming.



Distribution of certificates to the trainees

14. Training programme on 'Fish Culture in Farm Pond' at COFS, Udgir

College of Fishery Science, Udgir organized three days training programme funded by Agricultural Technology Management Agency, Latur on 'Fish culture in farm pond' during 27.02.2024 to 29.02.2024. Scientific fish farming practices and feeding of balanced feed for fish along with efficient marketing were taught by the experts. Total 25 Fish farmer youth from Latur District participated in the training.



Dr. B. R. Kharamol, Associate Dean COFS, Udgir addressing the farmers

7.2.2. Trainings for Officers / students / professionals / paravets

Forty six trainings of 140 days duration were organized for the veterinary students, graduates, livestock development officers, researchers etc. wherein 3921 professionals were trained in areas like advances in diagnostics, one health, advanced techniques in veterinary practice etc. Various trainings organized for officers included. 'Thoracic and abdominal ultrasonography in small animals', 'Microbiological techniques for food sampling, testing, and analysis', Laparoscopic surgery in small animal practice', 'Hands-on training on handling & management of laboratory animals, Training program for NDRF gazetted officers, "Anaesthesia and fracture management in large animals,' 'Best animal birth control practices in canines Veterinary diagnostic ultrasonography, 'Basics of wildlife health management, Chemical immobilization in wild animals etc.



International Training on "Principles and Practices of Epidemiology" organized in collaboration with Penn State University, USA and Advanced Rapid Diagnostic Techniques for Infectious Diseases" (Hybrid Mode) were organized in collaboration with the University of Veterinary Medicine and Pharmacy in Kosice, Slovakia were organized by Mumbai Veterinary College, Mumbai

Table 7.3. Institute wise trainings conducted for professionals

Sr. No.	Name of Institute	Training of Officers		
		No. of Trainings organized	Total Duration (No. of days)	No. of Participants / Trainees
1	MVC, Mumbai	18	48	3123
2	NVC, Nagpur	04	07	60
3	COVAS, Udgir	05	31	109
4	KNPCVS, Shirwal	01	03	10
5	PGIVAS, Akola	01	05	24
6	CDT, Warud	04	04	190
7	WRTC, Gorewada	13	42	405
	Total	46	140	3921

The details of representative trainings conducted for Professionals are as follows

1. Training on 'Small Animal Flexible and Rigid Endoscopy' at Mumbai Veterinary College, Mumbai

The Department of Surgery and Radiology, Mumbai Veterinary College, Mumbai conducted a three-day training programme on "Small animal flexible and rigid endoscopy" in collaboration with MARS INDIA LTD. from 17th to 19th April 2023. A total of 18 Veterinarians from Chhattisgarh, Andhra Pradesh, Kerala, Uttar Pradesh and Haryana participated in the training.



Participants undergoing hands on Gastroscopy Training

2. Hands-on training for Human Surgeons at Mumbai Veterinary College, Mumbai

The Department of Surgery and Radiology, Mumbai Veterinary College, Mumbai conducted a one day Hands-on training programme on 'Minimally Invasive Techniques' for human surgeons in collaboration with Medtronics India Limited on 23rd April 2023 wherein 8 human surgeons were trained on various innovative minimally invasive surgery techniques through animal models for its application in the human surgeries.



Hands-on training on 'Minimally Invasive Techniques' at MVC, Mumbai



3. Training for field officers and staff of Forest Department

Wildlife Research & Training centre, Gorewada, Nagpur organized one-day training on 'Wildlife Management and Forensics' on 12th July 2023. importance of forensics in vetrolegal cases and its use in the conservation of wildlife was highlighted in the training. A total of 40 field officers and staff of forest department actively participated in the training programme.



RFOs with experts during training at WRTC

4. Faculty Development Training Program on 'Use of AMS' at MAFSU Nagpur.

Two days Faculty Development Training Program on 'Use of AMS in Academic and Examination Work in Veterinary, Dairy and Fishery Sciences' was organized by MAFSU Nagpur on 27th July 2023. Twenty eight academic Officers from MAFSU guided about the use of Academic Management System (AMS) by the experts from ICAR.

5. Hands-on-Training on 'Blended Learning Platform'

Hands-on-Training Workshop on 'Blended Learning Platform' was organized by MAFSU, Nagpur for the faculties and PG/PhD students of various constituent colleges/ institutes of the University on 23rd February 2024 in Hybrid mode under NAHEP, Indian Council of Agricultural Research and Indian Agricultural Statistics Research Institute, New Delhi. Expert from IASRI, New Delhi delivered the lecture and gave hands on training.



Faculties with the expert during workshop on 'Blended Learning Platform'

7.3. WORKSHOPS/SEMINARS/WEBINARS/ FARMERS MEET ORGANIZED

Organization of workshop and Seminars is yet another activity The University through its constituent colleges and KVKs is organizing workshops, seminars, webinars for field officers, students paravets, unemployed youth, women and farmers. 36 programmes were organized for farmers in which 5464 farmers participated. Three Farmers Meets were separately organized at Nagpur, Udgir and Akola in which 738 farmers were benefitted.

7.3.1. Workshops for Farmers

Workshops organized by Veterinary, Dairy Technology, Fishery Science colleges and KVKs of the University for farmers included workshop on 'Equine care and management', 'Balanced nutrition in dairy animals', 'Infertility problems in bovines', 'Scientific goat Farming', 'Clean Milk Production', 'Importance of animal feed supplements', 'Backyard Poultry and Goat Farming', workshop on 'Being Magnificent Wild', 'Dairy Business and Dairy Milk Products' 'Preparation of Milk Products at cottage level', 'Fisheries and Aquaculture Development in Vidarbha', 'Fish Seed production', 'Fish culture in farm pond', 'Importance of Animal Husbandry', on 'Opportunities and Challenges in Livestock Sector', 'Role of Women in Animal Husbandry' etc.



Table 7.4. Institute wise farmers workshops/ farmers meets conducted

Sr. No.	Name of Institute	No. of Workshop	No. of Participants
1	DEE, MAFSU	03	1100
2	MVC, Mumbai	08	1099
3	NVC, Nagpur	04	952
4	COVAS, Parbhani	02	154
5	COVAS, Udgir	03	850
6	KNPCVS, Shirwal	04	555
7	PGIVAS, Akola	01	78
8	CDT, Warud	01	20
9	CDT, Udgir	01	50
10	COFS, Nagpur	03	104
11	COFS, Udgir	03	370
12	KVK, Sangli	01	33
13	KVK, Nagpur	01	60
14	KVK, Thane	01	39
Total		36	5464

1. Workshop on value added dairy products at CDT, Udgir

One day workshop on 'Value added Dairy Products' was organized at College of Dairy Technology, Udgir in collaboration with Agricultural Technology Management Agency (ATMA), Latur on 15th March 2024. During the workshop lectures on various topics such as value addition of milk, preparation of traditional Indian dairy products and practical demonstrations on preparation of paneer, burfi and pedha were conducted for 50 participants.



Participants of workshop along with staff of CDT, Udgir

2. Workshop on 'Hygienic and Live Fish Marketing' by COFS, Nagpur

A Workshop and demonstration on 'Hygienic and Live Fish Marketing' for members of fish farmers groups (FIGs) formed in various blocks of Gadchiroli district was organized on 18th April 2023 at the Science and Technology Resource Centre, Gadchiroli. Twenty five members of the Fish Interest Groups in the Gadchiroli district were guided about mobile fish vending machine, fish marketing and development of supply chain in the inland fisheries. Dr. Anil Kakodkar, Chairman RGSTC and Dr. C. D. Mayee, Chairman, Governing Body, STRC, Gadchiroli and former Chairman, ASRB, New Delhi also advised farmers.



Expert explaining about mobile fish vending machine to dignitaries



3. Workshop on 'Fisheries Technologies' at COFS, Nagpur

A one day workshop on 'Fisheries technologies' was organized at the College of Fishery Science, Nagpur for the fish sellers, fishermen and fish farmers of SC community under 'All India Coordinated Research Project on Post Harvest Engineering & Technology' operational at the Department of Veterinary Public Health, Mumbai Veterinary College, Parel, Mumbai. The total 25 farmers, fishermen participated in the workshop.



Dr. N. V. Kurkure, Director of Research, MAFSU, Nagpur guiding the fish farmers

4. One Day Farmers Meet and Awareness Program on 'Opportunities and Challenges in Livestock Sector' at NVC, Nagpur

One Day Farmers Meet and Awareness Program on 'Opportunities and Challenges in Livestock Sector' sponsored by ICAR-National Meat Research Institute, Hyderabad under SCSP programme was organized by NVC, Nagpur on 16th January 2024. Total 322 farmers from Nagpur and Bhandara district participated in the meet. Dr. S. B. Barbudhhe, Director, ICAR-NMRI Hyderabad was the chief guest for the inaugural function.



Dr. S. B. Barbudhhe, Director, ICAR-NMRI Hyderabad addressing the farmers

5. One Day Awareness Program on 'Backyard Poultry and Goat Farming' at COVAS, Udgir

One Day Awareness Program on 'Backyard Poultry and Goat Farming' sponsored by ICAR-National Meat Research Institute, Hyderabad under SCSP programme was organized at the College of Veterinary and Animal Sciences, Udgir on 2nd December 2023. Total 300 Scheduled Caste beneficiaries from adjoining villages of Udgir attended the program. Dr. Niteen Patil, Hon'ble Vice Chancellor, MAFSU was the chief guest and Dr. S. B. Barbudhe, Director ICAR-NIIRM, Hyderabad was guest of honor for the inaugural function.



Publication of the an information booklet at the hands of dignitaries at COVAS, Udgir



Dr. Niteen Patil, Hon'ble Vice Chancellor, MAFSU addressing the beneficiaries



6. Workshop on 'Goat farming' by College of Veterinary and Animal Sciences, Udgir

The Department of Veterinary Parasitology, College of Veterinary Animal Sciences, Udgir conducted one day workshop on 'Goat farming and field demonstration on deworming in goats' at Wadhona Bk, Tq. Udgir on 3rd December 2023. Thirty five SC-ST woman activity participants in for workshop Eighty two adult goats and 24 kids were dewormed during the demonstration camp.



Field demonstration on Deworming in goats

7. Workshop on 'Clean milk production' College of Dairy Technology at Warud

College of Dairy Technology, Warud at (Pusad) organized a one-day workshop on "Clean Milk Production" to commemorate University Foundation Day and Clean Milk Production Day on 3rd December 2023. The program was attended by 27 students from Mugsaji Maharaaj Mahavidyalay, Darvha, Yavatmal. Demonstrations on preparation of Khoa, Pedha, Paneer, Basundi, Kalakand, and Chocolate Burfi etc. were organized



Participants of workshop

8. Workshop on 'Fish culture in farm pond' at College of Fishery Science, Udgir

College of Fishery Science, Udgir organized one day workshop on 'Fish culture in farm pond' on 5th September 2023 in joint collaboration with Sahkar Maharshi Shankarrao Kolhe Sahakari Sakhar Karkhana Ltd. Sahajanandnagar, Kopargaon, Dist. Ahmednagar in hybrid mode. Experts delivered technical lectures on fish culture in farm ponds. A total of 300 fish farm four ahmednagar district participates in the programe.



Experts during the workshop on 'Fish culture in farm pond' at COFS, Udgir

7.3.2. Workshop for Professionals

A total of 37 technical offline/online workshops and seminars were organized for the field officers in which 3866 officers participated. These workshops were organized for professionals like Livestock Development Officers, Assistant Commissioners of Animal Husbandry Department, Human Gynaecologists, Human surgeons, Students and Researchers. The workshops covered varied topics from celebration of millet year , clinical case conference, wildlife week celebration to advancing the technical knowledge to human medicine experts.



Table 7. 5. Institute wise workshops conducted for professionals.

Sr. No.	Name of Institute	No. of workshops	No. of Participants
1	MVC, Mumbai	10	679
2	NVC, Nagpur	02	380
3	COVAS, Udgir	05	1034
4	KNPCVS, Shirwal	05	500
5	PGIVAS, Akola	03	364
6	CDT, Warud	12	909
Total		37	3866

1. One-Day Knowledge Sharing Workshop under ICAR- NAHEP- CAAST project

One-Day Knowledge Sharing Workshop was organized on 6th July 2023 in Hybrid mode under ICAR- NAHEP- CAAST project entitled "Centre of Excellence for Advanced Research on Animal Food Safety" by Department of Veterinary Public Health, MVC, Mumbai. Dr. R. C. Agrawal, DDG (Education) and National Director, NAHEP, ICAR, New Delhi, inaugurated the workshop. Padma Shri awardee Dr. M.L. Madan, EX-DDG (AS) Ex-Vice Chancellor, PDKV, Akola, DUVASU, Mathura and Dr. S. R. Gadakh Hon'ble Vice Chancellor MAFSU, Nagpur was present in this workshop.



Dr. S. R. Gadakh, Hon'ble Vice-Chancellor, MAFSU felicitating Padma Shri Dr. M. L. Madan Ex-DDG (AS)

2. National Seminar cum Workshop on Millets organized at PGIVAS, Akola

To commemorate the celebration of International Millets Year-2023, the Post Graduate Institute of Veterinary and Animal Sciences, Akola organized a National Seminar cum Workshop on "Millets in Animal Nutrition: Potential and Future Scope" with the aegis of Animal Nutrition Association (ANA) during 7th-8th September, 2023. The compendium was released at the hands of dignitaries. Total 250 faculties, scientists, researchers and students participated in the programme. The event hosted a Farmer scientist meet on 7th September, 2023, wherein 110 farmers and scientists participated.



Inauguration of the Seminar cum workshop at the hands of Dr. N. V. Patil, Hon'ble Vice-Chancellor



3. National Online Clinical Case Conference by PGIVAS, Akola

The 6th National Online Clinical Case Conference was successfully organized from 25th to 27th April 2023 by the Department of Veterinary Surgery and Radiology, Post Graduate Institute of Veterinary and Animal Sciences, Akola. A total of 248 students and staff participated in the event, wherein they presented clinical case findings under different sessions. Twelve students were awarded for Best paper presentations.



National Online Clinical Case Conference at PGIVAS, Akola

4. Workshop on Physiological Techniques for Improving Livestock Productivity at NVC, Nagpur

The SERB sponsored workshop on 'Upstream physiological techniques for improving livestock productivity' was organized at NVC, Nagpur during 19th-28th June, 2023 in which total 25 post graduate students from different institutes across the country participated. Ten days Workshop was aimed to train the young scientists in the field of emerging techniques in physiology.



Publication of Training Manual

5. Workshop on "Thoracic and Abdominal Ultrasonography in Small Animals" at MVC, Mumbai

A 5-days hands-on workshop on 'Thoracic and Abdominal Ultrasonography in Small Animals' was organized at MVC, Mumbai from 8th - 12th August 2023. Dr. Sangeeta V. Shah, renowned Veterinary Cardiologist, was the Chief guest for the inaugural function. Total 21 participants from Rajasthan, Kerala, Haryana and Veterinary from different districts of Maharashtra had enrolled for the said workshop.



Dr. Adarsh Kumar providing hands on training on clinical cases to the participants

6. Workshop on the occasion of National Wild Life Week at KNPCV, Shirwal - 2023

A workshop on wildlife was organized on 11th October 2023 by the Department of Anatomy, KNPCVS, Shirwal in collaboration with Rescue Charitable Trust, Pune. Dr. Chetan Vanjari and Shri Nachiket Utpat of the Rescue Charitable Trust spoke on the role of wildlife veterinarians in wildlife conservation and the future of wildlife veterinarians. The founder of Ila Foundation in Pune and bird watcher Dr. Satish Pandey delivered lecture on information about wild animals and their treatment methods.



Dr. A. U. Bhikane, Director of Extension Education, MAFSU, Nagpur visiting the wild life photo gallery



7.4. DEMONSTRATIONS ORGANIZED FOR FARMERS AND OFFICERS

Various types of demonstrations were organized for the farmers during training programmes, visits of farmers to institutes and also during scientists visit in the adopted villages and on farmer's field. Similarly demonstrations of various skill based operations were also carried out for the professionals during trainings. These result and method demonstrations serve a good way to showcase the worth of the technology and exhibit the most appropriate way of conducting various activities in the field.

7.4.1. Demonstrations for Farmers

Demonstrations on cultivation and management of various fodder varieties, silage making, azolla cultivation, preparation of balanced concentrate mixture, urea treatment of poor quality roughages, hydroponics, loose housing system, farm practices, selection of animal, age determination, breed identification, ear tagging, castration, CMT test, demonstration on deworming and spraying, milk processing & value addition, clean milk production & detection of adulteration, manufacturing of dairy products at cottage level, paneer and whey drinks preparation, preparation of traditional milk products, brooding management of chicks, incubation and hatchery management, quality control of egg and egg products, freshwater fish culture, preparation of value added fish products, operation of FRP carp hatchery, collection of soil sample, establishment of live fish selling unit, portable fish vending unit, fishing technologies, demonstration on induced fish breeding and seed production, common carp seed production, circular hatchery and lining of ponds, water quality management in farm pond, feed management in farm pond, fish sampling and growth monitoring, front line demonstration on vermicompost, pellet making demonstration, field demonstration on nutrient management of summer Gram and other pulses like Green gram, Black Gram, Pigeon Pea etc. were given to farmers throughout the year. A total of 264 demonstrations covering the above aspects were organized by 288 faculty members wherein 11080 farmers were benefitted (Table 7.6).

Table 7.6. Institute wise demonstrations conducted for farmers

Sr. No.	Name of Institute	No. of staff members participated	No. of Demonstrations for farmers	No. of Beneficiaries/ farmers
1	MVC, Mumbai	34	19	702
2	NVC, Nagpur	77	75	2232
3	COVAS, Parbhani	46	25	2405
4	COVAS, Udgir	25	25	2512
5	KNPCVS, Shirwal	41	39	604
6	PGIVAS, Akola	11	31	920
7	CDT, Warud	09	07	309
8	CDT, Udgir	10	03	72
9	COFS, Nagpur	10	10	308
10	COFS, Udgir	06	03	50
11	KVK, Sangli	05	12	181
12	KVK, Nagpur	09	02	55
13	KVK, Thane	05	13	730
	Total	288	264	11080



Demonstration of ear tagging at the farm at COVAS, Parbhani



Demonstration of summer Green Fodder plantation at COVAS, Udgir



Demonstration of ear tagging at MVC, Mumbai



Demonstration of castration in kids at NVC, Nagpur



Demonstration of paneer preparation at KNPCVS, Shirwal



Demonstration of Goat Examination at PGIVAS, Akola



On Farm Demonstration at Ghonshi, Tq.(Jalkot,) by CDT, Udgir



Demonstration of flavoured milk Preparation at Sawangi (Pusad) by CDT, Warud



Demonstration of fish seed production at Gadchiroli by COFS, Nagpur



Frontline demonstration on vermicompost unit at village Kadegaon by KVK, Sangli



7.4.2. Demonstrations for Officers

Demonstrations on thoracic and abdominal ultrasonography in small animals, laparoscopic surgery in small animal practice, handling of laboratory animals & routes of drug administration, blood & organ collection technique in laboratory animals, white slide test for diagnosis of endometritis, heat detection by vaginal electric resistance probe, bovine sex sorted semen technology, Ozone therapy in cattle & buffalo reproduction, use of auto analyzers, chemical immobilization techniques in wild animals, forensics in wildlife, demonstration of DNA isolation, PCR and Gel electrophoresis, post mortem examination in wildlife etc. were organized for field officials and professionals. A total of 25 demonstrations were organized wherein 711 professionals were benefitted (Table 7.7).

Table 7.7. Institute wise demonstrations conducted for officers

Sr. No.	Name of Institute	No. of Demonstrations	No. of Participants
1	MVC, Mumbai	10	434
2	NVC, Nagpur	02	54
3	WRTC, Gorewada	13	223
	Total	25	711



Demonstration on Good Animal Husbandry Practices at PGIVAS, Akola



Demonstration on Silage making to Animal Husbandry Offices

7.5. MAFSU ADVISORIES ON M- KISAN PORTAL

The Directorate of Extension Education, MAFSU, Nagpur has initiated the use of M-Kisan portal for the dissemination of mobile advisories for the farmers in the state. The University has disseminated a total of 35 advisories including 25 Veterinary, 3 Dairy and 7 Fishery advisories reaching to 26,71,830 livestock farmers, poultry farmers and fish farmers across the state.

7.6. EXHIBITION STALLS ORGANIZED /PARTICIPATED

The participation of the University is an important outreach activity for showcasing the latest technologies of the University for the benefit of the farmers in the University Participated in the 31 major exhibitions organized by the various organizations like Agri Education Fair-2023 at MVC, Mumbai, Agrovision, Agritech Exhibition, Dhanya Mahotsav, District Level Agriculture Meet cum Animal Science Exhibition and Livestock Show in Nagpur, Western Region Agricultural Fair at Parbhani, Sahyadri Krushi Pradarshan at Shirwal, Malegaon yatra in Nanded, Agrotech at Akola and others across the state.



Table 7.8 Institute wise organization and participation in Exhibitions

Sr. No.	Name of Institute	Organized		
		No. of Exhibitions	No. of Experts participated	No. of visitors
1	MVC, Mumbai	03	28	1375
2	NVC, Nagpur	3	21	1067
3	COVAS, Parbhani	02	15	1610
4	COVAS, Udgir	04	12	440
5	KNPCVS, Shirwal	04	24	1200
6	PGIVAS, Akola	03	40	2255
7	CDT, Warud	01	03	250
8	CDT, Udgir	03	08	572
9	COFS, Nagpur	04	10	5000
10	COFS, Udgir	01	04	102
11	WRTC, Gorewada	1	2	198
12	KVK, Dudhbardi	02	06	39
	Total	31	173	14108

The University staff participated in the following exhibitions

1. Agri Education Fair-2023 at Mumbai

Under the ICAR-NAHEP-CAAST-MAFSU Project "Centre of Excellence for Advanced Research on Animal Food Safety" Agri Education Fair-2023 was organized on 14th October, 2023 at Mumbai Veterinary College, Parel for 8th, 9th and 10th standard students. The Inaugural function was graced by Dr. N. V. Patil, Hon'ble Vice-Chancellor, MAFSU, Nagpur; Dr. Mohan Wani, Director, National Centre for Cell Science, Pune; Dr. A. M. Paturkar, Ex-Vice Chancellor, MAFSU, Nagpur; Dr. Artabandhu Sahoo, Director, National Research Centre on Camel, Bikaner, Rajasthan and University officials. A total of 254 participants from 26 schools attended the fair.



Visit of dignitaries to the stalls

2. Agritech-2023 Exhibition at Nagpur

The College of Fishery Science, Nagpur and Krishi Vigyan Kendra, Nagpur participated in Agritech-2023, organized by ATMA, Nagpur and State Agriculture Department at P.G. Hostel ground of Agriculture College, Nagpur during 23rd to 25th October, 2023. The informative material on agriculture, animal husbandry, fisheries and aquaculture technologies and live models were displayed.



Participation of COFS, Nagpur in Agritech-2023



3. Agrovision-2023 Exhibition at Nagpur

The University participated in Agrovision-2023 organized at Dr. Panjabrao Deshmukh Krishi Vidyapeeth Ground, Dabha, Nagpur during 24th to 27th November 2023 under the guidance of Dr. A. U. Bhikane, Director of Extension education, MAFSU, Nagpur. The staff of NVC, Nagpur and COFS, Nagpur participated as experts in the scientist-farmers interactions on various topics on animal husbandry, dairy development, poultry and inland fisheries.



Farmers visit to MAFSU stall at Agrovision

4. Yashwantrao Chavan Agricultural Industrial and Animal-Bird Exhibition at Karad

On the occasion of the 39th death anniversary of Yashwantrao Chavan, the first Chief Minister of Maharashtra, Yashwantrao Chavan Agricultural Industrial and Animal-Bird Exhibition was organized at Karad, District Satara during 24th to 28th November, 2023. Former Chief Minister of Maharashtra Hon'ble Mr. Prithviraj Chavan inaugurated the information stall set up by Krantisinh Nana Patil Veterinary College Shirwal. Staff and PG students delivered the information to farmers, students and industrialists visitors.



Visit of Ex. Chief Minister to MAFSU Stall at Karad

5. Dhanya Mahotsav -2023 at Nagpur

The College of Fishery Science, Nagpur participated with fisheries and aquaculture technologies exhibition stall in Dhanya Mahotsav-2023, organized by Agricultural Technology Management Agency, Nagpur and State Agriculture Department at P.G. Hostel ground of Agriculture College, Nagpur during 19th December to 23rd December, 2023.



COFS, Nagpur participated in Dhanya Mahotsav

6. State Level Agricultural Exhibition "AgroTech- 2023" at Akola

Post Graduate Institute of Veterinary and Animal Sciences, Akola participated in the State level Agricultural Exhibition "AgroTech 2023" organized by Dr. Panjabrao Deshmukh Krishi Vidyapeeth during 27th to 29th December, 2023 at Dr. PDKV campus, Akola. Exhibits, models, and demos were presented in the stall.



Students visit to the stall of college



7. District Krishi Festival at Chandrapur

The College of Fishery Science, Nagpur participated in District Krishi Festival organized at Chandrapur during 07th to 9th January 2024. The informative material on the fisheries and aquaculture technologies were displayed by COFS, Nagpur. Hon'ble Shri. Sudhir Mungatiwar, Minister for Fisheries, Forests & Cultural Affairs, Government of Maharashtra and Hon'ble Shri. Dhananjay Munde, Minister of Agriculture, Government of Maharashtra visited the stall.



Visit of Hon'ble Shri. Sudhir Mungatiwar and Hon'ble Shri. Dhananjay Munde to stall

7.7. LIVESTOCK SHOWS PARTICIPATED

The University experts are participating in various livestock shows organized across the State. During 2023-24, 103 University experts have participated in 18 Livestock shows as members/ chairman of judging committees.

Table 7.9. Institute wise organization & participation in Livestock shows

Sr. No.	Name of Institute	No. of Livestock Shows organized/participated	No. of Experts Participated
1	MVC, Mumbai	02	10
2	NVC, Nagpur	02	21
3	COVAS, Parbhani	03	24
4	COVAS, Udgir	06	16
5	KNPCVS, Shirwal	05	32
	Total	18	103

1. Livestock and Bird Show at Udgir

The experts from COVAS, Udgir, CDT, Udgir and COFS, Udgir participated in the livestock show organized by State Animal Husbandry Department on 28th January 2024 at Udgir on the occasion of Hawagiswami Yatra. The stalls showcased the scientific information on animal husbandry, Dairy Technology and Fisheries. The experts from COVAS, Udgir Participation as member of Judging panel in livestock show.



Dr. A. U. Bhikane, DEE, MAFSU during livestock show at Udgir

2. National level Mega Dog Show 24 at MVC, Mumbai

The Mumbai Veterinary College student's council 2023-24, successfully organized the National level mega dog show in collaboration with the Indian National club at Parel Campus of Mumbai Veterinary College on 17th March 2024. Shri Chandrasekhar Chore, Deputy Municipal Commissioner, BMC was the Chief guest of the inaugural function whereas Hon'ble Makarand Karnik, Additional Judge, Bombay High Court was the Chief guest for the prize distribution ceremony.



Dignitaries with the participating pets in the Mega Dog Show

7.8. CELEBRATIONS

Important National and International days related with animal husbandry, dairying, fisheries and Agriculture were celebrated with the organization of specific programmes and activities by the constituent colleges of MAFSU during the year 2023-24.

1 World Veterinary Day

World Veterinary Day was celebrated on 29th April, 2023 by constituent veterinary colleges of MAFSU. Dr. Sharad R. Gadakh, Hon'ble Vice Chancellor, MAFSU and Prof. Mohan Gupte, Founding Director, India FETP, Chennai, and Former Director, ICMR- National Institute of Epidemiology, Chennai were the guests of honour for inauguration of training on "Immobilization of Wild animals" organized at WRTC in association with FDCM Pvt. Ltd, Nagpur. Dr. Sachin Bhosale, Chief Conservator of Forests and an alumnus of KNPCVS, Shirwal, delivered an online lecture on "Importance of Veterinary Field in Competitive Examination". Ms. Vaishali Sheth delivered lecture on the topic 'Promoting Diversity, Equity and Inclusiveness in the Veterinary Profession' at COVAS, Udgir.



Dr. S. V. Upadhye, Director, WRTC, Nagpur welcoming Dr. Sharad R. Gadakh, Hon'ble Vice Chancellor, MAFSU

2. World Environment Day

The constituent colleges/ institutes of the University celebrated World Environment Day-2023 by organizing various programmes on 5th June 2023. At MVC, Mumbai, Poster and Photography competitions on the theme of "Waste to Wealth" was organized. Tree plantation drive was commenced at the hands of Dr. Arun T. R, Scientist-B, ICMR-National Institute of Virology, Pune (VCI Member). Tree plantation, Essay competition and poster competition were organized at COFS, Udgir. An awareness campaign on "Environmental Awareness and Cleanliness" was organized by CDT, Warud.



"Students Participating in Environmental Awareness and Cleanliness" drive organized by CDT, Warud.

3. World Food Safety Day 2023

Department of Veterinary Public Health, Mumbai Veterinary College, Mumbai celebrated "World Food Safety Day 2023" by organizing online lectures on Food Safety on 7th June 2023 under ICAR- NAHEP-CAAST project. Dr. Nadeem Fairoze, Ex-Professor and Head, the Department of Livestock Product Technology, Veterinary College, Bengaluru delivered lecture on "Global Challenges in Food Safety". A total of 349 participants including PG/ Ph.D. students, faculties of Veterinary, Dairy, and Fishery Colleges and institutions, as well as Industry personnel attended the programme.



4. World Ocean Day

College of Fishery Science, Udgir celebrated World Ocean Day on 08th June 2023 by organizing activities such as Quiz competition, Model and poster presentations on various aspects of ocean. The models prepared by the students depicted the ocean flora and fauna. These models depicted the importance of the ocean in maintaining natural balance of environment and different ecosystems across the world.



Poster presentation by students at CoFs Udgir

5. International Yoga Day

International Yoga Day was celebrated on 21st June 2023 at MAFSU Headquarter and all institutes of MAFSU to raise awareness about the benefits of yoga under the guidance of experts. Staff and students participated in the program with enthusiasm. Lecture on “Women empowerment through Yoga and Meditation and Stress Management” was organized at COFS, Udgir, 1 Mah R & Sqn NCC Unit at NVC, MAFSU Celebrated International Yoga Day at Futala Lake by Performing Yoga on Horseback.



Students & staff participation in Yoga Day

6. World Zoonoses Day

PGIVAS, Akola observed the "World Zoonoses Day" on 6th July, 2023, by organizing an awareness camp in Morgaon Bhakare, an adopted village under Unnat Bharat Abhiyan. The information of zoonotic diseases and preventive measures was disseminated amongst 49 school students of Mahatma Phule Vidyalaya, Morgaon Bhakare.

7. National Fish Farmers Day

The National Fish Farmers Day was celebrated on 10th July, 2023 at the COFS, Nagpur and COFS, Udgir. Demonstrations on induced fish breeding and seed production was organized for the 15 farmers at Nagpur. COFS, Udgir also celebrated National Fish farmers Day at Village Karanji, Tq. Jalkot, Dist. Latur by organizing a one day workshop on 'Fish culture in farm pond' in joint collaboration with Lal Kandhari Govansh Vikas Sanstha, Karanji in presence of Shri. Govind Narwate, Hon'ble. Executive Council Member, MAFSU, Nagpur.



Shri. Govind Narwate,
Hon'ble. Executive Council Member MAFSU, Nagpur
addressing the farmers at Karanji Tq. Jalkot

8. International Tiger Day

On the occasion of International Tiger Day 29th July, 2023 a mock drill was organized at the Wildlife Research & Training Centre for the Rescue Team engaged in the Rescue of Wild animals.



9. World Rabies Day

World Rabies Day was celebrated on 28th September 2023 in all veterinary colleges of MAFSU by organizing vaccination camps and awareness programmes. Dr. N. V. Patil, Hon'ble Vice Chancellor, MAFSU, Nagpur inaugurated anti rabies vaccination camp at VCC, KNPCVS, Shirwal. MVC, Mumbai, NVC, Nagpur, PGIVAS, Akola and COVAS, Parbhani organized various programs wherein a total of 513 pets were vaccinated and dog food was distributed to pet owners.



Dr. N. V. Patil, Hon'ble Vice Chancellor of MAFSU, Nagpur vaccinating the dog on the occasion of World Rabies Day at KNPCVS, Shirwal

10 Wildlife Week Celebration

Wildlife Research and Training Centre, Gorewada celebrated the wildlife week by organizing various awareness programmes. One day training on 'Basics of Wildlife Management' was organized for 48 forest officials on 2nd October 2023. Lecture on 'Wildlife Transport & Wildlife forensic' was organized at Pench Tiger Reserve on 03rd October 2023 for forest staff. Orations and experience sharing by Shri. R. K. Wankhede, Retired Forest Officials on 'Man-animal Co-existence' and Shri. Kiran Purandare on 'Delights of Bird watching' was organized at NVC, Nagpur on 5th and 6th October 2023, respectively.

11. World Egg Day

The World Egg Day was celebrated on 13th October 2023 by the Department of Poultry Science of constituent Veterinary colleges of MAFSU. Various programmes like Distribution of eggs, seminars and lectures on significance of eggs in human health, awareness programmes about egg consumption, street act play on awareness about myths and facts about egg consumption, egg shell painting competitions, egg recipe competition, poster presentation competition etc. were organized. Boiled eggs were distributed to participants of the programmes.



Street play for awareness of egg consumption by students of NVC, Nagpur

12. One Health Day

Department of Veterinary Public Health KNPCVS, Shirwal celebrated 'One Health Day' on 3rd November 2023 by arranging the interactive lectures of Dr. Shruti Gaikwad and Dr. Bhargavi Bhide from Punyashlok Ahilyadevi Holkar Government Medical College, Baramati. An essay competition on "One Health Concept" was also organized for undergraduate students.



The winner of Essay competition receiving certificate at KNPCVS, Shirwal



13. World Fisheries Day

The "World Fisheries Day" was celebrated at the COFS, Nagpur, COFS, Udgir and PGIVAS, Akola on 21st November 2023. Special lectures were organized at COFS Nagpur, COFS, Udgir organized webinar on 'Advances and scope in Fisheries and Aquaculture'. Fish farmers were guided about scientific aquaculture practices at Morgaon Bhakre, the village adopted under Unnat Bharat Abhiyan by PGIVAS, Akola.



Webinar on occasion of World Fisheries day by COFS, Udgir

14. Antimicrobial Resistance Awareness Week

Antimicrobial Resistance Awareness Week was celebrated during 18th to 24th November 2023. The campaign to raise awareness about antibiotic usage in production animals was carried out by MVC, Mumbai at 10 different private animal farms in the Goregaon East (Aarey colony) area. An awareness program on Antibiotic Resistance was organized by KNPCVS, Shirwal at New English School, Bholi Tal. Khandala, Dist. Satara and at Baramati. NVC, Nagpur organized a virtual Webinar on "Antimicrobial Resistance: A One Health Perspective". Technical seminar was organized at COVAS Udgir for faculty and students.



Experts creating awareness among dairy farmers of Aarey Milk Colony

15. National Milk Day

National Milk Day, Birth Anniversary of Dr. Verghese Kurien was celebrated on 26th November 2023 by the constituent colleges of MAFSU. Lectures for farmers, school children and an essay competition on the theme 'Prospects of Dairy Industry in India' and demonstrations on preparation of milk products like Pedha and Paneer were organized by the faculty of the University.

16. Celebration of National Farmers Day

Farmers Day was celebrated by constituent colleges of MAFSU on 23rd December 2023. The progressive farmers from adopted villages were felicitated by constituent colleges of MAFSU.



Distribution of prepared milk products to women by CDT, Warud



Felicitating progressive farmer by COVAS, Parbhani



17. International Women's Day

Krantisinh Nana Patil Veterinary College of Science, Shirwal celebrated International Women's Day by organizing lectures. Motivational Speaker Mrs. Meenakshi Kulkarni, who was the chief guest on the occasion, guided the students and women staff of the college on the women's protection. Dr. Prajwalini Thakur delivered a talk on Soft Skill Introduction to NeuroLinguistic Programming. An essay and poster competition was organized for students at MVC, Mumbai.



World Women's Day Celebration at KNPCVS, Shirwal

7.9 FIELD VISITS OF SCIENTISTS

The experts from the constituent college/Institute are regularly visiting the farmer's field for guidance and demonstrations for the dairy, poultry and fishery farmers. The technologies developed by the University and other national institutes are regularly demonstrated for the benefits of the farmers so that farmers can take advantages of these technologies.

These farm and field visits are important part of the rapport building exercise among the farmers about the outreach activities of the University. The university staff regularly visits the progressive farmers to disseminate the latest technologies so that its adoption across the farming community can be ensured for their benefit. In all 121 experts conducted 131 visits to farmer's field across the state.

Table 7.10. College wise & institute wise field visits of scientists

Sr. No.	Name of Institute	No. of Field visits of staff	No. of experts participated
1	DEE, MAFSU, Nagpur	14	02
2	MVC, Mumbai	04	08
3	NVC, Nagpur	15	21
4	COVAS, Parbhani	02	03
5	COVAS, Udgir	06	06
6	KNPCVS, Shirwal	08	13
7	PGIVAS, Akola	03	02
8	CDT, Udgir	05	18
9	COFS, Nagpur	10	10
10	COFS, Udgir	09	05
11	WRTC, Gorewada	25	25
12	KVK, Sangli	22	05
13	KVK, Nagpur	05	01
14	KVK, Thane	05	02
	Total	131	121



Scientists visit to goat farmers at Tadsar, Tal. Kadegaon, Dist. Sangli



Dr. Anil U. Bhikane, Director Extension Education, MAFSU during field visit



Dr. P. V. Patil guiding farmers on nutritional management of cows and buffaloes



Scientists of PGIVAS, Akola interacting with farmers

7.10. VISITS OF FARMERS TO INSTITUTE

Farmers are regularly visiting the various institutes, livestock farms, fodder cafeteria, poultry farms and fish farms of MAFSU individually and in groups to acquire the information and technical knowledge of various animal husbandry, dairying and fisheries activities including value addition in animal products, poultry and fisheries. Besides this, farmers are also visiting the different departments to take advice and services from the experts. The technology demonstration and museum are regular sites for the farmers visit in the college/Institutes. A total of 417 farmers visits involving 110 experts and 3969 farmers were recorded during the last year to the constituent Colleges/Institutes of MAFSU.

Table 7.11. College wise & institute wise visits of farmers

Sr. No.	Name of Institute	No. of farmers Visits	No. of experts participated	No. of Beneficiaries
1	MVC, Mumbai	06	05	64
2	NVC, Nagpur	05	06	113
3	COVAS, Parbhani	02	18	320
4	COVAS, Udgir	08	02	454
5	KNPCVS, Shirwal	45	45	2005
6	PGIVAS, Akola	07	02	327
7	CDT, Warud	02	07	79
8	CDT, Udgir	02	06	54
9	COFS, Nagpur	375	12	508
10	COFS, Udgir	10	07	45
	Total	417	110	3969



Farmers visit to extension department of
KNPCVS, Shirwal



Trainees visit to Feed Processing Plant at NVC, Nagpur



Visit of Dharampeth Science
College students to the Fish farm, COFS, Nagpur



Farmers visit to the ILFC
COVAS, Udgir

7.11. EXTENSION PUBLICATIONS

The Directorate of Extension Education has published following publications.

1. Annual Report: The annual report is the representation of the university activities in the domain of education, research, extension and administration. Annual report 2022-23 containing information of Establishment, Education, Research, Farm activities, Extension, Construction, and Accounts was placed in Legislative Council & Legislative Assembly in winter session of Maharashtra State and were approved.

2. MAFSUVARTA: It is a quarterly newsletter, a unique brand of the University which covers the important happenings in the University. These newsletters are not only covering the important events in the university but also highlighting the specific theme based editorials by the Hon'ble Vice-Chancellor and a two page picturesque cover story on important events/technological development and significant achievements of the University. Four issues of the Quarterly MAFSU Newsletter were published during the year 2023-24.

5. Leaflets: Informative leaflets covering important aspect of animal nutrition were published. Each leaflet is provided with a unique QR code for its speedy dissemination amongst the livestock farmers. Apart from this, popular publications by Faculty members on the transfer of scientific information & technologies for the farmers and other stakeholders are published in local newspapers/ magazines etc. The faculty of the University has published a total of 395 technical and popular publications through the reputed newspapers, magazines, and periodicals. The faculty members have also published 63 books/booklets/ manuals/ souvenirs and a total of 33 leaflets and folders.



3. MAFSU Calendar 2024: It is based on the theme of Biodiversity of Birds in Maharashtra. The MAFSU Calendar was inaugurated at the propitious hands of Shri. Ramesh Bais, Hon'ble Chancellor, MAFSU and Hon'ble Governor of Maharashtra. This informative calendar is equipped with a unique QR code for downloading it on any device and thus it is being circulated among different stakeholders at ease. Besides this the copies of this calendar were given to all the district authorities of Animal Husbandry department, Dairy Development and Fisheries and it is well ensured that it reaches in every talukas of the state and a copy is also available on University website.

4. MAFSU Diary 2024: It is having 117 pages information on important achievements of University and scientific information on dairy, goat, poultry, fishery, dairy technology, value addition in milk, meat and other animal products, fodder and feeding of different categories of animals, care and management of dogs and other relevant information about animal husbandry, dairy technology and fisheries. The copies of MAFSU Diary are widely circulated through the network of the constituent colleges and the statewide spread lower education schools. Besides this, informative diary is also made available on the University Website for its wide use.



Release of MAFSU Calendar 2024



Release of MAFSU Diary 2024

The institute wise extension publication are give in (Table 7.12)

Table 7.12 Institute wise Extension publications

Sr. No.	Name of Institute	Books/ Booklets/Souvenirs Compendium/training manuals	No. of Popular Articles	No. of Leaflets/ Folders
1	DEE, MAFSU, Nagpur	00	02	10
2	MVC, Mumbai	12	13	03
3	NVC, Nagpur	11	68	02
4	COVAS, Parbhani	03	96	03
5	COVAS, Udgir	18	114	3
6	KNPCVS, Shirwal	06	21	03
7	PGIVAS, Akola	05	65	04
8	CDT, Warud	00	07	00
9	CDT, Udgir	03	02	01
10	COFS, Nagpur	03	04	04
11	COFS, Udgir	01	01	00
12	WRTC, Gorewada	00	01	00
13	KVK, Sangli	00	00	00
14	KVK, Nagpur	01	01	00
15	KVK, Thane	00	00	00
Total		63	395	33



7.12. RADIO & TELEVISION TALKS

The present day farmers are well versed with the use of radio and television through internet and this has significantly increased the outreach of these media amongst the farmers especially the youth. The use of electronic medias like radio and television has proved its effectiveness in dissemination of the research based innovations and new technologies for the farmers. A total of 108 radio talks and 13 television talks were given by the expert faculty members from the University. The radio and television is encouraged through participation of the regional advisory meeting of the Doordarshan and Akashvani and more and more research based new technologies are advocated for the incorporation of these topics in the quarterly schedule of the AIR and Doordarshan.



Dr. S.V. Upadhye, Director Instructions & Dean, Faculty of Veterinary Science during TV Talk



Dr. A. U. Bhikane, Director Extension Education during TV Talk

7.13 UNNAT BHARAT ABHIYAN

The theme of the Unnat Bharat Abhiyan is to integrate the College-Knowledge-Village pathway to propel the available technologies from the research and development institutes to the villages through the college students under the guidance of the faculty members. The University is working for the dissemination of latest technologies to the farmers through theses adopted or operational villages. A total of 30 villages are adopted under "Unnat Bharat Abhiyan" the ambitious rural development program of Govt. of India for linking the Institutes of Higher Learning with the villages for sustainable synergistic development of the rural areas to achieve the aim of self-reliant India.

Table 7.13 Institute wise extension activities conducted in adopted villages

Sr. No.	Name of College	No of Adopted Village	No. of Extension activities	No. of Experts involved	No. of Participants
1	MVC, Mumbai	5	36	29	2584
2	NVC, Nagpur	5	09	18	220
3	COVAS, Parbhani	5	3	11	108
4	COVAS, Udgir	5	77	11	448
5	KNPCVS, Shirwal	5	10	22	936
6	PGIVAS, Akola	1	4	3	263
7	CDT, Warud	1	13	07	458
8	CDT, Udgir	1	13	08	476
9	COFS, Nagpur	1	05	10	144
10	COFS, Udgir	1	03	06	36
Total		30 villages	173	125	5673



The initiative includes the visit of University Scientist in the adopted villages for organization of various developmental activities in the villages. The university took a unique step forward for further improving this programme through the budgetary provision of Rs. 50,000/- per village thus making a total budget of Rs. 15.00 Lakhs per year for the implementation of this programme in the coming five years. During the last year through 173 different programs like farm visits, farmers scientist meet, group discussions, awareness campaigns, tree plantation, cleanliness drive, fodder production, value added milk, meat and fish product preparation, ambulatory clinical services, animal health camps, trainings, demonstrations, guidance about new technologies in the animal husbandry, dairying and fisheries, etc., a total of 5673 farmers were benefitted in these adopted villages of the university.



Demonstration of concentrate mixture preparation by staff of MVC, Mumbai



Guidance to school students on opportunities in Veterinary Science at Ajiwali Village



Lecture on Scientific backyard poultry farming at Parsodi waki by NVC, Nagpur



Women's Meet on occasion of World Women Day by NVC, Nagpur



Innaugration of Animal health camp in Village Pimpri Tq. Udgir



Examination of ailing animals in animal health camps organized by COVAS, Udgir



Experts of KNPCVS, Shirwal guiding school students in adopted village



Expert guiding farmers in the UBA camp organized by KNPCVS, Shirwal



Free workshop on "Checking of Blood group" at Sawngi Pusad by CDT, Warud



Poultry birds distribution at Morgaon (Bhakre) by PGIVAS, Akola



Demonstration on Paneer Manufacturing and Flavoured Milk at Ghonsi, Tq-Jalkot, Dist. Latur



Guidance to farmers at Ghonsi, Tq-Jalkot, Dist.-Latur



Farmer Scientist Meet at UBA adopted village Haibatpur, Tal. Udgir, Dist. Latur



Personnel hygiene program at Petkaldongari by COFS, Nagpur



7.14. ANIMAL HEALTH CAMPS

The organization of animal health camps by the constituent colleges in their jurisdiction is yet another novel outreach for extending the goodwill for the university and providing the experts services for the rural farmers wherein 16410 animals were treated through 96 animal health camps. Beside this, the experts from the university are also guiding the farmers on latest technologies for improving productivity and production of the farm animals.

Table 7.14 Cases Treated in Animal Health Camps

Sr. No.	Name of Institute	Animal Health Camps	Number of cases treated
1	MVC, Mumbai	10	2778
2	NVC, Nagpur	15	1986
3	COVAS, Parbhani	16	1566
4	COVAS, Udgir	27	3884
5	KNPCVS, Shirwal	16	2646
6	PGIVAS, Akola	7	3167
7	CDT, Warud	1	38
8	CDT, Udgir	1	180
9	WRTC, Gorewada	2	30
10	KVK, Sangli	1	135
Total		96	16,410



Experts performing per rectal examination during the camp



Expert performing surgery during camp



Health check up of elephants by wildlife experts



Experts conducting the gynecological examination of the animal



7.15. HOSPITAL SERVICES

The Veterinary colleges, Institutes and wildlife rescue centre of the University are actively involved in the treatment of animals as a regular practice for provision of animal health care facilities for the benefit of the animal owner. Besides this the staff of the Teaching Veterinary Clinical Complexes (TVCC) is actively involved in the outstation animal health camps being organized by the colleges.

A total of 181778 cases were treated by the staff of the TVCC wherein the cases treated in hospitals are 162785 and 2583 animals were treated during the ambulatory services being provided by the colleges. Among the cases treated, 80086 medicine cases, 68273 surgery cases and 15643 gynaecology cases were treated.

Table 7.15 Institute wise Cases Treated in Hospital & Ambulatory Clinic

Sr. No.	Name of Institute	No. of cases treated		Total	Revenue Receipt
		Hospital	Ambulatory Clinic		
1	MVC, Mumbai	94601	417	95018	1556850
2	NVC, Nagpur	36782	49	36831	10655195
3	COVAS, Parbhani	5047	144	5191	661310
4	COVAS, Udgir	7641	448	8089	2067092
5	KNPCVS, Shirwal	10637	550	11187	3092990
6	PGIVAS, Akola	7728	975	8703	1502550
7	WRTC, Gorewada	349	0	349	0
	Total	162785	2583	165368	1,95,35,987

The advance imaging techniques like USG were used for 3532 case while 5505 X-Rays were processed by the experts in the hospitals of the University.

Table 7.16. Institute wise diagnostic services provided in VCC

Sr. No.	Name of Institute	Imaging Techniques	
		X-ray	USG
1	MVC, Mumbai	35	101
2	NVC, Nagpur	1433	774
3	COVAS, Parbhani	371	391
4	COVAS, Udgir	1032	179
5	KNPCVS, Shirwal	2175	1740
6	PGIVAS, Akola	434	324
8	WRTC, Gorewada	25	23
	Total	5505	3532

7.16. LABORATORY DIAGNOSTIC SERVICES PROVIDED

Various Laboratory diagnostic services include samples processed at departments of Pathology, Parasitology, Biochemistry, Microbiology and Teaching Veterinary Clinical Complexes of Veterinary Colleges and Institutes of MAFSU.

A total of 10649 blood samples were analyzed for CBC, 6088 blood smears were examined, 1787 faecal samples were examined for parasitic infestations and 10724 biochemical estimations were carried out in the hospitals. (Table 7.16.)



Table 7.16. Institute wise laboratory diagnostic services provided

Sr. No.	Name of Institute	No. of samples processed				
		CBC	Blood Smear	Faecal exam	Biochemical	Miscellaneous
1	MVC, Mumbai	814	152	844	1031	301
2	NVC, Nagpur	2758	1221	202	7066	404
3	COVAS, Parbhani	111	79	13	1430	14
4	COVAS, Udgir	1299	980	109	498	557
5	KNPCVS, Shirwal	4857	2930	144	495	1966
6	PGIVAS, Akola	688	604	23	123	107
8	WRTC, Gorewada	122	122	452	81	10
	Total	10649	6088	1787	10724	3359

7.17 INFERTILITY AWARENESS CAMPAIGN

Under Vidarbha Marathwada Dairy Development Project (VMDDP), the university in collaboration with NDDDB deputed the experts from the constituent colleges of the University to participate in 19 infertility camps wherein 845 infertility cases in dairy cows and buffaloes were treated and these experts also guided the farmers about fertility management. Eight gynecologists spared one day for every month for treatment of challenging infertility cases in selected eight districts of Vidarbha and Marathwada region of Maharashtra during 2024.



Infertility Awareness Camp under VMDDP Project

7.18. LUMPY SKIN DISEASE CONTROL CAMPAIGN

The Director of Extension, as a nodal officer and task force member took active part in the control of lumpy skin disease control campaign by coordinating with the state department of animal husbandry and the experts of the university and guided the veterinarians through four online meeting wherein 305 veterinary officers were benefitted. A total of four advisories on various aspects of LSD control viz. guidelines for vector control, nursing and care of LSD affected animals, treatment protocol for Clinico-therapeutic management of Lumpy Skin Disease and Management of calves for prevention of LSD were issued by the University. The staff also published three leaflets on the care and management of the Lumpy skin disease and visited the LSD affected villages for extending the expert services in the field.



7.19. ESTABLISHMENT OF MAFSU MUSEUM

MAFSU Museum furnished with historically and academically important artefacts was opened for the public on the occasion of University Foundation Day on 3rd December 2023 at the august hands of the Prof. (Dr.) N. V. Patil, Hon'ble Vice-Chancellor, MAFSU, Nagpur.

MAFSU Museum has a perfect blend of its three major domains viz. Animal Science, Dairy Technology and Fishery Science. Museum is showcasing the worthwhile information about these domain areas through various sections. The museum has specific sections covering poultry farming, livestock biodiversity, dairy technology, fisheries development, taxidermy, wildlife, one health, opportunities in veterinary, dairying and fishery sector; historical development of animal husbandry sector in India and skeletal artefacts to adorn the scenic depiction of these varied themes with well-equipped amphitheatre for showcasing short documentaries. It's an opportunity for science loving citizen as well as farmers, livestock stakeholders, entrepreneurs, scholars of agriculture & allied sectors and students.



Inauguration of MAFSU Museum by Dr. N. V. Patil, Hon'ble Vice-Chancellor, MAFSU, Nagpur

Glimpses of Museum





Glimpses of Museum





8. MEMORANDAM OF UNDERSTANDING

MAFSU, Nagpur signed several significant Memorandams of Understanding (MoUs) with a diverse group of organizations, including agricultural producer company, NGOs, Mahila Arthik Vikas Mahamandal, national research institutes, poultry associations, zoo's etc. during 2023-24 for various extension, research and development initiatives. These collaborations are all ongoing and span diverse areas of expertise. These partnerships underline MAFSU's commitment to advancing its various streams through strategic collaborations. The list of MoU's signed during the year 2023-24 is given below.

- Paani Foundation, Mumbai & MAFSU, Nagpur
- Karkheda Agri Producer Company Ltd. Akola & MAFSU, Nagpur
- Reliance Foundation, Mumbai & MAFSU, Nagpur
- Mahila Arthik Vikas Mahamandal (MAVIM), Mumbai & MAFSU, Nagpur
- CellMed Biotech Pvt. Tech. Ltd., New Delhi and MAFSU, Nagpur
- ICAR-NBAGR, Karnal and MAFSU, Nagpur
- ICAR-National Research Centre on Camel, Bikaner, Rajasthan & MAFSU, Nagpur
- ICAR - Central Institute for Arid Horticulture, Bikaner, & MAFSU, Nagpur
- Gujarat Biotechnology Research Centre (GBRC), Gandhinagar & MAFSU, Nagpur
- Maharashtra Zoo Authority (MZA) and WRTC, MAFSU, Nagpur.

1. MOU between Paani Foundation, Mumbai and MAFSU, Nagpur

The Directorate of Extension Education, MAFSU, Nagpur signed a MoU with the Paani Foundation on 29th April 2023 at University Head Quarter. Through this MoU, activities for water literacy and water conservation programs will be undertaken. The university will also assist in collaborative activities like organization of animal health camps, awareness about scientific animal husbandry, dairying and fish farming, conservation of indigenous germplasm and imparting training on various aspects for improving production and productivity of animals in the rain-fed rural areas across the state. Dr. A. U. Bhikane, Director Extension Education & Dr. Satyajit Bhatkal, CEO, Panni Foundation signed MoU in presence of Hon'ble Vice-Chancellor of MAFSU, Dr. S. R. Gadakh.



Dr. A. U. Bhikane, Director Extension Education & Dr. Satyajit Bhatkal, CEO, Panni Foundation signed MoU in presence of Hon'ble Vice-Chancellor of MAFSU, Dr. S. R. Gadakh.



2. MOU between Karkheda Agri Producer Company Ltd., Akola & MAFSU, Nagpur

The Directorate of Extension Education, MAFSU, Nagpur signed a MoU with the Karkheda Agri Producer Company Ltd., Akola on 29th April 2023 at the University HQ. The MoU is signed to share the technical knowledge regarding goat husbandry and to assist the Karkheda Agri Producer Company Ltd; Akola in transfer of technologies in the domain of goat farming. The MoU was signed by Dr. A. U. Bhikane, Director Extension Education & Mr. Naresh Deshmukh, Director, Karkheda Agri Producer Company Ltd; Akola in presence of Hon'ble Vice-Chancellor of MAFSU, Dr. S. R. Gadakh.



Dr. A. U. Bhikane, Director Extension Education & Mr. Naresh Deshmukh, Director, Karkheda Agri Producer Company Ltd; Akola signed the MoU in presence of Dr. S. R. Gadakh, Hon'ble Vice-Chancellor of MAFSU.

3. MOU between Reliance Foundation, Mumbai & MAFSU, Nagpur

The Directorate of Extension Education, MAFSU, Nagpur signed a MoU with the Reliance Foundation on 29th April 2023 at the University HQ. This MoU is signed with a vision to share technical knowledge in the field of animal husbandry, dairying and fisheries for the benefit of farmers across the state through the use of digital technologies available with the Reliance Foundation. Dr. A. U. Bhikane, Director Extension Education & Mr. Sachin Mardikar from Reliance Foundation signed MoU in presence of Dr. S. R. Gadakh Hon'ble Vice-Chancellor MAFSU, Nagpur.



Dr. A. U. Bhikane, Director Extension Education & Mr. Sachin Mardikar from Reliance Foundation signed the MoU in presence of Dr. S. R. Gadakh, Hon'ble Vice-Chancellor of MAFSU.

4. MOA between Mahila Artihik Vikas Mahamandal (MAVIM), Mumbai & MAFSU, Nagpur

The Directorate of Extension Education, MAFSU, Nagpur signed a MOA with MAVIM, Mumbai on 1st June 2023. This MoU seeks to impart the capacity-building training of 1050 pashusakhis and 470 lead women identified by MAVIM, Mumbai through specifically designed training modules for the project during the year 2023-24 and 2024-25 through the constituent veterinary colleges/institutes of the University. The budget approved for the project is Rs. 4.17 Crores.



Dr. A. U. Bhikane, & Dr. Indu Jakhar, (IAS), Managing Director, MAVIM signed the MoU in presence of Mr. Mangal Prabhat Lodha, on'ble Minister for Women & Child Development Maharashtra.



5. MoU between Cell Med Biotech Pvt. Ltd., New Delhi and MAFSU, Nagpur

An MoU was signed between MAFSU, Nagpur and CellMed Biotech Pvt. Tech. Ltd., New Delhi for facilitating collaborative research with special reference to the stem cell application on 25th May 2023. The MoU was signed by Dr. N. V. Kurkure, Director of Research & Mr. Lalit Jaiswal, Director, Cell Med Biotech Pvt. Ltd., New Delhi.

6. MoU between ICAR-NBAGR, Karnal and MAFSU, Nagpur

An MoU was signed between MAFSU, Nagpur and ICAR- National Bureau of Animal Genetic Resources, Karnal in respect of Network Project on Animal Genetic Resources. Dr. N. V. Patil, Hon'ble Vice Chancellor, MAFSU, Nagpur & Dr. Anil Kumar Mishra, Principal Scientist, ICAR-NBAGR, Karnal signed MoU on 19th October, 2023 at the University HQ. This MoU is signed with a vision to share technical knowledge for characterization of newly identified, lesser known animal genetic resources of Maharashtra state under Network Project.

7. MoU between ICAR-National Research Centre on Camel (NRCC), Bikaner and MAFSU Nagpur

Maharashtra Animal and Fishery Sciences University (MAFSU), Nagpur, formalized collaborative agreements by signing a Memorandum of Understanding (MoU) with ICAR-National Research Centre on Camel (NRCC), Bikaner, on 13th March 2024. The primary aim of this MoU is to facilitate joint research and development endeavors, as well as promote the exchange of knowledge between the two institutions.

8. MoU between Gujarat Biotechnology Research Centre, Gandhinagar, Gujarat and MAFSU, Nagpur

On 13th March 2024, Maharashtra Animal and Fishery Sciences University (MAFSU), Nagpur, entered into a Memorandum of Understanding (MoU) with Gujarat Biotechnology Research Centre (GBRC), Gandhinagar, Gujarat. The objective of this MoU is to foster collaboration in research and development initiatives, as well as facilitate the exchange of knowledge between the two institutions.



Dr. Niteen V. Patil, the Hon'ble Vice -Chancellor of MAFSU and Dr. Artabandhu Sahoo, Director of NRCC, Bikaner signed the MoU



Dr. Niteen V. Patil, Hon'ble Vice-Chancellor of MAFSU, and Dr. C. G. Joshi, Director of GBRC, Gandhinagar, Gujarat Signing the MoU.

9. MoU between ICAR- Central Institute for Arid Horticulture, Beechwal, Bikaner, Rajasthan and MAFSU, Nagpur

Maharashtra Animal and Fishery Sciences University (MAFSU), Nagpur and ICAR - Central Institute for Arid Horticulture (CIAH), located at Beechwal, Bikaner, Rajasthan signed a Memorandum of Understanding (MoU) on 13th March, 2024. This Memorandum of Understanding aims to promote cooperation in related fields and shared research interests, development projects and information



sharing between the two organizations. It also covers student training and postgraduate research in innovative fields. The Hon'ble Vice-Chancellor of MAFSU, Dr. Niteen V. Patil and the Director of ICAR-CIAH, Beechwal, Bikaner, Dr. Jagadish Rane, signed the MoU formally.

10. MoU between MZA and WRTC, MAFSU, Nagpur

Dr. Shirish Upadhye, Director, Wildlife Research and Training Centre (WRTC), and Dr. Prabhu Nath Shukla, Member Secretary, Maharashtra Zoo Authority (MZA) signed the MoU in presence of Dr. Niteen Patil, Hon'ble Vice-Chancellor, MAFSU and Dr. Nitin Kurkure, Director of Research, MAFSU. Under the MoU, the MZA will facilitate the scientific management of zoos by undertaking capacity building, research and conservative breeding while WRTC, will essentially provide its technical expertise and support in areas of Wildlife Health and Management. The efforts will benefit Administrators, Animal Keepers, Veterinarians, Scientists and other key stakeholders involved in Wildlife Conservation from the inputs generated by the coordinated approach.



Signing of MoU between MZA and WRTC, MAFSU, Nagpur



9. AWARDS/HONOURS/RECOGNITION

9.1. AWARDS TO THE UNIVERSITY/INSTITUTE

1. National award for Breed Conservation to Red Kandhari Farm of COVAS, Parbhani

The Red Kandhari Research and Instructional farm of College of Veterinary and Animal Sciences, Parbhani under MAFSU, Nagpur bagged the prestigious national 'Breed conservation award-2023' hosted by ICAR-National Bureau of Animal Genetics Resources, Karnal, Haryana to recognize exemplary contributions towards conservation of registered Indian breeds of domestic livestock on 23rd December 2023.



Dr. Suhas Amrutkar receiving Breed Conservation Award 2023

2. 'Center of Excellence' to College of Dairy Technology, Warud

The State Government has recognized the College of Dairy Technology, Warud (Pusad) as a 'Center of Excellence'. Dr. Prashant Wasnik, Associate Dean, Dr. Sneha Shende, College Coordinator of Career Katta, and Dr. Ranjana Jivne, District Coordinator of Career Katta were honoured with the center of excellence certificate and Rs. 1 Lakh from Maharashtra Information Technology Support Center at the hands of Hon'ble Shri Chandrakant Dada Patil, Minister for Higher Technical Education on 8th September 2023 at Maharashtra State Teacher Development Institute in Pune.



Dr. Prashant Wasnik, Associate Dean, CDT, Warud receiving the Certificate of Center of Excellence from Govt. of Maharashtra

9.2. STAFF AWARDS

Faculty of MAFSU received six fellow awards from professional societies. Apart from this, MAFSU staff received fifteen society awards, twenty eight best oral and poster presentation awards and nine NGO and other society's awards

1. Fellow Awards

Dr. S. V. Upadhye, Director (Instructions) & Dean (Faculty of Vety. Sci.), Dr. N. V. Kurkure, Director Research and Dr. S.V. Kuralkar, Professor and University Head, Department of AGB were awarded with prestigious fellowship of National Academy of Veterinary Sciences (NAVS) on July 1st, 2023, during the 21st National Academy of



Dr. S. V. Upadhye receiving Fellowship



Veterinary Sciences (NAVS) Convocation cum Scientific Convention on Strategies for Enhancing Productivity of Dairy Animals, held at GADAVASU, Ludhiana, Punjab.



Dr. N. V. Kurkure receiving Fellowship



Dr. S. V. Kuralkar receiving Fellowship

Dr. A. U. Bhikane, Director of Extension Education, MAFSU, Nagpur and Dr. S. P. Waghmare, Professor of Veterinary Clinical Medicine, PGIVAS, Akola received Veterinary Internal & Preventive Medicine Society (VIPM) Fellow award and Dr. B. N. Ambore, Assistant Professor of Veterinary Clinical Medicine, KNPCVS, Shirwal received Associate Fellow VIPM Award in recognition of their outstanding achievements in 4th Annual Convention of VIPM and Symposium on 18th December 2023 held at SKUAST, Jammu.



Dr. A. U. Bhikane receiving VIPM Fellow Award



Dr. S. P. Waghmare receiving VIPM Fellow Award



Dr. B. N. Ambore receiving VIPM Associate Fellow Award

2. Lifetime achievement award

Dr. B. W. Narladkar, Associate Dean and Professor of Veterinary Parasitology, College of Veterinary and Animal Sciences, Parbhani was awarded with 'Lifetime Achievement Award of IAAVP' at Patna on 29th November 2023 for his outstanding contribution in the field of Veterinary Parasitology in teaching, research & extension.



Dr. B. W. Narladkar receiving Lifetime Achievement Award of IAAVP



3. Professional Society Awards

- "Dr. M. S. Bawaskar, Assistant Professor, Department of Animal Reproduction, NVC Nagpur received "Prof. Sukhdeep Singh Sidhu Memorial Award" from Indian Society of Advancement of Canine XIX Annual Convention of ISACP on "Recent Advances in Diagnostic Therapeutic Nutritional Management of Canines" held at Durg on 20th April 2023.
- Dr. P. A. Telvekar, Assistant Professor, Dept. of Fisheries Extension, Economics & Statistics, COFS, Nagpur was awarded for Excellence in Teaching from SCALFE at Shimla on 28.04.2023. In this conference Dr. S. B. Gore, Assistant Professor, Fisheries Engineering COFs Nagpur received Best Fishery Scientist Award.



Dr. Minakshi S. Bawaskar
receiving the award



Dr. S. B. Gore,
receiving the award

- Dr. V. D. Lonkar, Assistant Professor, KNPCVS Shirwal, awarded with 'Dr. D. Choudhary Award' for Best Ph.D. Dissertation 2023 from Indian Poultry Science Association at Shere-e-Kashmir University of Agricultural Sciences & Technology, Kashmir on 15th September 2023.
- Dr Dilipsingh Raghuwanshi, Professor and Head, Department of ARGO, NVC, Nagpur received the 'Best Extension Scientist Award-23' by Just Agriculture Education Group & AEEFWS Society, Chandigarh in the 5th International Conference on "Global Insights on Research and Development in Agriculture, Horticulture and Allied Sciences" - GIRDAHA 2023 held at G. H. Raisoni College, Nagpur on 5th October 2023.



Dr. V. D. Lonkar receiving
'Best Ph.D. Dissertation Award'



Dr. D. S. Raghuwanshi receiving
Best Extension Scientist Award



- Dr. S. P. Landge, Assistant Professor, Veterinary A. H. Extension Education, NVC, Nagpur was conferred with the 'Best Extension Scientist Award-23' in the 5th International Conference on "Global Insights on Research and Development in Agriculture, Horticulture and Allied Sciences" - GIRDAHA 2023 jointly organized by Just Agriculture Education Group & AEEFWS Society, Chandigarh and G. H. Raison College, Nagpur during 5th to 7th October 2023.
- Dr. G. S. Khandekar, Professor, Department of Surgery and Radiology, MVC, Mumbai received Dr. I. S. Chandana Memorial and appreciation Award from Indian Society for Veterinary Surgery held at Bhubneswar on 7th December 2023.



Dr. S. P. Landge receiving
Best Extension Scientist Award



Dr. G. S. Khandekar receiving
'Dr. I. S. Chandana award'

- Dr. V. S. Waskar, Professor, KNPCVS Shirwal was awarded with 'Dr. A. T. Sherikar Outstanding Public Health Veterinarian Award' from Indian Association of Veterinary Public Health at Hissar on 07th December 2023.
- Dr. G. U. Yadav, Assistant Professor and Dr. S. D. Tripathi, Assistant Professor, Department of Surgery and Radiology, MVC, Mumbai received Appreciation Award from ISVS at Bhubneswar on 7th December 2023.
- Dr. R. J. Zende, Professor, Dept. of Veterinary Public Health, Mumbai Veterinary College, Mumbai received 'Dr. R. K. Agrawal Food Safety Award' in the national conference of Indian Association of Veterinary Public Health held at Hissar on 07th December 2023.
- Dr. V. K. Basunathe, Assistant Professor, Dept. of Veterinary & AH Extension Education, Nagpur Veterinary College, Nagpur received 'Best Extension Professional Award 2023' in International Extension Education Congress held at Jaipur on 20th December 2023.



Dr. R. J. Zende, receiving
'Dr. R. K. Agarwal food safety award'



Dr. V. K. Basunathe receiving 'Best Extension
Professional Award 2023'



- Dr. Smita Kolhe, Assistant Professor, KNPCVS, Shirwal received 'Excellence in Extension Award' from the Society for Scientific Development in Agriculture & Technology at Raichur, Karnataka on 20th December 2023.
- Dr. P. M. Sonkusale, Assistant Professor, Department of Pathology, NVC, Nagpur received 'IAVP-Best Poultry Pathologist award-2023' from IAVP at Izatnagar on 22.12.2023.
- Dr. S. R. Warke, Assistant Professor, Department of Microbiology, NVC Nagpur grabbed 'Woman Scientist Award' and 'Excellence in Research Award' from Society of Agricultural Research and Social Development at Navsari, Gujarat on 28.12.2023.

4. Conference Awards

Faculty of MAFSU received 16 best oral and 12 best poster presentation awards in different national level conferences organized by different professional societies.

- Dr. S. B. Kawitkar, Professor, Department of Animal Nutrition, NVC, Nagpur, Dr. S. J. Manwar, Professor and Dr. M. R. Wade, Assistant professor, Department of poultry science, PGIVAS, Akola received three best poster presentation award from ANA at Akola on 8th September 2023.

- Dr. Mayura Gole, Assistant Professor, Department of Poultry Science, MVC, Mumbai won the second prize for paper presentation, Dr. Sumit Gaikwad, PhD student of MVC, Mumbai received the best paper presentation award and Dr. A. R. Ratnaparkhi, Ph.D. student, Department ARGO, PGIVAS, Akola bagged the award for Best Poster Presentation at the National seminar cum workshop organized by the Animal Nutrition Association at PGIVAS, Akola 8th September 2023.



Dr Mayura Gole receiving second prize for paper presentation

- Dr. D. T. Sakunde, Assistant Professor, Kranti Sinh Nana Patil College of Veterinary Sciences, Shirwal and Dr. S. M. Kolanagth, Subject Matter Specialist (BTY), Wildlife Research and Training Centre, Nagpur received best oral and Poster presentation award respectively from SVSBT at Mhow on 7th October 2023.



Dr. Sujit Kolangath during poster presentation

- Dr. Anant Dhotre, Assistant Professor (DE), College of Dairy Technology, Warud received the Best Paper Presentation Award and Best Ph.D. Thesis Award in an international conference organized by the Indian Dairy Engineers' Association at College of Dairy Science and Technology, GADVASU, Ludhiana (Punjab) during 13th to 14th October, 2023.



Dr. Anant V. Dhotre receiving the Awards



- Dr J G Gudewar Asst. Professor, Department of Veterinary Parasitology, MVC, Mumbai and Dr.P. D.Pawar Asst. Professor, Department of Veterinary Parasitology, KNPCV, Shirwal received best oral and poster presentation award from IAAVP at Patna on 1stDecember 2023.
- Dr. S. B. Akhare, Professor, and Dr. G. A. Fiske, Assistant Professor, Department of Veterinary Surgery, NVC, Nagpur received Gold Medal for best paper presentation and two best paper presentation awards from ISVS at Bhubaneswar on 8th December 2023.
- Dr. V. M. Vaidya and team won the Second Position in Poster as well as oral presentation in XIX Annual Conference of IAVPHS, Hissar, Haryana during 7th -8th December 2023.
- Dr. Mayur Pawshe, Subject Matter Specialist (ARGO), Wild Life Research & Training centre, Nagpur received Best Research Article Award from Indian Society for Studies on Animal reproduction at Mannuthy on 8th December 2023.



Dr. V. M. Vaidya, receiving award for Poster and Oral presentation



Dr. M. D. Pawshe receiving Best Research Article Award

- Dr. S. P. Waghmare, Professor & Hospital Superintendent, Department of VCC, PGIVAS, Akola received two best oral paper presentation awards from VIPM at Jammu on 18.12.2023. He also received best oral paper presentation Award from VIPM at Ayodhya on 16.03.2024.
- The research paper by Dr. S. G. Chavhan, COVAS, Udgir bagged first prize for poster presentation during 4th Annual Convention of VIPM & National Symposium held during 18th to 19th December 2023 at SKUAST, Jammu.
- Dr. M. R. Jawale, Assistant Professor, Department of Animal Nutrition, NVC, Nagpur received Best Scientist Award for the Best Lead Paper presentation and Dr. Shital Chopde, Assistant Professor, Department of Animal Nutrition, NVC, Nagpur received Best Oral presentation Award at 2nd Annual Convention of Association of Animal Scientists and National Symposium held during 17-19 February 2024 at Apollo College of Veterinary Medicine, Jaipur, Rajasthan.



Dr. Mahesh Jawale receiving Best Scientist Award



Dr. Shital Chopde receiving Best Oral presentation Award



- Dr. G. N. Bhangale, Assistant Professor, Department of Veterinary Parasitology, College of Veterinary and Animal Sciences, Parbhani received Best Poster Presentation award in National Seminar on Soil Ecosystem Services for Sustainable Agriculture (SESSA) from Indian Society for Soil Survey & Land Use Planning at ICAR - NBSS and LUP, Nagpur on 22th Feb. 2024.



Dr. Gajendra Bhangale receiving award

- Dr. M. P. Kaore, Assistant Professor, Department of Pathology, NVC, Nagpur received best poster award from AAHP at Hyderabad on 24th February 2024.

5. MAFSU Awards

Maharashtra Animal & Fishery Sciences University, Nagpur presented awards to the best officers & employees on occasion of its 23rd Foundation Day on 3rd December, 2023 at Nagpur as Best Teacher Award, Best Researcher Award, Best Research Publication Award and Best Employee Award in Class II, Class III & Class IV cadres.



Dr. G. R. Gangane receiving MAFSU Best Teacher Award



Mrs. A. N. Vyawahare and Co-workers receiving MAFSU Best Research Publication Award-2022 (Dairy Technology Faculty)



Dr. Mahesh Gupta and Co-workers receiving MAFSU Best Research Publication Award -2022 (Veterinary Faculty)



Dr. A. P. Dhok receiving Best Researcher Award



Shri. Nitin Sahebrao Kadam receiving Best Employee Award (Class- 3)



6. Other NGO & Society Awards

- Dr. V. D. Lonkar Assistant Professor, Department of Poultry Science, Kranti Sinh Nana Patil College of Veterinary Sciences, Shirwal received 'Dr. APJ Abdul Kalam Lifetime Achievement National Award' in teaching research and publication from National Institute for Socio Economic Development Bengaluru at Bengaluru on 6th May 2023.

- Dr. S. G. Deshmukh, Assistant Professor Department of Animal Reproduction, Gynaecology & Obstetrics, PGIVAS, Akola received State Level 'Rajiv Gandhi Krishi Ratna Award-2023' from Rajiv Gandhi Krishi Vidnyan Prathishthan, Amravati at Amravati on 21st May 2023.

- Dr. Atul Dhok, Assistant Professor, Department of Animal Nutrition, Nagpur Veterinary College, Nagpur has been bestowed with 'Best Teacher Award' for his contribution in the field of Animal Nutrition and his exemplary services as a teacher, researcher and extension worker. He is conferred with the by Senior Veterinary Foundation of Maharashtra, Pune on 18th June 2023 at Pune.



Dr. Atul Dhok, Receiving Award

- Dr. S. R. Warke, Assistant Professor, Department of Microbiology, NVC, Nagpur received Second Prize in the theme Animal Health IDEATHON, 2023 from DEATHON on 17th July 2023 and Award For outstanding Individual Accomplishment & Distinguished Veterinary Services to the Nation on the occasion of Republic Day of India, from Pashudhan Prahari on 26th January 2024.

- Dr. M. S. Bawaskar, Assistant Professor, Department of Animal Reproduction, NVC, Nagpur received 'Louis Pasteur award-2023' on 28th Sept. 2023 and 'Kranti Jyoti Savitribai Phule Women Achievers Award-2024' on 26th January 2024 from Pashudhan Prahari.

- Mr. Mahesh Deshmukh, Assistant Professor, College of Dairy Technology, Udgir received the 'Krushi Ratna 2023 Award' for the development of Dairy Technology related avenues in the Marathwada region of the state. the award is instituted by Sahkar Maharshi Padmashri Dr. Vitthalrao Vikhe Patil Foundation on 15th October 2023 at Nanded at the hands of Hon'ble Shri. Radhkrishna Vikhe Patil, Minister of Animal Husbandry, Maharashtra State.



Mr. Mahesh Deshmukh receiving the award

- Dr. H. Y. Palampalle, Deputy Director, Livestock Fram Complex, MVC, Mumbai received 'Maha Agro Idol Award 2023' from Agrocare Krushima Nch Startup at Nashik on 6th December 2023.



- Dr. C. S. Mote Assistant Professor, Department of Veterinary Pathology, KNPCVS Shirwal and Dr. M.V. Ingawale, Assistant Professor Deptt. of Animal Reproduction, Gynaecology & Obstetrics , PGIVAS, Akola received namely 'Best Research Worker Award 2022-23' and 'Best Veterinary Teacher Award 2022-23' from KNP Vet Alumni Association at KNPCVS Shirwal on 7th December 2023.

- Dr. A. U. Bhikane, Director of Extension Education, MAFSU, Nagpur was honoured with 'Kartrutva Gaurav 2024' award by Veterinary Practitioners Welfare Association, Mumbai at Mumbai on 7th January 2024. He received the award at the hands of Hon'ble Dr. Mohan Bhagwat, Sarsanghchalak, Rashtriya Swayamsewak Sangh.



Dr. A. U. Bhikane receiving the Award

- Dr. M. P. Kaore, Assistanat Professor, Department of Pathology, NVC, Nagpur received 'Krantijyoti Savitribai Phule Women's Achiever Award 2024' from Pashudhan Prahari on 26.01.2024.
- Dr. P. S. Bankar, Assistant Professor, Department of Animal Genetics and Breeding, PGIVAS, Akola received 'Dignitary Fellow - IOASD' from IOASD at Assam on 05.03.2024.
- Dr. P. V. Patil, Farm Manager, COVAS, Udgir received 'Award for Excellence in Extension' from Association of plant Science Researcher, Dehradun, Uttarakhand in 6th Plant Science Researchers Meet-2023-24 held at Geeta University, Panipat on 11th & 12th March, 2024.

9.3. STUDENTS AWARD

The students of the Maharashtra Animal & Fishery Sciences University, Nagpur received 27 awards in different events at national level which includes 16 oral presentation awards and 10 Poster awards.

9.3.1. Best Paper/ Poster Presentation Awards

- Dr. Vrushali Dhas and Dr. Sukirti Sharma, students of NVC, Nagpur, received 'Best clinical case paper presentation Award' in National Clinical Case Conference at PGIVAS, Akola on 27.04.2023.
- Dr. P. Kudale, Dr. Anilkumar Jami, Dr. Ashwin Chopade, Dr. Ashutosh Chaudhury, Dr. Somesh Chavan, students of PGIVAS, Akola received Best Poster Presentation Award in National Clinical Case Conference at PGIVAS, Akola on 27.04.2023.
- Yash Garg and Dr. Dipashri Das, students of NVC, Nagpur, received 'Best poster presentation Award' in NSWANA Conference held at PGIVAS, Akola on 08.09.2023.
- Dr. Snehal Jagdale, student of COVAS, Parbhani, received 'Best poster presentation Award' in NSWANA conference held, at PGIVAS, Akola on 08.09.2023.
- Dr. Archana N., student of PGIVAS, Akola, received 'Best Poster Presentation Award' in National Clinical Case Conference at PGIVAS, Akola on 08.09.2023 and 'Best paper presentation Award' in National Clinical case conference at -Chennai on 24.02.2024.
- Dr. Hrushikesh Bhuse and Dr. Pinky Roy, students of NVC, Nagpur received 'Best Poster Presentation Award' in IAVPHS conference held at LUVAS, Hissar on 15.09.2023.
- Mr. S. S. Gadewar, student of COVAS, Parbhani received 'Best Poster Presentation Award' in Indian Poultry Science Association Conference held at Kashmir on 15.09.2023.



- Dr. A. Nair and Dr. M. Bagang, students of MVC, Mumbai, received 'Best Poster Presentation Award' at IAVPHS, Hisar, Haryana on 08.12. 2023.
- Dr. Parikshit Katkhede and Dr. Sarang Bhasme, student of PGIVAS, Akola, received 'oral paper presentation Award' in 4th VIPM conference held at Jammu on 19th December 2023.
- Dr. Aniket Bhilawade, PG Scholar bagged third best oral presentation award during 4th Annual Convention of VIPM & National Symposium held during 18th to 19th December 2023 at SKUAST, Jammu.
- Dr. V. S. Degloorkar and Dr. T. Chopade, student of PGIVAS, Akola received 'Best Poster Presentation Award, in National Clinical Case Conference held at PGIVAS, Akola on 22.12.2023.
- Miss. Komal, student of COVAS, Parbhani received 'Best Poster Presentation Award' in 20th Biennial International Conference of Animal Nutrition Society held at Chennai on 25.01.2024.
- Dr. Pragati Gutte, student of PGIVAS, Akola received 'Best oral clinical case Presentation Award' in first VIPM Clinical case Conference at Ayodhya on 16.03.2024.



Yash Garg receiving
Best oral paper Presentation Award'



Dr. Dipashri Das receiving
Best oral paper Presentation Award'



Dr. Pragati Gutte receiving
Best oral paper Presentation Award'



Dr. Vaishnavi Degloorkar receiving
Best Poster Presentation Award



Dr. Aniket Bhilawade receiving the
Best Oral Presentation Award



Dr. Sarang Bhasme receiving
Best Oral Presentation Award



9.3.2. Other Awards

- Miss. Vaishnavi Devkar, Internship student of B.V. Sc. & A.H. degree from KNPCVS, Shirwal has been selected for the global inter-residential program at Dubai Equine Hospital Dubai for four months from July 1, 2023 to October 31, 2023.
- Mr. Shubham Pandurangji Mandhale, student of NVC, Nagpur got second rank and awarded Avishkar Research Fellowship of Rs. 30,000/- for developing the 'HD Wifi Artificial Insemination Gun' in Agriculture and Animal Husbandry category (PG level) at Chancellor Brigade State Level Inter University Research Convention "Avishkar" held during 12th - 15th January, 2024 at Maharashtra University of Health Sciences, Nashik.
- Dr. Sujata Bhatkar, student of NVC, Nagpur, received Animal Health IDEATHON-2023 at Ludhiana, on 19.07.2023.
- Mr. Abhishek Shinde, student of CDT, Warud received Fisrt Prize in Reels Making Competition in IDA webinar held at Mumbai on 12.03.2024.
- Dr. T. J. Vaidya, student of NVC, Nagpur received Scientific Writing Competition Prize from Chronicle of Aquatic Science Journal on March-2024.



Felicitation of Vaishnavi Devkar on her selection for global interiresidential Program at Dubai



Mr. Shubham Mandhale receiving Avishkar Research





10. VISIT OF DIGNITARIES

1. Visit of Hon'ble Governor, Shri Ramesh Bais to MAFSU, Nagpur

Hon'ble Chancellor, MAFSU & Governor of Maharashtra, Shri. Ramesh Bais visited MAFSU Head Quarter on 13th December 2023. Dr. Niteen Patil, Hon'ble Vice Chancellor, MAFSU felicitated Hon'ble Chancellor Shri. Ramesh Bais. The Hon'ble Chancellor also visited IVF Lab and WRTC, Gorewada, Nagpur and appreciated the facilities at the Centre and expressed satisfaction with the working of the Centre.



Felicitating of Hon'ble Governor, Shri Ramesh Bais by Dr. N. V. Patil, Hon'ble Vice-Chancellor, MAFSU, Nagpur



Visit of Hon'ble Governor to WRTC, Gorewada



Visit of Hon'ble Governor to IVF laboratory

2. Visit of Dr. Ashok Kale to COVAS, Parbhani

Dr. Ashok Kale, Retired Professor, Public Health Department, Jalgaon, Maharashtra visited to COVAS, Parbhani to deliver lecture on "Communicable diseases with special reference to Tuberculosis" on 11th April 2023. He highlighted the importance of communicable diseases and narrated the importance of Tuberculosis control to check the incidences of zoonoses and its impact of the human life and its economic significance for the livestock sector.



Dr. Ashok Kale delivering lecture at COVAS, Parbhani

3. Visit of Senior Scientist Division of Parasitology, IVRI to NVC, Nagpur

Dr. T. Sangran, Senior Scientist, Division of Parasitology, IVRI visited the Department of Parasitology, NVC, Nagpur to discuss about the collaborative research work on 17th April 2023.



4. Visit of Dr. Satyajit Bhatkal, CEO, Paani Foundation to the COFS, Nagpur

Dr. Satyajit Bhatkal, CEO, Pani Foundation visited the Fish Seed Production Centre, of the College of Fishery Science, Nagpur on 29th April 2023.

5. Visit of Founding Director, India FETP, Chennai, Prof. Mohan Gupte to WRTC, Gorewada

Prof. Mohan Gupte, Founding Director, India FETP, Chennai, and Former Director, ICMR- National Institute of Epidemiology, Chennai visited WRTC, Gorewada as a guest of honour on the occasion of the "World Veterinary Day" on 29th April 2023.



Visit of Dr. Satyajit Bhatkal, CEO, Paani Foundation to Fish Farm, COFS, Nagpur



Felicitation of Prof. Mohan Gupte at WRTC, Gorewada

6. Visit of Scientist Actrec, New Mumbai to laboratory animal house, NVC, Nagpur

Dr Arvind Ingle, Scientist Actrec, Kharghar, New Mumbai visited the laboratory animal house established under Department of Pharmacology to discuss advances in laboratory animal experimentation on 9th May 2023.

7. Visit of Mrs. Mohini Naik, Social worker, Pusad to CDT, Warud

Mrs. Mohini Naik, Social worker, Pusad visited to the College of Dairy Technology, Warud to know about preparation of traditional dairy products production on 1st June 2023.



Dr Arvind Ingle delivering lecture



Visit of Mrs. Mohini Naik to CDT, Warud



8. Visit of Director ADL, Penn State, USA to Department of VPH, MVC, Mumbai

Dr. B. Jayrao, Director ADL, Penn State, USA visited to Department of Veterinary Public Health, Mumbai, Veterinary College Mumbai to conduct training of faculty of MVC, Mumbai on 3rd June 2023.

9. Dr. Gurucharan Datta, VCI member visited KNPCVS, Shirwal

Dr. Gurucharan Datta, Member of the Veterinary Council of India, visited the KNP College of Veterinary Science, Shirwal on 5th June 2023 and verified the physical facilities, infrastructure and manpower available regarding the fulfillment of provisions of Minimum Standards of Veterinary Education Regulations 2016.



Dr. B. Jayrao, Director ADL, Penn State, USA delivering lecture



Visit of VCI Member to KNPCVS, Shirwal

10 . CZA team visits WRTC, BTGIZP and NVC, Nagpur

A Central Zoo Authority team comprising of Dr. Aditi Sharma, Ms. Nivideta and Dr. Kamlesh Kalike visited WRTC, Gorewada and Balasaheb Thackeray Gorewada International Zoological Park, Nagpur on 14th June, 2023 to inspect the facilities created, the research activities carried out at the centre. The team also visited to NVC, Nagpur for establishment of one health centre in wild life at CZA, New Delhi on 15th June 2023.

11. Visit of National Co-ordinator, NAHEP CAAST, ICAR, New Delhi to Department of VPH, MVC, Mumbai

Dr. A. Agarwal, National Co-ordinator, NAHEP CAAST, ICAR, New Delhi visited to Department of Veterinary Public Health, Mumbai Veterinary College, Mumbai for inauguration of world Zoonosis Day Programme on 7th July 2023.



Dr. Sujit Kolangath interacting with CZA team



Dr. A. Agarwal, delivering lecture



12. Visit of Professor Dr. M. Bhide to Department of VPH, MVC, Mumbai

Dr. M. Bhide, Professor, University of Veterinary Medicine and Pharmacy in Košice, Slovakia visited to Department of Veterinary Public Health, Mumbai, Veterinary College Mumbai to conduct training of faculty of Mumbai, Veterinary College, Mumbai on 12th July 2023.

13. Visit of CEO, Anna Saheb Shinde Foundation, Mumbai to the Department of AGB, NVC, Nagpur

Mr. Kiran Patwardhan, CEO, Anna Saheb Shinde Foundation, Mumbai visited the Department of Animal Genetics and Breeding, Nagpur Veterinary College, Nagpur for formation of MOU between NVC, Nagpur and ASF, Mumbai for Gaolao conservation work on 23rd August 2023.



Dr. M. Bhide, delivering lecture



Visit of Kiran Patwardhan to NVC, Nagpur

14. Visit of Jaun Mosqueda to the COVAS, Parbhani

Jaun Mosqueda, Professor of Parasitology, Mexico visited the College of Veterinary and Animal Sciences, Parbhani to deliver lecture on "Control of tick and tick born pathogen: Research opportunities" on 26th August 2023.

15. Visit of Chief Engineer, PWD, Nanded Division to CDT, Udgir

Mr. B. S. Pandhare, Chief Engineer, Public Works Department, Nanded Division visited the College of Dairy Technology, Udgir campus on 18th September 2023 and conducted review meeting about construction of new college building of the institute.



Mr. Jaun Mosqueda delivering lecture



Review meeting about construction of college building at CDT Udgir

16. Visit of Hon'ble Principal Secretary, Higher and Technical Education, Principal Secretary, Home, Government of Maharashtra to WRTC, Gorewada

Shri. Vikas Rastogi, Hon'ble Principal Secretary, Higher and Technical Education, Maharashtra State and Smt. Rastogi, Principal Secretary, Department of Home, Government of Maharashtra visited



WRTC, Gorewada as a invited Chief guest on the occasion of Ninth Foundation Day of WRTC, 2023 on 17th December 2023.

17. Director ICAR-NMRI, Hyderabad visited Department of VPH, NVC, Nagpur

Dr. S. B. Barbudhe, Director Indian Council of Agriculture Research-National Meat Research Institute, Hyderabad visited to the Department of Veterinary Public Health, Nagpur Veterinary College, Nagpur on 12th January 2024 to discuss about collaborative research work to be carried out.

Dr. Daulatsingh Zala, Government Medical College, Ahmadabad visited to the Department of Veterinary Public Health, Nagpur Veterinary College, Nagpur to see the facilities of the department on 12th January 2024.



Team WRTC with Shri. Vikas Rastogi and Smt. Rastogi



Visit of Dr. S. B. Barbudhe to NVC, Nagpur

18. Visit of Dr. Anil Kakodkar, Chairman, RGSTC, Mumbai to fisheries project of COFS, Nagpur

Hon'ble Dr. Anil Kakodkar, Chairman, Rajiv Gandhi Science & Technology Commission (RGSTC), Mumbai and Dr. Pragati Gokhale, Advisor, RGSTC and Office In-charge, RGSTC, Nagpur along with Hon'ble members of the Governing Body of the Science and Technology Resource Centre, Gadchiroli visited the FRP Portable Carp Hatchery at Shrinivaspur, Tal. Chamorshi on 26th January, 2024.

20. Visit of experts from ICAR- NBAGR, Karnal & ICAR-NRC on Pig, Guwahati to KNPCVS, Shirwal

The renowned scientists and experts Dr. S. K. Niranjn, Principal Scientist, ICAR-NBAGR, Karnal and Dr. P.J. Das, Principal Scientist, ICAR-NRC on Pig, Guwahati visited KNP College of Veterinary Science, Shirwal on 9th February 2024 for surveying a breeding tract of proposed Karkambi breed of pigs.



Visit of Hon'ble Dr. Anil Kakodkar to fisheries project site in Gadchiroli district



ICAR experts along with Associate Dean during the visit to the college

21. Visit of SDO, Pusad to CDT, Warud

Shri. Ashish Brijwal, SDO, Pusad visited to the College of Dairy Technology, Warud for the discussion on entrepreneurship in clean milk production on 3rd March 2024.





11. BUILDINGS AND CONSTRUCTIONS

The Engineering Unit of University is shouldering the responsibility of campus development and maintenance of all campuses of MAFSU spread across the state. This unit is headed by an Executive Engineer deputed by the state government from Public Works Department.

The infrastructural development wing in the University has successfully completed the work of Rs. 482.21 lakhs and is handling the ongoing development works worth Rs.20387.43 lakhs during 2023-24.

The major ongoing works included construction of administrative building at Dairy Technology Udgir Dist. Latur, construction of administrative and hostel buildings of Krushi Vigyan Kendras, construction for boys hostel for 300 students at Goregaon campus, MVC Mumbai and construction of guest house at College of Veterinary & Animal Sciences, Parbhani.

11.1. COMPLETED WORK

Sr. No.	Particulars of work	Total Cost (INR in Lakh)	Funding Agency
MAFSU HQ			
1	Providing and Arrangement of Furniture for Canteen at MAFSU, Nagpur.	5.87	URR
2	Providing Chain link fencing and Miscellaneous work at MAFSU, Nagpur.	9.96	URR
3	Repairs to old existing shed at MAFSU, Nagpur.	8.90	URR
4	Electrification to Old existing shed at MAFSU, Nagpur	1.22	URR
5	Providing & installing fire fighting arrangement system at Administrative building, Nagpur.	9.91	URR
6	Providing Maintenance of Air Cooler (Desert Cooler) and Installing new air cooler air conditioners, LED panel fitting at MAFSU HQ, Examination Building, University Library Building, DEE, MAFSU, Nagpur	2.97	URR
7	Maintenance of EI with replacing Armoured cable, Street light, UPS, and other miscellaneous work at Farmer Hostel bulding Library building and Administrative building. MAFSU, Nagpur.	2.98	URR
8	Miscellaneous Work of Skill Development Centre at Mouza Telankhedhi, MAFSU, Nagpur.	9.85	URR
9	Renovation of Electrification of Dean (Dairy Tech.) and Comptroller Cabin at MAFSU, Nagpur	1.17	URR



10	Repairs of Ground floor Toilet Block Ramp and Guard Room at Farmers Hostel and Renovation /Repairs at Directorate of Extension, MAFSU, Nagpur.	9.52	URR
11	Electrification for Guard Room at Farmers Hostel, and Mis. Renovation of EI for Library Admin, DEE building at MAFSU, Nagpur.	1.99	URR
12	Fabrication and Renovation work of Old Compound wall, Skill Development Centre Tenlankhedi, MAFSU, Nagpur	9.42	URR
13	Renovation and Repairs of Dean (Dairy Tech.) and Comptroller Cabin at MAFSU, Nagpur	4.52	URR
NVC, Nagpur			
14	Providing & supplying and laying of HDPE Pipe line at CBF (Unit no. 2) at NVC Nagpur.	6.46	URR
15	Providing Large Animal OPD Ward at Veterinary Hospital NVC Nagpur.	9.97	URR
16	Repairs and Renovation of Toilet at Anatomy Dept., NVC, Nagpur.	9.90	URR
17	Providing Small Animal OPD Ward & Miscellaneous Work at Veterinary Hospital, NVC, Nagpur.	9.97	URR
COVAS, Parbhani			
18	Providing and installing Armoured cable with feeder pillar at COVAS, Parbhani.	1.99	CRR
19	Repair Work for Girls hostel at COVAS, Parbhani.	9.78	CRR
20	Upgradation & Renovation work of main pannel switchgear and EI of TVCC Building at COVAS, Parbhani.	2.90	URR
COVAS, Udgir			
21	Renovation of EI of Boys Hostel COVAS, Udgir Dist. Latur	9.97	CRR
22	Construction of Layer shed (1000 birds) at COVAS Udgir, Dist. Latur	19.89	CRR
23	Renovation of Boys Hostel for College of Veterinary & Animal Sciences, Udgir (with Electrical work)	25.93	CRR
KNPCVS, Shirwal			
24	Renovation of Electrical Installation of Boys & Girls hostel building & Substation at K.N.P. Veterinary College, Shirwal. (With Electrical Work)	73.82	CRR / URR
CDT, Warud			
25	Replacing Profile roof sheet on Boys Hostel, Roof and Waterproofing work on terrace floor of Girls Hostel building and Electrical Work at CDT, Pusad (with Electrical Work)	50.02	CRR
KVK, Nagpur			
26	Construction of Compound Wall & Security Cabin for Krushi Vigyan Kendra land svy. No. 31, Mauza-Dudhbardi, Th- Kalameshwar, Dist. Nagpur.	173.33	URR
Total		482.21	



11.2. ONGOING WORK

Sr. No.	Particulars of work	Total Cost (INR in Lakh)	Funding Agency
MAFSU HQ			
1	Furniture arrangement of Skill Development center at Nagpur.	31.25	ICAR / URR
2	Providing Miscellaneous Work at MAFSU Premises Behind Main Building MAFSU, Nagpur	9.99	URR
MVC, Mumbai			
3	Construction for Boys Hostel for 300 students at Goregaon campus, MVC Mumbai.	2013.72	State Govt. Grant
4	Construction of College building at Goregaon Mumbai Veterinary College Mumbai.	7146.00	State Govt. Grant. (Plan)
NVC, Nagpur			
5	Construction of Compound wall at Veterinary Hospital NVC Nagpur.	127.72	CRR / URR
6	Construction of Compound Wall Behind Library building at NVC Nagpur.	68.24	URR
7	Renovation of C.O. Quarter for Nagpur Veterinary College at Seminary Hills, Nagpur.	9.98	URR
8	Furniture Arrangement of U. G. Hostel at Nagpur Veterinary College, Nagpur.	54.74	URR
9	Repair and Renovation of P-5 Type of Quarter at NVC Campus, Nagpur.	9.95	URR
COVAS, Parbhani			
10	Construction of Guest House, College of Veterinary & Animal Sciences, Parbhani	293.00	CRR
11	Electrification of Guest House, College of Veterinary & Animal Sciences, Parbhani.		
12	Providing Furniture for Boys & Girls Hostel at COVAS Parbhani.	2.30	URR
13	Repair Work of Boys Hostel for College of Veterinary & Animal Sciences, Parbhani.	49.79	CRR
COVAS, Udgir			
14	Construction of VIP Guest House (2 VIP & 4 Ordinary Suits) in premises of College of Veterinary & Animal Sciences, Udgir.	335.00	State Govt. Grant
15	Renovation of Boys Hostel for College of Veterinary & Animal Sciences, Udgir.	50.00	CRR
KNPCVS, Shirwal			
16	Construction of Compound wall on boundry of Gat no. 238 at KNPVC, Shirwal Dist. Satara	97.72	CRR / URR
17	Repair & Renovation of Toilet Blocks, Waterproofing work of Terrace slab and electrification of Boys & Girls hostel at KNP Veterinary College, Shirwal	73.82	CRR / URR



18	Construction of Boys Hostel at KNPVCS, Shirwal	1592.00	State Govt. Grant. (Plan)
PGIVAS, Akola			
19	Construction of Boys hostel building at PGIVAS, Akola	415.82	URR/CRR
20	Electrification of Boys hostel building at PGIVAS, Akola		
CDT, Udgir			
21	Construction of Administrative building at Dairy Technology Udgir Dist. Latur.	5918.00	State Govt. Grant. (Plan)
COFS, Nagpur			
22	Construction of Administrative building for College of Fishery Science, Nagpur.	566.57	State Govt. Grant
23	Providing EI, EPABX, Networking & CCTV System to Proposed Construction of College of Fishery Science Building at Seminary Hill, Nagpur.	33.77	
KVK, Sangli			
24	Construction of Administrative building at Krushi Vigyan Kendra, Tadsar, Ta. Kadegaon Dist. Sangli.	399.62	ICAR/ URR
25	Providing EI work with fire fighting arrangement to Administrative building at Krushi Vigyan Kendra, Tadsar, Tq.. Kadegaon Dist. Sangli		
26	Providing and Installing Transformer work & CCTV Surveillance System to Administrative Building for Krushi Vigyan Kendra Gat No 1157, 1158, 1167 (P), Tadsar, Tq.. Kadegaon Dist. Sangli for MAFSU, Nagpur.		
27	Construction of Farmer Hostel building at Krushi Vigyan Kendra, Tq. Kadegaon Dist. Sangli.	136.43	ICAR/ URR
KVK, Dudhbardi			
28	Construction of Administrative building at Krushi Vigyan Kendra, Dudhburdi, Tq. Kalmeshwar, Dist. Nagpur	387.96	ICAR/ URR
29	Providing EI work with fire fighting arrangement Administrative building at Krushi Vigyan Kendra, Dudhburdi, Tq. Kalmeshwar, Dist. Nagpur		
30	Construction of Farmer Hostel building at Krushi Vigyan Kendra, Dudhburdi, Ta. Kalmeshwar, Dist. Nagpur.	129.90	ICAR/ URR
KVK, Thane			
31	Construction of Farmer Hostel building at Krushi Vigyan Kendra, at Gat no. 385, Nagaon Tq. Murbad, Dist. Thane.	184.40	ICAR/ URR
32	Providing EI Work With Fire Fighting Arrangements to Proposed Farmers Hostel building for Krushi Vigyan Kendra, at Gat No 380, 385, Nagaon, Tq. Murbad, Dist. Thane.		
33	Construction of Administrative building at Krushi Vigyan Kendra, at Gat no. 385, Nagaon, Dist. Thane.	249.74	ICAR/ URR
Total		20387.43	

ICAR- Indian Council of Agricultural Research, URR- University Revenue Receipt, CRR- College Revenue Receipt.



12. ACCOUNTS AND FINANCE

The University receives financial assistance from different sources viz. State Government, Government of India, ICAR etc. The State Government provides grants for Salary and Pension that is entirely utilized for payment of salaries and pension. Apart from this, the State Government provides contingency grant. The University generates revenue through different activities which is utilized for developmental activities, strengthening the facilities and for supporting the teaching, research and extension programmes of the constituent colleges. The grants received through external funding are largely for specific research/ extension projects and are utilized for execution of research/ extension projects sanctioned by the external funding agencies.

Internal Resource Generation

The University headquarter together with its constituent colleges have been able to generate sizeable financial resource through different activities viz. Educational fees of the students, Sale of agricultural produce, fodder stumps, birds, eggs, milk and milk products, fish, fish seed, livestock, TVCC Services, Diagnostic Services, Consultancy services, Trainings for different stake holders, Clinical trials, Toxicopathology studies, Validation of products etc.

12.1 STATE GOVERNMENT GRANTS FOR THE YEAR 2023-24 (INR IN LAKH)

University received Rs. 17179 Lakhs under non plan for salary, pension and contingency and Rs. 5000 Lakhs under plan scheme by State Government.

Sr. No.	Particulars	Amount Received	Expenditure
A	Non Plan		
1	Salary	11944	11934
2	Pension	4955	4799
3	Contingency	280	280
	Total Rs.(A)	17179	17013
B	Plan		
1	Mafsuarth/ MahaIT	43	43
2	Works	4957	4957
	Total Rs.(B)	5000	5000
	Total Rs. (A+B)	22179	22013

12.2 EXTERNAL FUNDING (INR IN LAKH)

(Grants received from ICAR, New Delhi/Central/State Govt/ Other agencies)

The University received the funding of Rs. 1485.24 lakhs from ICAR for education, AICRP, KVK and for other schemes sponsored by ICAR. A grant of Rs. 143.84 Lakhs were also received from sponsoring agencies like DST, ICMR, and other agencies while state government also provided grants of Rs. 303.6 Lakhs for implementation of projects through MAVIM and SMART projects.



Sr.No.	Particulars	Amount Received	Expenditure
A. ICAR funding			
1	Education Division	207.19	192.98
2	AICRP	75.3	41.63
3	KVK	486.11	328.48
4	Other ICAR support	716.64	691.06
	Total	1485.24	1254.15
B. Funding from other National agencies			
1	DST	4.62	1.78
2	ICMR	90.75	81.34
3	Other	48.47	21.58
	Total	143.84	104.7
C. State Government Funding			
1	SMART Project	91.56	65.54
2	MAVIM Project	153.58	150.24
3	Others	58.46	34.7
	Total	303.6	250.48
	Total Rs. (A+B+C)	1932.68	1609.33

12.3. FUNDING FROM PRIVATE AGENCY (INR IN LAKH)

The university received Rs. 62.64 lakhs from various private agencies for small projects like clinical trials, feed trials etc.

Sr.No.	Particulars	Amount Received	Expenditure
1.	Private Agency Schemes	62.64	35.25
	Total	62.64	35.25

12.4. UNIVERSITY RECEIPT (INR IN LAKH)

The university generated a receipt of Rs. 3382 Lakhs from the educational fees, sale of farm produce like milk, eggs, fodder stumps, compost and animals etc.

Sr.No.	Particulars	Amount Received	Expenditure
1.	University Receipt	3382	3382
	Total	3382	3382



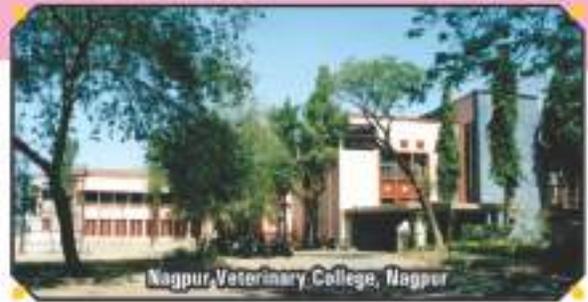
12.5. ALLOCATION OF FUNDS FOR OFFICE EXPENDITURE, EDUCATION, RESEARCH AND EXTENSION (INR IN LAKH)

Sr No.	Name Of Institute	Office Expenditure	Education	Research	Extension	Total Expenditure
1	MVC, Mumbai	125	55	45	32	257
2	NVC, Nagpur	260	211	0	2	473
3	COVAS, Udgir	192	3	1	1	197
4	COVAS, Parbhani	14	157	0	7	178
5	KNPCVS, Shirval	144	128	29	7	308
6	PGIVAS, Akola	26	29	34	28	117
7	CDT, Warud	57	1	0	0	58
8	CDT, Udgir	60	1	0	0	61
9	COFS, Nagpur	24	2	1	0	27
10	COFS, Udgir	49	1	0	0	50
11	CBF, Bor. Manju	11	0	9	0	20
12	CBF, Nagpur	59	6	0	0	65
13	CBF, Igatpuri	8	0	0	0	8
14	CBF, Udgir	25	0	0	0	25
15	Sub Centre Udgir	24	1	0	0	25
16	HQ MAFSU Nagpur	435	77	36	52	600
	Total	1513	672	155	129	2469





Mumbai Veterinary College, Mumbai



Nagpur Veterinary College, Nagpur



College of Veterinary and Animal Sciences, Parbhani



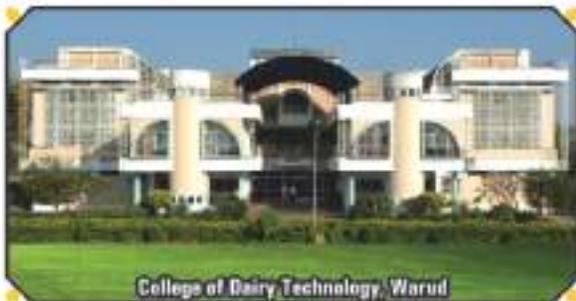
College of Veterinary and Animal Sciences, Udgir



Krantichh Nana Patil College of Veterinary Science, Shirwal



Post Graduate Institute of Veterinary & Animal Sciences, Akola



College of Dairy Technology, Warud



College of Dairy Technology, Udgir



College of Fishery Science Nagpur



College of Fishery Science, Udgir



WRTC, Gorewada, Nagpur



Krishi Vigyan Kendra, Dudhburdi, Nagpur

