



ANNUAL REPORT

2017 - 2018



**MAHARASHTRA ANIMAL AND
FISHERY SCIENCES UNIVERSITY, NAGPUR**



ANNUAL REPORT 2017-2018

Patron

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Vice-Chancellor

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Preface



Prof. A. M. Paturkar
Vice-Chancellor

I have the honour to present annual report of MAFSU for the year 2017-18 reflecting the achievements of the University in the field of education, research and extension.

The University was established on 3rd December 2000 at Nagpur with a view to facilitate sustainable management, conservation and augmentation of rich and diverse animal resources including fisheries in the State of Maharashtra by producing highly competent human resources through teaching and training, developing innovative technologies processes / products through research interventions and to provide technology support for enhancing livestock, fisheries, poultry productivity, value addition, waste management and marketing. It is my proud privilege to head this largest Animal and Fishery Sciences University in the country with five constituent Veterinary Colleges, one post-graduate Institute of Veterinary and Animal Sciences, two Dairy Technology Colleges and two Fishery Sciences Colleges besides 101 affiliated schools offering diploma in livestock management and dairy production.

MAFSU's Mission is to ensure enlightenment and empowerment of the students by imparting advanced knowledge in the fields of Animal, Dairy and Fishery Sciences by adopting innovative, efficient and effective strategies. The University has been striving for creating rural employment, economic prosperity and well-being of the poor farming community in the state through viable research and impact making extension education services.

In order to develop the professional skills, knowledge and abilities, the University deputes its Academic Officers for various training programmes on continued education, career development, performance management and development, coaching, organization development and for Doctoral programmes within or outside the University.

The students of the University regularly participate in the various extra-curricular activities including sports, cultural and research events organized by the Office of the Hon'ble Governor of Maharashtra, Association of Indian Universities and ICAR, New Delhi.

The University is committed to need based research aimed at enhancing the quality, productivity and efficiency of livestock and fishery sectors and to set up a system that continuously forecasts the scientific and technological needs of animal, dairy and fishery industries in Maharashtra. Apart from externally funded projects the University also conducts need based research as a part of post graduate thesis requirement.

The faculty members of our colleges have published 321 research papers in journals of national and international repute. Excellent infrastructure and research facilities have been created in last few years through the grants received from various funding agencies.



A major share of funding for our research programmes come from Government of Maharashtra, Rashtriya Krishi Vikas Yojana, Indian Council of Agricultural Research, Department of Science and Technology, Department of Biotechnology, Indian Council of Medical Research, Ministry of Food Processing Industry and Ministry of Environment and Forest and Rajiv Gandhi Science and Technology Commission, Govt. of Maharashtra.

It is a matter of pride for us that the University has completed 09 research projects funded with a total outlay of 157.73 lakhs. Presently a total of 40 projects costing 4748.42 lakhs are in progress at different constituent colleges of the University.

The College of Fishery Sciences Nagpur has prepared and submitted Action Plan for Development of Fisheries and Aquaculture in Vidarbha to Govt. of Maharashtra. It is a comprehensive Action Plan based on extensive research targeted on adoption of different culture practices and technologies as per the type of water body in Vidarbha region to increase the annual fish production.

Another significant development of the recent times is Establishment of Wildlife Research and Training Centre (WRTC) at Nagpur in collaboration with Forest Development Corporation of Maharashtra Ltd. (FDCM). The WRTC shall be instrumental in providing instructions to the undergraduate students; research material for post graduate students and imparting training to filed veterinarians regarding wildlife health management.

Extension Education and training plays an important role in transfer of technology for the benefit of rural masses and to train unemployed youths for self-employment. The University is working in close co-ordination with state department of Animal Husbandry, Dairy Development, Fisheries, Agriculture, Banks and NGO's. The University has applied for five additional KVK's sanctioned to the state in Nagpur, Jalna, Kolhapur, Sangli and Thane districts. Two KVK's at Sangli & Nagpur has been sanctioned to the University.

The University has participated in 48 exhibitions and 859 farmer's scientist's interactions guided by the faculty of the University, 195 demonstrations were organized at the farmer's door steps. Hospital and ambulatory services are provided for medical treatment, surgical operations, Gynecological examinations and artificial inseminations. Total 1,64,824 cases were treated during the year through the college dispensaries and various animal health camps, 129 programmes on Akashwani and 37 on Doordarshan were presented on Animal Husbandry, Dairy Technology, Poultry, Fisheries by the faculty of the University. Total 42 leaflets, 8 books, 158 publications were published in local news paper and 53 periodicals were also published as extension publications.

The engineering department of the University has successfully completed work worth Rs. 497.33 lakhs. This wing of the University is now handling ongoing civil works worth Rs. 4738.79 lakhs. The faculties and students have excelled in various fields and were awarded/ felicitated by Govt. and Non-Government organizations.

I would like to take this opportunity to thank office of Hon'ble Chancellor Government of Maharashtra especially department of ADF and ICAR for providing necessary supports for executing the work in the areas of academic, research and extension. Thanks are also due to the other funding agencies like DBT, DST, ICMR, RKVY, ATMA RGS&TC and other sponsoring agencies/industries for their financial support. I am also thankful to Hon'ble Executive Council for constructive support and suggestions towards improving the functioning of the University.

Prof. A. M. Paturkar



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1

EXECUTIVE SUMMARY

Maharashtra Animal & Fishery Sciences University (MAFSU) was established under the state Act 1998 (MAH. XVII of 1998) on 3rd December, 2000 with its head quarter 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 University was carved out of the four Agricultural Universities in the State by transferring five Veterinary Colleges, one Post Graduate Institute of Veterinary and Animal Science and one Dairy Technology College. Considering the need for developing human resource in fishery sciences as well as in dairy technology, University established two new colleges of fishery sciences, one at Nagpur in 2006 and another at Udgir in 2008. Similarly, one dairy technology college was established at Udgir in 2008.

The University offers undergraduate programmes in the faculty of Veterinary Science (B.V.Sc. & A.H.), Dairy Technology (B. Tech) and Fisheries (B.F.Sc.). A Master (M.V.Sc.) and Doctorate programmes (Ph.D.) in the faculty of Veterinary and Animal Sciences are being offered by the veterinary colleges. The course contents for B.V.Sc. and A.H. are periodically updated as per minimum standards of veterinary education laid down by Veterinary Council of India. For B. Tech and B. F. Sc. degree programmes the course contents are periodically updated as per the recommendations of Dean's Committee of Indian Council of Agricultural Research (ICAR). The Post-Graduate programme is of two years' duration (four semesters). The doctoral degree programme in the university for the regular candidates is for three years (six semester) duration whereas for inservice candidates the duration is of four years (eight semesters).

Apart from this, the University faculty of Lower Education offers two years' diploma course "Livestock Management and Dairy Production" for promoting entrepreneurship through its 101 diploma schools recognized by the University. Total 4603 students are admitted in LMDP diploma course in 2017-18.

The students of constituent colleges of the University have consistently registered excellent performance at All India ICAR-JRF Entrance Examination. During the year 2017-18, a total of 53 students have qualified the Entrance Examination and 6 students are receiving the Junior Research Fellowships. Apart from this, scholarships and fellowships are awarded to academically meritorious students. The government is also providing financial assistance to economically poor and backward class students as freeships. Student's welfare is being achieved by encouraging the students to participate in various extra curricular activities *viz.* Inter-University Sports/Cultural festival/Avishkar (Research competitions), regular and special NSS activities as a learning experience.

Research is an integral part of the University work and during 2017-18 a total of 40 sponsored research projects funded by various national, state and private agencies with a total outlay of Rs. 4748.42 lakhs were in progress. A total of 09 research projects worth Rs. 157.73 lakhs were completed during the report year. Total 321 research publications were published in national and international journals by faculty members of colleges.



University Extension is yet another vibrant wing of the University with focus on technology dissemination amongst all the stakeholders. To achieve this, the University is working in close co-ordination with state department of Animal Husbandry, Dairy Development, Fisheries, Agriculture, and allied line departments and NGO's. To strengthen the extension activities, the University has applied for five additional KVK's in the districts, Nagpur, Jalna, Kolhapur, Sangli and Thane, out of which two KVK's viz. Mauza Tadsar, Tahsil Kadegaon, Dist. Sangli & other at Mauza Dudhbardi, Tahsil Kalmeshwar Dist. Nagpur have been sanctioned to the University.

The University participated in 48 exhibitions and fairs with 114 trainings for farmers and 195 demonstrations for imparting the scientific knowledge to farming community. Veterinary care and services also forms an important part of the outreach activities of University. Hospital and ambulatory services provided medical treatment, surgical operations, gynecological examinations and artificial inseminations have been witnessed by 1,64,824 cases including vaccinations through these services. Expert faculties from the University have delivered guidance using Electronic Mass Medias like radio and television through 166 programmes on animal husbandry, dairy technology, poultry and fisheries sector both in regional and State level radio and television stations. Total 42 leaflets, 8 books, 158 publications were published in local news paper and 53 periodicals were also published as extension publications.

The University has successfully completed the infrastructural work worth Rs. 497.33 lakhs. This wing of the University is now handling ongoing works worth Rs. 4738.79 lakhs. The construction of Girls Hostel under Babu Jagjiwanram Chatravas Yojana and International student's hostel at Nagpur are some of the finest achievements of the University Engineering section.

Faculties and students have excelled in various fields and were awarded/ felicitated by Govt. and Non-Govt organizations. The University is now poised at an appropriate stage of development where the real benefits can be served to the society.



2

MANDATE OF THE UNIVERSITY

- To impart and co-ordinate education in Animal and Fishery Sciences including the post graduate education;
- 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;
- To impart lower education in the field of Veterinary, Animal and Fishery Sciences;
- 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;
- To hold examinations and confer such Degrees, Diplomas, Certificates and other academic distinctions as deemed fit;
- 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;
- To integrate teaching research and extension training with an ultimate aim to promote productivity in Animal Husbandry, Dairy, Poultry and Fishery Sectors;
- To promote marine and inland fisheries, to preserve and upgrade wild life and zoo animals in the State;
- To develop brackish water and fresh water aquaculture;
- To develop marketing infrastructure;
- To formulate welfare schemes for fishermen and livestock farmers;
- To develop by-products technology in livestock, fisheries and dairy;
- 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 specialised in the field of Animal and Fishery Sciences with a view to keep abreast of the latest technology.



3

UNIVERSITY AUTHORITIES

A) Executive Council

B) Academic Council

C) The Faculties

- Faculty of Veterinary and Animal Sciences
- Faculty of Dairy Technology
- Faculty of Fisheries
- Faculty of Lower Education

D) Board of Studies (BOS)

- Faculty of Veterinary & Animal Sciences -18
- Faculty of Dairy Technology - 06
- Faculty of Fisheries - 07

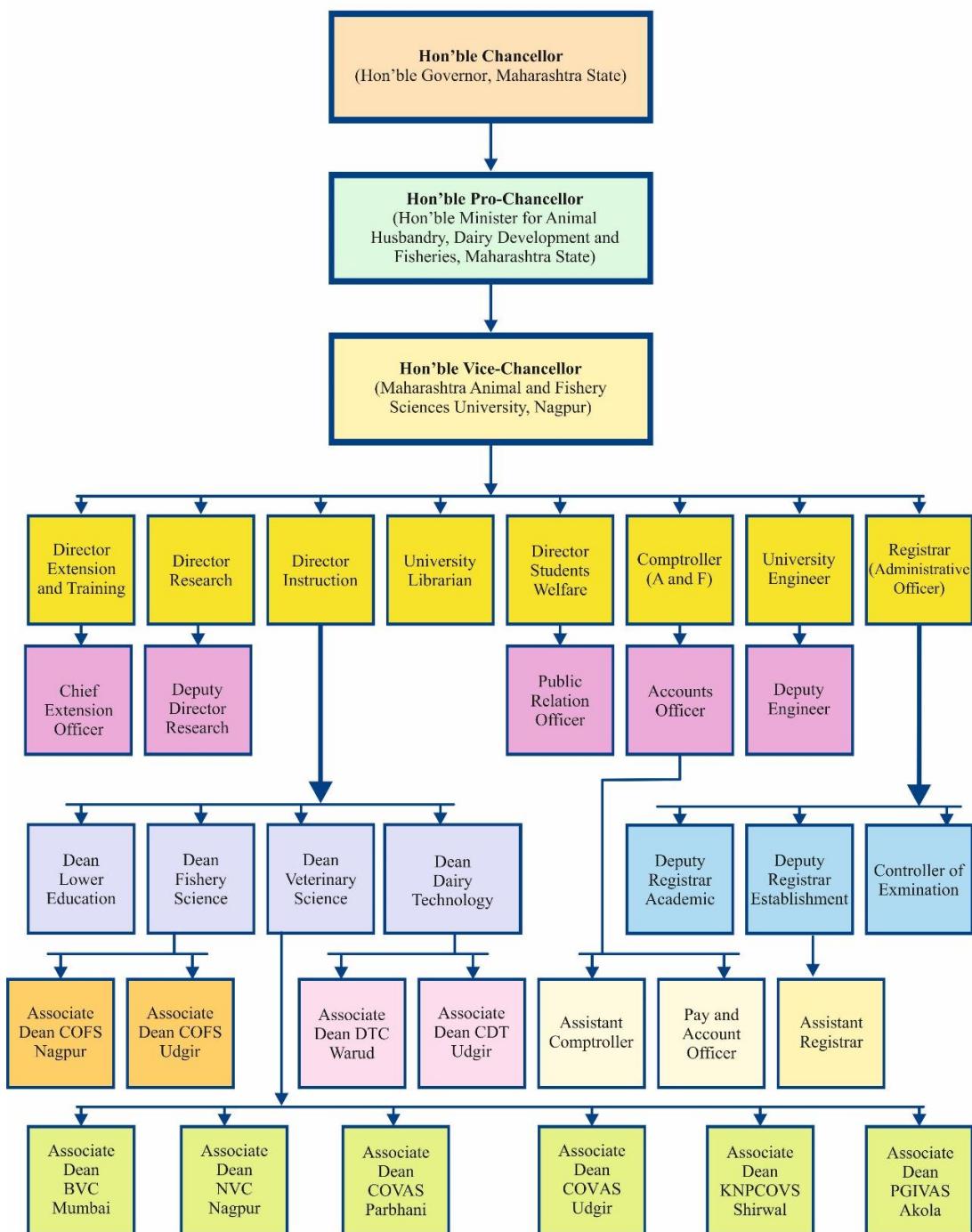
E) Other Authorities of the University

- Research Council
- Extension and Continuing Education Council
- Advisory Council of Associate Deans of Constituent Colleges (10 Colleges)
- Board of Examination
- Grievance Committee for the University Employees
- Standing Committee for Finance, Budget, Development and Planning
- Committee for Library and Information Center
- Student's Welfare Committee
- University Employees Welfare Committee
- Works Committee
- Legal Committee



3.

ORGANOGRAM





3.A. EXECUTIVE COUNCIL MEMBERS

The Executive Council is the chief executive body of the University. The Vice Chancellor is the ex-officio Chairman and Registrar is ex-officio Secretary to the Executive Council. The Executive Council consists of following members.

Executive Council Members 2017-18

Sr. No	Name and Designation	
1	Prof. A. K. Misra, Hon'ble Vice-Chancellor, Maharashtra Animal & Fishery Sciences University, Nagpur- 440 001	Chairman
	Shri. Anoop Kumar (IAS), Hon'ble Vice-Chancellor, Maharashtra Animal & Fishery Sciences University, Nagpur- 440 001	
	Prof. A. M. Paturkar, Hon'ble Vice-Chancellor, Maharashtra Animal & Fishery Sciences University, Nagpur- 440 001	
2	Commissioner of Animal Husbandry (M.S) Opp. Spicer College, Aundh, Pune - 411 007	Member
3	Commissioner of Fishery Development (M.S) Taraporwala Aquarium, Netaji Subhash Road, Charni Road, Mumbai-400002	Member
4	Commissioner of Dairy Development (M.S), Administrative Building, Abdul Gafar Khan Marg, Worli, Seaface Mumbai - 400018	Member
5	Commissioner, Agriculture (M.S), Central Building, Pune - 411 001	Member
6	Conservator of Forests (Working Plan), Near Govt. Press, Zero Miles, Civil Lines, Nagpur -440 001	Member
7	Shri. Arunkumar Narayanrao Patil, Managing Director, Dairyplant.com, E/603, Nirman Palace, Andheri (East), Mumbai- 400 093	Member
8	Dr. V.V. Kulkarni, Director, National Research Centre on Meat, Hyderabad - 500092	Member
9	Dr. Sanjay K. Gavkare. General Manager (Technical), Ventri Biologicals, Venkateshwara Hatcheries Pvt. Ltd., Pune- 411 025	Member
10	Dr. Rajiv Raman Bhatkar Aquaculture and Fisheries Consultant, 9, Pushkar, Dadar (W), Mumbai - 400 028	Member
11	Dr. (Smt) Mandakini Prakash Amte, Lok Biradari Prakalp, Hemalkasa, Gadchiroli- 442 710	Member
12	Dr. Rahul Vedprakash Patil, Hon'ble MLA and Chairman, Shankar Sahakari Dudi Vyawsayik Sanstha, CIDCO, Aurangabad-430110	Member
13	Shri. Rajesh Gajanan Wankhede Om GurudevChandani Chowk, A/P: Sawada, Tal: Raver, Dist: Jalgaon - 425 502	Member
14	Shri. Baburao Uttam Bhosale, A/P Shivajinagar, Tal. Kadegaon, Dist. Sangli - 416416	Member
15	Shri. Mukund Nagnath Dongare, A/P. Mangarul, Tal. Tuljapur, Dist. Usmanabad- 413501	Member
16	Shri. Bashir Amin Murtuza, 1076, Bazarpath, Ratnagiri -415612	Member
17	Dr. G. S. Toteja, Scientist 'G' and Head (Nutrition), ICMR, Ansari Nagar, Post Box 4911, New Delhi- 110029	Member
18	Dr. Ashok Kumar, Assistant Director General (AH) (Animal Science), ICAR, Krishi Anusandhan Bhawan, Pusa, New Delhi-110 012	Member
19	Dr. Bhagwan Ashok Satale, Satale Medical and General Stores, Shivaji Chowk, Gangapur, District- Aurangabad - 430 110 (MS)	Member



20	Dr. N. P. Dakshinkar, Dean, Faculty of Veterinary Science, MAFSU, Nagpur-440001	Member
	Dr. A. S. Bannalikar, Dean, Faculty of Veterinary Science, MAFSU, Nagpur-440 001	Member
21	Dr. N. N. Zade, Dean, Faculty of Lower Education, MAFSU, Nagpur-440 001	Member
	Dr. P. T. Jadhao, Dean, Faculty of Lower Education, MAFSU, Nagpur-440 001	Member
22	Dr. S. P. Changade , Dean, Faculty of Dairy Technology, MAFSU, Nagpur-440 001	Member
23	Dr. P. T. Jadhao, Dean, Faculty of Fishery Sciences, MAFSU, Nagpur-440 001	Member
24	Dr. A.P. Somkuwar, Director of Extension, MAFSU, Nagpur-440 001	Member
25	Dr. A. S. Bannalikar , Director of Research , MAFSU, Nagpur-440 001	Member
26	Dr. A. S. Bannalikar, Registrar, MAFSU, Nagpur-440 001	Secretary
	Shri. N. K. Lonkar, Registrar, MAFSU, Nagpur-440 001	

3.B. ACADEMIC COUNCIL MEMBERS

The Academic council of the University serves as an advisory body and have right to advice 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.

Academic Council Members 2017-18

Sr. No	Name / Designation	Status
1	Prof. A. K. Misra, Hon'ble Vice-Chancellor, Maharashtra Animal & Fishery Sciences University, Nagpur- 440 001	Chairman
	Shri. Anoop Kumar (IAS), Hon'ble Vice-Chancellor, Maharashtra Animal & Fishery Sciences University, Nagpur- 440 001	
	Prof. A. M. Paturkar, Hon'ble Vice-Chancellor, Maharashtra Animal & Fishery Sciences University, Nagpur- 440 001	
2	Dr. A. S. Bannalikar, Director of Research, MAFSU, Nagpur-440 001	Member
3	Dr. A. P. Somkuwar, Director of Extension & Training, MAFSU, Nagpur-440 001	Member
4	Dr. N. P. Dakshinkar, Dean, Faculty of Veterinary Science, MAFSU, Nagpur-440 001	Member
	Dr. A. S. Bannalikar, Dean, Faculty of Veterinary Science, MAFSU, Nagpur-440 001	Member
5	Dr. N. N. Zade, Dean, Faculty of Lower Education, MAFSU, Nagpur-440 001	Member
6	Dr. S. P. Changade, Dean, Faculty of Dairy Technology, MAFSU, Nagpur-440 001	Member
7	Dr. P. T. Jadhao, Dean, Faculty of Fishery Science, MAFSU, Nagpur-440 001	Member
8	Dr. Salil T. Hande, VCI Nominee, Camp Office, Bombay Veterinary College, Parel, Mumbai -400012	Member
9	Dr. A. M. Paturkar, Associate Dean, Bombay Veterinary College, Parel, Mumbai-400012	Member
10	Dr. Sharmila B. Majee, Associate Dean, College of Veterinary & Animal Sciences, Parbhani-431402	Member
11	Dr. A. G. Karpe, Associate Dean, College of Veterinary & Animal Sciences, Udgir, Latur-413517	Member
	Dr. R.R. Mugale Associate Dean, College of Veterinary & Animal Sciences, Udgir, Latur-413517	Member
12	Dr. A. S. Ranade, Associate Dean, KNP College of Veterinary & Animal Sciences, Shirwal, Satara-412801	Member



13	Dr. P. T. Jadhao, Associate Dean, College of Fishery Sciences, Nagpur-440 001	Member
14	Dr. A. G. Karpe, Associate Dean, College of Fishery Science, Dist. Latur-413517	Member
	Dr. B.S. Khillare, Associate Dean, College of Fishery Science, Dist. Latur-413517	Member
15	Dr. H. S. Birade, Associate Dean, P.G. Institute of Veterinary & Animal Sciences, Akola-444104	Member
16	Dr. S. P. Changade, Associate Dean, Dairy Technology College, Warud (Pusad), Dist -Yavatmal -445204	Member
17	Dr. P.G. Wasnik, Associate Dean, Dairy Technology College, UdgirDist - Latur -413517	Member
18	Dr. A. D. Deshmukh, Head of Department, Animal Nutrition, Nagpur Veterinary College, Seminary Hills, Nagpur-440 006	Member
19	Dr. A. S. Bannalikar, Head of Department, Veterinary Microbiology, KNP College of Veterinary & Animal Sciences, Shirwal, Dist. Satara-412801	Member
20	Dr. R.R. Mugale, Head of Department, Veterinary Anatomy, Histology & Embryology, College of Veterinary & Animal Sciences, Udgir, Dist. Latur- 413517	Member
21	Dr. S. S. Kulkarni, Head of Department, Veterinary Physiology, College of Veterinary & Animal Sciences, Udgir, Dist. Latur- 413517	Member
22	Dr. A. U. Bhikane, Head of Department, Clinical Veterinary Medicine including Ethics & Jurisprudence, College of Veterinary & Animal Sciences, Dist. Latur-17	Member
23	Dr. A.S. Ranade, Head of Department, Poultry Science, Bombay Veterinary College, Parel, Mumbai – 400012	Member
24	Dr. M. L. Gatne, Head of Department, Veterinary Parasitology, Bombay Veterinary College, Parel, Mumbai – 400012	Member
	Dr. B.W. Narladkar, Head of Department, Veterinary Parasitology, College of Veterinary & Animal Sciences, Parbhani- 431402	Member
25	Dr. S. D. Deshpande, Veterinary Biochemistry including Clinical Biochemistry, College of Veterinary & Animal Sciences, Parbhani– 431402	Member
26	Dr. (Mrs.) M. M. Gatne, Head of Department, Veterinary Pharmacology & Toxicology, Bombay Veterinary College, Parel, Mumbai – 400012	Member
	Dr. A. P. Somkuwar, Head of Department, Veterinary Pharmacology & Toxicology, Nagpur Veterinary College, Seminary Hills, Nagpur-440 006	Member
27	Dr. H. S. Birade, Head of Department, Animal Reproduction, Gynaecology and Obstetrics, P.G. Institute of Veterinary & Animal Sciences, Akola-444104	Member
28	Dr. P. T. Jadhao, Head of Department, Veterinary Surgery and Radiology, Nagpur Veterinary College, Seminary Hills, Nagpur-440 006	Member
29	Dr. V. P. Pathak, Head of Department, Veterinary Pathology, P.G. Institute of Veterinary & Animal Sciences, Akola-444104	Member
	Dr. S.D. Moregaonkar, Head of Department, Veterinary Pathology, College of Veterinary & Animal Sciences, Parbhani– 431402	Member
30	Dr. A.M. Paturkar, Head of Department, Veterinary Public Health, Bombay Veterinary College, Parel, Mumbai-400012	Member
	Dr. N.N. Zade, Head of Department, Veterinary Public Health, Nagpur Veterinary College, Seminary Hills, Nagpur-440 006	Member
31	Dr. M. P. Sawane, Head of Department, Animal Breeding and Genetics including Biostatistics, Bombay Veterinary College, Parel, Mumbai -400012	Member
32	Dr. M. F. Siddiqui, Head of Department, Livestock Production and Management, College of Veterinary & Animal Sciences, Parbhani- 431402	Member
	Dr. J.M. Chahande, Head of Department, Livestock Production and Management, Nagpur Veterinary College, Nagpur – 440006	Member



33	Dr. R. K. Ambedkar, Head of Department, Livestock Products Technology, Nagpur Veterinary College, Nagpur-440006	Member
34	Dr. S. U. Digraskar, Head of Department, Veterinary Epidemiology and Preventive Medicine, College of Veterinary & Animal Sciences, Parbhani- 431402	Member
35	Dr. D. S. Deshmukh, Head of Department, Veterinary and Animal Husbandry Extension, College of Veterinary & Animal Sciences, Parbhani- 431402	Member
36	Dr. P. G. Wasnik, Head Department of Dairy Engineering, Dairy Technology College, Warud (Pusad), Dist-Yeotmal-445204	Member
37	Dr. M.R. Patil, Head of Department, Dairy Chemistry, Biochemistry and Food Technology, Dairy Technology College, Warud (Pusad), Dist-Yeotmal-445204	Member
38	Shri. G. N. Narnaware, Head of Department Dairy Economics, Extension & Management, Dairy Technology College, Warud (Pusad), Dist-Yeotmal-445204	Member
39	Dr. A. R. Sarode, Head of Department Dairy Microbiology, College, Warud (Pusad), Yeotmal-445204	Member
40	Dr. S.S. Ghatge, Head of Department, Fisheries Resource Management, College of Fishery Science, Udgir-413517	Member
41	Shri. S. S. Belsare, Head of Department, Aquaculture, College of Fishery Science, Nagpur-440001	Member
42	Shri. A. T. Tandale, Head of Department, Fisheries Processing Technology & Microbiology, College of Fishery Science, Udgir-413517	Member
43	Dr. P. A. Telvekar, Head of Department, Fisheries Resources, Economics, Statistic & Extension Education, College of Fishery Science, Nagpur-440001	Member
44	Dr. J.G.K. Pathan, Head of Department, Fishery Hydrography, College of Fishery Science, Nagpur-440001	Member
45	Dr. A. S. Bannalikar, Registrar, MAFSU, Nagpur-440 001 Shri. N.K. Lonkar, Registrar, MAFSU, Nagpur-440 001	Secretary

3.C. THE FACULTIES

- 3.C.1. Faculty of Veterinary Science
- 3.C.2. Faculty of Dairy Technology
- 3.C.3. Faculty of Fishery Science
- 3.C.4. Faculty of Lower Education

3.D. BOARD OF STUDIES

3.D.1. Faculty of Veterinary and Animal Sciences

1	Veterinary Anatomy, Histology & Embryology	2	Veterinary Physiology
3	Veterinary Biochemistry including Clinical Biochemistry	4	Veterinary Pharmacology and Toxicology
5	Veterinary Parasitology	6	Veterinary Microbiology & Biotechnology
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, Gynecology 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

3.D.2. Faculty of Dairy Technology

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

3.D.3. Faculty of Fisheries

1	Aquaculture	2	Fisheries Resource Management
3	Aquatic Environment Management	4	Fisheries Engineering
5	Aquatic Animal Health Management	6	Fisheries Processing Technology
7	Fisheries Extension, Economics and Statistics		

3.E. OTHER AUTHORITIES

3.E.1. RESEARCH COUNCIL

Research Council constituted to serve as a think tank advisory body of the University and shall advise 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 secretary to the Research Council.

Research Council Members 2017-18

Sr. No.	Name & Address	Status
1.	Prof. A. K. Misra, Hon'ble Vice-Chancellor, Maharashtra Animal & Fishery Sciences University, Nagpur- 440 001	Chairman
	Shri. Anoop Kumar (IAS), Hon'ble Vice-Chancellor, Maharashtra Animal & Fishery Sciences University, Nagpur- 440 001	
	Prof. A. M. Paturkar, Hon'ble Vice-Chancellor, Maharashtra Animal & Fishery Sciences University, Nagpur- 440 001	
2.	Dr. A. S. Bannalikar Director of Research, MAFSU, Nagpur-440001	Member Secretary
3.	Dr. N. P. Dakshinkar, Dean, Faculty of Veterinary Science, MAFSU, Nagpur-440 001	Member
	Dr. A. S. Bannalikar, Dean, Faculty of Veterinary Science, MAFSU, Nagpur-440 001	
4.	Dr. A. P. Somkuwar, Director of Extension Education and Training, MAFSU, Nagpur-440001	Member
5.	Dr. N. N. Zade, Dean, Faculty of Lower Education, MAFSU, Nagpur-440001	Member
6.	Dr. P. T. Jadhao, Dean, Faculty of Fishery Science, MAFSU, Nagpur-440001	Member
7.	Dr. S. P. Changade, Dean, Faculty of Dairy Technology, MAFSU, Nagpur-440001	Member
8.	Dr. Dinesh T. Bhosle, Former Chairman CLAFMA, 228 Nariman Point, Mumbai – 400021	Member



9.	Dr. H. D. Sarma, SO(G), RBHSD Bhabha Atomic Research Centre, Bio-Science Group, Trombay, Bombay - 400085	Member
10.	Dr. D. D. Parkale, Managing Director, PunyashlokAhilyadevi Maharashtra MendhiVaSheli Vikas MahamandalLtd. Mendhi Farm, Pune – 411016	Member
11.	Dr. Arun Kumar Rawat, Director, Department of Biotechnology, Ministry of Science &Technology, Gol, New Delhi – 110003	Member
12.	Dr. Vijay Makhija, Member, Poultry Federation of India, Regional Marketing and Communication APAC-ANH, DSM Nutritional Products, Ambernath (E) Thane - 421501 (Mumbai)	Member
13.	Dr. R. D. Kokane, Member, Indian Diary Association, 167/A/5344, Kannamwar Nagar, Vikhroli (E), Mumbai- 400083	Member
14.	Dr. Manju Rahi, Scientist 'E', Epidemiology & Communicable Diseases, Indian Council of Medical Research, Department of Health Research Ministry of Health & Family Welfare, V. Ramalingaswami Bhawan, Ansari Nagar, New Delhi – 110029	Member
15.	Commissioner of Agriculture, Govt. of Maharashtra, Commissionerate of Agriculture, Central Building, 3 rd Floor, Pune - 411001	Member
16.	Commissioner of Animal Husbandry, Govt. of Maharashtra, Dept.of Animal Husbandry, Opposite Spicer College, Aundh, Pune- 411007	Member
17.	Commissioner of Dairy Development, Govt. of Maharashtra, New Administrative Building, Abdul Gaffar Khan Road, WorliSeaface, Mumbai - 400018	Member
18.	Commissioner of Fisheries, Govt. of Maharashtra, Taraporwala Aquarium, Netaji Subhash Road, Charni Road, Mumbai - 400002	Member
19.	Director of Research, Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, Ratnagiri - 415712	Member
20.	Director of Research, Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani - 431402	Member
21.	Director of Research, Mahatma PhuleKrishiVidyapeeth, Rahuri - 413722	Member
22.	Director of Research, Dr.Panjabrao Deshmukh Krishi Vidyapeeth, Akola - 444104	Member
23.	Associate Dean, Nagpur Veterinary College, Seminary Hills, Nagpur - 440006	Member
24.	Associate Dean, Bombay Veterinary College, Parel, Mumbai - 400 012	Member
25.	Associate Dean, College of Veterinary & Animal Sciences, Parbhani-431 402	Member
26.	Associate Dean, College of Veterinary & Animal Sciences, Udgir, Latur-413517	Member
27.	Associate Dean, KNP College of Veterinary Sciences, Shirwal, Dist. Satara-412 801	Member
28.	Associate Dean, PG Institute of Veterinary & Animal Sciences, Akola-444104	Member
29.	Associate Dean, College of Dairy Technology, Pusad, District Yeotmal-445 204	Member
30.	Associate Dean, College of Dairy Technology, Udgir, District Latur- 413 517	Member
31.	Associate Dean, College of Fishery Science, Telangkhedi, Nagpur - 440 001	Member
32.	Associate Dean, College of Fishery Science, Udgir, District Latur - 413 517	Member



3.E.2. EXTENSION AND CONTINUING EDUCATION COUNCIL

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

Extension and Continuing Education Council Members 2017-18

Sr. No.	Name & Designation	Status
1.	Prof. A. K. Misra, Hon'ble Vice-Chancellor, Maharashtra Animal & Fishery Sciences University, Nagpur- 440 001	Chairman
	Shri. Anoop Kumar (IAS), Hon'ble Vice-Chancellor, Maharashtra Animal & Fishery Sciences University, Nagpur- 440 001	
	Prof. A. M. Paturkar, Hon'ble Vice-Chancellor, Maharashtra Animal & Fishery Sciences University, Nagpur- 440 001	
2.	Dr. A. S. Bannalikar, Director (Research), MAFSU, Nagpur- 440001	Member
3.	Dr. N. P. Dakshinkar, Dean, Faculty of Veterinary Science, MAFSU, Nagpur-440001	Member
	Dr. A. S. Bannalikar, Dean, Faculty of Veterinary Science, MAFSU, Nagpur-440 001	
4.	Dr. P. T. Jadhao, Dean, Faculty of Lower Education, MAFSU, Nagpur-440006	Member
5.	Dr. S.P. Changade, Dean, Faculty of Dairy Technology, Warud, District : Yavatmal - 445 204	Member
6.	Dr. P .T. Jadhao, Dean, Faculty of Fishery Science, MAFSU, Nagpur-440006	Member
7.	The Secretary, Rural Development, M. S. Mantralaya, Mumbai - 400032	Member
8.	The Commissioner, Animal Husbandry(M.S.), Opp. Spicer Memorial College, Aundh, Pune	Member
9.	The Commissioner, Dairy Development, Worli Sea Face, Mumbai - 400018.	Member
10.	The Commissioner, Fisheries, Tarapurwala Aquarium, Marine Line, Mumbai-400002	Member
11.	The Commissioner, Agriculture(M.S.), Central Building, Pune-411001	Member
12.	Associate Dean, P. G. Institute of Animal & Veterinary Sciences, Akola - 444104	Member
13.	Associate Dean, Bombay Veterinary College, Mumbai-400012	Member
14.	Associate Dean, Nagpur Veterinary College, Nagpur-440006	Member
15.	Associate Dean, College of Veterinary & Animal Sciences, Parbhani - 431402	Member
16.	Associate Dean, College of Veterinary & Animal Sciences, Udgir, Dist. Latur-413517	Member
17.	Associate Dean, K.N.P. College of Veterinary Sciences, Shirwal, Dist-Satara-401802	Member
18.	Associate Dean, College of Dairy Technology, Warud, Yavatmal - 445 204	Member
19.	Associate Dean, College of Dairy Technology, Udgir, District Latur - 413 517	Member
20.	Associate Dean, College of Fishery Sciences, Nagpur – 440001	Member
21	Associate Dean, College of Fishery Sciences, Udgir, District Latur - 413 517	Member
22.	Director of Extension Education, Dr.Panjabrao Krishi Vidyapeeth, Akola - 444 004	Member
23.	Director of Extension Education Dr.Balasaheb Sawant Krishi Vidyapeeth, Dapoli, Distt - Ratnagiri - 415712	Member
24.	Director of Extension Education Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani.- 431402	Member



25.	Director of Extension Education Mahatma Phule Krishi Vidyapeeth, Rahuri, Dist. Ahmadnagar- 413722	Member
26.	Dr. Randhir Singh, Assistant Director General (Agri. Extension), ICAR, New Delhi	Member
27.	Dr. A. V. Harikumar, Senior Manager (AH), NDDDB, PB No. 40, Anand-388001 (Gujrat)	Member
28.	Shri. Chandramohan Nandanpanawar, Dy. Director (Prog.), Doordarshan Kendra, Worli Mumbai-400030	Member
29.	Dr. Dhananjay Parkale, Managing Director, Punyashloh Ahilyadevi Sheep & Goat Development Board, Pune	Member
30.	Dr. Dinesh T. Bhosale Past-Chairman of CLFMA of India, CLFMA of India, Nariman Point, Mumbai - 400 021	Member
31.	Dr. Ravindra Hari Patil Entrepreneur in Poultry Breeding & Hatchery Business, Jalgaon - 425002	Member
32.	Dr. G.S. Rajorhia, Vice President IDA, Urban Estate, Karnal-132 001	Member
33.	Shri. Nilkanth Vitthalrao Kodhe, Director Cooperative Society, At Sonapar, Post-Dhapewada, Tal-Kalmeshwar, Dist- Nagpur-441501	Member
34.	Mrs. Prajakta Suresh Dhas Director Women Cooperative Dairy Society, At post Jamgaon, Tal. Ashti, Dist. Beed-414203	Member
35.	Mrs. Kiran Umesh Mahalle 104, Sambhaji Nagar, Amravati-444603, Maharashtra	Member
36.	Dr. Rajendra Vadnere Director, School of Continuing Education, YCMOU, Nashik-422222	Member
37.	Dr. P. Sivaswaroop Regional Director, IGNOU, Regional Centre, Nagpur- 440033	Member
38.	Shri. Ashok Mankar 196, 'Krutarth', Medical Square, Untakhana, Nagpur-440 009	Member
39.	Dr. Sharad N. Bharsakale Shri Krupa Poultry Feed, F-38, MIDC, Amravati	Member
40.	Shri. Sunil Mansinghka Chief Coordinator, Go-Vigyan Anusandhan Kendra, Nagpur-440 032	Member
41.	Dr. Satender Singh Arya Chief Executive Officer, ASCI, K-59, South City 9, Gurgaon-122018 Agriculture Skill Council of India, K-59, South City 9, Gurgaon-122018	Member
42.	Dr. A. P. Somkuwar Director, Extension & Training, MAFSU, Nagpur-440001	Member Secretary



4

ESTABLISHMENT

Cadre wise list of teaching and non teaching post

4. A. ACADEMIC OFFICERS

Sr. No.	Establishment	Sanctioned	Filled	Vacant
1.	University Head Quarter, Nagpur	11	01	10
2.	Bombay Veterinary College, Mumbai	128	74	54
3.	Nagpur Veterinary College, Nagpur	109	68	41
4.	College of Veterinary & Animal Sci., Parbhani	116	59	57
5.	College of Veterinary & Animal Sci., Udgir	80	39	41
6.	KNP College of Veterinary Science, Shirval	85	46	39
7.	Post Graduate Institute of Vet & Ani. Sci., Akola	51	28	23
8.	College of Dairy Technology, Warud (Pusad)	36	28	08
9.	College of Dairy Technology, Udgir, Dist. Latur	18	07	11
10.	College of Fishery Science, Nagpur	16	10	06
11.	College of Fishery Science, Udgir	15	09	06
12.	Cattle Breeding Farm, Igatpuri	04	01	03
13.	Cattle Breeding Farm, Nagpur	04	04	00
14.	Cattle Breeding Farm, Udgir	04	02	02
15.	Cattle Breeding Farm, Borgaon Manju (Akola)	04	01	03
16.	University Sub-Centre, Udgir	04	03	01
17.	WRTC, Gorewada	09	00	09
	Total	694	380	314

4. B. NON TEACHING OFFICER / EMPLOYEES

Sr.No.	Establishment	Sanctioned	Filled	Vacant
1.	University Head Quarter, Nagpur	159	62	97
2.	Bombay Veterinary College, Mumbai	235	101	134
3.	Nagpur Veterinary College, Nagpur	163	78	85
4.	College of Veterinary & Animal Sci., Parbhani	163	40	123
5.	College of Veterinary & Animal Sci., Udgir	122	41	81
6.	KNP College of Veterinary Science, Shirval	143	57	86
7.	Post Graduate Institute of Vet & Ani. Sci., Akola	79	39	40
8.	Dairy Technology College, Warud (Pusad)	47	18	29
9.	Dairy Technology College, Udgir, Dist. Latur	18	01	17
10.	College of Fishery Science, Nagpur	22	12	10
11.	College of Fishery Science, Udgir, Dist. Latur	17	04	13
12.	Cattle Breeding Farm, Igatpuri	30	07	23
13.	Cattle Breeding Farm, Nagpur	30	11	19
14.	Cattle Breeding Farm, Udgir	25	09	16
15.	Cattle Breeding Farm, Borgaon Manju (Akola)	36	16	20
16.	University Sub-Centre, Udgir	13	05	08
17.	WRTC, Gorewada	11	00	11
	Total	1313	501	812

Total strength = (A+B) = 694 + 1313 = 2007



5

INTRODUCTION

5.A. BOMBAY VETERINARY COLLEGE, MUMBAI

Bombay Veterinary College was established in 1886, when British were ruling India. The college was established with the aim to create the human resource for treating the horses and thus the prime institute imparting veterinary education was established in Asia.

After independence, animal husbandry developed as the major allied sector for development of agricultural economy and the mandate of veterinary institutes revolved around the activities related to the upliftment of farmers and livestock owners.

Bombay Veterinary College possesses two campuses; Parel campus where the institute was established and Goregaon campus of 145 acres which was acquired in 1978 for expanding various activities. The activities of Parel campus comprise the post-graduate and doctoral studies whereas undergraduate courses are run at Goregaon campus. Parel campus is blessed with animal hospital affiliated to the institute maintained by BSCPA and has facilities for the inpatient animals. It provides rich clinical material and hands on practice to the post-graduate students.

Some of the priority areas of the research involve karyotyping of breeding bulls, housing systems for livestock, cardiovascular medicine, development of novel drug delivery systems, screening of herbal drugs for various activities in laboratory animals, utilizing non-conventional feed resources for enhancing productivity, developing novel molecular methods of diagnosis for parasitic infestations, stem cell research and zoonotic diseases. Institute also offers facilities for contract research for industries. In the recent years, excellent infrastructure development is brought about through the novel schemes, out of the funds flowing from Central & State Government funding agencies. This has enabled creating unique laparoscopy training centre for veterinarians and medical professionals, establishing livestock instructional farm, laboratory animals house, centre for studying genomics of breeding bulls, ultrasound unit for diagnosing early pregnancy in animals, blood bank, dialysis unit for animals, etc.

5.B. NAGPUR VETERINARY COLLEGE, NAGPUR

Nagpur Veterinary College, Nagpur was established in the year 1958. The college came under the umbrella of Maharashtra Animal & Fishery Sciences University, (MAFSU) Nagpur since 2001. At present, there are 17 departments involved in UG teaching. In addition, most of the departments are also having PG and Ph. D programme. The intake capacity of UG programme is 80 students. The Central Instrumentation Facility and Cell culture laboratory and animal house available are the other additional facilities for catering the research activities of the institute.

College has the unique facility of Remount Veterinary Corps (RVC), wherein training related to discipline and national security is imparted to the students. The experimental farms (cattle breeding farm and poultry farm) and stud farm attached to the college provides adequate opportunities to the students to acquire skills pertaining to management and health care aspects of livestock as well as poultry and equines.



In the recent past, ICMR and ICAR, New Delhi has funded a project on "Center for Zoonoses" under Niche Area of Excellence under the umbrella of this college, wherein infrastructure as well as instruments / equipments have been procured from the financial assistance received from the ICAR. Wildlife Research Training Centre has been established at Gorewada Zoo with sanction of manpower and necessary infrastructure. Similarly, Teaching Veterinary Clinical Complex with referral clinical hospital facility including critical care is being utilized by the livestock owners for treatment.

5.C. COLLEGE OF VETERINARY AND ANIMAL SCIENCES, PARBHANI

College of Veterinary and Animal Sciences, Parbhani was established in 1972 under Marathwada Agricultural University. Since its inception, the college is providing its services to the stakeholders like dairy farmers, poultry farmers, entrepreneurs, pet owners, concerned government & semi-government agencies along with imparting education for veterinary and animal sciences. Initially the college offered B.V.Sc. & A.H. degree programme of 4 years' duration, which was later extended to 4.5 years w.e.f. 1975 and 5 years after 10+2 pattern w.e.f. 1995-96 when Veterinary Council of India implemented uniform course curriculum all over the country. From 1976 onwards the College introduced Post-Graduate education, which took a full-fledged shape in 1979-80. With the formation of Maharashtra Animal & Fisheries Sciences University, Nagpur this college is now a constituent unit of MAFSU. The College is engaged in research, teaching and extension.

5.D. COLLEGE OF VETERINARY AND ANIMAL SCIENCES, UDGIR

The College of Veterinary and Animal Sciences, Udgir was established on 17th September 1987 under Marathwada Agriculture University, Parbhani. Since 1st April 2001, the college is functioning under Maharashtra Animal & Fishery Sciences University, Nagpur. MAFSU sub-centre was established in 2003. The campus is divided into Udgir, (where College building, Cattle Breeding Farm, MAFSU Sub-centre are located) and a small village, Sunegaon (Tq. Ahmedpur), (where an additional facility for animal sheds and mainly grassland is developed).

The college has started a new era of work by shifting from the old multi-purpose blocks, into the newly constructed building of three phases. The Clinical departments were shifted to New TVCC Building in April 2011, Para-clinical departments to 'B' block in Sept.2011 and remaining departments and Office of Associate Dean in December 2012.

In 2003, Post graduate programme was introduced in seven disciplines and in 2008 PG programme was also started in departments of Animal Reproduction and Animal Nutrition. From 2016 PG programme in all and PhD programme in some disciplines has been started.

Department of Science and Technology (DST), Govt.of India, New Delhi has sanctioned new project on Characterization and Evaluation of Non - Descript Goat Population of Marathwada and Western Maharashtra (25.70 lacs).

5.E. KRANTISINH NANA PATIL COLLEGE OF VETERINARY SCIENCE, SHIRWAL

Placed majestically on the picturesque background of hills of Sahyadris, Krantisinh Nana Patil College of Veterinary Science, Shirwal (KNPCVS) is one of the most rapidly growing Veterinary institute of Maharashtra Animal and Fishery Sciences University Nagpur. The institute has completed more than 28 years of its establishment and over the past two and half decades has made remarkable progress on all fronts especially in providing excellent academic environment to the students.

The academic performance of the students during the year 2017-18 as usual was excellent. Out of the 23 total students completing their B.V.Sc. & A.H. degree, 18 students were qualified for ICAR JRF.



The institute made a significant progress towards infrastructure development during the year under report. The institute also took up the work of campus beautification and as a part of this the duck pond, fountain and installation of mashal was all set in front of the TVCC building. Construction of main gate of college was going on. AICRP – National Research Centre on Pig (ICAR) was sanctioned to this institute in May 2017.

5.F. POST GRADUATE INSTITUTE OF VETERINARY & ANIMAL SCIENCES, AKOLA

Post Graduate Institute of Veterinary Science was established in the year 1970 under administrative and financial control of Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola (Agricultural University), running Post Graduate Programmes in eleven well equipped Departments. Consequent upon the establishment of Maharashtra Animal & Fishery Sciences University (MAFSU) at Nagpur, in the year 2000, these eleven departments were metamorphosed and started functioning as an independent constituent Institute of newly formed Maharashtra Animal and Fishery Sciences University, Nagpur and renamed as Post Graduate Institute of Veterinary and Animal Sciences (PGIVAS), Akola. The institute has 15.47 hectares of land for the premises viz. academic building, girl's hostel, livestock farms, library and TVCC.

PGIVAS, Akola imparts Post Graduate education (M.V.Sc.) in eleven disciplines and Ph.D. by course work in eight disciplines. PGIVAS, Akola and also have well developed and equipped laboratories alongwith Poultry Farm, Purnathadi Buffalo Instructional Unit and Teaching Veterinary Clinical Complex (TVCC). The institute has specialized laboratories like Molecular Genetics Laboratory, Embryo Transfer Technology Laboratory, Mineral Assay Laboratory, Methane Laboratory, Laboratory Animal House etc. PGIVAS has collaboration with several National institute and International institutes.

Presently there is one ongoing research project funded by RKVY as well as three agency sponsored projects with specific objectives. Institute has developed some novel technologies like Pelleted complete feed for goat, ETT calf production, diagnostic techniques developed for diagnosis of non-penetrating foreign body syndrome, development of herbal drugs for common illness, pathology of saline water drinking in livestock and poultry and area specific mineral deficiency in livestock

5.G. COLLEGE OF DAIRY TECHNOLOGY, WARUD (PUSAD)

The Government of Maharashtra, in 1992, sanctioned and established College of Dairy Technology at Warud (Pusad), Dist. Yavatmal under the Jurisdiction of Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola, with an initial intake capacity of 32 students. The regular activity of the College started from August 1992, in administrative building of Government Milk Scheme situated in MIDC area of Pusad. Later on, the work for the construction of temporary buildings in the premises of Agriculture School, Warud (Pusad) was undertaken and the College was shifted in July 1993. Simultaneously, a proposal was submitted to the Government covering the work of civil construction for Administrative Building, Roads, Laboratories, Hostels, Staff Quarters, Workshop, Guest House & Student Dairy Plant for the permanent establishment of the college on 15.68 ha land at Taluka Seed Farm, allotted to this College which was acquired in 1994. Government of Maharashtra vide letter No. 1496/PR254/20, dated 25/8/98 sanctioned 624.75 Lac and 82.20 Lac for the construction of Administrative Building and Student Dairy Plant respectively. Construction of the administrative building of the Institute was finished with the end of 2004 and college was shifted from temporary structure to the recent building. Construction of Students Training Dairy Plant was completed during 2006 for want of installation of pasteurization unit with pouching and sterilization setup was possible after reception of financial aid from ICAR in 2010. At present construction of Guest House and Girls Hostel is completed in premises of the college.

After 2004, college has headed towards overall progressive developments in educational facilities, amenities for students and staff, equipments in laboratories and facilities in improving teaching, research and extension.



Presently college is providing education in the field of Dairying by offering degree courses B. Tech (DT) and M. Tech. in disciplines of Dairy Chemistry, Dairy Technology, Dairy Engineering and Dairy Microbiology.

5.H. COLLEGE OF DAIRY TECHNOLOGY, UDGIR

Government of Maharashtra has established College of Dairy Technology, Udgir (Dist. Latur) on 8th of August 2008 under Marathwada Development Programme as a constituent college of Maharashtra Animal and Fishery Sciences University, Nagpur. The main aim of the institute is to enlighten and empower students by imparting advanced knowledge in the fields of dairy technology by adopting innovative, efficient and effective strategies. The college was started in the small structure belonging to College of Veterinary and Animal Science, Udgir and as temporary arrangement, services of teaching and non-teaching staff were pulled from College of Dairy Technology, Warud (Pusad). It was shifted on 26th Jan, 2010 to new structure. Within short span of time, the college acquired basic facilities required for B. Tech (Dairy Technology) degree programme.

The College is offering B. Tech (Dairy Technology), a four-year degree course based on ICAR pattern and having the intake capacity including ICAR is 36 students. The course curriculum is on the line of ICAR, New Delhi, which consist of 8 semesters covering one hands on training and an industrial training at multi-product dairy plant all over the country. Since the acceptance of V Dean's committee's recommendations (2016-17), the students are exposed under READY programme to experience various training aspects related to farm milk production practices in the cattle farm of veterinary college, for milk procurement systems the students are deputed to milk collection centers of co-operative and private organization. Also, students are handling and operating the equipments for milk processing, manufacturing of milk products and its marketing during their practical course and hands on training. Beside this for efficient education, institute provides facilities such as internet, intranet, website, sport grounds and its materials. Institute initiated various facilities for the students on no loss and no profit basis viz. transport, tea/Coffee, photocopy, lamination, spiral binding, Wifi campus, Optical Fiber Cable, CCTV, etc.

5.I. COLLEGE OF FISHERY SCIENCE, NAGPUR

The fisheries sector is a sunrise sector having potential to generate self-employment, especially for rural landless labours and marginal farmers having water resource and water bodies. The sector, is an important tool to alleviate rural poverty in rural areas. Keeping this in view, the Government of Maharashtra established the College of Fishery Science at Nagpur under the Maharashtra Animal and Fishery Sciences University (MAFSU), Nagpur in Oct. 2006. The college has been actively involved in intensifying 'Aquaculture' activities through dissemination of advanced fish-farming technologies amongst the rural farmers and unemployed youth of this region. The College of Fishery Science, Nagpur is a leading fisheries education institute in Vidarbha which has been instrumental in creating technical manpower in terms of professional fisheries graduates.

Baseline database of 75 fish species from selected 15 reservoirs of Nagpur district has been prepared. The work regarding preparation of action plan for "Development of Fisheries and Aquaculture in Vidarbha" was sanction to the College of Fishery Science by Vidarbha Development Board, Nagpur with a total outlay of Rs 23.10 lakh.

5.J. COLLEGE OF FISHERY SCIENCE, UDGIR

College of Fishery Science was established at Udgir, Dist. Latur (M.S.) in December 2006 under Maharashtra Animal & Fishery Sciences University, Nagpur. This college started with an aim of producing fisheries professionals to cater to the need of development of fisheries sector in the state. Total seven batches have been passed out from its inception.



Integrated Ornamental Fishery Unit and Value Added Fish Product Development Centre are established with financial assistance from National Fisheries Development Board, New Delhi. These units are established to conduct research and extension activities.

College of Fishery Science, Udgir offers four years Bachelor of Fishery Science (B.F.Sc.) degree course which includes total eight semesters. College has adopted the syllabus recommended by V Deans Committee year from academic year 2016-17. For final year students, "Hands on Training" programme is conducted at College and "In-plant Training" programme is conducted in private firms at places like Ratnagiri, Mumbai and Surat for getting practical knowledge under Fish Processing Technology module and Aquafarming module.

5.K. WILDLIFE RESEARCH & TRAINING CENTRE, NAGPUR

MAFSU established "Wildlife Research and Training Centre" at Gorewada Zoo and Rescue Centre, Nagpur. The central location of Nagpur Veterinary College, and the University head quarter, with adjoining various forest rescue areas, and the strength and contribution of the faculty members of the college in wildlife health management, the University signed a Memorandum of Understanding with the FDCM Ltd. for establishment of Wildlife Research & Training Centre at Gorewada Zoo & Rescue Centre, Nagpur. An ambitious project of around Rs. 18.73 crores have been approved by the Government of Maharashtra. A separate faculty (total 20 posts) have been proposed including Director (01- from Clinical departments), Deputy Directors (03- 01 each from Surgery, Medicine & Gynaecology), Subject Matter Specialists (05- 01 each from Surgery, Medicine, Gynaecology, Pathology & Biotechnology), Field Associates (02), Training Assistant (01) and supporting staff (08). A State of the Art Veterinary Hospital and Laboratory is proposed with ultramodern equipments costing around 9.00 Crores.

The major aim of the project is to provide inputs for *in-situ* and *ex-situ* conservation programme and health initiatives being presented to any population benefit consideration as well as issue relating to the viability and sustainability of services provided and preparation of database on diagnostic methods and healthcare. The objective is to undertake training of field vets and State Forest Department officers to have requisite technical competence in management of free ranging and captive wildlife.



6

EDUCATION

6.A. HIGHER EDUCATION

Maharashtra Animal and Fishery Sciences University is imparting five and halfyears degree as Bachelor of Veterinary Science and Animal Husbandry (B.V.Sc. & A.H.), as per minimum standards of Veterinary Education laid down by VCI in 2016, two years' master's degree as Master of Veterinary Science (M.V.Sc.) and Doctorate (Ph.D.) in all the disciplines of Veterinary Science. Similarly, four years' degree programme as Bachelor of Fishery Science (B.F.Sc.) is being imparted through Fishery Science Colleges and four years' degree programme as Bachelor of Technology (Dairy Technology) [B.Tech. (DT)] through Dairy Technology Colleges of the University, as per the recommendations of Vth Dean's Committee Report.

The students are not only pursuing degrees but also getting hands on training through internship training programme, fisheries industrial and rural work experience programme and in-plant trainings being implemented by various faculties. This has developed a dynamic system of education to train students and mould them into self-employers and entrepreneurs and to that extent develop its capacities both in terms of infrastructure and skills; with changing needs of society. The University is emphasizing to make it more skill-learning-based, problem-solving and self-exploratory so as to inculcate in the student's 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 current undergraduate and post-graduate courses to foreign nationals and NRIs.

6. A. 1. Faculty of Veterinary Science

Admission Strength, Admitted Students for B. V. Sc. & A. H. Degree Course for the year 2017-18

Cast Category	NVC, NAGPUR			BVC, MUMBAI			COVAS, PARBHANI			COVAS, UDGIR			KNPCVS, SHIRWAL			TOTAL		
Intake capacity	68+12*+1#			85+15*+3**+1#			68+12*+1#			54+10*+1#			51+9*+3**+1#			326+58*+6**+5#+10@		
Gender	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
SC	4	5	9	6	5	11	7	3	10	4	4	8	4	2	6	25	19	44
ST	2	3	5	3	3	6	2	2	4	2	2	4	2	2	4	11	12	23
VJ/DT(a)	3	0	3	2	1	3	2	1	3	1	1	2	2	0	2	10	3	13
NT(b)	1	2	3	0	0	0	1	1	2	1	0	1	2	1	3	5	4	9
NT(c)	2	0	2	3	1	4	2	2	4	5	1	6	4	1	5	16	5	21
NT(d)	2	1	3	3	0	3	4	2	6	2	1	3	2	1	3	13	5	18
OBC	20	7	27	10	10	20	11	6	17	7	4	11	11	4	15	59	31	90
UR	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	2	0	2
NRI/FN/PIO- HSSC studied in India	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NRI/FN/PIO- HSSC studied Abroad	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1

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GOA**	0	0	0	1	2	3	0	0	0	0	0	0	1	2	3	2	4	6
J&K#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NRI / FN / PIO@	2	1	3	4	1	5	1	0	1	0	0	0	0	0	0	7	2	9
VCI*	5	1	6	4	0	4	4	0	4	5	0	5	5	1	6	23	2	25
Total	52	26	78	57	40	97	51	22	73	42	17	59	39	21	60	241	126	367

M=Male, F= Female, T = Total VCI*, Goa**, J&K#, NRI/FN/PIO@

PIO: Person of Indian Origin NRI: Non Resident Indian FN: Foreign National UR: Unreserved

6. A. 2. Faculty of Dairy Technology

Admission Strength, Admitted Students for B. Tech (DT) Degree Course for the year 2017-18

Caste Category	CDT, UDGIR			DTC, WARUD			TOTAL		
	Intake Capacity			32+1#			27+1#+5*		
Gender	M	F	T	M	F	T	M	F	T
SC	3	1	4	3	1	4	6	2	8
ST	1	1	2	2	0	2	3	1	4
VJ/DT(a)	0	1	1	1	2	3	1	3	4
NT(b)	1	0	1	0	0	0	1	0	1
NT(c)	2	0	2	1	1	2	3	1	4
NT(d)	2	0	2	0	0	0	2	0	2
OBC	4	6	10	7	2	9	11	8	19
SBC	0	0	0	0	0	0	0	0	0
UNRESERVED	9	1	10	8	3	11	17	4	21
NRI / FN / PIO	0	0	0	1	1	2	1	1	2
ICAR	0	0	0	1	0	1	1	0	1
Total	22	10	32	24	10	34	46	20	66

M=Male, F= Female, T = Total J&K#, * ICAR, NRI/FN/PIO@

6. A. 3. Faculty of Fishery Science

Admission Strength, Admitted Students for B. F. Sc. Degree Course for the year 2017-18

Category	COFS, NAGPUR			COFS, UDGIR			TOTAL		
	Intake Capacity			32+1#			64+2#+10@		
Gender	M	F	T	M	F	T	M	F	T
SC	5	1	6	1	3	4	6	4	10
ST	1	2	3	2	1	3	3	3	6
VJ/DT(a)	1	0	1	2	0	2	3	0	3
NT(b)	1	0	1	1	1	2	2	1	3
NT(c)	0	1	1	1	0	1	1	1	2
NT(d)	1	1	2	0	1	1	1	2	3
OBC	8	6	14	4	3	7	12	9	21
SBC	0	0	0	1	0	1	1	0	1
Unreserved	1	3	4	6	4	10	7	7	14
ICAR-MAFSU	0	0	0	0	0	0	0	0	0
Total	18	14	32	18	13	31	36	27	63

J&K# and NRI/FN/PIO@



6.A.4. Faculty of Veterinary Science

Post Graduate Admission strength, Admitted students for M. V. Sc. Degree Course for the year 2017-18

Cast Category	NVC, NAGPUR			BVC, MUMBAI			COVAS, PARBHANI			COVAS, UDGIR			KNPCVS, SHIRWAL			PGIVAS, AKOLA			TOTAL						
	Intake Capacity			28+9*+2@+4#			39+12*+3@+1#			35+11*+1@+1#			26+4*+1@+1#			34+2@+1#			36+1@+4#			198+36*10@+12#			
Gender	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	
SC	2	2	4	3	3	6	3	1	4	0	2	2	1	2	3	1	4	5	10	14	24				
ST	0	1	1	0	1	1	1	1	2	0	0	0	1	0	1	0	0	0	2	3	5				
VJ/DT(a)	0	0	0	0	0	0	1	0	1	1	0	1	1	0	1	0	1	1	1	3	1	4			
NT(b)	0	0	0	1	0	1		0	0	2	0	2	0	0	0	1	0	1	4	0	4				
NT(c)	0	0	0	2	0	2	1	1	2	1	0	1	1	0	1	0	1	1	5	2	7				
NT(d)	0	0	0	1	0	1	2	1	3	0	0	0	1	0	1	1	0	1	5	1	6				
OBC	3	3	6	2	4	6	2	1	3	1	1	2	3	1	4	5	1	6	16	11	27				
UNRESERVED	4	3	7	7	10	17	5	5	10	1	0	1	5	3	8	6	4	10	28	25	53				
NRI/FN/PIO Quota	1	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2				
ICAR	2	5	7	2	4	6	2	0	2	0	1	1	0	0	0	0	0	0	6	10	16				
ICAR Quota (SML)	0	1	1	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3				
Total	12	15	27	20	23	43	17	10	27	6	4	10	13	6	19	14	11	25	82	69	151				

* ICAR, #State Govt In-service, @NRI/FN/PIO

6.A.5. Faculty of Veterinary Science

Admission Strength, Admitted Students for Ph.D. Degree Course

Cast Category	NVC, NAGPUR			BVC, MUMBAI			COVAS, PARBHANI			PGIVA, AKOLA			KNPCVS, SHIRWAL			COVAS, UDGIR			TOTAL						
	Intake Capacity			20+3*=23			22+5*=27			9+1*=10			10			6			5			72+9*+10@			
Gender	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	
SC	0	2	2	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2	4		
ST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
VJ/DT(a)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
NT(c)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
NT(d)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
OBC	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2		
UNRESERVED	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1		
ICAR Quota*	0	1	1	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3		
Total	1	4	5	4	0	4	1	0	1	0	0	0	0	0	0	0	0	0	0	6	4	10			

* ICAR, and @NRI/FN/PIO

6.A.6. Degrees Awarded / Presented

B.V. Sc. & A. H.

Name of College	Open		OBC		SC		ST		VJ/DT/NT		SBC		Total		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
Gender															
BVC, Mumbai	15	12	10	07	03	07	03	00	07	03	00	00	38	29	67
NVC, Nagpur	16	19	04	03	05	05	01	01	02	01	00	01	28	30	58
COVAS, Parbhani	14	09	09	04	05	03	00	00	09	00	00	00	37	16	53
KNPCVS, Shirval	07	03	05	01	01	02	01	01	05	02	00	00	19	09	28
COVAS, Udgir	06	03	03	02	01	00	00	00	04	00	00	00	14	05	19
Total	58	46	31	17	15	17	05	02	27	06	00	01	136	89	225



B. Tech (D.T.)

Name of College	Open		OBC		SC		ST		VJ/DT/NT		SBC		Total		
	Gender	M	F	M	F	M	F	M	F	M	F	M	F	M	F
CDT, Warud	05	02	05	03	05	04	01	00	04	02	01	00	21	11	32
DTC, Udgir	11	00	07	00	01	01	01	00	06	00	00	00	26	01	27
Total	16	02	12	03	06	05	02	11	10	02	01	00	47	12	59

B.F.Sc.

Name of College	Open		OBC		SC		ST		VJ/DT/NT		SBC		Total		
	Gender	M	F	M	F	M	F	M	F	M	F	M	F	M	F
COFS, Nagpur	01	01	02	01	02	02	01	03	01	00	01	00	08	07	15
COFS, Udgir	05	01	04	00	03	01	00	00	02	01	00	00	14	03	17
Total	06	02	06	01	05	03	01	03	03	01	01	00	22	10	32

M.V.Sc.

Name of College	Open		OBC		SC		ST		VJ/DT/NT		SBC		Total			
	Gender	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
NVC, Nagpur	3	5	2	1	0	2	1	1	1	0	0	0	0	7	9	16
BVC, Mumbai	4	13	2	2	2	0	2	0	4	0	0	0	0	14	15	29
COVAS, Parbhani	6	3	3	4	1	1	0	0	8	2	0	0	0	18	10	28
PGIVAS, Akola	4	3	2	1	0	0	1	1	1	0	0	0	0	8	5	13
KNPCVS, Shirwal	3	1	1	1	0	0	0	0	1	1	0	0	0	5	3	8
COVAS, Udgir	3	1	0	0	1	0	0	0	1	0	0	0	0	5	1	6
Total	23	26	10	9	4	3	4	2	16	3	0	0	57	43	100	

Ph.D.

Name of College	Open		OBC		SC		ST		VJ/DT/NT		SBC		Total			
	Gender	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
NVC, Nagpur	1	2	2	0	2	1	1	0	1	0	0	0	0	7	3	10
BVC, Mumbai	2	0	0	0	1	0	1	0	1	0	0	0	0	5	0	5
COVAS, Parbhani	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1
PGIVAS, Akola	2	0	0	0	0	0	0	0	0	0	0	1	0	3	0	3
KNPCVS, Shirwal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COVAS, Udgir	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	2	2	0	4	1	2	0	2	0	1	0	16	3	19	

6.B. LOWER EDUCATION

The Faculty of Lower Education of Maharashtra Animal & Fishery Sciences University, Nagpur, was established on 10.02.2002 as per University Act 1998 chapter six sr. no. 36, 37 and 38. After establishment Faculty of Lower Education under this university, 42 diploma schools from four Agriculture Universities in Maharashtra State were transferred to this University.

Forty non granted private diploma schools were running Dairy Management and Animal Husbandry (DMAH) diploma course and two granted Arey and Dapchery diploma institutes are of Dairy Development Department, Govt. of Maharashtra imparting Diploma in Dairy Technology. Only academic matter is under control of this university. Dapchery diploma institute was transferred in closed condition. Presently one diploma institute, Arey Mumbai is imparting diploma which is after 12th standard with English medium.



In addition to above 40 non-granted private diploma schools which were transferred to this University, permission was given to new other 112 non-granted private diploma schools during the year 2002 - 2003. Thus the two year DMAH diploma course was running throughout the Maharashtra State.

The University had discontinued the Dairy Management and Animal Husbandry diploma course from the academic year 2006 – 07 at the behest of Hon’ble Supreme Court judgment on the plea of VCI. The new two-year diploma, Livestock Management and Dairy Production (LMDP) has been started from 2006-07 in Marathi language after passing S. S. C. Examination. This diploma course has been started with a view to start self employment and to create the semi technical supporting manpower in livestock sector.

From the academic year 2013-14, the syllabus of LMDP diploma course has been little modified by inclusion of 200 marks Artificial Insemination subject in second year of diploma curriculum.

Diploma schools of private education societies are imparting LMDP diploma course. Seven constituent veterinary / dairy technology colleges of this university are coordinating centers for controlling activities of lower educational diploma schools. These coordinating centers are assisting Lower Education Faculty for admissions, examination, result declaration, diploma certificate distribution, fees deposition, re-recognition to diploma schools and monitoring all other academic activities related to diploma schools.

Student intake capacity/admitted/received diploma:

Sr No	Region/ constituent college	Number of schools (2017-18)	Student intake capacity / admitted (1 st yr) (2016-17)		Number of students received diploma in year (2018)
			intake capacity	admitted	
1	7 Colleges	101	101x60= 6060	4603	2751

Students on Roll (Lower Education) (year-wise):

Category	I st year		II nd year	
	Male	Female	Male	Female
Open	895	42	716	32
OBC	760	81	667	69
SC	969	211	734	195
ST	352	58	279	62
VJ/DT (a)/NT	1116	119	888	78
Total	4092	511	3284	436

Distribution of Lower Education schools -

Throughout the Maharashtra State 103 diploma schools were awarded recognition to run the diploma course of Lower Education for the academic year 2017-18.

(i) Constituent colleges wise distribution of schools

Sr.No.	Controlling Veterinary / Dairy Colleges	Schools
1	Nagpur Veterinary College, Nagpur	15
2	Bombay Veterinary College, Mumbai	16
3	KNP, College of Veterinary Scince, Shirwal	17
4	College of Veterinary & Animal Sciences, Parbhani	19
5	College of Veterinary & Animal Sciences, Udgir	14
6	Post Graduate Institute of Veterinary & Animal Sciences, Akola	14
7	College of Dairy Technology, Warud (Pusad)	06
	Total	101



(ii) Region and District wise distribution of schools

Sr.No.	Region	Region / District wise distribution of diploma schools	Schools
1	Nagpur	Nagpur	03
2	Nagpur	Wardha	01
3	Nagpur	Bhandara	05
4	Nagpur	Gondia	04
5	Nagpur	Gadchiroli	01
6	Nagpur	Chandrapur	01
		Total - 15	
7	Amravati	Yavatmal	03
8	Amravati	Amravati	04
9	Amravati	Akola	04
10	Amravati	Washim	01
11	Amravati	Buldhana	02
		Total - 14	
12	Nashik	Dhule	02
13	Nashik	Nashik	04
14	Nashik	Jalgaon	03
		Total - 09	
15	Mumbai	Thane	01
16	Mumbai	Raigarh	01
17	Mumbai	Sindudurg	01
		Total - 03	
18	Pune	Pune	02
19	Pune	Satara	04
20	Pune	Kolhapur	05
21	Pune	Sangli	05
22	Pune	Solapur	01
		Total - 17	
23	Aurangabad	Aurangabad	06
24	Aurangabad	Ahmadnagar	12
25	Aurangabad	Jalna	02
26	Aurangabad	Hingoli	03
27	Aurangabad	Parbhani	01
		Total - 24	
28	Latur	Beed	04
29	Latur	Nanded	07
30	Latur	Osmanabad	03
31	Latur	Latur	05
		Total - 19	
		Grand Total	101

6.C. SCHOLARSHIPS / FELLOWSHIPS

Scholarships/Fellowships are awarded to as many students as possible. Following are details for the year 2017-18. The Department of Science and Technology, Govt. of India is providing inspiration scholarship. Besides, private organizations are also providing scholarship to the students.



• **Bombay Veterinary College, Mumbai**

Sr.No.	Name of Scholarship / Free-ship	Number of Students		Total Amount (Rs.)
		Boys	Girls	
1.	VJNT-GOI Scholarship	20	6	5,69,585
2.	ST--GOI Scholarship	4	3	1,98,545
3.	SC--GOI Scholarship	16	11	7,79,930
4.	OBC--GOI Scholarship	21	4	5,29,870
5.	VJDT-GOI Freeship	6	4	1,14,745
6.	ST--GOI Freeship	5	4	1,94,745
7.	SC--GOI Freeship	9	14	47,945
8.	OBC--GOI Freeship	10	21	5,73,225
9.	SBC- GOI Freeship	1	-	24,505
10.	NTS	19	8	4,84,000
11.	Minority	2	-	66,900
12.	Private scholarship	2	-	43,350
	Total	115	75	40,58,850

• **Nagpur Veterinary College, Nagpur**

Sr.No.	Name of Scholarship / Free-ship	Numbers of Students		Total Amount (Rs.)
		Boys	Girls	
1	VJNT-GOI Scholarship	16	17	2,48,715
2	ST--GOI Scholarship	05	02	1,78,000
3	SC--GOI Scholarship	11	15	2,89,210
4	OBC--GOI Scholarship	39	18	1,32,560
5	VJDT-GOI Freeship	16	07	1,40,175
6	ST--GOI Freeship	02	07	1,75,000
7	SC--GOI Freeship	13	07	1,66,765
8	OBC--GOI Freeship	07	13	6,07,955
9	SBC- GOI Freeship	01	03	30,715
10	NTS	25	07	8,15,000
11	Private scholarship - Dr. Babasaheb Ambedkar Research Fellowship for SC Candidates to persueM.Phil/ Ph.D Degree	---	02	6,00,000
	Total	135	98	33,55,380

• **College of Veterinary and Animal Sciences, Parbhani**

Sr.No.	Name of Scholarship/ Free-ship	Number of Student		Total Amount (Rs.)
		Boys	Girls	
1	VJNT-GOI Scholarship	22	16	8,09,895
2	ST--GOI Scholarship	09	02	3,30,545
3	SC--GOI Scholarship	25	15	12,19,570
4	OBC--GOI Scholarship	34	09	8,93,215
5	SBC--GOI Scholarship	01	-	23,025
6	VJDT-GOI Freeship	11	07	3,56,320
7	ST--GOI Freeship	-	03	81,615
8	SC--GOI Freeship	03	07	2,13,245



9	OBC--GOI Freeship	05	12	3,20,070
10	SBC- GOI Freeship	01	-	18,350
11	NTS	10	02	1,95,000
12	Minority	03	01	86,700
Total		124	74	45,47,550

• **College of Veterinary and Animal Sciences, Udgir**

Sr.No.	Name of Scholarship / Free-ship	Number of Students		Total Amount (Rs.)
		Boys	Girls	
1	VJNT-GOI Scholarship	21	09	7,19,440
2	ST--GOI Scholarship	07	02	1,85,485
3	SC--GOI Scholarship	12	11	7,01,600
4	OBC--GOI Scholarship	19	07	5,77,330
5	SBC--GOI Scholarship	01	01	47,450
6	VJDT-GOI Freeship	03	02	1,24,200
7	SC--GOI Freeship	03	03	1,54,950
8	OBC--GOI Freeship	06	06	2,50,100
9	SBC- GOI Freeship	01	-	20,650
10	NTS	09	02	1,95,000
Total		82	23	29,76,205

• **Krantisinh Nana Patil College of Veterinary Science, Shriwal**

Sr.No.	Name of Scholarship / Free-ship	Number of Students		Total Amount (Rs.)
		Boys	Girls	
1	VJNT-GOI Scholarship	19	08	8,44,990
2	ST--GOI Scholarship	04	02	1,38,800
3	SC--GOI Scholarship	01	03	1,00,650
4	OBC--GOI Scholarship	16	07	4,67,090
5	SBC--GOI Scholarship	02	01	46,770
6	VJDT-GOI Freeship	03	05	25,29,900
7	ST--GOI Freeship	02	-	30,230
8	SC--GOI Freeship	06	05	3,73,600
9	OBC--GOI Freeship	11	05	3,07,840
10	Private scholarship	04	-	40,000
Total		64	36	48,79,870

• **Post Graduate Institute of Veterinary & Animal Sciences, Akola**

Sr. No.	Name of Scholarship / Free-ship	Number of Students		Total Amount (Rs)
		Boys	Girls	
1.	ST--GOI Scholarship	01	--	23,055
2.	SC--GOI Scholarship	--	01	23,055
Total		01	01	46,110

• **College of Dairy Technology, Warud (Pusad)**

Sr.No.	Name of Scholarship / Free-ship	Number of Students		Total Amount (Rs.)
		Boys	Girls	
1	VJNT-GOI Scholarship	08	04	2,44,465
2	ST--GOI Scholarship	03	--	81,715



3	SC--GOI Scholarship	09	06	3,34,750
4	OBC--GOI Scholarship	20	07	5,45,955
5	SBC--GOI Scholarship	01	--	19,010
6	VJDT-GOI Freeship	04	03	1,45,550
7	ST--GOI Freeship	02	03	72,725
8	SC--GOI Freeship	01	--	17,305
9	OBC--GOI Freeship	05	03	94,890
10	NTS	02	01	62,645
11	Minority	06	02	2,00,000
	Total	61	29	18,19,010

• College of Dairy Technology, Udgir

Sr.No.	Name of Scholarship / Free-ship	Number of Students		Total Amount (Rs.)
		Boys	Girls	
1	VJNT-GOI Scholarship	13	04	3,15,280
2	ST--GOI Scholarship	00	01	30,955
3	SC--GOI Scholarship	09	02	2,48,215
4	OBC--GOI Scholarship	17	07	4,79,480
5	VJDT-GOI Freeship	03	02	96,210
6	SC--GOI Freeship	00	02	30,210
7	OBC--GOI Freeship	00	03	55,650
8	NTS	05	00	1,00,000
9	Minority	02	01	35,000
	Total	49	22	13,91,000

• College of Fishery Science, Nagpur

Sr.No.	Name of Scholarship / Free-ship	Number of Students		Total Amount (Rs.)
		Boys	Girls	
1	VJNT-GOI Scholarship	4	1	64,135
2	ST--GOI Scholarship	1	1	41,720
3	SC--GOI Scholarship	8	5	2,26,475
4	OBC--GOI Scholarship	11	8	2,09,115
5	SBC--GOI Scholarship	2	2	36,570
6	VJDT-GOI Freeship	0	2	30,710
7	ST--GOI Freeship	1	0	5,422
8	SC--GOI Freeship	1	1	30,710
9	OBC--GOI Freeship	2	6	1,22,840
10	NTS	1	1	6,000
	Total	31	27	8,27,697

• College of Fishery Science, Udgir (Latur)

Sr.No.	Name of Scholarship/Free-ship	Number of Students		Total Amount (Rs.)
		Boys	Girls	
1.	VJNT-GOI Scholarship	12	03	2,31,285
2.	ST--GOI Scholarship	01	01	36,210
3.	SC--GOI Scholarship	08	03	1,43,155
4.	OBC--GOI Scholarship	08	09	2,17,525
5.	VJDT-GOI Freeship	00	01	21,455
6.	ST--GOI Freeship	02	00	33,561



7.	SC--GOI Freeship	03	03	1,00,680
8.	OBC--GOI Freeship	04	03	1,11,235
9.	SBC- GOI Freeship	00	01	12,105
	Total	39	24	9,31,211

All India Entrance Examination for PG admissions

The results of the students from the University who have graduated and appeared for PG admissions for All India Entrance Examinations to the PG programme conducted by ICAR is given below.

Name of College	Qualified for JRF	Qualified for SRF	Student receiving JRF	Student receiving SRF
BVC, Mumbai	3	-	-	-
NVC, Nagpur	14	Nil	01	Nil
COVAS, Parbhani	Nil	03	Nil	02
COVAS, Udgir	01	Nil	01	Nil
KNPCVS, Shirwal	18	Nil	Nil	Nil
PGIVAS, Akola	Nil	Nil	Nil	Nil
CDT, Warud	09	Nil	02	Nil
CDT, Udgir	02	Nil	02	Nil
COFS, Nagpur	(02) CIFE, Mumbai, Institutional Fellowship	Nil	Nil	Nil
COFS, Udgir	04	NA	Nil	NA

6.D. HOSTEL ACCOMMODATION

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 existing capacities of existing hostels.

Students Accommodated in Hostels.

Name of Colleges	Boys Hostel			Girls Hostel		
	Name of Hostel	No. of rooms	No. of students	Name of Hostel	No. of rooms	No. of students
BVC, Mumbai	U.G. Hostel, Parel Campus	30	98	Girls Hostel, Parel	12	23
	P.G. Hostel, Parel Campus	43	52	Girls Hostel, Goregaon	16	68
NVC, Nagpur	UG Hostel	104	170	Old Hostel	16	41
	PG Hostel	16	24	Babujagjivanram New Girls Hostel	129	82
COVAS, Parbhani	U.G. Hostel (Gokul)	94	138	Vrundavan	62	96
	P.G. Hostel (Gokul)	28	29			19
COVAS, Udgir	U.G. Hostel	60	98	----	----	----
KNPCVS, Shriwal	Subhanmangal Boys Hostel	78	120	Krantijyoti Girls Hostel	21	60



PGIVAS, Akola	P. G. Hostel	-	-	Rajmata Jijau Girls Hostel	10	19
DTC, Warud	Aadinath Boys Hostel	09	43	Mauli Girls Hostel	08	11
COFS, Nagpur	----	----	----	Babu Jagjivanram New Girls Hostel	09	18

6.E. LIBRARY

Central library facility is available at MAFSU headquarter, Nagpur which furnishes the need of students of Nagpur Veterinary College, Nagpur, College of Fishery Science, Nagpur and students from other constituent colleges.

Sr. No.	Name of College	Item	Number of Books Available	New Books Purchased / Added	Amount Spent (Rs.)
1.	MAFSU Library, Nagpur	Books	33,306	1,464	29,18,11
		Journals	66	56	12,42,692
		Other Publications (Thesis & Bound Volumes)	7,972	123	-
		Electronic Database	* CD – Rom Databases: – VET, BEST, FSTA * FSTA (1969 to March, 2017 CD)	-	-
2	BVC, Mumbai	Books	20,339	329	5,00,000/-
		Journals	Nil	Nil	-
		Other Publications	7357	42	-
		Electronic Database	142	-	-
3	COVAS, Parbhani	Books	8865	345	2,00,000/-
		Journals	18	18	-
		Other Publications	795	26	-
		Electronic Database	2	-	-
4	COVAS, Udgir	Books	6891	202	2,00,000
		Journals	-	-	-
		Other Publications	319	-	-
		Electronic Database	-	-	-
5	KNPCVS, Shirwal	Books	7112	0194	63,788
		Journals	06	00	00
		Other Publications	263	68	00
		Electronic Database	00	00	00
6	PGIVAS, Akola	Books	2497	-	-
		Journals	06	-	-
		Other Publications	337	-	-
		Electronic Database	22	-	-
7	CDT, Warud	Books	7455	461	2,00,000
		Journals	08	NIL	NIL



		Other Publications	140	--	--
		Electronic Database	--	--	--
8	CDT, Udgir	Books	3844	--	--
		Journals	17	9	18,574
		Other Publications	-	-	-
		Electronic Database	-	-	-
9	COFS, Udgir	Books	3941	75	2,075
		Journals	02	-	-
		Other Publications	-	-	-
		Electronic Database	-	-	-

6.F. INFRASTRUCTURE / EQUIPMENTS

- **Bombay Veterinary College, Mumbai**

Sr. No.	Infrastructure/Name of Equipments	Amount (Rs. in Lakhs)	Name of Agency/Scheme
1	Monocular Microscopes	3.34	RKVKY
2	Binocular Microscope with Camera	4.33	RKVKY
3	ELISA Reader with Washer	2.41	RKVKY
4	Electrolyte Analyser	1.79	RKVKY
5	Somatic Cell Counter	7.90	RKVKY
6	Atomic Absorption Spectrophotometer	19.70	RKVKY
7	RT-PCR	10.81	RKVKY
8	Haematology Analyser	7.96	RKVKY
9	Refrigerated Centrifuge	4.99	RKVKY
10	Ultra Low Freezer -80°C	4.92	RKVKY
11	UV Spectrophotometer	5.97	RKVKY
12	Analytical Weighing Balance	3.74	RKVKY
13	Urine Analyser	1.98	RKVKY
14	Water Purification System	2.98	RKVKY
15	Auto Analyser	2.95	RKVKY
16	Coagulometer	1.97	RKVKY
17	Computers with servers	1.24	ICAR
18	Nano Drop Machine (Spectrophotometer)	3.69	ICAR
19	Hot air oven	0.99	ICAR
20	Deep Freezer -80°C	4.88	Monitoring of Drug Residues & Environmental Pollutants 2017-18
21	Office Furniture	0.54	Lower Education
22	Service meter	0.89	ICAR
23	Laminar air Flow (Vertical)	0.99	ICAR
24	Student Microscope (no. 5) with micrometer	1.07	ICAR
25	Stereozoom microscope	0.99	NIF-DST scheme
26	Binocular compound microscope	0.62	Agency scheme
	Total	103.64	



• Nagpur Veterinary College, Nagpur

Sr. No.	Infrastructure/Name of Equipments	Amount (Rs. in Lakhs)	Name of Agency/Scheme
1	Refrigerated Microcentrifuge	1.90	Revolving Fund Scheme ICMR ICMR ICAR ICAR ICAR ICAR ICAR ICAR ICAR ICAR ICAR ICAR ICAR ICAR ICAR ICAR ICAR ICAR RKVY Project Resource Generation of the Department Resource Generation of the Department
2	PCR machine	3.00	
3	Electrophoresis unit	1.50	
4	Gel documentation unit	4.46	
5	CO2 Incubator	4.48	
6	Incubator-O ₂ ,CO ₂ ,N ₂	4.48	
7	Binocular Microscope	0.88	
8	Compact Benchtop Cooling Centrifuge 'Remi'	0.94	
9	Urine Analyser	0.54	
10	Deep Freezer 170 lit. Cellfrost	0.51	
11	Geneamp Thermo cycler	1.70	
12	Ophthalmic microscope and ophthalmic surgical instruments set complete	18.74	
13	Hydraulic operation table for large animals (s.s)	19.55	
14	Biochemical Analyzer	5.53	
15	C-arm x-ray for small animals with accessories	9.62	
16	Echocardiogram	9.37	
17	Color Doppler with transducers, thermal printer, biopsy guide instruments	16.40	
18	Holter ECG machine	3.72	
19	Haematology cell counter	6.42	
20	Large animal inhalation anaesthesia unit with ventilator with different vaporizers	17.89	
21	Complete unit of Laparoscope with light source, insufflation unit, Electrocautery, instruments CCTV and camera (video monitoring)	30.39	
22	Bronchoscope, Urethrocystoscope, Oesophagoscopy set for small animals with all accessories.	27.25	
23	Laser surgical unit compete set with accessories.	22.57	
24	Portable blood gas, electrolytes and critical care analyzer	6.87	
25	Laboratory Microscope Trinocular with camera	4.94	
26	Digital Podium for Training Hall (01 No.)	2.44	Resource Generation of the Department
27	Green Writing Board (02 No.) and Universal Projector Kit (02 No.) for Training Hall and Group Discussion Chamber cum U.G. Laboratory	0.37	Resource Generation of the Department
28	Development of Multicolour Rolling Posters for UG, PG Teaching and Farmer's Training	0.49	ICAR
29	Development of Laminated ColourPhoto Blowup for UG, PG Teaching and Farmer's Training	0.48	ICAR
	Total	227.43	



• **College of Veterinary & Animal Sciences, Parbhani**

Sr. No.	Infrastructure/Name of Equipments	Amount (Rs. in Lakhs)	Name of Agency/Scheme
1	Nikon Make E-100 Binocular Microscopes (4)	2.99	Star College Scheme funded by DBT New Delhi
2	SMZ745 Zoom Stereoscopic microscope (1)	1.75	Star College Scheme funded by DBT New Delhi
3	Zoom Stereoscope (1)	4.20	DBT research project
4	Laminar Flow(1)	1.00	DBT Research Project
5	LCD projector with screen and stand	0.75	ICAR funds
6	Gradient Thermal Cycler – PCR	2.99	DBT- Star college scheme
7	Renovation & Repairs of lecture hall No. 1, 2, 3 & 4 at COVAS, Parbhani	1.44	ICAR funds
8	Renovation & Repairs of Main Toilet block & Ladies Toilet block COVAS, Parbhani	2.28	ICAR funds
9	Repairs of Boys Hostel (Gokul) at COVAS, Parbhani (Work in progress)	66.00	ICAR funds
	Total	69.72	

• **College of Veterinary & Animal Sciences, Udgir**

Sr. No.	Infrastructure/Name of Equipments	Amount (Rs. in Lakhs)	Name of Agency/Scheme
1	Autoclave Vertical	0.74	College Revenue Receipt
	Total	0.74	

• **KNP College of Veterinary Science, Shirwal**

Sr. No.	Infrastructure/Name of Equipments	Amount (Rs. in Lakhs)	Name of scheme/ Budget received from
1	Kel Plus-Distyl EM	1.50	The Associate Dean, KNPVC, Shirwal
2	Sartorius Electronic Weighing Balance	0.78	The Associate Dean, KNPVC, Shirwal
3	Construction of Pig Shed	35.00	
4	B.O.D.Incubator	1.49	
5	Desktop and Printer	0.59	
6	Post Mortem Instrument Sets	0.70	
7	Post Mortem Table of Stainless steel make	0.70	
8	High Pressure Water Pumps for Cleaning of Post Mortem Hall	0.30	
9	Binocular Research Microscope for Diagnosis of Diseases from PM cases	0.86	
10	Heavy duty Battery operated Post Mortem Bone Saw for field use.	0.73	
	Total	42.65	Funds provided by MAFSU, Nagpur for strengthening of infrastructure of Post mortem facility.



- Post Graduate Institute of Veterinary & Animal Sciences, Akola

Sr. No.	Infrastructure/Name of Equipments	Amount (Rs. in Lakhs)	Name of Agency/Scheme
1	Electrolyte analyser	0.94	Revenue receipt
2	Semiautomatic clinical chemistry analyser	0.84	Revenue receipt
3	Inhalentanaesthetic machine with sevoflurane vaporizer	1.20	Revenue receipt
		Total	2.98

- College of Dairy Technology, Warud(Pusad)

Sr. No.	Infrastructure/Name of Equipments	Amount (Rs. in Lakhs)	Name of Agency/Scheme
1	Planetary Mixer	0.52	ICAR
2	Heat Stability Apparatus	1.5	ICAR
		Total	2.02

- Dairy Technology College, Udgir

Sr. No.	Infrastructure/Name of Equipments	Amount (Rs. in Lakhs)	Name of Agency/Scheme
1.	Automatic Protein Digestion (Model KES 08LR-TS)	1.07	State Contingency
2.	Automatic Protein Distillation (Model DISTYL EM VA)	1.43	State Contingency
3.	Scrubber System (Model KEL VAC)	0.45	State Contingency
4.	Reciprocating pump test rig	0.59	State Contingency
5.	Centrifugal pump test rig	0.84	State Contingency
6.	Cut section of refrigeration trainer	0.59	State Contingency
7.	Bomb calorimeter	0.83	State Contingency
8.	Establishment of Language lab	5.90	State Contingency
		Total	11.7

- College of Fishery Science, Nagpur

Sr. No.	Infrastructure/Name of Equipments	Amount (Rs. in Lakhs)	Name of Agency/Scheme
1	Digital Podium	2.46	DST, New Delhi
2	Plastic Pool	0.65	DST, New Delhi
3	FRP tanks	1.47	DST, New Delhi
4	FRP portable hatchery	4.98	DST, New Delhi
5	Multiparameter Meter unit & analysis kit	1.35	Vidarbha Development Board, Nagpur
6	Portable Visible Spectrophotometer & reagents	2.18	Vidarbha Development Board, Nagpur
7	Classroom Projector	0.75	Vidarbha Development Board, Nagpur
		Total	13.84



6.G. STUDENTS WELFARE ACTIVITIES

6.G. 1. Inter University / Inter State/ National Level

The Directorate of Students Welfare plays 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.

Sr. No.	Sports / Games Name	Games / Sports	Date	No. of Participating Students		Host Institute
				Boys	Girls	
1.	Maharashtra State Inter University Cultural Competition	Indradhanushya 2017-18 (M/W)	05.11.2017 to 09.11.2017	18	15	Vasantrao Naik Krishi Vidyapeeth, Parbhani
2.	Maharashtra State Inter University	KridaMahotsava 2017 (M/W)	27.11.2017 to 01.12.2017			Dr. Balasaheb Sawant Kokan Krishi Vidyapeeth, Dapoli
		Volleyball		11	12	
		Basketball		12	12	
		Kabaddi		12	-	
		Kho-Kho		11	-	
3.	Maharashtra State Inter University Research Convention	Avishkar 2017	15.01.2018 to 17.11.2018	11	05	Mahatma Phule Krishi Vidyapeeth, Rahuri
4.	West Zone Inter University Tournament	Chess 2017-18 (M)	27.10.2017 to 31.10.2017	05	-	Jagran Lake-City University, Bhopal
5.	West Zone Inter University Tournament	Chess 2017-18(W)	04.11.2017 to 08.11.2017	-	05	Jagran Lake-City University, Bhopal
6.	West Zone Inter University Championship	Badminton 2017-18 (M/W)	19.12.2017 to 23.12. 2017	04	04	North Maharashtra University, Jalgaon
7.	West Zone Inter University Tournament	Table Tennis 2017 (M)	23.01.2018 to 26.01.2018	04	-	Solapur University, Solapur
8.	All India Basis	Malkhamb (M) 2017	15.01.2018 to 19.01.2018	04	-	Kurukshetra University, Kurukshetra

6.G.2. NATIONAL SERVICE SCHEME (NSS) ACTIVITIES

1. Total No. of Colleges in University having NSS : 09
2. NSS Strength allocated under Regular Activities by State Govt. for the Year : 1000
3. Total No. of NSS units in University : 13
4. Actual Enrolment during the Year: Male: 603 Female: 386 : 989
5. Category wise Enrolment: SC: 122 ST: 69 OBC: 252 Minority: 49 : 492
6. No. of Self Finance NSS Units if any : 01



Actual Enrolment under SFU during the Year:	Male: 55	Female: 27	: 82
(Category wise Enrolment: SC: 10 ST: 05 OBC: 13 Minority: 01 Others: 53)			
7. NSS Strength allocated under Special camping for the year by State Govt.	500		
No. of NSS Special Camp organized during the year:	01	No. of villages adopted	: 09
No. of participants in Special Camp:	Male 277	Female 161	: 438

• **Education & Health Awareness/ Camps Programmes**

Activity	No. of Programme organized	No. of NSS Volunteers involved		
		Male	Female	Total
Disaster Management Training	04	130	86	216
Self Defense Training for Girls	01	31	14	45
School Dropout Survey conducted	00	00	00	00
Road Safety Campaign/ Camp	03	107	59	166
Yoga Training /Demonstration if any	16	448	190	638
Pulse Polio Immunization	01	00	10	10
Eye check-up camps	01	40	21	61
Health Camps/Dental	17	196	97	293
Prevention of Diseases (Awareness)	Rallies	16	304	162
	Organizing functions	16	160	90
	Street Plays	10	173	111
	Door-to-door Campaigns	15	244	126
	Distribution of IEC Materials	04	128	108
	Distribution of Iron and/Folic Acid Tablets	06	130	70
	Facilitating institutionalized Deliveries of women	03	33	17
Swachha Bharat Abhiyan	216	1574	293	1867
Defecation Free Campaign	02	33	17	50
Farmer Centric/ Agriculture based activity like organic farming any demonstration /training if any	27	593	219	812
Programmes on Conservation of water/ Water Harvesting/ watershed development	04	225	184	409
Shramadan Programme	61	532	234	766
Program on energy efficiency/ conservation	Deployment of super Efficient Appliances	02	165	75
	Promoting use of solar Energy	01	125	55
	Energy conservation- a people's Movement (led Bulb sale campaign)	02	155	75
Programmes on Employment Generation Strategies/ career Counselling	13	287	153	440
Skill Development Training	06	127	78	205
Blood Donation Camps	07	269	71	340
Tree Plantation	633	576	227	803



- **College wise Adopted Villages under NSS**

Sr. No	Name of the college/Institution/ School	No of Volunteers participated in Special camp	Dates/Period of Special Camp if conducted	Adopted village/slum
1	Bombay Veterinary College, Parel, Mumbai-12	90	01.11.2017 to 07.11.2017 at Waghadi, Tal-Dahanu, Dist. Thane - 401607	Lalthane Ta. & Dist. Palghar
2	Nagpur Veterinary College, Nagpur	100	Special Camp During 13.11.2018 to 19.11.2018 at Bhadrawati Dist. Chandrapur	Borgaon (Khurd) Tq. Dt. Nagpur
3	Krantisinh Nana Patil College of Veterinary Science, Shirwal (Satara)	65	05.02.2018 to 11.02.2018 at Village Bhilar, Tal. Mahabaleshwar, Dist. Satara	Javhale Ta. Khandala Dist. Satara
4	College of Veterinary & Animal Sciences, Parbhani	50	12.03.2018 to 18.03.2018 at Rumna, Tal. Gangakhed, Dist. Parbhani	Rumna, Tal. Gangakhed, Dist. Parbhani
5	College of Veterinary & Animal Sciences, Udgir	61	20.12.2017 to 26.12.2017 at Nagalgav, Tq. Udgir (Latur)	Kumdal (U.) Ta. Udgir Dist. Latur
6	College of Dairy Technology, WarudPusad	45	23.02.2018 to 01.03.2018 at Moha (E) Ta Pusad, Dist Yawatmal	Moha (E) Ta Pusad, Dist Yawatmal
7	College of Dairy Technology, Udgir	30	12.03.2018 to 18.03.2018 at Pimpri Ta. Udgir Dist Latur	Wadhawana (Kh.) Ta. Udgir Dist. Latur
8	College of Fishery Science, Nagpur	35	22.02.2018 to 28.02.2018 at Pethkaldongari, Tal & Dist. Nagpur	Pethkaldongari, Tal & Dist. Nagpur
9	College of Fishery Science, Udgir, Dist: Latur	30	17.11.2017 to 23.11.2017 at adopted village-Umarga manna Ta. Udgir Dist. Latur	Umarga Manna Ta. Udgir Dist. Latur

- **Special Activities under N.S.S**

- 1) **Bird Treatment Camp**

Bombay Veterinary College, Mumbai organized the special campaign for "Bird Treatment Camp" on the occasion of Makar Sankranti. The NSS volunteers of Bombay Veterinary College, Mumbai participated in the campaign. The campaign was undertaken with collaboration of different NGOs and NSS volunteers. The treatment camps were conducted in prominent areas of the city on 14 – 15th January, 2018.

- 2) **Selection in Republic Day Parade**

Mr. AnujkumarBrahmadevKoli and Miss. SnighaRachitaSamonre the students from College of Veterinary and Animal Science, Udgir were selected for "Republic Day Parade" and represented the University on 26th January, 2018 at Shivaji Park, Dadar, Mumbai.

- 3) **Avishkar 2017 (Inter University Research Convention)**

The Inter University Research Convention "Avishkar 2017" was organized at Mahatma Phule Krishi Vidyapeeth, Rahuri during 15-17th January, 2018. Sixteen students from MAFSU, Nagpur participated in the event. Mr. Pradeep Ramchandra Balage, 1st Year of M.V.Sc. student from College of Veterinary & Animal Science, Parbhani has won the first prize in Agriculture and Animal Husbandry (P.G.) category.



4) **Indradhanushya – 2017 (Inter University Cultural - Youth Festival)**

The MAFSU team participated in rally in very discipline manner with live theme of “Support of livestock to prevent farmers’ suicide” and received 2nd prize. Similarly, One Act Play “The Outburst” received 3rd prize in Indradhanushya–2017 at Vasantrao Naik Krishi Vidyapeeth, Parbhani on dated 05-09th November, 2017.

6.G.3 (MAH) REMOUNT AND VETERINARY SQUADRON, NCC UNIT

Students Performance in NCC

Sr. No.	Type of Examination	Number of Students Passed
1.	B - Cert.	60
2.	C - Cert.	22

Camps		
Place	Number of Students Participated	
	Male	Female
New Delhi (NIC)	10	06
Saoner, Dist. Nagpur (Sept. 2017)	28	33
Saoner, Dist. Nagpur (Oct. 2017)	06	04

Activities under NCC

1. Tree plantation : June 2017
2. World Yoga day organisation and participation at University : June 2017
3. Indradhanush: An immunization programme of the Govt of India : July 2017
4. Mountaineering camp's certificate of excellence : Oct 2017
5. National Integration Camp's Gold Medal Award for Group dance : Nov 2017
6. Blood Donation Programme : Dec 2017
7. Cleanliness drive : Dec 2017
8. Republic Day Camp, Bronze medal in hacks : Jan. 2018



7

HUMAN RESOURCE DEVELOPMENT

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 also. The University is regularly deputing the faculties for such events. The funding agencies and especially ICAR provides regular funding for development of human resource in the University. Following is the list of faculty members participated in HRD programmes and the list of programme organized.

Sr. No.	Name of the college	Number of faculty undergone training
1	Bombay Veterinary College, Mumbai	71
2	Nagpur Veterinary College, Nagpur	247
3	College of Veterinary And Animal Sciences, Parbhani	74
4	College of Veterinary And Animal Sciences, Udgir	27
5	Krantisinh Nana Patil College Of Veterinary Science, Shirwal	122
6	Post Graduate Institute Of Veterinary & Animal Sciences, Akola	134
7	College of Dairy Technology, Warud	09
8	College of Dairy Technology, Udgir	05
9	College of Fishery Science, Nagpur	07
10	College of Fishery Science, Udgir.	05



8

RESEARCH

The university is actively engaged in various research activities aimed at enhancing the quality, productivity and efficiency of livestock sector. The university has maintained a close liaison with the animal, dairy and fishery industries and is striving towards developing a system that scans the needs of the industries and forecasts the solutions, to the imminent challenges faced by the industries. This is an important step towards making the industries in Maharashtra more competitive with their national and international counterparts.

The University has system in place for internal review of these research activities at college level and also at University level. Every year the Animal Science Research Council meetings are convened at constituent colleges to review various research activities carried out at these colleges. The recommendations proposed in these meetings are finally placed in the Joint Animal Science Research Council meeting under the chairmanship of Hon'ble Vice Chancellor. The expert members from various streams of animal, dairy and fishery sciences are invited for the Joint Animal Science Research Council Meetings, for their valuable inputs and meaningful discussions on recommendations and research programmes of the University. This significantly helps the University to identify the thrust areas and prioritize its commitments as far as the research mandate is concerned. The recommendations are finally published for the benefit of livestock farmers, veterinary practitioners, field veterinarians and livestock industries.

8.A. Ongoing Research Project:

8.A.1. Funding Agency wise number of ongoing research projects

Sr. No.	Name of the funding agency	No. of projects	Rs. in Lakh
1	Department of Biotechnology, Govt. of India, New Delhi	02	61.75
2	Department of Science and Technology, New Delhi	03	130.70
3	Indian Council of Agricultural Research, New Delhi	09	308.19
4	Indian Council of Medical Research, New Delhi	01	50.00
5	Rashtriya Krishi Vikas Yojana,	05	2232.56
6	FDCM Ltd, Government of Maharashtra	01	1874.00
7	STRC, Gondwana University, Gadchiroli	01	36.80
8	Vidarbha Development Board	01	23.10
9	Private Agency Scheme	17	31.32
Total Number of Projects		40	4748.42

8.A.2. Institute wise number of ongoing research projects

Sr.No.	Name of the college	No. of project	Rs. In Lakh
1	Bombay Veterinary College, Mumbai	10	640.79
2	Nagpur Veterinary College, Nagpur	12	2792.18
3	College of Veterinary & Animal Science, Parbhani	05	522.66
4	KNP College of Veterinary Science, Shirwal	04	187.73
5	College of Veterinary & Animal Science, Udgir	02	27.24
6	Post Graduate College of Veterinary & Animal Sciences, Akola	04	453.93
7	College of Fishery Science, Nagpur	03	123.89
Total		40	4748.42



Details of the Research Projects.

8.A.3. Funding agency wise list of ongoing research projects

1. DEPARTMENT OF BIOTECHNOLOGY (DBT), NEW DELHI

Sr. No.	Name of Scheme	Name of P. I. & Addresses & Institution	Date of Start	Duration	Rs. in Lakhs
1	Designing Novel Nanobiotechnological Systems for Effective Delivery of Select Indigenous Herbs with Potent Antitubercular Activity	P.I.: Dr. Alka Pravin Mukne, Assistant Professor, Bombay College of Pharmacy. P.I.: Dr. A. S. Bannalikar, BVC, Mumbai Co. PI: Dr. R. R. Pharande, BVC, Mumbai	19.06.2013	3 years (Due to delayed release of funds of 2015-16 in 2016-17, the project extended to June 2017)	3.75
2	Strengthening of Life Science and Biotechnology Education and Training at undergraduate level under Star College Scheme	Dr. P. V. Nandedkar	01.04.2017	3 years	58.0
Total					61.75

2. DEPARTMENT OF SCIENCE AND TECHNOLOGY, NEW DELHI

Sr. No.	Name of Scheme	Name of P. I. & Addresses & Institution	Date of Start	Duration	Rs. in Lakhs
1	Expression, localization and modulatory effect of adipokines in ovary of cyclic buffaloes	Dr. Mahesh Gupta, Assistant Professor, Nagpur Veterinary College, MAFSU Nagpur	21.09.2016	3 years	41.01
2	Characterization and Evaluation of Non- Descript Goat Population of Marathwada and Western Maharashtra	Dr. V.B. Dongre, Instructional Livestock Farm Complex, COVAS, Udgir	20.03.2018	3 years	25.70
3	Dissemination of fisheries technology for poverty alleviation of tribal/ rural community of Gadchiroli District.	Shri. S. A. Joshi College of Fishery Science, Nagpur	18.05.2017	3 Years	63.99
Total					130.70

3. INDIAN COUNCIL OF AGRICULTURAL RESEARCH, NEW DELHI

Sr. No.	Name of Scheme	Name of P. I. & Addresses & Institution	Date of Start	Duration	Rs. In Lakhs
1	All India Co-ordinated Research Project on Post Harvest Technology	Dr. R. J. Zende, Professor & HOD (I/c) Department of Veterinary Public Health	16.11.2009	upto 31.03.2020	63.20
2	Monitoring of Pesticide Residues at National Level	Dr. R. J. Zende, Professor & HOD (I/c) Department of Veterinary Public Health	04.09.2012	upto 31.03.2020	42.00
3	Outreach Programme On Zoonotic Diseases- PI	Dr. V.M. Vaidya, Assistant Professor, Department of Veterinary Public Health	17.11.2009	upto 31.03.2020	10.50
4	ICAR Scheme, "Outreach programme on Monitoring of Drug Residues & Environmental Pollutants"	Dr. S.S. Sole, Incharge Professor, Department of Pharmacology & Toxicology, Bombay Veterinary College, Parel, Mumbai	2009	5 yrs	11.17



5	Understanding molecular basis of PPRV mediated host immune modulation for development of next generation vaccine	Dr. P. A. Tembhere	April 2017	3 years	49.12
6	Niche Area of Excellence Project on 'Centre for Zoonoses'	Dr. S. P. Chaudhari, Associate Professor, Dept. of Veterinary Public Health, Nagpur Veterinary College, Nagpur	30.03.2015	3 years	64.01
7	Outreach Programme on Zoonotic Diseases		04.03.2010	10 years	11.25
8	Establishment of community based animal husbandry practices in the tribal villages of Gadchiroli District of Maharashtra State	Dr. M. S. Patil, Assistant Professor, Deptt. of ARGO, NVC, Nagpur.	December 2014	5 years	32.33
9	AICRP - National Research Centre on Pig (ICAR)	M.B. Amle, KNP College of Veterinary Science, Shirval, Satara	May 2017	3 Year	50.35
Total					333.93

4. INDIAN COUNCIL OF MEDICAL RESEARCH, NEW DELHI

Sr. No.	Name of Scheme	Name of P. I. & Addresses & Institution	Date of Start	Duration	Rs. In Lakhs
1	Molecular surveillance and cross species transmission of rotaviruses of animal and human origin	Dr. V. C. Ingle	March 2017	3 years	50.00
Total					50.00

5. RASHTRIYA KRISHI VIKAS YOJANA, GOVT. OF MAHARASHTRA, MUMBAI

Sr. No	Name of Scheme	Name of P. I. & Addresses & Institution	Date of Start	Duration	Rs. In Lakhs
1	Strengthening and Modernization of Teaching Veterinary Clinical Complex, Diagnostic Laboratory & Establishment of Training Centre at Bombay Veterinary College	Dr. R V Gaikwad Dr. S. D Ingole Dr. D. U Lokhande Dr. S. U Gulavane	April 2017	2 years	499.79
2	Strengthening and Modernization of Teaching Veterinary Clinical Complex, Diagnostic Laboratory & Establishment of Training Centre at Veterinary & Animal Science under MAFSU (Nagpur) Infrastructure development- 2017-18 to 2018-19 (2 years)	Dr. S.V. Upadhye, Associate Professor, Veterinary Surgery & Radiology, NVC, Nagpur	16.10.2017	2 years	691.32
3	RKVV sponsored project 'Strengthening and modernization of TVCC'	Dr. V.D. Aher, Professor, Dept. of Vety. Surgery & Radiology, COVAS, Parbhani	29.04.2017	2 years	459.45
4	Prevention & Therapeutic management of diseases causing reproductive failures in animals	Dr. K.P. Khillare, KNP College of Veterinary Science, Shirva IDist Satara	March 2016	3 years	132.00
5	Strengthening of Teaching Veterinary Clinical Complex and Diagnostic Laboratory at Post Graduate Institute of Veterinary and Animal Sciences, Akola	Dr. S. P. Waghmare, PGIVAS, Akola	15.12.2017	2 years	450.00
Total					2232.56



6. FOREST DEVELOPMENT CORPORATION OF MAHARASHTRA LTD.

Sr No	Name of Scheme	Name of P. I. & Institution	Date of Start	Duration	Budget Rs. in Lakhs
1	Establishment of Wildlife Research & Training Centre at Gorewada	Dr. N. P. Dakshinkar	2014-15	Continued	1874.00
Total					1874.00

7. SCIENCE AND TECHNOLOGY RESEARCH CENTRE, GONDWANDA UNIVERSITY, GADCHIROLI

Sr No	Name of Scheme	Name of P. I. & Institution	Date of Start	Duration	Budget Rs. in Lakhs
1	Sustainable livelihood of tribal population in Gadchirlo district through scientific fisheries technologies	Dr. P.A. Telvekar, College of Fishery Science, Nagpur	13.05.2016	2 years	36.80
Total					36.80

8. VIDARBH DEVELOPMENT BOARD, NAGPUR

Sr No	Name of Scheme	Name of P. I. & Institution	Date of Start	Duration	Budget Rs. in Lakhs
1	Development of Fisheries and Aquaculture in Vidarbha	Shri. S.W. Belsare College of Fishery Science, Nagpur	11.08.2016	2 years	23.10
Total					23.10

9. PRIVATE AGENCY SCHEME

Sr. No	Name of the Scheme	Name of the PI & Institution	Date of Start	Duration	Budget Rs. in Lakhs	Funding Agency
1	Effect of guar korma on the performance of broiler chicken.	Dr. B.N. Ramteke, Associate Professor, Department of Animal Nutrition, BVC, Mumbai	09.01.2018	1 year	2.71	Lucid Colloid Limited, Mumbai(INDIA)
2	Efficacy evaluation of gout management formula AV/AUP/16 in ameliorating the signs of gout in poultry.	Dr. P. V. Meshram, Department of Pathology, BVC, Mumbai	March 2018	1.5 years	1.30	Ayurved Ltd, Solan (HP)
3	Agency scheme, Studies on Flunixin OTC	Dr. S.S. Sole, Incharge Professor, Department of Pharmacology & Toxicology, BVC, Mumbai	June 2009	On going	4.41	Agency Scheme-Bayer Pharmaceuticals Ltd.
4	Studies on laboratory and acceptance testing of OzOO Mommy Oil (Intra mammary formulation)	P.I.: Dr.R.V. Gaikwad, Dr.C.N. Galadhar Co. PI: Dr. Mrs R.S. Gadge Dr. H.Y. Palampalle Dr.P.S. Masare, Dr.D.A.Pavalkar	03.06.2016	1 Year	1.95	HKL Pharmaceutical India Pvt. Ltd.Mumbai



5	Assessment of NuPro® supplementation on growth performance and biochemical parameters in commercial broiler chicken	Dr. S.D. Borkar Assistant Professor, Department of Veterinary Biochemistry	10.03.2018	42 days	0.51	Alltech Biotechnology Pvt. Ltd.No. 3. 6th Cross, HAL-II Stage, Kodihalli, Off Old Airport Rd, Bangalore
6	Feed additive effect of curcumin on growth performance in commercial broiler chicken	Dr. M.M. Kadam, Department of Poultry Science, Nagpur Veterinary College, Nagpur	Feb. 2018	6 month	1.57	Ramon Vila, LaboratoriosKari zoo SA, Polg. Industrial La Borda, Mas Pujades, 11-12, 08140 Caldes de Montbui, Barcelona (Spain)
7	Efficacy of Herbal Oral and Gel formulations in Treatment of Skin affections in Dogs and Small ruminants	Pl.: Dr. B.N. Ambore, NVC, Nagpur	May 2017	1 year	1.25	Ayurved Ltd, Solan (HP)
8	Potential efficacy of herbal products as treatment option for retained placenta in dairy cows and Role of "balanced" mineral supplement in heifer reproductive and productive measurements	Dr. A. D. Patil Assistant Professor, Dept. of ARGO, NVC, Nagpur.	Nov 2016	1 year	1.55	Ayurved Ltd., Badi, Himachal Pradesh
9	Documentary on Medicinal plants in Animal Diseases	Dr.S.R. Rajurkar I/c Professor Department of Veterinary Pharmacology & Toxicology, COVAS, Parbhani	Feb 2017	20 Months	1.00	Maharashtra Horticulture & Medicinal Plant Board
10	Effect of 5-ALA Premix (5-Amino Levulinic Acid) as feed supplement on performance, Haematological and Immune status of broiler	Dr. M.V. Dhumal, Professor of Poultry Science, COVAS, Parbhani	18.04.2017	42 days	1.10	Uttara Impex, Private Limited, Hyderabad
11	Effect of different herbal products supplementation through layer ration on egg production and its quality	Dr.M.G. Nikam, Assistant Professor, Poultry Science	22.03.2017	5 years	3.11	Aurvet Limited Baddi, Himachal Pradesh
12	Efficacy of Herbal anti-diarrheal product Diaroak&Salcochek for diarrhea of specific and non-specific origi	Dr. M. D Meshram	2015-16	2 years	4.08	Dabur Ayurved India



13	To evaluate comparative therapeutic efficacy of AV/RMP/23 &Pachoplus against indigestion in diary animals	Dr.M. D Meshram	2015-16	2 years	1.30	Dabur Ayurved India
14	Efficacy of oral inorganic phosphorous preparation in management of osteomalecia in buffalo and pica in bovines	Dr.A.U.Bhikane	07.03.2018	1 year	1.54	Rakesh Pharmaceuticals Kalol, Ahmedabad
15	Hepatoprotective effect of polyherbal formulations on paracetamol-induced liver damage in broiler chicks	Dr. P.R. Rathod Dept. of Vet. Pathology, PGIVAS, Akola	01.08.2017	45 days	1.41	AYURVET
16	Evaluation of prophylactic and therapeutic potential of salcochek and salcochek-pro against <i>E. coli</i> induced infestation in broilers	Dr. S. W. Hajare Dept. of Vet. Pharmacology, PGIVAS, Akola	20.10.2016	1year	1.28	AYURVET
17	Evaluation of acute Toxicity study of 12 Ayurved Products	Dr. S. W. Hajare Dept. of Vet. Pharmacology, PGIVAS, Akola	19.06.2017	1year	1.24	AYURVET
Total					31.31	

8.B. COMPLETED RESEARCH PROJECTS

8.B.1. FUNDING AGENCY WISE NUMBER OF COMPLETED RESEARCH PROJECTS

Sr. No.	Name of the funding agency	No. of projects	Budget Rs. in Lakh
1	Department of Biotechnology, New Delhi	01	110.51
2	Indian Council of Agricultural Research, New Delhi	01	32.00
3	Other Agency Schemes	06	11.59
4	National Innovation Foundation	01	3.63
	Total	09	157.73

8.B.2. INSTITUTE WISE NUMBER OF COMPLETED RESEARCH PROJECTS (ABSTRACT)

Sr. No.	Name of the institute	No. of project	Budget Rs. in Lakh
1	Bombay Veterinary College, Mumbai	03	40.67
2	Nagpur Veterinary College, Nagpur	02	111.51
3	College of Vet. & Ani. Sciences, Parbhani	02	2.88
4	KNP college of veterinary science, Shirval	01	1.67
5	College of Veterinary & Animal Sciences, Udgir	01	1.0
	Total	09	157.73



8.B.3. DETAILS OF RESEARCH PROJECTS

8.B.3.a. FUNDING AGENCY WISE COMPLETED RESEARCH PROJECTS

1. DEPARTMENT OF BIO TECHNOLOGY, GOVT. OF INDIA, NEW DELHI

Sr. No.	Name of Scheme	Name of P. I. & Addresses & Institution	Date of Start	Duration	Rs. In Lakhs
1	Molecular epidemiology of ticks and tick-borne disease, host resistance and development of novel pathogen vaccines	Dr.S.W. Kolte Department of Veterinary Parasitology NVC, Nagpur	June 2014	3years	110.50
Total					110.50

2. INDIAN COUNCIL OF AGRICULTURAL RESEARCH, NEW DELHI

Sr. No.	Name of Scheme	Name of P. I. & Addresses & Institution	Date of Start	Duration	Rs. In Lakhs
1	Experiential Learning Unit on Goat-Setting up of goat unit	Dr.Siddiqui MBA, Bombay Veterinary College,Mumbai	March 2016	1 year	32.00
Total					32.00

3. NATIONAL INNOVATION FOUNDATION

Sr. No.	Name of Scheme	Name of P. I. & Address of Institution	Date of Start	Duration	Rs. In Lakhs
1	<i>In vivo</i> and <i>in vitro</i> acaricide efficacy of three herbal extracts against ticks of cattle.	Dr. G.P. Bharkad, Dept of Veterinary Parasitology, BVC, Mumbai	May 2013	4 years	3.63
Total					3.63

4. PRIVATE AGENCY SCHEME

Sr. No.	Name of Scheme	Name of P. I. & Addresses & Institution	Date of Start	Duration	Funding Agency	Rs. In Lakhs
1	Risk assessment of Antibiotic Residue and <i>Salmonella</i> spp. in Chicken Meat Production	Dr. R. J. Zende, Professor & HOD (I/c) Department of Veterinary Public Health	Dec 2015	2.3 years	Private	05.04
2	Ovarian response after treatment with AV/OIP/22 in post partumanestrus and other cases of specific and non specificanestrus in cows and buffaloes	Dr.S.K.Sahatpure	March 2018	1 year	Ayurved, Baddi, HP	1.00
3	Efficacy evaluation of liver tonic product on growth, performance, carcass traits in broilers	Dr.M.V. Dhumal Professor of Poultry Science, COVAS,Parbhani	20.09.17	42 days	Indian Herbs Specialities Pvt. Ltd Chandigarh	1.18
4	Efficacy of a composite formulation (Masticure) as an adjunct therapy in the treatment of mastitis in bovines	Dr. Tawheed A.S. Assistant Professor, Dept. of Vet. Medicine, COVAS, Parbhani	April 2017	6 Months	Nutricare Life Sciences Limited, Dehradun, Utterakhand	1.66
5	Efficacy evaluation of coccidiostat against caecal coccidiosis in broilers	Dr (Major) Krishnendu Kundu	June 2017	2 months	Jubilant Life Sciences, Ltd., Noida	1.67



6	Efficacy of polyherbal spray (cleantick) against ticks and lice infestation in cattle and buffaloes	Dr.A.U.Bhikane	April 2015	2 years	Rakesh Pharmaceutical Kalol, Ahmedabad	1.00
Total						11.55

8.C. RESEARCH RECOMMENDATIONS

1	Project Title	Effect of replacement of concentrate mixture by maize hydroponic fodder on performance of goat.
	Investigators	Miss. SoniyaDhawale and Dr. A. D. Deshmukh
	Name of the college	Nagpur Veterinary College, Nagpur
	Recommendation	It is recommended to replace 25 percent concentrate mixture by hydroponic maize fodder on dry matter basis for economical rearing of growing goats.
2	Project Title	Growth performance of goats fed <i>Moringa oleifera</i> leaf meal incorporated in concentrate mixture.
	Investigators	Mr. Bilal Ali and Dr. S. B. Kawitkar
	Name of the college	Nagpur Veterinary College, Nagpur
	Recommendation	It is recommended to replace cotton seed cake with <i>Moringa oleifera</i> leaf meal (MOLM) upto 12.5 parts (50 Percent) in concentrate mixture for economical rearing of growing goats.
3	Project Title	Effect of protected and unprotected fat supplementation on performance of growing goats.
	Investigators	Miss. S. M. Kate and Dr. B. N. Ramteke
	Name of the college	Bombay Veterinary College, Mumbai
	Recommendation	It is recommended to supplement protected fat @ 1% of DMI for economical rearing of growing goats.
4	Project Title	Effect of dietary inclusion of guar (<i>Cyamopsis tetragonoloba</i>) korma meal on performance, gut health and litter attributes in broiler chicken.
	Investigators	Mr. R. S. Awhad and Dr. K. Y. Deshpande
	Name of the college	College of Veterinary and Animal Sciences, Parbhani
	Recommendation	It is recommended to incorporate 5 percent Guar Korma Meal to replace protein source in broiler diet for economical broiler production.
5	Project Title	Effect of supplementation of chromium propionate on the performance of lactating Murrah buffaloes (<i>bubalus bubalis</i>).
	Investigators	Mr. Chetan Wanjari and Dr. S. M. Bhalerao
	Name of the college	KNP College of Veterinary Science, Shirwal
	Recommendation	It is recommended to supplement chromium propionate @ 1.5 mg/kg DMI in lactating Murrah buffaloes for economical milk production.
6	Project Title	Comparative study of combination of different litter materials on the performance of broilers.
	Investigators	Mr. Narwade Anand Rohidas and Dr. Percy E. Avari
	Name of the college	Bombay Veterinary College, Mumbai
	Recommendation	It is recommended that, it is beneficial to mix Rice Husk with 50 Percent soybean husk or 75 percent Jowar Husk as litter material but Mixing 75 percent Jowar Husk is more economical for getting better production performance and profits in broiler rearing.
7	Project Title	Effect of dietary supplementation of Guar meal with β-mannanase on performance of broilers.
	Investigators	Dr. S. L. Pashamwar and Dr. M. G. Nikam
	Name of the college	College of Veterinary and Animal Sciences, Parbhani



	Recommendation	It is recommended that 5 percent toasted guar meal can safely replace DOC soy up to 5 percent level with supplementation of β -mannanase enzyme @ 5gm/ 100kg of feed for economic production of broiler chicken.
8	Project Title	Effect of organic acid treated corn cob bedding material on broiler performance, hock burn incidence and litter quality.
	Investigators	Dr. V. D. Lonkar and Dr. A.S. Ranade
	Name of the college	KNP College of Veterinary Science, Shirwal
	Recommendation	It is recommended to use 10 percent organic acid treated corn cob as litter material for rearing commercial broilers to improve the performance, litter quality and ensure welfare.
9	Project Title	Effect of inclusion of different sources of insoluble fibre (Oat, Barley, Corn and Arbocel – Cellulose fibre) on the performance of broilers.
	Investigators	Dr. V. D. Lonkar and Dr. A.S. Ranade
	Name of the college	KNP College of Veterinary Science, Shirwal
	Recommendation	It is recommended to use 2 percent Oat Hulls as a source of natural insoluble fibre to replace antibiotic growth promoters in broiler diets with reduction in 100 Kcal/Kg ME, 2.5 percent CP and amino acids to improve the performance and obtain higher profits.
10	Project Title	Effect of melatonin on bovine sperm characteristics and ultrastructure changes
	Investigators	Dr. A. R. Chaithrashree and Dr. S. D. Ingole
	Name of the college	Bombay Veterinary College, Mumbai
	Recommendation	It is recommended that, addition of a cryopreservation extender with 0.1mM Melatonin provides a cryoprotective effect on bull sperm quality.
11	Project Title	1. Detection of <i>Theileriaannulata</i> in cattle using PCR and ELISA. 2. Pathology and diagnosis of <i>Theileriaannulata</i> and <i>Theileriaorientalis</i> in buffaloes.
	Investigators	Dr. Siddharth Jamdade, Dr. Pratik Ingle Patil, Dr. P.M. Sonkusale and Dr. N.V. Kurkure
	Name of the college	Nagpur Veterinary College, Nagpur
	Recommendation	Ear vein blood smear examination and PCR is better to diagnose the cattle and buffalo suffering from clinical theileriosis than that of jugular vein blood smear examination and PCR.
12	Project Title	<i>In vitro</i> evaluation of fungal bio-control agents and herbal bio-pesticide against cattle tick <i>Rhipicephalus microplus</i> (Acarina: Ixodidae)
	Investigators	Dr. Greeshma Rao U. B. and Dr. B.W. Narladkar
	Name of the college	College of Veterinary and Animal Sciences, Parbhani
	Recommendation	Based on OER (Overall Efficacy Rate) and Scorecard, all the 3 funguses <i>Beauveria bassiana</i> , <i>Metarhiziumanisopliae</i> and <i>Verticillium lecanii</i> @ 5gm per liter of water (Per gm powder containing 10^8 spores) + 5 gm jaggery has good efficacy against egg and adult stage of <i>R. (B) microplus</i> and shall be used as spray at breeding places in the cattle shed @ 30 ml per square meter area and be inducted in the integrated tick management programmes for Marathwada region.
13	Project Title	Effect of electron beam irradiation on different pork products stored at refrigerated temperature.
	Investigators	Dr. Deepika Prabhakar and Dr. R. J. Zende
	Name of the college	Bombay Veterinary College, Mumbai
	Recommendation	The Electron Beam irradiation at dose rate of 4.5 kGy is recommended for shelf-life extension of pork sausage and salami upto 27 days and 29 days at refrigeration storage, respectively.
14	Project Title	Phenotypic and molecular characterization of Extended Spectrum Beta-Lactamases in <i>Escherichia coli</i> isolated from food animals.
	Investigators	Dr. Ranjan M. and Dr. R.P. Kolhe
	Name of the college	KNP College of Veterinary Sciences, Shirwal



	Recommendation	A rigorous epidemiological study to determine the diversity of the <i>E. coli</i> of livestock and poultry origin in terms of ESBL production, beta lactam genes and CTXM groups needs to be performed in the context of increasing risk of antimicrobial resistance.
15	Project title	Diagnostic and Therapeutic management of Diabetes Mellitus in canine.
	Investigators	Dr. P. P. Chaudhari and Dr. V. M. Dhoot
	Name of the college	Nagpur Veterinary College, Nagpur
	Recommendation	Treatment of diabetic dogs with injections of recombinant insulin @ 0.5 IU/kg, intramuscularly twice a day resulted in significant decrease in blood glucose levels over the period of time.
16	Project title	Therapeutic Management of Canine Demodicosis with Immunomodulators.
	Investigators	Dr. M. P. Sakhare and Dr. N. P. Dakshinkar
	Name of the college	Nagpur Veterinary College, Nagpur
	Recommendation	Canine Demodicosis can be effectively treated using combination of PanchgavyaGhrita (5ml/20kgs BW BID) and Garlic pills (1-2 pearls BID till recovery) as it improves cell mediated immunity.
17	Project title	Therapeutic efficacy of <i>Calotropis procera</i> and <i>Artemisia annua</i> against Theileriosis in Cattle.
	Investigators	M. F. M. F. Siddiqui and S. P. Waghmare
	Name of the college	Post Graduate Institute of Veterinary and Animal Sciences, Akola
	Recommendation	The hydro-ethanolic extract (40 per cent distilled water and 60 per cent ethanol) of <i>Artemisia annua</i> plant @ 100 mg/kg BW orally for six days found effective in treatment of subclinical theileriosis.
18	Project title	Diagnostic & therapeutic aspects of hepatic jaundice in cattle
	Investigators	Mr. H.A. Shaikh and Dr. A.U. Bhikane
	Name of the college	College of Veterinary and Animal Sciences, Udgir
	Recommendation	Treatment of hepatic jaundice in cattle with Dextrose 5 percent @ 25ml/kg in two divided doses IV for 10 to 15 days or till recovery, Vitamin B Complex @ 10 ml IM for 15 to 20 days, Dexamethasone @ 40 mg, 30mg, 20 mg IM on 1st, 2nd and 3rd day, Chlorpheniramine maleate @ 0.25 mg/kg body weight for 5-7 days in cases showing itching, herbal liver tonic @ 10 tab P.O. BID for 20-30 days, laxative 450 ml P.O. for 3-5 days and Amoxycillin+Cloxacillin @ 10mg/kg IV for 7-10 days is recommended.
19	Project title	Prevalence and clinico-therapeutic management of theileriosis in buffaloes
	Investigators	Mr. A.A. Bhosale and Dr. A.U. Bhikane
	Name of the college	College of Veterinary and Animal Sciences, Udgir
	Recommendation	Theileriosis is prevalent in buffalo population of Latur and Nanded districts of Marathwada region, hence buffaloes exhibiting fever, enlargement of superficial lymph nodes, pale mucous membranes, low to moderate reduction in haemoglobin (< 9g/dl) and no response to antibiotic treatment should be suspected and screened for theileriosis.
20	Project title	Epidemiology, Diagnosis and Therapeutic Management of Snake Bite in Buffaloes.
	Investigators	Dr. A. U. Bhikane, Dr. R.K. Jadhav, Dr. P.S. Masare and Dr. S.S. Ghoke
	Name of the college	College of Veterinary and Animal Sciences, Udgir
	Recommendation	<ol style="list-style-type: none"> 1. Ascending swelling on limbs or asymmetrical swelling on face with or without bleeding signs is suggestive of haemotoxic snake bite in buffaloes. 2. For haemotoxic snakebite platelet count and blood clotting time should be used for assessment of severity and monitoring recovery of haemotoxic snakebite. <p>Treatment protocol comprising polyvalent anti-snake venom (PASVS) @ 20 ml IV initially followed by 10-20 ml within first 24 hrs depending upon severity of signs, Amoxycillin-cloxacillin @ 10 mg/kg IV/IM for 7-9 days, Dexamethasone @ 80 mg iv on first day, 40 mg on 2nd& 3rd</p>



		day and 20 mg on 4 th & 5 th day in non-pregnant animals, Meloxicam @ 0.5mg/kg IV/IM daily for 5-9 days in pregnant animals and from 6th day onwards for 4 days in non-pregnant animals, Dextrose 5% @ 4-6 L IV for 5 days, Furosemide @ 1-1.5 mg/kg IV/IM and Carbazochrome salicylate @ 10 ml IM daily for 3-5 days, and Vitamin B-complex @5-10 ml IM for 5- 6 days and iron bolus @ 1 PO BID for 10 days from 5th day onwards in anaemic buffaloes is recommended for treatment of hemotoxic snakebite.																															
21	Project title	Evaluation of essential oils as an adjunct therapy in the treatment of lacto-acidosis in goats (<i>Capra hircus</i>).																															
	Investigators	Mr. B.S. Nithin and Dr. S. U. Digraskar																															
	Name of the college	College of Veterinary and Animal Sciences, Parbhani																															
	Recommendation	It is recommended that the intraruminal administration of 1ml Garlic oil and 2 ml cinnamon oil as an adjunct therapy in combination with standard set of conventional therapy for successful treatment of lactoacidosis in goats.																															
22	Project title	Diagnostic and therapeutic methods in postpartum endometritis and its impact on reproductive performance in crossbred cows																															
	Investigators	Mr. R. J. Chaudhari and Dr. (Mrs) S.U. Gulavane,																															
	Name of the college	Bombay Veterinary College, Mumbai																															
	Recommendation	It is recommended to use combination of vaginoscopic vaginal discharge score along with endometrial cytology by cytobrush technique for the accurate diagnosis of endometritis in cows at 30 ± 2 days postpartum at field level.																															
23	Project title	Augmentation of fertility in Dangi cows by using Ovsynch and Double synch protocols.																															
	Investigators	Mr. K. P. Yadav and Dr. R. R. Shelar																															
	Name of the college	Bombay Veterinary College, Mumbai																															
	Recommendation	It is recommended to use Doublesynch protocol over Ovsynch protocol for effective induction of estrus and improvement of fertility in Dangi cows.																															
24	Project title	Assessment of Feline Neonates using the Apgar Scoring System																															
	Investigators	R. C. Ribeiro and Dr. S. M. Gaikwad																															
	Name of the college	Bombay Veterinary College, Mumbai																															
	Recommendation	It is recommended to use Apgar scoring system for identification of distressed neonates and reduce short term neonatal mortality in kittens. Apgar Scoring System in feline neonates.																															
		<table border="1"> <thead> <tr> <th>Parameter</th><th>Score 0</th><th>Score 1</th><th>Score 2</th></tr> </thead> <tbody> <tr> <td>Mucous Membranes</td><td>Cyanotic, pale</td><td>Pink</td><td>Reddish</td></tr> <tr> <td>Heart Rate (BPM)</td><td>< 120</td><td>120 – 180</td><td>> 180</td></tr> <tr> <td>Respiratory Rate (bpm)</td><td>< 15</td><td>15 – 30</td><td>> 30</td></tr> <tr> <td>Reflex Irritability</td><td>None</td><td>Feeble reaction</td><td>Active reaction</td></tr> <tr> <td>Mobility</td><td>None</td><td>Hypo-mobility</td><td>Active mobility</td></tr> <tr> <td>Suckling</td><td>None</td><td>Weak</td><td>Energetic</td></tr> <tr> <td>Vocalization</td><td>None</td><td>Mild</td><td>Vigorous</td></tr> </tbody> </table>	Parameter	Score 0	Score 1	Score 2	Mucous Membranes	Cyanotic, pale	Pink	Reddish	Heart Rate (BPM)	< 120	120 – 180	> 180	Respiratory Rate (bpm)	< 15	15 – 30	> 30	Reflex Irritability	None	Feeble reaction	Active reaction	Mobility	None	Hypo-mobility	Active mobility	Suckling	None	Weak	Energetic	Vocalization	None	Mild
Parameter	Score 0	Score 1	Score 2																														
Mucous Membranes	Cyanotic, pale	Pink	Reddish																														
Heart Rate (BPM)	< 120	120 – 180	> 180																														
Respiratory Rate (bpm)	< 15	15 – 30	> 30																														
Reflex Irritability	None	Feeble reaction	Active reaction																														
Mobility	None	Hypo-mobility	Active mobility																														
Suckling	None	Weak	Energetic																														
Vocalization	None	Mild	Vigorous																														
	Kittens with a total Apgar score																																
	Apgar score 0-4 indicates severely distressed																																
	Apgar score 5-9 indicates moderately distressed																																
	Apgar score 10-14 indicates healthy																																
Project title	Clinical evaluation of different laparoscopic sterilization techniques in bitches																																
Investigators	S. P. Salvekar and Dr. P. T. Jadho																																



	Name of the college	Nagpur Veterinary College, Nagpur
	Recommendation	Laparoscopic salpingectomy is recommended as feasible and safe sterilization technique for avoiding the after-effects of hormonal imbalance in bitches.
26	Project title	Surgical management of urinary calculi by using different urethral approaches in dog.
	Investigators	Mr. A.P. Biradar and Dr. S.V. Upadhye
	Name of the college	Nagpur Veterinary College, Nagpur
	Recommendation	The method of retrieving the urethral and cystic calculi through urethral incision posterior to os-penis by inserting a Ryle's tube of larger diameter into the urinary bladder for irrigation and suction to remove smaller calculi is recommended in dogs to avoid cystotomy.
27	Project title	A Clinical Study on Laparoscopic Bariatric Procedure in Dogs for maintenance of good health.
	Investigators	Mr. S. D. Tripathi and Dr. L. B. Sarkate
	Name of the college	Bombay Veterinary College, Mumbai
	Recommendation	Laparoscopic gastric greater curvature serosa-to-serosa plication (LGGCP) controls the weight in dogs and hence is recommended in obese dogs for weight control.
28	Project title	Diagnosis and treatment of teat canal affections by Theloresectoscopy in ruminants.
	Investigators	Mr. Walvekar Santosh Bhikaji and Dr. G.S. Khandekar
	Name of the college	Bombay Veterinary College, Mumbai
	Recommendation	Surgical management of milk flow disorders by thelorescetoscopy is recommended for diagnosis and treatment of milk flow disorders in cattle, buffalo and goat.
29	Project title	A comparative study of conventional method and Laparoscopic assisted technique for surgical treatment of gastro-intestinal affections in dogs.
	Investigators	Thomas Eunice George and Dr. S. D. Tripathi
	Name of the college	Bombay Veterinary College, Mumbai
	Recommendation	Laparoscopic assisted method is recommended in diagnosis and treatment of gastro-intestinal affections like intussusception, intestinal obstruction etc., where the traditional method of diagnosis is doubtful.
30	Project title	Evaluation of sub-xiphoid and midlateral intercostal thoracoscopy examination under propofol-isoflurane and ketamine-isoflurane anaesthesia in dogs.
	Investigators	Mr. Dafir Anil Appasaheb and Dr. G. S. Khandekar
	Name of the college	Bombay Veterinary College, Mumbai
	Recommendation	Sub-xiphoid port placement is recommended for thoracoscopic examination in dogs.
31	Project title	Comparative evaluation of single and double stage diaphragmatic herniorrhaphy in buffaloes.
	Investigators	Mr. PendharkarGandhar Ghanshyam and Dr. A.H. Ulemale
	Name of the college	KNP College of Veterinary Science, Shirwal
	Recommendation	In buffaloes, for repair of diaphragmatic hernia, single stage herniorrhaphy is a convenient method for surgeon, less stressful to animal and more economical to farmer. Hence, recommended for its application.
32	Project title	Surgico-Therapeutic Strategies for Management of Hoof Affections in Cattle
	Investigators	Dr. R. V. Raulkar and Dr. M. G. Thorat
	Name of the college	Post Graduate Institute of Veterinary and Animal Sciences, Akola
	Recommendation	<ol style="list-style-type: none"> 1) Regular cleaning of hoof, foot bath with 5 percent CuSO₄ or KMnO₄ solution and timely hoof trimming is an effective practice for prevention and treatment hoof affections in cattle. 2) Use of self polymerising powder commonly used for preparation of denture is recommended for application of hoof block for the treatment of severe sole ulcer and sole puncture in cattle under field conditions.



8.D. STUDENT'S RESEARCH:

8.D.1. Veterinary Anatomy, Histology & Embryology		
1	Title	: Gross Anatomical and Histomorphological Studies of the Plantar Group of Muscles in the Hind Limb in Dog (<i>Canis familiaris</i>) in relation to Biomechanics
	Conclusions	: 1. Muscle length, fasciculus and cross sectional was more in biceps femoris which is responsible for weight bearing and locomotion whereas fiber length and Architectural Index of semitendinosus muscles is highest which is responsible for fast running. 2. Stress and isometric force generated by muscle is absorbed by the tendon during locomotion.
8.D.2. Veterinary Physiology		
1	Title	: Effect of melatonin on bovine sperm characteristics and ultrastructure change.
	Conclusion	: The results obtained revealed that the velocity and vigour of spermatozoa were highest in the 0.25mM MLT treated semen followed by 0.1mM MLT treated semen where as velocity and vigour decreased for 0.2 mM MLT treated samples when compared with control-post thaw except for VCL and ALH which increased with increase in the concentration of melatonin. The highest percentage of sperm viability, acrosome intactness and HOST reactive spermatozoa was observed for semen treated with 0.2mM MLT with respect to control -post-thaw group followed by 0.1mM MLT and 0.25mM MLT treated semen. The electron micrography showed that within the melatonin treated group, the fine structure of plasma membrane and acrosome integrity was maintained in 0.1 mM MLT when compared to control group whereas the highest damaged acrosome and plasma membrane was observed in 0.2 and 0.25 mM MLT. Thus it is concluded that, the supplementation of melatonin to the freezing medium during cryopreservation improves the motility, viability, plasma membrane integrity and normal morphology of cryopreserved bull spermatozoa through its antioxidant properties by preserving the integrity of plasma membrane fine structures, mitochondrial dense structure and activity of the cryopreserved spermatozoa.
2	Title	: Interleukin 1 β (IL-1 β) and protein profile during different stages of gestation in buffalo.
	Conclusion	: The result of the present study indicated that the concentration of serum Interleukin 1 β was higher in mid gestation than early and late gestation and was non-significant. Serum total protein decreased from early to mid-gestation and increased again during late gestation. The serum total protein concentrations during three stages of gestation are non-significant. The serum albumin level increased sharply from early to mid-gestation. It decreased from mid to late gestation. The serum albumin concentrations during three stages of gestation are non-significant. The serum globulin level is highest during mid gestation, comparatively lower in late gestation and lowest in early gestation. The serum globulin concentrations during different stages of gestation in buffalo are non-significant. The Serum A: G ratio is highest during early gestation. It was lower in late gestation and lowest in mid gestation. The Serum A: G ratio was non-significant during different stages of gestation in buffalo. Correlation of Interleukin 1 β with serum total protein, albumin, globulin and A: G was found non-significant in all stages but was



		positively correlated with serum total protein and globulin during early, mid and with A: G during late gestation. Correlation of serum total protein was found to be significant with serum globulin during early gestation, with globulin and A: G during mid and with globulin during late gestation. Serum albumin was positively correlated with globulin during early and late gestation, with globulin and A: G during mid-gestation and is non-significant. Correlation of globulin is negatively correlated with A: G during early, mid and late gestation and is significant. It is concluded that the increased IL-1 β concentrations during mid-gestation could be the trend in buffalo that can be species specific. Highest concentration during mid gestation may play some vital role which needs to be investigated further.
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8.D.3. Pharmacology & Toxicology

1	Title	: Antimicrobial activity of extracts of selected plants against multi drug resistant <i>Staphylococcus aureus</i> isolated from Bubaline mastitis.
	Conclusion	: The study suggests the use of these medicinal plants in the treatment of various diseases of animal as well as human caused by MDR S. Aureus strains. Also further investigations should be carried out to detect active phytochemicals responsible for antibacterial activity of the plants.
2	Title	: Possible endocrine disrupting effect of deltamethrin of male zebrafish and its effects on embryo development.
	Conclusion	: Deltamethrin, at the concentrations selected for the present study, has shown some characteristics of EDCs. The data can be further strengthened by undertaking histopathology, hormonal assays and vitellogenin assay.
3	Title	: Developmental toxicity of some veterinary drugs in zebrafish (<i>Danio Rerio</i>) embryos
	Conclusion	: The order of toxicity among the studies drugs from higher to lower toxicity were Triclabendazole, Closantel, Levamisole, Tiamulin and Ractopamine. Overall results indicated that zebrafish embryos constitute a reliable model for testing the developmental toxicity.
4	Title	: Detection of some heavy metals in dog serum from Mumbai & Thane area.
	Conclusion	: The difference in the SGPT and SGOT levels in different age group dogs was found significant. Also the BUN levels showed significant difference between male and female dogs. The SGOT, SGPT, BUN and creatinine values in all the groups were within the normal range and no significant differences were found. Hb, PCV, RBC, LYM, WBC, MCH, MCHC and platelet levels were within the normal range in all the groups and no significant difference was found.
5	Title	: Study of antibacterial activity and synergism amongst plant extracts and conventional antibacterials against <i>Staphylococcus aureus</i> and <i>Escherichia coli</i>.
	Conclusion	: The study revealed that plant <i>Hindicus</i> and <i>P.grantum</i> possesses broad antibacterial activity against gram positive and gram negative bacteria. The extract of <i>M. indica</i> combined with conventional antibacterial has shown increase antibacterial activity against <i>S.aureus</i> and combination of <i>P.grantum</i> extract with conventional antibacterial was found more effective against <i>E.coli</i> .
6	Title	: Antibacterial activity of leaf extract of <i>Limoniaacidissima</i>Linn with special reference to <i>Pasteurelalmultocida</i>
	Conclusion	: From the study it was concluded that aqueous and ethanolic extract can be utilized for therapeutic purposes, however its use as an antibacterial drug against animal pathogen cannot be assured but minor infection can be treated. Since very little activity was observed against <i>P. multocida</i> , it cannot justify the use of leaves in treatment of Haemorrhagic Septicemia.
7	Title	: Comparative Evaluation of <i>Phyllanthus Emblica</i> and <i>Allium sativum</i> on Arsenic Induced Genotoxicity, Oxidative Stress and Immunotoxicity in Mice & Rats
	Conclusion	: The short and long duration repeated exposure of sodium arsenite in wistar rats and Swiss albino mice causes toxicity. <i>Phyllanthus emblica</i> extract treated animals showed improved status as compared that with <i>Allium sativum</i> treatment.
8	Title	: Sub-Acute Dermal Toxicity Evaluation of <i>MorindaCitrifolia</i> Linn. Fruit Extract Coated Gold Nano Particles in Wistar Rats
	Conclusion	: There is no significant toxicity in entire dosage, from hematology aspect but slight immune stimulation seen upto 14 th day of experiment in McFE coated gold nano particles doses with no relation to dose & coating.



9	Title	: Evaluation of prophylactic and therapeutic efficacy of curcumin against <i>Escherichia coli</i>-induced infection in broiler chicks
	Conclusion	: Curcumin at prophylactic and therapeutic doses showed positive impact on weight gain, feed consumption and restoration or amelioration of hemato-biochemical alterations in <i>E. coli</i> induced infection in broiler chicks. Thus, curcumin could be a potential candidate in controlling <i>E. coli</i> infection in broiler birds.
8.D.4. Veterinary Parasitology		
1	Title	: <i>In-vitro</i> evaluation of fungal bio-control agents and herbal bio-pesticide against cattle tick, <i>Rhipicephalus microplus</i> (Acarina: Ixodidae)
	Conclusions	: <ol style="list-style-type: none"> 1. All the 3 fungal biopesticides i.e. <i>Metarhizium anisopliae</i>, <i>Beauveria bassiana</i> and <i>Verticillium lecanii</i> against cattle tick, <i>Rhipicephalus microplus</i> showed significant acaricide activity in terms of mortality of adult ticks, reducing egg laying capacity, less hatchability and less hatchability of treated eggs. The activity was optimum at 5g/l. On the basis of this, all the 3 funguses can be recommended for tick control programmes, subject to the evaluation under field conditions. 2. Herbal acaricide product (containing Neem oil, Karanj oil, Eucalyptus oil, Rohit Gawash and Karpura) showed 100% effectiveness as tickicidal and ovicidal, thus can be recommended in the integrated tick control programme. Similarly study also observed the combination of 3-4 herbs prepared in a base which act as surface reductant and which helps in better dissolution; has the best activity as ovicidal and tickicidal.
8.D.5. Veterinary Microbiology & Biotechnology		
1	Title	: Bacteriological and Fungal Investigation of Canine Skin Infections
	Conclusions	: <ol style="list-style-type: none"> 1. The incidence of bacterial infection (80.3%) was found more in skin infections of dog as compared to fungal infection (66.6%). 2. The incidence of both infections observed were more in the dogs of 1-3 years age group male dogs than female dogs 3. <i>Staphylococcus</i> spp. was the major bacterial cause (67.20%) of canine skin infection in dogs amongst <i>Staphylococcus</i> spp. 4. Among mycotic agents' dermatophytes (20%) and yeast (22%) infections were in similar range. 5. Gentamycin, Chloramphenicol and Vancomycin were found most suitable antibiotics in treatment of bacterial skin infections. 6. Miconazole was the most effective antifungal drug and Nystatin had the poorest activity against dermatophytes. 7. <i>M. pachydermatis</i> and <i>Candida</i> were more sensitive to Amphotericin B 20 (90.9%) and less sensitive to Ketoconazole 3 (13.63%) and Itraconazole 6 (27.27%).
2	Title	: Development of <i>Mycoplasma gallisepticum</i> coloured antigen for rapid diagnosis of avian mycoplasmosis
	Conclusions	: <ol style="list-style-type: none"> 1. PPLO medium with pig serum (20%) and yeast extract (40%) yielded maximum growth of field strain of <i>Mycoplasma gallisepticum</i> culture for antigen preparation. 2. Experimental antigen prepared from field strain found better than antigen prepared from ATCC strain in detecting <i>M. gallisepticum</i> antibodies. 3. Optimum reaction of RSA was observed in serum dilution of 1:20 without cross reaction and false positive results. 4. Sensitivity of ERSAA was found greater than ELISA in detection <i>M. gallisepticum</i> antibodies 5. Comparative results of sensitivity of RSA by ERSAA and CRSAA antigen indicated that ERSAA antigen is superior to CRSAA antigen in detection of <i>M. gallisepticum</i> antibodies.



3	Title	: Seroprevalence of <i>Mycoplasma gallisepticum</i> and <i>Mycoplasma synoviae</i> in poultry
	Conclusions	: 1. Studies showed serological evidence of the presence of MG and MS antibodies in broiler chicken in five different regions of Maharashtra state. 2. The highest percentage of MG and MS seroprevalence was noted in Western Maharashtra and lowest percentage in Vidarbha region of Maharashtra state. Age group studies revealed that 2 week age group of broiler birds show highest percentage of MG and MS seroprevalence. Also the highest positive percentage of Mycoplasmosis seroprevalence is noted in Winter season. 3. RSA and ELISA may be used as screening tools in monitoring programs to detect avian mycoplasmosis in broiler. Positive results should be confirmed by isolation by traditional microbiological methods and biomolecular assays. 4. The highest percentage of positive seroprevalence of MG and MS in western Maharashtra is unknown. However, it may be due to well developed, high density of poultry rearing farming and huge influx of animals. A detailed study on the Maharashtra state wide seroprevalence of MG and MS should be designed to establish the current status of Mycoplasmosis in Maharashtra State.
4	Title	: Molecular Characterization and Phylogenetic Analysis of <i>Peste Des Petits Ruminants Virus</i> In Goats
	Conclusion	: Out of 25 nasal swab samples processed, 03 samples were positive for PPRV viz. ED-01/2017, PBN-02/2017 and PBN-03/2017 which were determined to be of Lineage IV. The intra lineage variation for Lineage IV was 0.039 it was n/c, 0.093 and 0.08 in the lineage I, II and III respectively.
5	Title	: Molecular characterization and Phylogenetic analysis of Contagious ecthyma virus in Goats
	Conclusion	: Out of the 25 scab samples of goats, 10 were confirmed positive for contagious ecthyma virus. The five contagious ecthyma virus sequences studied indicated that four contagious ecthyma viruses (F4/CF/PBN/2017, 68/Asola/PBN/2016, 70/PBN/2017 and 96/CF/PBN/2017) showed close identity with each other with the exception of only one contagious ecthyma virus sequence (N1/Pimpla/PBN/2017) that showed close phylogenetic relationship with Jaganathpara/Tripura/14_India_2014, sequence.
6	Title	: Emergence of Virulent and Antibiotic Resistant <i>Pasteurellamultocida</i> and <i>Mannheimiahemolytica</i> in Sheep and Goats of Western Maharashtra, India
	Conclusions	: 1. Overall incidence of Pasteurellosis was found to be more in sheep than in goats in the area. 2. <i>P. multocida</i> species were isolated and phenotypically identified at higher rate than <i>M. haemolytica</i> species from respiratory tract of diseased as well as healthy sheep and goats. 3. <i>P. multocida</i> when processed with CAP A and CAP D capsular antigen PCR, resulted in higher proportion of CAP A strains than CAP D. Thus, suggesting necessity to monitor continuously the prevalence of various serotypes in the area in small ruminants.
8.D.6. Veterinary Pathology		
1	Title	: Studies on Effect of <i>Costus pictus</i> and <i>Enicostemalittorale</i> Extracts in Streptozotocin Induced Diabetes Mellitus in Sprague Dawley Rats.
	Conclusions	: 1. Extractability % of <i>Costus pictus</i> was found higher than that of extracts of <i>Enicostemalittorale</i> in both, ethanolic and aqueous extracts. Overall, nutritive values of leaves of <i>Costus pictus</i> were found better than that of <i>Enicostemalittorale</i> Blum. Qualitative phytochemical analysis of aqueous and ethanolic extracts of both the plants revealed presence of phytoconstituents useful against diabetes.



		<ol style="list-style-type: none"> 2. Phase-I study revealed that, the LD₅₀ cut off value of aqueous and ethanolic extracts of <i>Costuspictus</i> and <i>Enicostemalittorale</i> when fed individually and in combination was more than 2000 mg/kg body weights. 3. Diabetes mellitus can be effectively induced by single intraperitoneal injection of STZ at the dose rate of 45 mg/kg BW in Sprague dawley rats, and maintained consistently for 42 days. 4. Phase-II experiment (range finding study) revealed that average dose of 450 mg/kg BW could be an effective dose for efficacy study (Phase-III). 5. Treatment of diabetic rats with aqueous and ethanolic extracts of <i>Costuspictus</i> were found more effective in lowering the blood glucose levels than that of aqueous and ethanolic extracts of <i>Enicostemalittorale</i> @ 450 mg/kg BW. 6. Aqueous forms of herbal extracts studied were found comparatively more effective than ethanolic extracts. Moreover, combined herbal extracts showed ameliorative effect by synergistic action in the study. 7. It can be concluded that, aqueous extract of combine treatment of <i>Costuspictus</i> and <i>Enicostemalittorale</i> (@ 450 mg/kg BW) can be considered as an effective treatment for diabetes mellitus in SD rats.
2	Title	: Clinicopathological Studies on Spontaneous Growths in Canines
	Conclusions	<ol style="list-style-type: none"> 1. There was an equal incidence of benign and malignant neoplasms. The epithelial tumors showed equal predisposition to be either benign or malignant. However mesenchymal and lympho-histiocytic tumors were more malignant than benign. The mesenchymal tumors predominated at 36.9% cases. Also, the highest number of cases recorded was of lymphosarcomas and adenocarcinomas. 2. Largest number of cases was recorded in Labradors; however, there was a higher incidence of benign and inflammatory growths in this breed. Second most susceptible breed was Non-descript dogs who not only had a high incidence of tumors but also a higher ratio of these were malignant in nature. 3. The occurrence of spontaneous growths was most common in dogs between 5.1 to 9 years of age. 4. Spontaneous growths occurred more in males than in females. However, the females had more cases of malignant growths than males. 5. Historical data with respect to size, location and gross appearance of tumors was helpful in obtaining a tentative diagnosis for many types of tumors. It was also found that anaemia, leukocytosis and elevated ALP values are a common finding in cancer cases. 6. Round cell tumors can easily be diagnosed by cytology. However, mesenchymal tumors have more chances of giving an inconclusive diagnosis. 7. USG guided cytology was effective in diagnosing visceral lymphoma and tumors of reproductive system, while cytology of the spleen has limited diagnostic value. 8. A quick stain can be effective for cytology as long as the cytopathologist is accustomed to the colourations observed. 9. Cytology is a reliable tool for the diagnosis of neoplasia; however, owners should be informed that a negative result does not rule out neoplasia completely. 10. In addition to cytology, histopathology should be employed for confirmation, staging and grading of cancer.
3	Title	: Pathology and diagnosis of <i>Theileriaannulata</i> and <i>Theileriaorientalis</i> in buffaloes
	Conclusions	<ol style="list-style-type: none"> 1. Prevalence of Theileriosis was found to be 17.62% (40/227) on the basis of microscopic examination of stained blood smear. The sensitivity of blood sample collected from jugular and ear vein was found to be 28.88% and 31.39 % respectively. 2. On the basis of PCR assay, prevalence of Theileriosis in buffaloes of Nagpur area was 39.20 % (89/227). However, prevalence of <i>T. annulata</i>, <i>T. orientalis</i> and both <i>T. annulata</i>



		<p>and <i>T. orientalis</i> in buffaloes was found to be 30.39% (69/227), 5.72% (13/227) and 3.08% (7/227) respectively.</p> <ol style="list-style-type: none"> Haematobiochemical alterations and pathological changes were more pronounced in buffaloes found positive for both <i>T. annulata</i> and <i>T. orientalis</i> followed by <i>T. annulata</i> and <i>T. orientalis</i> infection. Ear vein is the best site for diagnosis of Theileriosis. PCR technique is highly specific and sensitive in the diagnosis of Theileriosis at any stage of disease.
4	Title	Detection of Theileriaannulata in cattle using PCR and ELISA
	Conclusions	<ol style="list-style-type: none"> Ear vein blood smear examination is better to diagnose the cattle suffering from clinical theileriosis than that of jugular vein blood smear examination. Haematological parameters revealed reduced Hb, PCV and TEC values in infected animals as compared with the non- infected animals. Biochemical analysis revealed decrease in serum total protein, serum albumin and serum globulin values and elevated AST and ALT values in infected animals as compared to non-infected animals. PCR has higher sensitivity and specificity over conventional blood smear examination and other diagnostic techniques. Ear vein blood sample PCR needs to adopted for diagnosis of <i>Theileriaannulata</i> infection in cattle. ELISA is suitable for large-scale epidemiological studies in endemic regions. The antigen 2 can be explored further for development of diagnostics. Amongst the infected animal higher prevalence of Theileriosis was observed in crossbred animals as compared to indigenous animals. PCR is best tool for diagnosis of Theileriaannulata in cattle which can detect infection in chronic carrier stage and can be used as standard diagnostic method for detection of Theileriaannulata in cattle from ear vein blood.
5	Title	Etiopathological investigations of respiratory affections in Goats with special reference to bacterial infections
	Conclusions	<ol style="list-style-type: none"> The overall prevalence of respiratory affections in screened goats was found to be 89.72% The goats aging 1 year showed 96.91% prevalence and goats ageing more than 1 year were with 71.92% prevalence of respiratory affections <i>Staphylococcus</i> species found to be highly prevalent than other bacterial species.
6	Title	Ameliorative effect of <i>Picrorhizakurroa</i> against <i>Lantana camera</i> toxicity in Wistar rats
	Conclusion	<p><i>Lantana camera</i> @ 0.25 %/kg body weight through feed when given daily for 28 days in male and female rats reduced body weight from 3rd week onwards till 28th day. <i>Lantana camera</i> @ 0.25 %/kg body weight on its feeding daily showed non-significant reduction in Hb and TEC with rise in TLC.</p>
7	Title	Pathomorphological studies of gastrointestinal Parasitism in Osmanabadi Goats
	Conclusion	<p>The overall prevalence of gastrointestinal parasitism in slaughtered and died Osmanabadi goats in and around Parbhani was 71.06%. The projected economic losses as a result of gastrointestinal parasitism in goats in and around Parbhani approximately estimated to a tune of Rs. 314,94,475/- per annum.</p>
8.D.7. Veterinary Public Health		
1	Title	Molecular Characterization OF <i>Trichinella</i> spp. Isolated from Pigs of Goa and Assam Regions of India
	Conclusions	<ol style="list-style-type: none"> None of the sample out of 421 samples of slaughtered pigs of Goa (346) and Assam (75) examined by acid-pepsin digestion and PCR assays showed positivity for Trichinellosis with a prevalence of zero percent. Similarly, none of the sample out of 161 samples of slaughtered pigs of Maharashtra examined by acid-pepsin digestion and PCR assays showed positivity for Trichinellosis with a prevalence of zero percent.



		<p>3. In Multiplex PCR analysis, the isolated DNA of <i>T. britovi</i> showed amplified genotype fragment size of 127 and 253 bp for ESV and ITS1 primers, respectively. However, <i>T. spiralis</i> showed only one amplified genotype fragment size of 173 bp for ESV. Therefore, standardized multiplex PCR can be useful for differentiation of <i>T. britovi</i> and <i>T. spiralis</i>.</p> <p>4. Findings observed in the study conclude that pigs of Goa, Assam and Maharashtra were not infected or had a very low infection with Trichinellosis at the slaughtering level.</p> <p>5. Regular monitoring and surveillance programmes at national level are necessary to generate scientific data to support pig industry of the country and get the <i>Trichinella</i> free status.</p>
2	Title	: Standardization of Flow Through Assay for Serodiagnosis of Cysticercosis in Pigs
	Conclusions	<p>1. The overall prevalence of cysticercosis in slaughtered pigs of Deonar abattoir by post-mortem inspection was observed to be 0.33%.</p> <p>2. It is recommended that the postmortem inspection is useful for the diagnosis of cysticercosis in slaughtered pigs but the serodiagnosis is an important tool for the identification of disease status at ante mortem level</p> <p>3. The seroprevalence of cysticercosis by FTA using purified antigens i.e., CFA, WCA and SA was found to be 9.6%, 12.8% and 13.6%, respectively.</p> <p>4. The seroprevalence of cysticercosis by ELISA was found to be 6.4% with 88% sensitivity and 100% specificity.</p> <p>5. By comparing FTA and ELISA, there was no significant difference in sensitivity and specificity ($k=0.82$) and the strength of agreement between these tests was very good.</p>
3	Title	: Effects of Electron Beam Irradiation on The Quality of Pork Products Stored at Refrigeration Temperature
	Conclusions	<p>1. The irradiation at the dose rate of 4.5 kGy was found to be effective for the shelf-life extension of pork sausage and salami for 27 days at refrigeration storage temperature.</p> <p>2. The Electron Beam irradiation showed a significant reduction in microbial count, physico-chemical parameters; however, there was no significant effect on sensorial values in both pork sausage and salami.</p>
4	Title	: Prevalence of <i>listeria monocytogenes</i> in ruminants and vectors at organized farm and its environment
	Conclusions	<p>1. Isolation of <i>Listeria</i> spp. using two step enrichment in University of Vermont (UVM) following selective plating onto Polymixin-Acriflavin-Lithium-chloride-Ceftazidime-Aesculin-Mannitol(PALCAM) agar is a satisfactory combination for isolation of <i>L. monocytogenes</i> from goats, cattle and its farm environment including vectors. Of these, the highest prevalence of <i>L. monocytogenes</i> in goats (12.63 per cent) followed by five (ten per cent) in goats slaughtered in the region, which were subsequently revalidated by multiplex PCR targeting two genes, <i>prs A</i> (842 bp) and <i>isp</i> (711 bp) whereas no isolation could be noted among human cancer patients. The variability in Xylose fermentation pattern noted among <i>L. monocytogenes</i> isolates could be specific for this region.</p> <p>2. Prevalence of <i>Listeria monocytogenes</i> among goats was to the tune of 12.63 percent. The environmental and vector samples revealed positivity for <i>L. monocytogenes</i> among a soil sample (5.88 per cent), a fly (6.25 per cent) & a tick (3.57 per cent).</p> <p>3. The seroprevalence for listeriosis was noted as 11.58 per cent in goats while none of the cattle serum turned positive for ALLO.</p> <p>4. Isolates showed 14 pulsotypes tuned of 60 per cent similarity indicating the isolates were of diverse nature. The most frequent serotype of <i>L. monocytogenes</i> for the present study were of 4b (93.33%) and only one isolate revealed 1/2b serotype.</p>
5	Title	: Scenario of <i>orientia tsutsugamushi</i> infection in human and rodent population
	Conclusions	<p>1. Conventional PCR targeting 56-kDa gene is more sensitive than nested PCR for the detection of <i>Orientia tsutsugamushi</i> in human population including clinical cases than any other PCR assay.</p>



		<p>2. Serodiagnosis based on IgM IFA is more efficacious in differentiating the infecting strains than IgM ELISA, but for routine diagnosis in laboratory, the IgM ELISA can be exploited when IFA is not available.</p> <p>3. Nested PCR targeting 56-kDa gene is more sensitive than conventional PCR for the detection of <i>Orientia tsutsugamushi</i> in rodent population.</p> <p>4. Investigation of circulating serotypes/strains in endemic areas should be based on molecular diagnosis as compared to serological assays. The sequence analysis of the amplified fragments (410 and 483bp) from the 56kDa gene were found to be closely related to those of Kawasaki strain.</p>
6	Title	Prevalence of Q fever in small ruminants and risk groups
	Conclusions	<p>1. <i>Trans</i>-PCR employing primers of set-II (<i>Trans</i>1 and <i>Trans</i>2) exhibiting product size of 687bp is highly specific for detection of Q fever agent in small ruminants and humans. The test revealed an overall prevalence of 12.85 per cent in small ruminants (including four per cent in apparently healthy sheep, 29.21 per cent in goats and 22.50 per cent in clinical cases) and 18.34 per cent in human (including 19.44 per cent in occupationally exposed risk groups and 30 per cent in cases of abortions).</p> <p>2. <i>Trans</i>-PCR employing primers Set-I (<i>Trans</i>3 and <i>Trans</i>4) revealing product size of 243bp is good test for detecting <i>Coxiella burnetii</i> in vectors. Wherein 23.52 per cent prevalence is detected in ticks.</p> <p>3. Always a battery of tests inclusive of molecular and serological assays for detection of cases of Q fever should be employed.</p> <p>4. Screening of Q fever in occupationally exposed risk groups should be performed regularly for knowing the actual load among the population and further measures for prevention of transmission.</p>
7	Title	<i>In-vitro</i> efficacy of bacteriocins released by lactic acid bacteria to improve shelf life of meat.
	Conclusions	<p>1. The cumulative presence of <i>nisA</i>, <i>nisR</i> and <i>nisZ</i> can be taken as indicator of high bacteriocin production for <i>L. lactis</i> isolates.</p> <p>2. The absence of lactosin S, <i>plnA</i> and <i>plaA</i> in <i>Lactobacillus</i> indicate the probability of other controlling factors for production of bacteriocin.</p> <p>3. MRS media added with 6% glucose and 2% peptone with an incubation period of 12 hr. is found to be better combination for enhanced production of bacteriocin among Lactic Acid Bacteria (LAB).</p> <p>4. Application of DEAE cellulose ion exchange chromatography with Tris buffer (10M) after 50% ammonium sulphate saturation followed by dialysis yielded better results for purification of bacteriocins.</p> <p>5. The crude CFS obtained from <i>Lactococcus lactis</i> exhibited good antimicrobial activity against Gram positive and Gram negative pathogens upto three days.</p>
8	Title	Comparative efficacy of whole cyst and cystic fluid antigens for detection of cysticercosis in pigs and humans
	Conclusions	<p>1. The prevalence of cysticercosis in pigs was estimated as 0.39%.</p> <p>2. Cystic fluid antigen is found to be more efficacious for diagnosis of cysticercosis.</p> <p>3. The overall seropositivity of cysticercosis in pigs was recorded to the tune of 39.74% for Cystic Fluid Antigen (CFA) and 34.32% for Whole cyst antigen (WCA) and 33.14% for both the antigens.</p> <p>4. The seropositivity of neurocysticercosis among human epileptic patients was 12% and 24% for antibodies against WCA and CFA respectively.</p> <p>5. The bands of 36kDa and 146kDa recognized by two seropositive pigs are specific for WCA and can be explored for diagnostic value.</p> <p>6. The diagnostic potential of blood PCR needs to be revalidated by inclusion of large number of known positive cases of cysticercosis.</p> <p>7. More studies with purified antigens are needed to rule out cross reactivity with other related parasites.</p>



9	Title	: Quality assessment of raw milk at dairy farm, transportation & retail shop
	Conclusion	: Adultration of milk with water was present and that os urea, starch and caustic soda was absent. Physico-chemically milk was found to be of good quality. External contamination with <i>E. coli</i> was seen in majority of samples. <i>Listeria</i> spp were observed in 2.08 percent samples. The <i>Clostridium</i> spp contamination was observed in all stages of supply chain indicating soil contamination.
10	Title	: Phenotypic and molecular characterization of extended spectrum beta lactamases in <i>Escherichia coli</i> isolated from food animals.
	Conclusion	: <i>Escherichia coli</i> present in the fecal matter of food animal species and broiler birds are multidrug resistant, ESBL type harboring blaCTXM and blaTEM genes predominantly.
8.D.8. Animal Nutrition		
1	Title	: Effect of varying plane of nutrition on performance of growing Dangi calves
	Conclusion	: It is concluded that growing Dangi calves performed adequately well when fed on diet containing 10% less nutrients than ICAR (1998) and such reduction of nutrient was cost effective.
2	Title	: Effect of protected and unprotected fat supplementation on performance of growing goats
	Conclusion	: It is concluded that supplementation of protected fat i.e calcium salt of palm oil fatty acid @1% DMI per kid per day is beneficial for improving the overall growth performance of kids in terms of weight gain, efficiency of feed utilization and such supplementation is cost effective as compared to unprotected fat i.e palm oil.
3	Title	: Effect of inclusion of wet distillers grain with solubles replacing concentrate mixture in the ration of growing goats
	Conclusion	: It is concluded that inclusion of WDGS at 30% level replacing equal quantity of concentrate mixture is beneficial for improving the overall growth performance of growing goats in terms of weight gain, efficiency of feed utilization and such supplementation is cost effective.
4	Title	: Growth performance of goats fed <i>Moringa oleifera</i> leaf meal incorporated in concentrate mixture
	Conclusion	: It is concluded that 12.5 percent incorporation of <i>M. oleifera</i> leaf meal (MOLM) in concentrate mixture of growing goat replacing equal proportion of cotton seed cake can reduce cost of production of growing local goats by 12.8 percent.
5	Title	: Effect of replacement of concentrate mixture by maize hydroponic fodder on performance of Goat
	Conclusion	: It is concluded that hydroponic maize fodder can replace concentrate mixture up to 25 percent for economical raising of growing goats.
6	Title	: Effect of dietary inclusion of guar (<i>Cyamopsis tetragonoloba</i>) korma meal on performance, gut health and litter attributes in broiler chicken
	Conclusion	: GKM supplementation improved net profit per kg live weight over the conventional standard broiler ration, validating use of GKM as a probable alternative protein source in broilers upto 10% with or without supplementation of β -mannanase and probiotic.
7	Title	: Performance of broilers fed limiting amino acids with varied levels of crude protein
	Conclusion	: Reduction in dietary CP levels than BIS (2007) standards could improve overall performance of broilers vis-e-vis control group without compromising net profit of broiler production.
8	Title	: Effect of supplementation of chromium propionate on the performance of lactating murrah buffaloes(<i>Bubalus bubalis</i>)
	Conclusion	: The observation made in present study concluded that, supplementation of chromium propionate had significant effect on DMI, milk production, FCM, DCP, TDN, digestibility of nutrients, feed efficiency and farm economics.



9	Title	: Effect of partial replacement of maize with dried citrus pomace in concentrate mixture of goats (<i>Capra hircus</i>)
	Conclusion	: The present study concluded that, replacement of maize from concentrate mixture by dried citrus pomace in the diet of goats shows improvement in digestibility of nutrients, weight gain and economics
10	Title	: Fatty acid profile of broiler chicken meat fed on various edible oils and tallow included diets
	Conclusions	: <ul style="list-style-type: none"> • The required favorable levels of essential fatty acids like Linoleic, Linolenic and Arachidonic acid can be successfully achieved in the chicken meat for human consumption by inclusion of specific vegetable oils in chicken diet. • Safflower oil improved Linoleic acid levels while, soybean and sunflower oil improved Linolenic and Arachidonic acid levels respectively in breast and thigh muscles of chicken.
11	Title	: Effect of supplementation of critical amino acids on the performance of broiler chicken fed on low protein diet
	Conclusion	: Broiler chicken fed 10 per cent low crude protein diet than BIS standards (2007), balanced with critical amino acids as per BIS, 2007 as well as NRC (1994) standards had improved overall performance of birds. Fortification of diet with critical amino acids, as cheaper source of protein with better availability than other feed ingredients ensures strategic supplementation of nutrients by precision feeding and can fetch more profit without impairing any adverse effect on broiler rearing.
12	Title	: Effect of herbal vitamin D₃ on reduced level of calcium with phytase enzyme on performance of broiler chicken
	Conclusion	: The performance in commercial broiler chicks fed suboptimum level of calcium increased with supplementation of herbal vitamin D ₃ and phytase enzyme. Addition of herbal vitamin D ₃ with phytase in a calcium reduced diet showed positive impact on bone mineralization, blood biochemical as well as improved nutrient retention signifies improvement in the efficiency of absorption and utilization of nitrogen, calcium and phosphorous nutrients. Thus, permit formulation diets lower in calcium. Further, addition of herbal vitamin D ₃ and phytase in calcium reduced diet save the cost of production by decreasing the source of calcium which can increase profit margin in broiler sector.
13	Title	: Performance of broiler chicken supplemented with critical amino acid and multienzyme on low protein and energy diet
	Conclusion	: Broiler chicken fed 5% low crude protein and energy diet balanced with critical amino acid, L-Lysine and DL-Methionine as per BIS 2007, supplemented with multienzyme showed significant improvement in performance of broilers weight gain with improved retention of nitrogen and carcass traits. It can be concluded that L-Lysine and DL-Methionine balanced; low protein and energy diet supplemented with multienzyme was found to be better in performance as well as economical and can maximise profitability of poultry production.

8.D.9. Animal Genetics and Breeding

1	Title	: Mutational Analysis of BRCA 2 Gene in Canine Mammary Tumour
	Conclusions	: <ol style="list-style-type: none"> 1. A total of 40 DNA samples from blood and tissue were processed for PCR out of which fragment having expected size of 2.5 kbp was obtained from 30 DNA samples and rest of the samples failed to amplify due to the formalin preservation. 2. Sequence analysis of four tumour and fur blood samples was carried out and 9 mutations (7 mis sense and two silent) were observed. Out of this mutations K801Q and K1435R was found reported.



		<p>3. In the present study the mutations (AAT→GAT i.e. N669D), (GAC→GAT i.e. D1322D), (TCA→TCT i.e. S1437S), (GAG→CAG i.e. R908T), were reported for the first time in canine BRCA2 gene which could have functional impact and requires further detail studies.</p> <p>4. K1435R is located in BRC3 repeat of BRCA2 exon 11 and affect the interaction of canine BRC3 with RAD 51 and may considered deleterious. This mutation also reported in human breast cancer patients occurred as amino acid (K144R and K1440E) corresponding to K1435R mutation in dogs.</p>
2	Title	PCR- RFLP of IGFBP-3 Gene in Madgyal Sheep
	Conclusions	<p>1. In the present investigation, Madgyal sheep were found to be monomorphic carrying only wild type of allele at IGFBP-3 gene locus comprising of partial exon 2, complete intron 2, complete exon 3, partial intron 3. Therefore, no association could be established between IGFBP-3 gene polymorphism and birth weight of Madgyal sheep.</p> <p>2. <i>Haelli</i> restriction site found to be absent for 333 bp amplicon of IGFBP-3 gene of studied Madgyal sheep.</p> <p>3. Since the study was limited to small number and specific region, the study can be undertaken on large scale in order to genotype the Madgyal sheep in different parts of the breeding tract of these sheep.</p>
3	Title	Cytogenetic and Molecular Analysis of Reproductive Disorders in cattle
	Conclusions	<p>1. In the present study GTG banded karyotype were found to be normal (2n=60) according to ICNDB 2000, no major numerical as well as structural abnormalities were observed.</p> <p>2. Total 36 per cent of cows were shown minor chromosomal abnormalities such as chromatid gap, chromatid break, centromeric attenuation and sex chromosomal abnormalities in repeat breeder and anestrous cows under investigation.</p> <p>3. The range of minor chromosomal abnormalities was found to be between 11.23 to 28 per cent in affected animals. The trend of occurrence of fragile sites in autosomes and X chromosome was highest for chromatid breaks followed by chromosomal gaps and centromeric attenuation.</p> <p>4. It was also observed that the percentage of fragile sites was higher in repeat breeder (40.38%) cows than that of anestrous cows (30%).</p> <p>5. The X chromosomal fragile sites were found to be higher in HF crossbred cows (16.66%) than indigenous (4.1%).</p> <p>6. All the cows were found to be normal for monogenic disorders i.e. FXID, CVM and DUMPS. Therefore, it can be concluded that these disorders may not be directly associated with reproductive problems in the studied population.</p> <p>7. Finally, it can be concluded that the reproductive disorders in 36 per cent of cattle were directly or indirectly associated with these chromosomal abnormalities, while reproductive disorders in remaining 64 per cent studied cows might be attributed to non genetic factors.</p> <p>8. Incidence of minor chromosomal abnormalities spread to other normal animal population. It can be narrated as there might be chances of having such cytogenetic disorders and genetic disorders well known for reducing fertility and productivity in affected cows.</p> <p>9. Hence through screening for genetic disorder in cattle population will strengthen the improvement or conservation programs. A future program to study the prevalence of these disorders is highly essential, especially for strengthening of livestock development.</p>
4	Title	Polymorphism study of fecundity genes (FecX^B and FecX^H) in Berari Goat
	Conclusion	There was no genetic polymorphism of FecX ^B and FecX ^H gene in Berari goat and the population was found to be monomorphic for loci.
8.D.10. Livestock Production & Management		
1	Title	Behavior and milk yield of Gir cows on different flooring material
	Conclusion	Study concluded that there was significant effect of different flooring materials on sitting/idling and cleanliness score in Gir cows where as non-significant effect on body condition score of Gir cows.



2	Title	: Growth performance of madgyal lambs under different housing system
	Conclusion	: Study concluded that slatted floor housing shows good result in madgal lambs, also significant effect was found in morphometric traits and non-significant effect was found in behaviour and physiological parameters.
3	Title	: Effect of different roofs on growth performance and behavior of Osmanabadi kids
	Conclusion	: The growth performance of Osmanabadi kids was significantly higher in thatch roof housing as compared to asbestos and FRP roof housing.
4	Title	: Body condition score of Osmanabadi Does partially fed on hydroponically grown maize fodder
	Conclusion	: The crude protein content in hydroponic maize is higher as compared to conventional green roughage. Improvement in Hematological parameters as well as BCS indicates beneficial effect of hydroponic maize on health of the does. Biochemical parameters such as total protein and serum creatinin are within normal range which indicates no adverse effect of hydroponic maize in does. Higher incorporation of Hydroponic maize in the diet of does was economically beneficial.
5	Title	: Performance of cross bred cattle (Holstein Frisian) fed on urea treated sugarcane tops silage
	Conclusion	: It was concluded that, there was no adverse effect on performance of crossbred cattle fed on 50% replacement of maize silage with sugarcane tops silage on milk yield, milk composition and blood mineral composition of treatment group compare to control group. The utilization of SCT as source of fodder in areas where SCT are available in abundant quantity can decrease the cost of production. The oxalate content reduced to the tune 0.20 against 0.28.
6	Title	: Growth performance of Osmanabadi Goats under different feeding methods
	Conclusion	: In Osmanabadi goats, stall feeding by means of hanging bunches of green as well as dry fodder is the most economic and comfortable method of feeding as it results inincrease in feed intake and overall improvement in growth performance.

8.D.11. Poultry Science

1	Title	: Comparative study of combination of different litter materials on the performance of broilers
	Conclusion	: It is concluded that soybean husk and jowar husk can be used as litter materials by replacing rice husk upto 50 and 75% levels, respectively. Moreover, the replacement of rice husk by jowar husk upto 75% level was found to be more beneficial for obtaining better production performance and higher profit margins from broilers.
2	Title	: Post hatch chick gut health through <i>Competitive Exclusion</i> Bacteria against <i>Escherichia coli</i> challenge in Commercial broiler Chicken
	Conclusions	: The study concluded that supplementation of <i>Competitive Exclusion</i> bacteria (dose @12.5 g/1000 chicks) may act as an prophylaxis agent in controlling <i>E.coli</i> infection in commercial broiler chicken
3	Title	: Effect of dietary supplementation of guar meal with β- mannanase on performace of broilers
	Conclusions	: The best production performance parameter viz., body weight gain, feed intake and cumulative feed conversion ratio were attained by the birds fed the diet with 5 per cent replacement of soya Doc with toasted guar meal and β - mannanase.
4	Title	: Effect of dietary nano zinc oxide supplementation on performance of broilers
	Conclusions	: The dietary supplementation of nano zinc oxide improved live body weight and weight gain during initial phase. Further, it also improvd the immune response, zinc retention and livability in broiler chickens.



5	Title	: Effect of corn distiller's dried grains with solubles in diets on production performance and egg quality in layers
	Conclusions	: The corn DDGS can be included up to 10% in layer diets replacing soyabean meal without affecting the performance of layer birds. However, the inclusion of corn DDGS at 15 and 20 % in layer diets was economically more beneficial with improved egg quality.
6	Title	: Chlorpyrifos induced toxicity and its amelioration with cow urine distillate in broilers
	Conclusions	: 28 days' subacute toxicity of chlorpyrifos @ 50 mg/kg in feed of broiler birds caused adverse effect on feed consumption, body weight gains and haematobiochemical indicates injuries of various organs and tissues due to chlorpyrifos toxicity. Chlorpyrifos has potential to induce hepatotoxicity, nephrotoxicity and neurotoxicity in broiler birds. Cow urine distillate was effective in improving feed consumption and body weight as well as effective in amelioration of chlorpyrifos induced haematobiochemical and histopathological alterations in broiler birds.
7	Title	: Effect of <i>Andrographis paniculata</i> in <i>E. coli</i> induced pathology in broilers
	Conclusions	: Experimentally induced <i>E. coli</i> infection affectef feed consumption, body weight gain, haematobiochemical and pathological parameters in broilers. It is concluded that <i>Andrographis paniculata</i> exhibited antibacterial, hepatoprotective, nephroprotective and cardioprotective effects during <i>E. coli</i> induced pathology in broilers.
8.D.12. Livestock Product Technology		
1	Title	: Development of intelligent packaging indicator for monitoring chicken meat quality during refrigerated storage.
	Conclusion	: Indicator sensor-1 prepared by coating indicator solution-1 (Bromocresol purple) can be used to monitor quality of chicken meat stored under refrigeration temperature ($4\pm1^{\circ}\text{C}$) on the basis of colour change of indicator sensor-1. Initial light blue colour was observed on 5 th day, which became dark on 9 th day of refrigerated storage, when meat became unacceptable. Indicator sensor-2 and 3 (Natural) packaged with chicken meat showed fading of colour during 9 days' storage at refrigeration temperature ($4\pm1^{\circ}\text{C}$). Out of indicator sensor – 1, 2 and 3, indicator sensor-1 was found to be more effective for monitoring quality of chicken meat at refrigerated ($4\pm1^{\circ}\text{C}$) storage on the basis of colour change.
2	Title	: Effect of Packaging and Superchilling on the Quality and Shelf Life of Chicken.
	Conclusion	: Poultry meat (breast fillets) superchilled at -1.5 to -2.5°C had a shelf life of 20 and 45 days under aerobic and vacuum packaging conditions respectively, without adverse effect on its quality.
3	Title	: Effect of super chilling on the shelf life of chicken nuggets
	Conclusions	: 1. Superchilled products evinced better quality as compared to chilled product during storage. 2. Chicken nuggets superchilled at ($-0.5 \pm 0.5^{\circ}\text{C}$ and $-2 \pm 0.5^{\circ}\text{C}$) had a shelf life of minimum 35 days under aerobic conditions.
4	Title	: Development and quality assessment of meat based novel product: Chicken chakali.
	Conclusion	: Chicken chakali packaged under vacuum conditions had better keeping quality as compared to chicken chakali packaged under aerobic condition upto 30 day at ambient temperature.
5	Title	: Process development and quality evaluation of the quail meat enrichednoodles
	Conclusions	: The acceptable quality of noodles was prepared with incorporation of 40% quailmince meat in wheat flour based noodles without ad versely affecting the sensory qualities and physico-chemical characteristics. Noodles made with incorporation of 40% quail mince meat in wheat flour-based noodles were acceptable for a period of 60 days when packed aerobically in LDPE (low density poly ethylene) and stored at room temperature ($35\pm2^{\circ}\text{ C}$). Noodles made with incorporation of 40% quail mince meat in wheat flour-based noodles are more cost effective as compared to 50% and 60% of quail mince meat in wheat flour based noodles.



8.D.13. Animal Reproduction Gynaecology and Obstetrics		
1	Title	: Augmentation of fertility with luteotropic hormones in repeat breeding buffaloes
	Conclusion	The efficacy of human chorionic gonadotropin @ 3000 IU is more than that of GnRH @ 20 µg and HCG @ 1500 IU to enhance the conception rate in repeat breeding buffaloes of non-infectious origin when administered on day 7 after artificial insemination.
2	Title	: Augmentation of Fertility in Dangi Cows by using Ovsynch and Doublesynch protocols.
	Conclusion	Doublesynch protocol seems to be more effective in induction of estrus and higher conception rates (66.66 vs 50.00 %) than Ovsynch protocol
3	Title	: Assessment of Feline Neonates using the Agar Scoring System
	Conclusion	From 40-60 days of gestation in domestic cats, the PSV and EDV of the umbilicus increased significantly; and the PI and RI decrease significantly. Moderately distressed kittens respond satisfactorily to resuscitation and kittens with Apgar scores of four or less by 30 minutes will usually die and of five or more usually survive for 24 hours after birth. Within 24 hours. A longer parturition time results in lower vitality of kittens at birth.
4	Title	: Diagnostic and therapeutic methods in Postpartum endometritis and its impact on reproductive performance in crossbred cows
	Conclusion	The vaginoscopy was useful in diagnosing clinical endometritis under field conditions. However, cytobrush which requires skilled person was better technique to diagnose sub clinical endometritis in cows with clear discharge at 30 ± 2 days postpartum. Endometritis in cattle is mainly caused by <i>E. Coli</i> followed by, <i>Staphylococcus</i> and <i>Proteus</i> sp which were most sensitive to ciprofloxacin and ceftriaxone in Nasik and Pune region of Maharashtra. Two injections of prostaglandin treatment at 14 days apart along with ceftriaxone @ 10 mg/kg body weight intra muscular and metronidazole @ 5mg/kg body weight intravenous for five days was most economical treatment followed by oyster glycogen infusion @ 500 mg once intrauterine for endometritis at 30 ± 2 days
5	Title	: Testicular colour doppler ultrasonography, testicular biometry, serum testosterone levels and seminal attributes in pre and postpubertal Osmanabadi bucks
	Conclusions	<ol style="list-style-type: none"> 1. The monthly gain in body weight testicular length, width and thickness is significantly high in 5 to 6 months of age i.e. just before pubertal age. 2. The gain in scrotal circumference is maximum immediately post pubertal from 6 to 7 months of age and later on it decreases along with monthly body weight gain in Osmanabadi bucks. 3. The mean age of puberty is 6.05 ± 0.08 months (5.5 to 6.5) and sexual maturity is 8.5 to 9 months in Osmanabadi bucks. 4. All semen macroscopic and microscopic parameters significantly increased and abnormal, dead spermatozoa count significantly decreased with advancement of age from 7 to 9.5 months in Osmanabadi bucks. 5. There was no effect of monsoon and winter season on all macroscopic and microscopic parameters. 6. The scrotal circumference followed by body weight and testicular length should be monitored at monthly intervals in prepubertal stage while selecting Osmanabadi bucks and for breeding purpose on the basis of seminal attributes should be at age of 8.5 to 9 months. 7. There was significant rise in serum testosterone concentration above 1 ng/ml at age of puberty and above 5 ng/ml at age of sexual maturity which can be used as marker for identification of puberty and sexual maturity in Osmanabadi bucks.
6.	Title	: Controlled breeding programme for improvement of fertility in postpartum anoestrous Buffaloes (Ph.D research)
	Conclusion	It was concluded that the use of Ovsynch+PRID protocol found to be very effective for improvement of fertility in post partum oestrous buffaloes during breeding and non breeding season to achieve estrus induction, high conception rate, intense estrus exhibition than Ovsynch alone followed by PRID + GnRH protocol



7.	Title	: Therapeutic Management of Uterine Inertia in Bitches (Ph. D research)
	Conclusion	: It was concluded that cases of partial primary uterine inertia can be best treated by using either Dextrose with Oxytocin or by using combination of Calcium gluconate, Oxytocin, Valethmate bromide with Dextrose.
8.	Title	: Determination of ovulation timing by different techniques in bitches (M.V.Sc research)
	Conclusion	: It can be concluded that Leishman's stain can be used preferably best for vaginal cytology to determine ovulation timing in bitches. Serum progesterone estimation, electronic ovulation detector and pH estimation can also be used to determine ovulation timing in bitches.
9.	Title	: Efficacy of Neem Extract, Lugol's Iodine and <i>E. Coli</i> LPS for the Treatment of Endometritis in Cows and Buffaloes
	Conclusion	: On considering herbal, chemical and immunomodulator with and without immunostimulatory levamisole in the treatment of endometritic animals, immunomodulator <i>E. coli</i> LPS with immunostimulatory levamisole therapy in endometritic animals was the best therapy with having higher recovery and pregnancy rate.
10.	Title	: Effects of two different doses of GnRH and double insemination on conception rate in cows and buffaloes
	Conclusion	: On comparison approaches in normal cyclic cows and buffaloes and also in non-infectious repeat breeder animals, higher conception rate was observed in low dose GnRH attempted groups. However, the differences were statically non-significant. In conclusion, higher conception can be achieved by use of low dose of GnRH with single insemination in both normal cyclic and non-infectious repeat breeder cows and buffaloes.
11.	Title	: Efficacy of modified controlled breeding and fecundity improvement protocols with assessment by ultrasonography in osmanabadi goats
	Conclusion	: Prostaglandin pre-synchronized Ovsynch protocol was found to be superior for fertility improvement and energy supplementation for fecundity improvement protocol was superior in Osmanabadi goats, where comparison of trans-rectal and trans-abdominal approach of ultrasonography indicated convenience and superiority of trans-rectal approach. Numerically efficacy of trans-rectal approach was found to be more than that of trans-abdominal approach for early pregnancy diagnosis and even statistically trans-rectal approach was highly significant than that of trans-abdominal approach.
12.	Title	: Impact of oxidative stress and antioxidants on buffalo semen functions
	Conclusion	: Strong association existed among activity of reactive oxygen species (ROS), lipid peroxidation (LPO), antioxidative enzyme, and semen quality parameters. ROS generation and its associated damage are likely to be an important contributor to the reduced sperm motility and functional integrity in fresh and frozen thawed buffalo semen. Oxidative stress to the cells increased during incubation of frozen thawed semen samples.
13.	Title	: Fertility improvement through different hormonal protocols in postpartum dairy cows
	Conclusion	: Presynch protocol for synchronization was better to improve fertility in postpartum cows.
14.	Title	: Polymorphism of gonadotropin releasing hormone receptor gene (GnRHR) and their association on semen quality in Holstein Friesian crossbred bulls
	Conclusion	: The GG and GA genotypes were observed for the GNRHR gene at 286 locus in the HF crossbred bulls and the testicular length as well as hypo osmotic swelling test was significant ($P<0.05$) in GA genotype.
15.	Title	: Polymorphism of FSH beta subunit gene (FSH β) and their association on semen quality in Jersey and Holstein Friesian crossbred bulls
	Conclusion	: The BB, AB and AA genotypes were observed for the FSH beta genes in the HF and Jersey crossbred bulls and the testicular parameters as well as seminal attributes were statistically non-significant ($p<0.05$) for BB, AB and AA genotypes in HF and Jersey crossbred bulls.



16.	Title	: Reproductive performance of cows supplemented with dietary polyunsaturated fatty acids during postpartum period.
	Conclusion	: Supplementation of crushed flaxseed improves the first service conception rate whereas soyabean oil supplemented cows showed good effect on intensity of estrus and adverse effect on first service conception rate in postpartum crossbred cows.

8.D.14. Veterinary Surgery & Radiology

1.	Title	: Comparative evaluation of biphasic calcium phosphate as an osteoconductive and platelet rich fibrin as an osteoinducer for osseointegration in repair of long bone fracture with bone loss in dogs - a clinical study
	Conclusions	: 1. Radiographic examination showed early periosteal reaction, callus formation and remodelling in group III, followed by group II & group I. 2. Biphasic calcium phosphate (BCP) is an osteoconductive agent comprising less soluble hydroxyapatite (HA) and more soluble β -tricalcium phosphate (β -TCP). BCP's chemical composition is similar to that of apatite in biological bone. The hard particles of HA support the bulk of the graft material and β -TCP increases the replacement of its degradation products with blood vessels and lamellar bone.
2.	Title	: Evaluation of sub-xiphoid and mid-lateral intercostal thoracoscopy examination under propofol-isoflurane and ketamine-isoflurane anaesthesia in dogs
	Conclusions	: 1. Both the methods are suitable for performing thoracoscopic examination in dogs. But sub-xiphoid port placement gives better visualization of thoracic organs, more space for handling and maneuvering of thoracic organs. Neither of the method affected the haematobiochemical parameters significantly. 2. Acepromazine - Propofol - Isoflurane and acepromazine - ketamine - Isoflurane anaesthesia as a protocol for general anaesthesia is safe and effective with smooth and rapid recovery and can be used for thoracoscopic procedures and most routine surgical procedures comfortably.
3.	Title	: A comparative evaluation of conventional and laparoscopic-assisted technique for gastro-intestinal affections in dogs
	Conclusions	: 1. The laparoscopic-assisted method of gastro-intestinal surgery provides better visualization of the abdominal organs as compared to the conventional method and also ensures confirmatory diagnosis and surgical treatment. 2. The laparoscopic-assisted GI surgery has lesser intra and post-operative complications, a smaller incision length (depending on the case), minimal tissue handling and lower pain scores postoperatively compared to conventional GI surgery.
4.	Title	: Comparative evaluation of full thickness skin mesh graft with stay sutures and pedicle graft (advancement flap) for repair of extensive wounds in canines'
	Conclusions	: 1. The pedicle graft (advancement flap) can be comfortably used on extensive wounds and on any part of the body. 2. In mesh graft method, cosmetic appearance is improved only if graft is accepted, whereas in flap method, the cosmetic as well as aesthetic appearance was found better.
5.	Title	: Clinical evaluation of different laparoscopic sterilization technique in bitches.
	Conclusions	: Laparoscopic surgeries are superior, painless and due to their Minimal invasiveness reduce the post operativemanagement by reducing the hospitalization time without affecting the hematobiochemical parameters when compared to conventional method. Laparoscopic or conventional laparotomy salpingectomy can be an alternative method of sterilization in dogs where the owner wants to keep the animal intact in view of avoiding after effects of ovariohysterectomy. Laparoscopic salpingectomy was found equally feasible and safe as that of other laparoscopic sterilization techniques. All the three laparoscopic techniques are minimally invasive and can be employed for animal birth control programmes effectively.
6.	Title	: Comparative evaluation of guaifenesin and diazepam in xylazine-ketamine induced total intravenous anaesthesia in equines for gelding
	Conclusions	: 1. Anaesthesia maintained with triple drip of guaifenesin, xylazine and ketamine produces excellent to good quality of anaesthesia in horses for castration and had very minimal side effect on physiological and blood biochemical parameter in horses.



		<p>2. Recovery from anaesthesia of horses maintained with triple drip of guaiphenesin, xylazine and ketamine was more rapid and satisfactory than diazepam, xylazine and Ketamine.</p> <p>3. Anaesthesia maintained with triple drip containing guaiphenesin in xylazine and ketamine found safer for castration under field condition.</p>
7.	Title Conclusions	Surgical management of urinary calculi by using different urethral approaches in dog. <p>The hospital incidence of urolithiasis in dogs at TVCC of Nagpur Veterinary College, Nagpur was 3.67 per cent. Maximum numbers of dogs were between age of 3 to 9 years with mean age of 6.95 ± 0.72 years. Dalmatian, Labrador and Pomeranian breeds had the highest incidence of urolithiasis. The most common site for calculi obstruction was in the urethra just posterior to os penis bone followed by penile urethra. In half of the cases, urethral calculi were noted concurrently with cystic calculi.</p>
8.	Title Conclusions	Surgical management of long bone affections of thoracic limb in growing dogs. <p>Locking Compression Plate was effective for cancellous bones found in skeletally immature dogs and showed excellent clinical outcome with majority of the dogs returning to normal ambulation within 30 days. Furthermore, the implant doesn't impair periosteal blood flow as it does not come in direct contact with the bone cortex. Plate-rod technique provides more rigid fixation for humeral diaphyseal fractures. Cranial radial plating provides sufficient rigidity for reduction of transverse, oblique and comminuted (limited to less than one-third of the diaphysis) radio-ulnar fractures in immature dogs.</p>
9.	Title Conclusions	Evaluation of guaifenesin-ketamine-xylazine anaesthesia for castration in donkeys <p>Xylazine 1.1 mg/kg body weight intravenously five minutes prior to triple drip of guaiphenesin, xylazine and ketamine intravenously produces faster and smooth induction of anaesthesia in donkeys. Maintenance of anaesthesia with triple drip of guaiphenesin, xylazine and ketamine produces excellent to good quality of anaesthesia in donkeys for surgical procedure with minimal effect on heart rate and respiration rate and biochemical values in donkeys. Maintenance of anaesthesia with triple drip of guaiphenesin, xylazine and ketamine better for castration in donkeys under field condition, where inhalant anaesthetic machine not available.</p>
10.	Title Conclusion	Clinical Evaluation of Terminalia arjuna on wound healing in caprine <p>The procedure for preparation of 5% ointment of methanolic extract of <i>T. arjuna</i> was found to be easy, safe, economic and simple. The ointment prepared was having pleasant odour, spread easily on the wound and stable at refrigeration and room temperature. The side effect was not showed.</p>
11.	Title Conclusion	Ovariohysterectomy under acepromazine – butorphanol -glycopyrrolate with Propofolanaesthesia in canine <p>Reduction in wound area percentage and rate of wound contraction percentage in group B was found statistically highly significant on day 5 and 10 on compared to group A. Changes in the haemoglobin, PCV, TLC, TEC, ESR were non-significant. Significant increase in eosinophil count and significant decrease in monocyte count were observed, respectively in DLC. TSP was found to be significant. This was found in both the groups.</p>
12.	Title Conclusion	Comparative evaluation of single and double stage diaphragmatic herniorrhaphy in buffalo <p>The present clinical study concluded that, the incidence of diaphragmatic hernia in buffaloes was higher in advance pregnant and recently calved buffaloes. This condition can be successfully treated with single stage diaphragmatic herniorrhaphy when compared with double stage diaphragmatic herniorrhaphy. Single stage diaphragmatic herniorrhaphy considerably reduces stress due to two surgeries, infection and associated pain in animals. Moreover, this technique is affordable to farmers. This study needs further investigation for refinement and standardization of technique.</p>



13.	Title	: Comparison of extracapsular lens extraction and phacoemulsification techniques for treatment of cataract in dogs.
	Conclusion	: In the present clinical study, both techniques i.e. extracapsular lens extraction and phacoemulsification were compared on the basis of various findings. It was concluded that, qualitatively, cataract surgery performed by phacoemulsification technique had a superior visual outcome as compared to surgery performed by extracapsular cataract extraction technique.
14.	Title	: Comparative evaluation of string of pearls interlocking plate with platelet rich plasma versus string of pearls interlocking plate alone in long bone fracture in canine.
	Conclusion	: In the present clinical study, it was concluded that, platelet rich plasma enhanced the effect of string of pearls (SOP) interlocking plate by giving better stability to plate when used in long bone fracture repair. In the clinical cases of dogs in which platelet rich plasma (PRP) was used, showed minimal clinical lameness score and shorter time was recorded for weight bearing on fractured limb as well as to attend full gait.
15.	Title	: Efficacy of Ropivacaine and Lignocaine Hydrochloride for Epidural anaesthesia in Buffaloes
	Conclusions	: 1. Epidural administration of Lignocaine Hcl produce quicker onset of analgesia than Ropivacaine Hcl. 2. Ropivacaine Hcl produces significantly longer duration of maintenance than Lignocaine Hcl. 3. Ropivacaine Hcl was associated with negligible motor in coordination of hind limbs, thus pelvic, urogenital, perineal manipulations and operations can be conveniently performed, maintain standing position under epidural anaesthesia.

8.D.15. Veterinary Clinical Medicine including Ethics & Jurisprudence

1.	Title	: <i>Therapeutic management of dogs with oligoanuric renal dysfunction using hemodialysis</i>
	Conclusions	: 1. Oligoanuria could be physiological or pathological and conversion of oliguria to non-oliguria need not mean reversal of kidney injury. 2. Oliguric AKI is milder than Anuric AKI 3. Conversion of oliguria to non-oliguria is better in patients treated with dialysis 4. Positive fluid balance has poor survivability 5. Timely referral of AKI patients for dialysis has better survival and outcome
2.	Title	: <i>Studies on M Mode echocardiographic parameters in healthy German Shepherds</i>
	Conclusions	: 1. Mean VHS for male and female was 9.72 ± 0.12 and 9.90 ± 0.08 respectively. 2. No statistical difference. 3. No gender differences in ECG parameters 4. LA dimensions had positive correlation with BW and BSA in male, 5. Whereas with LVDs in females. 6. Observed Echocardiographic parameters may serve as reference range for 7. German Shepard dogs managed in Indian condition.
3.	Title	: <i>Diagnostic and Therapeutic Management of Diabetes Mellitus in Canine</i>
	Conclusions	: 1. The prevalence of diabetes mellitus in dogs was found to be 1.86%, more in Labrador breed and females were more affected at TVCC, Nagpur Veterinary College, Nagpur. 2. The common symptoms exhibited by diabetic dogs are polydipsia, polyuria and polyphagia. 3. There was no significant effect of treatment on fasting blood glucose levels, however, the post-prandial blood glucose levels significantly decreased between the intervals. 4. Treatment of diabetic dogs with injections of recombinant insulin @ 0.5 IU/kg, intramuscularly twice a day resulted in significant decrease in blood glucose levels over the period of time.



4.	Title	: Evaluation of essential oils as an adjunct therapy in the treatment of Lactoacidosis in goats (<i>Capra hircus</i>)
	Conclusions	: 1. The overall occurrence of ruminal lactoacidosis was 29.44%. Use of Garlic oil (Therapeutic grade) followed by Cinnamon oil (Therapeutic grade) combined regimen as an adjunct therapy is highly effective in the treatment of lactoacidosis in goats. 2. The comprehensive therapeutic regimen comprising, standard set of conventional therapy along with Garlic (1ml intra-ruminal) and Cinnamon oil (2ml intra-ruminal), as an adjunct therapy, be administered for the successful treatment of lactoacidosis in goats.
5.	Title	: Therapeutic Management of Theileriosis in Cattle using different Regimen
	Conclusion	: A combination of buparvaquone and levamisole is having best results in treatment of Theileriosis in Cattle followed by buparvaquone alone and then chloroquine-levamisole therapy.
6.	Title	: Evaluation of Various Therapeutic Protocols for the Treatment of Osteomalacia in Buffaloes
	Conclusions	: 1. Osteomalacia is one of the commonly encountered metabolic disorder in drought affected Marathwada. 2. Osteomalacia occurred mostly in local high yielding buffaloes in their mid to late lactation and in pregnant buffaloes during mid to late pregnancy. 3. High milk yield, pregnancy and exclusive feeding of dry roughages are important causal factors for osteomalacia. 4. Osteomalacia can be tentatively diagnosed on the basis of typical signs such as progressive emaciation, stiff gait, arching of back and kneeling on carpal joints 5. Confirmatory diagnosis of osteomalacia can be made based on severe hypophosphatemia and radiological findings. 6. Soils of Udgir area are deficient in available phosphorus and calcareous in nature. 7. Forages grown in disease prone area are highly deficient in phosphorus and having wide calcium: phosphorus ratio. 8. The combined treatment with parenteral buffered phosphorus preparation and mineral mixture proved most effective and economic for treatment of osteomalacia in buffaloes. 9. There is need to educate farmers from the disease prone area to provide optimum quantity of concentrates to dairy buffaloes. 10. The mineral supplementation through diet in dairy buffaloes on regular basis is required for prevention of phosphorus deficiency syndromes in view of phosphorus deficiency in the soil and forages in the disease prone area.
7.	Title	: Therapeutic efficacy of <i>Calotropis procera</i> and <i>Artemisia annua</i> against theileriosis in cattle
	Conclusion	: The overall study concluded that administration of <i>Calotropis procera</i> flower extract and crude powder and <i>Artemisia annua</i> plant extract and crude powder showed promising efficacy in inducing recovery in sub clinical Theileriosis with improvement in altered haematobiochemical parameters without any adverse effect. Moreover, the hydro-ethanolic extract of <i>A. annua</i> plant found to be superior to <i>C. procera</i> in inducing better recovery against sub clinical Theileriosis in cattle and could be a better choice than other treatments
8.	Title	: Surgico-therapeutic strategies for management of hoof affections in cattle
	Conclusion	: It can be concluded that hoof trimming is an effective procedure for prevention and treatment of hoof affections in cattle. If the affection persists, appropriate surgico-therapeutic strategy needs to be undertaken to cure the ailment. Awareness programmes should be held to educate the livestock owners as well as local veterinary practitioners with the view to make them understand the importance of regular cleaning of hoof, foot bath with timely hoof trimming and its concurrent effect on the economics of livestock owners.


8.D.16. Veterinary & Animal Husbandry Extension

1.	Title	:	Knowledge Level of Dairy Farmers regarding Zoonotic Diseases in Beed District of Maharashtra
	Conclusions	:	<ol style="list-style-type: none"> 1. Majority of farmers were middle aged, with nuclear and medium family size, possesses semi-medium land holding with dairy and agriculture as their main source of income with medium annual income having medium herd size. 2. Dairy farmers of Beed district possess poor and partial knowledge regarding zoonotic diseases. However, majority of dairy farmers had correct knowledge regarding Brucellosis, Tuberculosis, Rabies, FMD, Tetanus and Dermatophytosis. 3. Lack of awareness and inadequate knowledge, no testing of animals for zoonotic diseases before purchasing, no self vaccination of farmers while handling zoonotic disease animals were the major constraints faced by the dairy farmers.
2.	Title	:	Use of Mobile Phone as an ICT Tool by Dairy Entrepreneurs in Kolhapur District of Maharashtra
	Conclusions	:	<ol style="list-style-type: none"> 1. Majority of the respondents belonged to middle aged group and sell milk directly to dairy co-operatives regular and round the year thus, eliminating the role of middle man. 2. Majority (100%) of dairy entrepreneurs had favourable attitude towards use of mobile phone for obtaining information regarding animal husbandry and allied sectors. 3. Majority (100%) of dairy entrepreneurs were having access to mobile phone and 50 % of the respondents had high knowledge regarding use of various dairy mobile applications. 4. Easy access to veterinary expert reduces time and distance barrier and timely access to reliable source of information were the major benefits while high cost of mobile phone / internet services, poor / low network connectivity and security issue (fraud, hacking, virus etc.) were the major constraints perceived by the dairy entrepreneurs.
3.	Title	:	A Descriptive Analysis of Tribal Goat Farming System in Gadchiroli District of Maharashtra
	Conclusions	:	<ol style="list-style-type: none"> 1. High knowledge among the tribal goat farmers about the improved goat husbandry can be used to establish the organized goat husbandry practices in this tribal belt. There is a scope to improve the adoption of scientific goat husbandry practices by organizing capacity building and skill orientation programmes for the tribal goat farmers. 2. High percentage of tribal goat farmers following better feeding practices like use of concentrate, mineral mixture, and special feeding during breeding management can be used to further strengthen the goat husbandry by providing vital missing links like availability of capital supports through institutionalized mechanism and encouragement through specific goat development schemes with provision of insurance and other incidental benefits for the tribal communities. 3. Medium level of adoption indicates that there is ample scope for introduction of improved practices for goat husbandry especially from the areas like marketing and organized goat rearing with development of small-scale institutions like self-help groups and goat producers companies in the region. 4. Use of ITKs by the tribal goat farmers is their way of life but safeguarding their rights in term of protection of intellectual rights for these ITKs is essential. Systematic documentation, validation and building small scale industries on these small innovations can be lucrative option for sustainable development in this region for the tribal communities. 5. Lack of capital, access to market, development of pasture lands and providing remunerative price for the produce are essential for steady growth in the goat industry. With the growing demand for the animal proteins and demand for goat meat there is a good opportunity to develop the goat production hubs in these tribal areas.



8.E. STAFF RESEARCH

8.E.1 Veterinary Physiology

1.	Name of Project	Expression, localization and modulatory effect of adipokines in ovary of cyclic buffaloes
	PI and Co-PI	Dr. Mahesh B. Gupta, Dr. J. P. Korde and Dr. N. V. Kurkure
	Funding Agency	Science & Engineering Research Board, Department of Science & Technology, New Delhi
	Summary (Short)	Second instalment of Rs 9.5 lakh has been received in February 2018. Research work is in progress.
2	Name of Project	Leptin gene polymorphism in polymorphism in pandharpuri buffaloes in relation with protein and fat content of milk
	PI and Co-PI	Dr. V.R. Patodkar and Dr. Prajwalini Mehere
	Funding Agency	Departmental Research Intramural
	Summary (Short)	Study was aimed to reveal PCR-RFLP pattern of the leptin (exon2) locus in the Pandharpuri buffaloes. Fragment of Leptin was subject to RFLP using restriction enzyme HpaII. In Pandharpuri buffalo no polymorphism was found using this enzyme, like in other cross breed cattle.
3.	Name of Project	Determination of climatic profile of Udgir Area (2017-18)
	PI and Co-PI	Dr. S.S. Kulkarni
	Funding Agency	Intramural
	Summary	The Department of Physiology has established an Observatory, recognized by the IMD, Pune, giving honour for being the first Veterinary College, having its own observatory, instrumental to determine the status of agroclimatic zone of the area, to record amplitude and frequency of changes in different seasons, to furnish data for research, to relate the meteorological observations with changes in physiological characteristics of animals, to help the animal husbandry for developing advisory towards improved management.
4.	Name of Project	Biometrical Measurements in Deoni Cattle and Marathwadi Buffaloes in the Units of COVAS, Udgir
	PI and Co-PI	Dr. M. M. Vaidya
	Funding Agency	Intramural
	Summary	Multi institutional projects on topic "Deciphering molecular, endocrine and physiological mechanism of environmental stress tolerance in different indigenous breeds of cattle (Amritmahal, Punganur & Deoni) and appropriate intervention for improving reproductive and productive efficiency." submitted by NIANP to ICAR. Dr. M. M. Vaidya acts as a CCPI from MAFSU. The concept note at NASF ICAR has been accepted, and scrutiny is in progress.
5.	Name of Project	Milk constituents of Berari Goat
	PI and Co-PI	Prajakta Kuralkar
	Funding Agency	Departmental Project
	Summary	Ongoing

8.E.2. Veterinary Biochemistry

1.	Name of Project	Molecular Characterization of plasmids extracted from <i>Salmonella enterica</i> isolated from poultry
	PI and Co-PI	Dr. N. Z. Gaikwad, Dr. A. V. Bhonsle, Dr. V. S. Waskar and Dr. A. M. Shende
	Funding Agency	Intramural project.
	Summary	Present study is based on the collection of poultry droppings, processing of these samples for <i>Salmonella enterica</i> and molecular characterization of plasmids extracted from <i>Salmonella enterica</i> . Work is in progress: Fecal Samples from poultry has been collected and processed. Growth of bacteria in selenite broth after fecal sample culture overnight was observed. Colony characteristics of salmonell was seen on Mackonkys agar.



2.	Name of Project	Metabolic Profiling in Pre-partum Stage of Transition Deoni cows																										
	PI and Co-PI	Dr.M.J.Sanap, Dr.N.Z.Gaikwad, Dr.V.M.Salunke and Dr.M.M. Vaidya.																										
	Funding Agency	Intramural project																										
	Summary	<p>Present study is based on metabolic profiling in the selected pregnant transitional deoni cows. The aim of study is to determine metabolic status of pregnant animals in order to take corrective measures before parturition in animals.</p> <p>Work is in progress: Some few samples were processed in the laboratory. Blood parameters were determined by the use of blood analyzer. Biochemical parameters were determined by biochemical kits on Biochemical Semi Auto Analyzer.</p>																										
3.	Name of Project	Subclinical mastitis and its effect on buffalo (bubalusbubalis) milk composition.																										
	PI and Co-PI	Dr.A.M.Shende, Dr.L.S.Kokate and Dr.N. Z.Gaikwad																										
	Funding Agency	Intramural project- College Revenue.																										
	Summary	<p>Present study is based on identification of mastitis in Buffalo and effect of mastitis on milk composition in animals. Work is in progress: Some samples were collected and process for identification of mastitis. Further work is in progress.</p>																										
8.E.3.Veterinary Parasitology																												
1	Name of Project	<i>In-vitro</i> studies with neem oil, eucalyptus oil, Kutaighanavati and Kutajarishta for controlling cecal coccidiosis in domestic chicken																										
	PI and Co-PI	Dr. K. Kundu, Dr. M.W. Khasnis, Dr. V.D. Lonkar and Dr. A.S. Kadam																										
	Funding Agency	Departmental Research Intramural																										
	Summary	<i>In-vitro</i> studies showed that eucalyptus oil at 5% emulsion causes reduction in oocyst sporulation by 80% in comparison to controls.																										
8.E.4. Veterinary Microbiology																												
1	Name of Project	Molecular Characterization of avian turkey pox																										
	PI and Co-PI	Dr.M.M.Pawade and Dr.P.P.Mhase																										
	Funding Agency	Departmental Research Intramural																										
	Summary	Turkeys are frequently affected with pox virus infection in India as well as world over. In present studies scab from turkey were collected and was molecular characterisation by polymerase chain reaction (PCR) to detect virus from recurring poxvirus infection in Turkey. The avipox specific PCR was performed and 578 bp product of P4b gene was amplified.																										
8.E.5.Veterinary Pathology																												
1.	Name of Project	Revolving Fund Scheme entitled, "Establishment of diagnostic laboratory for animals and birds."																										
	PI and Co-PI	Dr. D. P. Kadam- PI, Associated Scientists: Dr. P. V. Meshram, Dr. G.K.Sawale, Dr. V.S. Dhaygude																										
	Funding Agency	ICAR, New Delhi																										
	Summary	<p>Samples were analysed and results are given as tabulated below</p> <p>i) Hematology, Urine& Clinical chemistry Services (Under RFS):</p> <table border="1"> <thead> <tr> <th colspan="4">Serum Biochemical Tests performed</th> </tr> <tr> <th>Type</th> <th>Serum biochemistry</th> <th>Blood Sugar</th> <th>Grand Total</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>137</td> <td>--</td> <td>137</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="5">Hematology and urine examinations</th> </tr> <tr> <th>Type</th> <th>CBC</th> <th>Urine examinations</th> <th>Agglutination</th> <th>Grand Total</th> </tr> </thead> <tbody> <tr> <td>No</td> <td>244</td> <td>02</td> <td>--</td> <td>246</td> </tr> </tbody> </table>	Serum Biochemical Tests performed				Type	Serum biochemistry	Blood Sugar	Grand Total	No	137	--	137	Hematology and urine examinations					Type	CBC	Urine examinations	Agglutination	Grand Total	No	244	02	--
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No	244	02	--	246																								



			<p>ii) Urine & Clinical chemistry Services (Under RFS): iii) Hispathology Services (Under RFS):</p> <table border="1"> <thead> <tr> <th>Type</th><th>HP slide examinations</th><th>Tissue processing and HP examinations</th><th>FNAC/Cyt ology</th><th>Grand Total</th></tr> </thead> <tbody> <tr> <td>No</td><td>--</td><td>46</td><td>--</td><td>46</td></tr> </tbody> </table>	Type	HP slide examinations	Tissue processing and HP examinations	FNAC/Cyt ology	Grand Total	No	--	46	--	46	
Type	HP slide examinations	Tissue processing and HP examinations	FNAC/Cyt ology	Grand Total										
No	--	46	--	46										
2.	Name of Project	:	COL-MAFSU collaborative project on open and distance learning (ODL)											
	PI and Co-PI	:	Dr. D. P. Kadam- PI, Dr. P. V. Meshram- Co-PI											
	Funding Agency	:	Common wealth of Learning, Canada											
	Summary	:	<p>Four courses have been developed in Department of Pathology, Veterinary College, Parel, Mumbai and being offered to the field veterinarians.</p> <ol style="list-style-type: none"> Post Mortem Examination of Domestic Animals Diagnosis of Parasitic Diseases Techniques in Large Animal Surgery-I Techniques in Small Animal Surgery-I 											
3.	Name of Project	:	<i>In vivo and in vitro</i> acaricide efficacy of three herbal extracts against ticks of cattle.											
	PI and Co-PI	:	Dr. G.P. Bharkad											
	Funding Agency	:	NIF											
	Summary	:	<ol style="list-style-type: none"> All the three herbal extracts viz., Ecto Z, Ecto C and Ecto A showed acaricide efficacy. Ecto C showed highest efficacy followed by Ecto Z, Ecto C. Ecto C was highly effective for <i>in vitro</i> bioassay studies while Ecto Z had high efficacy for <i>in vivo</i> / on field trials. All the three herbal extracts viz., Ecto Z, Ecto C and Ecto A showed residual acaricide effect and protected the animals upto 12 days. 											
8.E.6.Veterinary Public Health														
1.	Name of Project	:	Monitoring of Pesticide Residues at National Level											
	PI and Co-PI	:	Dr. R. J. Zende Dr. V.M. Vaidya and Dr. R. N. Waghmare											
	Funding Agency	:	ICAR, New Delhi											
	Summary	:	<ul style="list-style-type: none"> Objective of project is to monitor Egg, Meat and Fish Samples for pesticide residue, sold at different points in and around Mumbai city. In year 2016-17 a total of 192 Egg, 192 Meat and 58 Raw fish Samples were extracted, detected and Quantified for organochlorine and organophosphate pesticide. NABL reassessment audit has been successfully completed in the month of July 2017. NABL accreditation of laboratory is valid upto July 2019. 											
2.	Name of Project	:	All India Co-ordinated Research Project on Post Harvest Technology											
	PI and Co-PI	:	Dr. R. J. Zende Dr. V. M. Vaidya and Dr. R. N. Waghmare											
	Scientist	:	Dr. D. P. Kshirsagar (VPH) and Dr. V.S. Lande (LPT)											
	Funding Agency	:	ICAR, New Delhi											
	Summary	:	<ol style="list-style-type: none"> Use of Electron Beam Processing for Shelf Life Extension of Meat Products <ul style="list-style-type: none"> Electron Beam irradiation at the dose rate of 4.5 kGy was found to be more effective in reducing the microbiological load and extension of shelf-life of pork sausage and salami at refrigeration storage. 											



			<ul style="list-style-type: none"> Further, study on effects of electron beam irradiation on inactivation /reduction of gram positive and gram-negative bacteria inoculated in pork products is in progress. Moreover, study on effects of electron beam irradiation on other meat products is in progress <p>2. Development of low cost processing technology for the preparation of chicken liver powder and chicken liver chews</p> <ul style="list-style-type: none"> The pilot trials for preparation of chicken liver powder are in progress using chicken liver collected from various retail shops from Mumbai. <p>3. Development and Establishment of Model Retail Outlet for Hygienic Sheep/ Goat Meat Production</p> <ul style="list-style-type: none"> The study of present status and slaughtering practices from sheep / goat meat retail outlets was carried out in and around Mumbai city in the form of survey by visiting and communicating with chicken retail outlet owners Survey on problems of Sheep/ Goat meat shop owners is in progress Architectural designing of model is in progress.
3.	Name of Project	:	Outreach Programme On Zoonotic Diseases
	PI and Co-PI	:	PI - Dr. V.M. Vaidya, Co-PI's - Dr. R. J. Zende, Dr. D.G. Dighe, Dr. H.Y. Palampalle, Mentor – Dr. A. M. Paturkar
	Funding Agency	:	ICAR, New Delhi
	Summary	:	<ul style="list-style-type: none"> Based on the research finding, it is observed that prevalence of Hydatidosis in Maharashtra is 0.63% in buffalo and 0.16% in pigs and the prevalence of Cysticercosis in Maharashtra is 0.42% in pigs. The prevalence of Trichinellosis in pigs was found to be 0.14% by Acid (HCl) pepsin digestion and microscopic observation by stereomicroscope. Out of 228 serum samples collected from pigs, 102 serum samples were tested for detection of antibodies against cysticercosis by ELISA, which showed 7.84% seroprevalence in pigs. Prevalence of cysticercosis by FTA for purified antigens i.e. CFA, WCA and SA was found to be 9.6, 12.8 and 13.6 respectively. Screening of 15 rats from the vicinity of pig farms and different abattoirs by acid pepsin digestion assay showed 1 sample found positive for Trichinellosis.
4.	Name of Project	:	Risk assessment of Antibiotic Residue and <i>Salmonella</i> spp. in Chicken meat Production
	PI and Co-PI	:	Dr. R. J. Zende Dr. V.M. Vaidya and Dr. R. N. Waghmare
	Funding Agency	:	Vista Processed Foods Pvt Ltd. Taloja, Raigad
	Summary	:	<ul style="list-style-type: none"> A total of 956 various samples, comprising of 432 farm origin, 324 poultry processing stage wise and environmental and 154 product processing stages and environmental samples were collected from poultry farms and processing units located in for isolation of <i>Salmonella</i> spp. Further, a total of 252 samples comprised of 42 each of muscle, liver, kidney, feed, serum and water were collected from 48 poultry farms, while 100 samples comprising of muscle, liver, kidney and processed products were collected from poultry processing units. All these samples were subjected for antibiotic residue screening by Premi test kit. Meat tissue (Muscle, Liver and Kidney) samples found positive for antimicrobial residue during the screening by Premi test kits along with randomly selected negative samples were subjected for analysis by High Performance Liquid Chromatography to determine the residual levels of doxycycline Out of 432 various samples analyzed from farming systems, 6.70% showed presence of <i>Salmonella</i> spp. corresponding to occurrence of 4.16, 1.08, 0.46 and 0.23% for non-



		<p>integrated, partially integrated, completely integrated with use of antibiotic and completely integrated with use of CE product, respectively.</p> <ul style="list-style-type: none"> Out of 324 samples analyzed from processing stages (n=114) and environment (n=210), 11.41% samples showed presence of <i>Salmonella</i> spp. with 5.55, 4.32 and 1.54% occurrence for retail shops, semi-automated and automated processing unit, respectively. Amongst 154 processing stage-wise and environmental samples collected from chicken product processing unit, 02 and 01 samples were found to be positive with corresponding occurrence rate of 1.29 and 0.64%, respectively. Out of 43 isolates, 31 were identified as <i>Salmonella</i> Virchow (20), <i>Salmonella</i> Newport (6) and <i>Salmonella</i> Typhimurium (5), whereas 12 isolates remained untypable. <i>Salmonella</i> isolates were tested against 19 commonly used antimicrobials for resistance pattern. Higher resistance was recorded against Doxycycline (100%), followed by Oxytetracycline (97.62%), Neomycin (88.10%), Erythromycine (83.33%), Tetracycline (78.57%) and Ceftizoxime (35.71%). All the isolates were found susceptible to Ceftazidime. The drugs found to be effective in terms of susceptibility were Colistin (83.33 %), Chloramphenicol (95.24%), Gentamicin (88.10%) and Amikacin (95.24%). All the tested 31 <i>Salmonella</i> serotypes were found to carry Tetracycline resistance gene <i>tet A</i>, whereas, none of them were carrying <i>tet B</i> gene. Further, 05 isolates were found to be positive for <i>bla TEM</i> indicating resistance against broad spectrum β-lactamases. However, none of the isolate was found to be carrying <i>CTXM</i> gene. Amongst of 180 samples analyzed for antibiotic residues by Premi test kit from various sources of different farming systems, 6.11% samples were found positive with corresponding to 3.88 and 2.22% for non-integrated and partially integrated farming systems, respectively. Out of 62 randomly selected Premi test kit positive and negative samples, comprising of muscle (21), liver (19), kidney (19) and meat product (3) subjected for confirmation of Doxycycline residue by standardized HPLC showed that only 2 each of muscle and liver samples were found positive for doxycycline residue with corresponding percent occurrence of 9.5 and 10.52, respectively.
5.	Name of Project	Niche Area of Excellence on "Centre for Zoonoses"
	PI and Co-PI	PI-Dr. S. P. Chaudhari, Associate Professor, Dept. of Veterinary Public Health, Nagpur Veterinary College, Nagpur Co-PI- 1) Dr. N. V. Kurkure, Associate Professor, Dept. of Vety. Pathology 2) Dr. S. W. Kolte, Associate Professor, Dept. of Vety. Parasitology 3) Dr. V. C. Ingle, Associate Professor, Dept. of Microbiology 4) Dr. W. A. Khan, Assistant Professor 5) Dr. P. A. Tembherne, Assistant Professor 6) Dr. S. P. Awandkar, Assistant Professor 7) Dr. S. V. Shinde, Assistant Professor 8) Dr. M. P. Kaore, Assistant Professor
	Funding Agency	ICAR, New Delhi
	Summary	Achievements: <ul style="list-style-type: none"> A duplex PCR has been standardized for simultaneous detection of Brucellosis and tuberculosis in animals. The technique is under validation with collaborators and has a potential of patenting.



		<ul style="list-style-type: none"> Cases of reverse zoonoses with respect to tuberculosis in animals and human have been detected in collaboration with medical collaborator; Central India Institute of Medical Sciences (CIIMS), Nagpur. Proteins for rapid, sensitive and simple serological assay (on-field) for diagnosis of tuberculosis in animals have been identified. Attempts are going on for standardization of test. New vectors for propagation of <i>Listeria monocytogenes</i> have been identified. In house listeriolysin -O (LLO) based ELISA have been developed for serodiagnosis of listeriosis. Mite species "<i>Ornithonyssusbacoti</i>" (tropical rat mite) has been detected with potentials to transmit <i>Orientiatsutsugamushi</i>; an etiological agent for Scrub typhus in the region. Karp strain of <i>Orientia tsutsugamushi</i> as a major circulating genotype among rodents of the region has been identified first time. An outbreak was attended at Mumbai in collaboration with Bombay Municipal Corporation which was confirmed as Leptospirosis among animals (cattle, buffaloes, dogs and rodents) as well as human. The major common serovars in human and animals were Tarassovi, Djasiman and Pomona. The work has been done in collaboration with NIVEDI, Bengaluru. Under the 'Capacity building', five National training programs have been conducted on theme "Diagnostic Approaches for Zoonotic Diseases", 'Surveillance and Outbreak Investigations for Veterinarians', 'Host -pathogen interaction' and Genomics and Zoonoses research' .The trainings were attended by a total of 92 academicians, scientists, field veterinarians, medicos from all over country. The training on 'Surveillance and Outbreak Investigations for Veterinarians' was organized in collaboration with National Institute of Epidemiology, Chennai. The collaboration/Linkages with the National and International Institutes have been developed. Four articles in esteemed International journals with high NAAS and impact factor ie., <i>Vector-borne and Zoonotic Diseases</i>, 17:749-754, <i>Tropical Animal Health and Production</i>, 50:91-96, <i>Letters in Applied Microbiology</i> pp1-5, <i>Transactions of the Royal Society of Tropical Medicine and Hygiene</i> are published. So far 16044 samples of animal origin have been screened for detection of zoonotic diseases under study. In animals the overall prevalence of brucellosis, tuberculosis, listeriosis, leptospirosis and rotavirus observed as 11.91%, 4.35%, 8.29% and 62.17% and 2.92% respectively. In case of rodents the Scrub typhus was reported as 7.16% In isolation, positivity for <i>Brucella</i> pathogen was noted among 9.6% animals while 5.74% for <i>Listeria monocytogenes</i>. Screening of 5690 samples from livestock owners/farmers and risk population, seropositivity was noted among 1.87% for <i>Listeria</i> antibodies, 2.78% for <i>Brucella</i>, 92.30% for <i>Leptospira</i> antibodies while 43.33% were sero-positive for scrub typhus. Employing PCR 4.31% were positive for <i>Listeria monocytogenes</i>, 1.14 % for <i>Brucella</i>, 4.6% for TB, 9% for <i>Leptospira</i> and 8.64% for scrub typhus infection.
6.	Name of Project	Outreach Programme on Zoonotic Diseases
	PI and Co-PI	PI - Dr. S. P. Chaudhari, Associate Professor, Dept. of Veterinary Public Health, Nagpur Veterinary College, Nagpur Co-PI - Dr. 1) S. V. Shinde, Assistant Professor 2) Dr. W. A. Khan, Assistant Professor 3) Dr. D. S. Kale, Assistant Professor



	Funding Agency	: ICAR, New Delhi
	Summary	: <ul style="list-style-type: none"> • The antigens Scolex Antigen (SA), Excretory Secretory Antigen (ESA) and Membrane Body Antigen (MBA) were prepared from the cysts obtained from slaughtered pigs and were characterized by SDS-PAGE. • Employing Scolex Antigen (SA), Excretory Secretory Antigen (ESA) and Membrane Body Antigen (MBA); 23.5% (43/200), 15.5% (31/200) and 9.0% (18/200) of slaughtered pigs were found sero-positive. • A seropositivity of 38.46% (10/26), 30.76% (8/26) and 15.38% (4/26) was observed against SA, ESA and MBA respectively in 26 human epileptic patients. • The immunodominating bands in EITB were found in lower and medium kDa range (16-68 kDa) against SA, ESA and MBA in seropositive cases in pigs. • Of the all seropositive pigs against antigens SA, ESA and MBA; 20, 30 and 12 were found PCR positive targeting LSU rRNA gene. • A total of 1014 serum samples from Nagpur (90) and Mumbai (924) were screened by Indirect ELISA to estimate the seroprevalence of cysticercosis among pigs. • The overall seroprevalence of cysticercosis was recorded to the tune of 39.74% (403) for CFA & 34.32% (348) for WCA and 33.14% (336) for both the antigens. • Out of 924 samples collected from Mumbai 363 (39.29%) and 298 (32.25%) sera samples were positive for antibodies against CFA and WCA respectively whereas 298 (32.25%) samples were positive for both the antigens. • From Nagpur region 40 (40.44%) and 50 (55.56%) samples were positive for presence of antibodies against CFA & WCA respectively and 42.22% (38) were positive for both the antigens was recorded. • 29 clinical suspected cases for Humans were tested out of which 17 were indentified positive with 58.62% positivity. • Mitochondrial 16S r-RNA lager subunit 1 sequence from <i>Taenia solium</i> cyst was submitted at NCBI Genebank for which Accession no. MH084945, MH244503, MH244504 were received • Antigen Purification was performed for all five antigen WCA, MBA, CFA, ESA, SA by using DEAE Sepharose weak anionic exchanger targeting peptide with high molecular wt. • A total of 309 samples (223 sheep, 60 goats, 26 clinical cases) were processed with <i>trans</i>-PCR out of which prevalence rate is 0.89% in sheep, 6.66% in goats, and 15.38% in clinical cases • A total of 107 ticks were processed with <i>trans</i>-PCR out of which 24.29% prevalence found in ticks. • A total of 72 samples from humans were processed (60 abattoir workers, 2 farmers, 6 abortion cases, 5 aborted material) in which prevalence rate is 11.66% in abattoir workers, 100% in 2 farmers, 33.33% in abortion cases. • <i>Coxiella</i> positive PCR products were sequenced and submitted at NCBI Gene Bank and Following Accession no were received MG385665, MG385666, MG385667, MG385668, MG385669
7.	Name of Project	: Monitoring of microbiological and chemical quality of milk and milk products marketed in and around Udgir area.
	PI and Co-PI	: Dr. V.S. Waskar and Dr. R.D. Suryawanshi
	Funding Agency	: Intramural
	Summary	: Analysis of milk and milk products, depending upon the availability, for microbiological and chemical quality is in progress.



8.	Name of Project	: Studies on adaptability of developed low cost technology model in different seasons for enhancement of keeping quality of milk.
	PI and Co-PI	: Dr.V.S.Waskar and Dr.R.D.Suryawanshi
	Funding Agency	: Intramural
	Summary	: The model utilizing the locally available low cost/waste material such as broken out pieces/entire slabs of bricks, mud, lime powder, cooler net and straw was prepared. Two rectangular structures of desired size with one nested in another were prepared using bricks and mud. The model was constructed at the doorstep of the farmer Shri. KundlikLokare in the village KumdalTq, Udgir, Dist. Latur and the results under field condition were studied. The keeping quality of milk was found to be increased by 4 hours at ambient temperature as compared to milk exposed to ambient environment during winter, rainy and summer seasons.
9.	Name of Project	: Isolation, pathogenicity and verocytotoxicity studies of <i>E.coli</i> O157:H7 from fresh meats.
	PI and Co-PI	: Dr.V.S.Waskar and Dr.R.D.Suryawanshi
	Funding Agency	: Intramural
	Summary	: 22 <i>E. coli</i> isolates recovered from meat were characterized biochemically. A correlation study will be carried out with isolates recovered from clinical diarrhoeal samples (39) from organized farm at Udgir by using MALDI TOF MS & PFGE.

8.E.7 Animal Genetics & Breeding

1.	Name of Project	: A survey on population dynamics of various strains of Deoni
	PI and Co-PI	: Dr.Mrs.P.V.Jadhav and Dr.V.B.Dongre
	Funding Agency	: Intramural
	Summary	: Study regarding the number of animals of each strain of Deoni cattle is performed in this survey based study.

8.E.8 Livestock Production and Management

1.	Name of Project	: Experiential learning unit on goat (Education Project)
	PI and Co-PI	: P. I: Dr. Siddiqui M.B.A. Co.PI: Dr.Chopade S.S., Dr. H.Y.Palampalle, Dr. Jagdale S.D.
	Funding Agency	: ICAR
	Summary	: The Experiential learning unit on goat (Education Project) is being completed for the Entrepreneurship Development Programme of U. G students, P.G. student research and the various farmers commimng to the department for goat training with most modern facilities viz, Feeder, Waterer, CCTV installation at the shed for studying the behaviour of goat for P.G students of the department.

8.E.9 Poultry Science

1.	Name of Project	: Effect of organic acid treated corn cob bedding material on broiler performance, Hock burn incidence and litter quality
	PI and Co-PI	: Lonkar V.D., Ranade A.S., Kulkarni V.R., Pathak C.B.
	Funding Agency	: Departmental Research Intramural
	Summary	: The organic acid treated corn cob bedding material was highly beneficial in significant increase in live body weight, weight gain, feed intake and improving FCR of broilers than untreated rice husk bedding material. This significant improvement in the performance of broilers was might be due to significant decrease in PH, moisture and ammonia level in litter. Treatment of corn cob with Organic acid increased nitrogen content of litter. The birds reared on corn cob lowered the incidence of hock burn than untreated rice husk litter material.
2.	Name of Project	: Effects of Presan FY on performance of broiler chickens
	PI and Co-PI	: Ranade A.S., Lonkar V.D., Mote C.S. and Mhase P.P.



	Funding Agency	NUTRECO Nederland B.V, Veerstraat 38, 5831 JN Boxmeer, the Netherlands
	Summary	The AGP from commercial broiler diet can be replaced by inclusion of Presan FY in Prestarter, Starter and finisher diet at the dose rate of 1.5, 1.0 and 0.5 kg per ton of feed respectively.
3.	Name of Project	Inclusion of Oat Hulls as a source of Insoluble fiber in broiler diet: An alternative to AGP
	PI and Co-PI	Lonkar V.D., Ranade A.S., Kulkarni V.R., Pathak C.B.
	Funding Agency	Department Research- Intramural
	Summary	The AGP can be replaced with Oat Hulls as source of natural insoluble fiber in broiler diet

8.E.10 Animal Reproduction Gynaecology&Obstetrics

1.	Name of Project	Fertility improvement in dairy animals with new hormonal protocols
	PI and Co-PI	N. M. Markandeya, B. L. Kumawat and A. G. Sawale
	Funding Agency	Intramural Individual Research
	Summary	Ovsynch protocol was employed in non-cyclic bovines in the different seasons of the year to study the seasonal variations in response to cows and buffaloes. Pre-monsoon, monsoon, winter and early summer groups have responded to the treatment of Ovsynch protocol with 70, 100, 100 and 75per cent response and 50, 83.33, 100 and 58.33per cent for pregnancy in cows, whereas 57.14, 100, 87.5 and 63.63 per cent treatment response and 42.85, 75, 62.5 and 45.45 per cent pregnancy were recorded in buffaloes, respectively.Overall response pattern was same in cows and buffaloes with higher number of pregnancies during monsoon and winter season followed by early summer and pre monsoon phase.Buffaloes showed less response to GPG than cows during pre-monsoon and early summer.
2.	Name of Project	Efficacy of various treatments for improvement of fertility in clinical cases
	PI and Co-PI	B L Kumawat, N M Markandeya, and A G sawale
	Funding Agency	Intramural Individual Research
	Summary	The clinical efficacy of Progesterone (PRID) protocol for induction of estrus in true anoestrus cases and thereby conception rate in responded animals was studied in 31 cows and 10 buffaloes having non-cyclic ovarian status.Progesterone impregnated intravaginal insert in terms of PRID (Triu-B@ Virbac Animal Health Pvt. Ltd.) was implanted for 07 days in the selected cases followed by injection Estradiol benzoate (Pregheat@ Virbac Animal Health Pvt. Ltd.) @ 1 mg, IM was administered on day 7th.Responders exhibiting estrus were bred at appropriate time as per the duration of estrus by AI. Follow up was continued for confirmation of pregnancy.PRID treatment was found to be successful and overall response was recorded as 87.09% cows and 80 % buffaloes.Responded animals showed exhibitory estrus within 3.52 ± 0.23 days after removal of implant.The pregnancy rate was recorded as 74.19 and 70.00 per cent in cows and buffaloes, respectively.The response was found to be marginally superior in cows.

8.E.11 Veterinary Medicine

1.	Name of Project	Efficacy of a composite formulation (Masticure) as an adjunct therapy in the treatment of mastitis in bovines.
	PI and Co-PI	PI: Tawheed, A.S., Co-PI: S.U. Digraskar, Borikar, S.T. and Dudhe, N.C.
	Funding Agency	Nutricare Life Sciences Limited, Dehradun,Utterakhand
	Summary	Beneficial effects of "Masticure" therapy against subclinical mastitis of lactating dairy cows were obtained. The presence of minerals, probiotics, amino acids and enzymes with phyto extracts in Masticure possess antibacterial, anti-inflammatory and milk yield enhancing potential as substantiated by elimination of intramammary infections and increase in milk yield.



2.	Name of Project	: Efficacy of polyherbal spray against ticks and lice infestation in cattle and buffaloes
	PI and Co-PI	: Dr.A.U.Bhikane, Dr.B.S.Khillare, Dr.R.K.Jadhav&Dr.R.S.Ghadge
	Funding Agency	: Rakesh Pharmaceuticals, Gujarat
	Summary	: <ul style="list-style-type: none"> • Treatment of cattle and buffalo with polyherbal spray for tick infestation proved effective till 7th day with reasonable residual effect up to 21 days. So weekly spraying of cattle and buffaloes infested with ticks may prove helpful during seasons of tick activity • Being herbal spray and having pleasant smell, use of polyherbal spray by animal owner is easier and • Application of spray didnotrevealany adverse reaction or toxicity signs, which are common in case of chemical acaricides • Polyherbal spray is not effective in lice infestation

8.E.12 Livestock Farm Practices

1.	Name of Project	: Comparative study of different silages
	PI and Co-PI	: Dr. P.V.Patil, Dr. V.M.Salunke and Dr.A.B.Kanduri
	Funding Agency	: Intramural
	Summary	: <ul style="list-style-type: none"> • Objectives of this Project: To evaluate the quality (colour, smell and PH), chemical composition and palatability in cows, buffaloes, sheep and goat of different Silages. • Different silages were prepared from green maize, yeshwant/Jaywant grass, Multicut Jowar, Azolla+Maize+Multicut Jowar, Yeahwant+Green Maize, Maize+Vegetable waste, Maize50%+Azolla50%, Co4 grass and proximate analysis and palatability trial was carried out for the above silages in different species. In addition to this colour, smell and pH was recorded. The work of silage preparation from sugarcane leaves, Lucerne+Maize, Tree leaves+ Maize and natural grass is in progress.
2.	Name of Project	: Cropping of different fodder varieties, its chemical analysis and response study of fodder beneficiaries.
	PI and Co-PI	: Dr. S.M.Durge, Dr.L.S.Kokate, Dr. V.N.Khandait, V.N. and Dr.V.M.Salunke
	Funding Agency	: Intramural
	Summary	: Successfully established 22 varieties on CBF as demostration plots. Chemical analysis is in progress. Once fodder variety propogated to the farmers land response study will be done.

Faculty of Fishery Science:

8.E.13 Fisheries Resources, Economics, Statistics & Extension Education

1	Name of Project	: Sustainable livelihood of tribal population in Gadchirli district through scientific fisheries technologies
	PI and Co-PI	: Dr. P. A. Telvekar, S. A. Joshi & Shri. S. T. Shelke
	Funding Agency	: Science and Technology Research Centre, Gondwana University, Gadchiroli
	Summary	: The impoved fish farming technologies are disseminated in four village ponds in Gadchiroli district Simillary, the value added fish product technology is demonstated to the women self help groups in the district through this project.
2.	Name of Project	: Socio-economic study of fishermen along Lendi River (Godavari river basin).
	PI and Co-PI	: S.N. Kunjir, A.S. Kulkarni, M.M. Girkar and S.S. Ghatge
	Funding Agency	: Intramural
	Summary	: In the present work, a comprehensive Schedule was prepared initially and tested for its correctness. The data of fishermen was collected through conducting interview of fishermen along LendiRiver.Information of total 40 fishermen from location i.e. Mukramabad, Degloor, Tiru dam, Ekurka fishermen was collected. The work will be continued for one year period.

8.E.14 Department of Aquatic Environment Management

1.	Name of Project	: Development of Fisheries and Aquaculture in Vidarbha
	PI and Co-PI	: S.W. Belsare and Others



	Funding Agency	:	Vidarbha Development Board, Nagpur
	Summary	:	The present study was carried out in two divisions namely Nagpur and Amravati covering 11 district of Vidarbha where in comprehensive study and survey was conducted on various aspects of fisheries and aquaculture in Vidarbha region. The study involved survey of fisheries cooperative societies, State Fisheries Departments Seed production units, Seed rearing units and fish markets in all 11 districts of Vidarbha.
2.	Name of Project	:	To study physio-chemical parameters of Lendi River
	PI and Co-PI	:	M. M. Girkar, V. B. Sutar, S. N. Kunjir & S. S. Ghatge
	Funding Agency	:	Intramural
	Summary	:	Physio-chemical parameters of water from three different stations on Lendi river were analysed on monthly basis.
8.E.15 Aquaculture			
1.	Name of Project	:	Study of fish consumption in Udgir city
	PI and Co-PI	:	Shri. S. R. Yadav
	Funding Agency	:	Intramural
	Summary	:	-
8.E.16 Department of Fisheries Resource Management			
1.	Name of Project	:	Inventorying Fish Fauna of Lendi River (Godavari river basin).
	PI and Co-PI	:	S.S. Ghatge, S.N. Kunjir, A.T. Tandale and M.M. Girkar
	Funding Agency	:	Intramural
	Summary	:	At present 27 fish species have been collected. Twenty-four species have been identified upto species level and three upto genus level. At present three transplanted and two exotic species have been documented. Also two indigenous fish methods are documented during the present work.

8.F. RESEARCH PUBLICATIONS

8.F.1. Collegewise Research Publications

Sr. No.	Name of College	No of Research Papers		
		National	International	Total
1.	Bombay Veterinary College, Mumbai	58	12	70
2.	Nagpur Veterinary College, Nagpur	59	26	85
3.	College of Veterinary & Animal Sciences, Parbhani	47	18	65
4.	KNP College of Veterinary Science, Shirwal	11	18	29
5.	College of Veterinary and Animal Sciences, Udgir	13	05	18
6.	Post Graduate Institute of Vety& Animal Sci, Akola	24	10	34
7.	College of Dairy Technology, Warud	02	04	06
8.	College of Dairy Technology, Udgir	08	00	08
9.	College of Fishery Science, Nagpur	03	01	04
10.	College of Fishery Science, Udgir	02	00	02
Total		227	94	321

8.FG.2. Departmentwise Research Publications

- **Bombay Veterinary College, Mumbai**

Sr. No.	Name of Department	No of Research Papers		
		National	International	Total
1.	Veterinary Anatomy and Histology	2	-	2
2.	Veterinary Physiology	7	-	7



3.	Animal Nutrition	2	-	2
4.	Animal Genetics and Breeding	-	2	2
5.	Poultry Science	3	1	4
6.	Livestock Production & Management	1	-	1
7.	Veterinary & Animal Husbandry Extension	3	2	5
8.	Veterinary Public Health	6	1	7
9.	Veterinary Pathology	7	0	7
10.	Veterinary Microbiology & Biotechnology	2	5	7
11.	Clinical medicine, Ethics, Jurisprudence	1	-	1
12.	Department of Surgery & Radiology	9	1	10
13.	Animal Reproduction, Gynaecology & Obstetrics	6	-	6
14.	Cattle Breeding Farm and Dangi Cow Research Station, Igatpuri Dist. Nasik	6	0	6
15.	Dept. of Veterinary Parasitology	3	-	3
Total		58	12	70

- Nagpur Veterinary College, Nagpur**

Sr. No.	Name of Department	No of Research Papers		
		National	International	Total
1	Veterinary Anatomy and Histology	03	00	03
2	Veterinary Physiology	02	00	02
3	Animal Nutrition	02	00	02
4	Livestock Production and Management	00	01	01
5	Livestock Product Technology	04	00	04
6	Veterinary and A.H. Extension Education	01	02	03
7	Veterinary Pathology	02	05	07
8	Veterinary Pharmacology & Toxicology	00	02	02
9	Veterinary Microbiology & Biotechnology	04	04	08
10	Veterinary Public Health	02	06	08
11	Veterinary Clinical Medicine, Ethics and Jurisprudence and Department of Veterinary Preventive Medicine	05	01	06
12	Veterinary Surgery & Radiology	11	01	12
13	Animal Reproduction Gynaecology and Obstetrics	11	01	12
14	Institutional Livestock Farm Complex (ILFC)	03	01	04
15	Teaching Veterinary Clinical Complex (TVCC)	09	02	11
Total		59	26	85

- College of Veterinary and Animal Sciences, Parbhani**

Sr. No.	Name of Department	No of Research Papers		
		National	International	Total
1	Veterinary Anatomy and Histology	02	00	02
2	Veterinary Physiology	00	01	01
3	Veterinary Microbiology	00	01	01
4	Animal Genetics & Breeding	01	00	01
5	Veterinary Parasitology	07	02	09



6	Livestock Production & Management	01	00	01
7	Animal Nutrition	02	00	02
8	Veterinary Public Health	00	02	02
9	Veterinary Pathology	03	03	06
10	Poultry Science	00	03	03
11	Animal Reproduction, Gynecology & Obstetrics	27	01	28
12	Veterinary Medicine	02	00	02
13	Veterinary Surgery	00	02	02
14	Veterinary Pharmacology & Toxicology	02	03	05
Total		47	18	65

• **K.N.P. College of Veterinary Science, Shirwal**

Sr. No.	Name of Department	No of Research Papers		
		National	International	Total
1	Veterinary Parasitology	00	02	02
2	Veterinary Physiology	00	02	02
3	Department of Animal Genetics and Breeding	00	03	03
4	Animal Nutrition	01	00	01
5	Livestock Production and Management	02	06	08
6	Poultry Science	01	00	01
7	Veterinary Pathology	02	01	03
8	Veterinary Microbiology	01	00	01
9	Livestock farm complex	01	01	02
10	Veterinary Public Health & Epidemiology	00	02	02
11	Veterinary Epidemiology & Preventive Medicine	01	00	01
12	Veterinary Surgery & Radiology	01	00	01
13	Veterinary Clinical Medicine, Ethics & Jurisprudence	00	01	01
14	Animal Reproduction, Gynaecology and Obstetrics	01	00	01
Total		11	18	29

• **College of Veterinary and Animal Sciences, Udgir**

Sr. No.	Name of Department	No of Research Papers		
		National	International	Total
1	Animal Genetics and Breeding	02	01	03
2	Animal Nutrition	03	-	03
3	Animal Reproduction, Gynecology & Obstetrics	00	01	01
4	Dept. of Veterinary Biochemistry	02	-	02
5	Livestock Products Technology	01	-	01
6	Poultry Science	01	-	01
7	Veterinary Clinical Medicine	02	03	05
8	Institutional Livestock Farm Complex (ILFC)	02	-	02
Total		13	05	18

• **Post Graduate Institute of Veterinary & Animal Science, Akola**

Sr. No.	Name of Department	No of Research Papers		
		National	International	Total
1	Veterinary Biochemistry	02	00	02
2	Veterinary Physiology	00	00	00



3	Surgery and Radiology	04	01	05
4	Animal Reproduction Gynaecology and Obstetrics	01	03	04
5	Veterinary Clinical Medicine	01	00	01
6	Teaching Veterinary Clinical Complex and Department of Veterinary Clinical Medicine	03	01	04
7	Department of Poultry Science	01	04	05
8	Department of Pathology	10	00	10
9	Animal Genetics and Breeding	00	00	00
10	Animal Nutrition	00	00	00
11	Vety. Pharmacology & Toxicology	02	01	03
12	Livestock Production Management	00	00	00
Total		24	10	34

- **College of Dairy Technology, Warud**

Sr. No.	Name of Department	No of Research Papers		
		National	International	Total
1	Dairy Technology	01	02	03
2	Dairy Engineering	00	00	00
3	Dairy Chemistry	01	02	03
4	Dairy Microbiology	00	00	00
5	Dairy Economics, Dairy Extension&Management	00	00	00
6	Computer Science, Mathematics and Statistics	00	00	00
Total		02	04	06

- **College of Dairy Technology, Udgir**

Sr. No.	Name of Department	No of Research Papers		
		National	International	Total
1	Dairy Engineering	03	00	03
2	Dairy Chemistry	03	00	03
3	Library	02	00	02
Total		08	00	08

- **College of Fishery Science, Nagpur**

Sr. No.	Name of Department	No of Research Papers		
		National	International	Total
1	Aquatic Environment Management	02	01	03
2	Dept. of Aquaculture	01	00	01
Total		03	01	04

- **College of Fishery Science, Udgir**

Sr. No.	Name of Department	No of Research Papers		
		National	International	Total
1	Aquatic Environment Management	02	00	02
Total		02	00	02



Details of Research Publications / Research papers

Sr. No.	Name of Author/s	Title of Research Article	Name of the publication/Journal, Volume, Edition, Page Nos. etc
1	Jyoti Saini, P. L. Dhande, S. A. Gaikwad, V. D. Shankhapal and A. D. Patil	Physico-morphological characteristics and Fertilizing ability studies on semen of Holstein Friesian bull	Indian J of Vety. Anatomist Vol. 29, Pp. No. 59 -62
2	Shilpa S. Modekar, P. L. Dhande, V. D. Shankhapal, S. A. Gaikwad, A. D. Patil and Jyoti Saini	Assessment of udder characteristic of lactating and non-lactating mammary gland of non-descript goat of Maharashtra region	Indian J of Vety. Anatomist Vol. 29 (2) Pp. No. 18 -20
3	Meshram, P. V, Moregaonkar S. D, Gatne, M. M, Gaikwad, R. V, Zende, R. J, Ingole, S. D and Vanage, G. R	Physicochemical and Phytochemical Screening of Aqueous and Ethanolic Extracts of CostusPictus D. Don and EnicostemaLittorale Blum	Chemical Science Review and Letters. 6(21), 426-434
4	P. M. Kekan, S. D. Ingole, S. D. Sirsat, S.V. Bharucha, S. D. Kharde and A. S. Nagvekar	The role of pheromones in farm animals - A review	Agricultural Reviews, 38 (2): 83-93
5	S. P Mohapatra, S. D Ingole, S. V Bharucha, A. S Nagvekar, P. M Kekan and S. D Kharde	Changes in urinary dipstick parameters in cyclic and early pregnant Murrah buffaloes	The Pharma Innovation Journal. 6(7): 08-10
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202	Kadam, P. D., Markandeya, N. M., Sawale, A. G., Kumawat, B.L., Anbhule, R. S. and Lawange, S. R.	Dystocia in goat due to over grown twins relieved by fetotomy.	Paper presented during 33rd ISSAR conference held at Kolkata. Compendium PP: 191
203	Kumawat, B. L., Markandeya, N. M. and Sawale, A.G.	Comparative efficacy of PGF2 α and estradiol benzoate in PRID protocols for induction of estrus in Indian zebu cattle (<i>Bos Indicus</i>).	Paper presented during 33rd ISSAR conf held at Kolkata. Comp PP: 84
204	Pujar. C., Markandeya, N.M., Mali A. B., Puro, N. A., and B. L. Kumawat	Fecundity improvement through various approaches in osmanabadi goats.	Paper presented during 33rd ISSAR conference held at Kolkata. Comp PP: 21
205	Raut, S.S., Markandeya, N. M., Sawale, A.G., Kumawat, B. L., Lawange, S.R, Anbhule, R.S. and Kadam, P.D.	Ultrasonographic diagnosis of cystic endometrial hyperplasia in bitch.	Paper during 33rd ISSAR confheld at Kolkata during 9th to 11th February 2018. Comp PP: 91
206	Anbhule R. S., Markandeya, N. M., Sawale A. G., Kumawat B. L., Lawange S. R. and Kadam P. D.	Clinical Management of Anestrus due to Luteal Cyst in Red Kandhari Cow.	Paper presented during clinical case conf held on 17th Feb



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207	Kadam P. D., Anbhule R. S., Markandeya, N. M., Sawale A. G., Kumawat B. L. and Lawange S. R.	Post-partum uterine eversion in goat.	Paper presented during clinical case conf at PGIVAS, Akola. Comp PP: 59
208	Lawange, S. R., Markandeya N. M., Sawale A. G., Kumawat B. L. Anbhule R. S. and Kadam P. D.	Dystocia due to Hydrocephalic Fetus in Buffalo.	Paper presented during clinical case conference at PGIVAS, Akola. Compendium PP:57
209	Narotek.V., Markandeya, N. M., Sawale A. G. and Kumawat B. L.	Diagnosis and Treatment of Puerperal Metritis in A Gir Cow.	Paper presented during clinical case conf at PGIVAS, Akola. Comp.PP: 59
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298	P. V. Godbole, S. W. Hajare, P. Bhosale, M. Hedau, M. V. Ingawale, R. S. Ingole, P. Kuralkar, N.M. Bhojane	Effect of Curcumin on Hemato-biochemical alteration after induced <i>E. coli</i> infection in Broilers.	Journal of Pharmacognosy and Phytochemistry, 7(1) 484-486
299	U. N. Kulthe, R. S. Ingole, Maduri Hedau, S. W. Hajare & M.V. Ingawale	Protective effect of <i>Andrographis paniculata</i> on haematobiochemical profile during chlorpyrifos induced subacute toxicity in Japanese quails.	Journal of Pharmacognosy & Phytochemistry, 7(1)
300	N. M. Bhojane, R. S. Ingole, Madhuri Hedau, S. W. Hajare, S.V. Kuralkar, S. J. Manwar & S.P. Waghamare	Individual and combined toxicity effect of indoxacarb and glyphosate on general performance and hematological parameters in Japanese quails	Journal of Entomology and Zoology Studies, 6(2) : 1212-1216
301	M. Hedau, R.S. Ingole, S.W. Hajare, M.V. Ingawale, S.V. Kuralkar and S. J. Manwar	Effect of individual and combined toxicity of chlorpyrifos and acetamiprid on growth parameters in broilers	J of Entomology and Zoology Studies, 6(2) : 2784-2787

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Sr. No.	Name of Author/s	Title of Research Artical	Name of the publication / Journal, Volume, Edition, page Nos. etc
302	P. D. Sawale, G. R. Patil, S. A. Hussain, A.K Singh and R. R. B.Singh	Release Characteristics of Polyphenols from Microencapsulated <i>Terminalia Arjuna</i> Extract: Effects of Simulated Gastric Fluid.	Int J of food properties - Online 2 April 2017 doi.org/10.1080/10942912.2017.1280677



303	P. D. Sawale, G. R. Patil, S. A. Hussain, and A.K Singh	Effect of incorporation of encapsulated and free Arjuna herb on storage stability of chocolate vanilla dairy drink	Food Bioscience- Sept., 2017 https://www.sciencedirect.com/science/article/abs/pii/S2212429216301328
304	P. D. Sawale, A. M. Shendurse, M. S. Mohan	Isomaltulose (Palatinose) - An Emerging Carbohydrate	(Review paper)Food Bioscience- 18:46-52
305	P. D. Sawale A.M. Shendurse and S.P.Changade	Microencapsulation of Herb for Food Application	Approaches in Poultry, Dairy & C Veterinary (Sciences http://crimsonpublishers.com/apdv/pdf/APDV.000540.pdf)
306	Chitra Gupta,Sumit Arora, Syama M. A. & Apurva Sharma	Preparation of milk protein- Vitamin A complexes and their evaluation for vitamin A binding ability	Food Chemistry, 237, 141-149
307	Chitra Gupta,Sumit Arora, Syama M. A. & Apurva Sharma	Physicochemical characterization of native and modified sodium caseinate- Vitamin A complexes	Food Research International, 106, 964-973
308	Wasnik, PG, Menon RR, Surendra Nath B, Balasubramanyam BV, Manjunatha M and Sivaram M	Application of particle analysis and colour parameters for detection of adulteration of cow ghee with vanaspati derived from image analysis,	Indian Journal of Dairy Science 70(2) 200-208.
309	Wasnik, PG, Menon RR, Surendra Nath B, Balasubramanyam BV, Manjunatha M and Sivaram M	Application of pixel intensity, fractal dimension and skeleton parameters for detection of adulteration of cow ghee with vanaspati derived from image analysis,	Indian Journal of Dairy Science 70(3) 331-337.
310	Bajad DN., Khedkar C .D., Kalvankar S.D, Deshmukh M.A, Chopade S.S, .Kele V.D	Exhibition Of Antibacterial Characteristics Of Probiotic Acido-Bifido-Yogurt Against Group of Certain Pathogens	Multilogic in Science Vol. VI Pp13-16 (April 2017)
311	A.M. Patil, C.D. Khedkar; S.D. Kalyankar, R.B. YedatkarandD.N. Bajad;	Standardization of a Method for Preparation of Probiotic Curd	Vol. 19, No. (3): 2017: 719-721 © Global Science Publications ISSN-0972-3005
312	Bajad, D.N; Khedkar, C.D.; Kalyankar S.D; Bajad,G.S, Deshmukh M.A and Bachanti P.R	PotancyAntibacterial Properties ofProbioticAcido-Bifido-Yogurt against E.Coli	International Journal of Pure & Applied Bioscience Iissn: 2320 - 7051 Int. J. Pure App. Biosci. 6 (1): 1547-1551 (2018)
313	S.S Chopde*, M.R Patil, Adil Shaikh, BB Chavhan and MA Deshmukh	Developments in Computer Vision System, Focusing on its Applications in Quality Inspection of Fruits and Vegetables-A Review	Agricultural Reviews, 38 (2) 2017 : 94-102
314	Shinde M.M, Shete C.D, DeshmanP.J. e, Munjewar S.A	Anti-Plagiarism Websites and Tools	Int J of Comm and Media Studies (IJCMS) ISSN (P):2250-0014, Vol. 8, Issue 1 Pp 1-6
315	Munjewar S.A, Shinde M.M and Deshmane P.J	Multimedia: An Overview	Int J of Resin Applied, Natural and Social Science, ISSN(P): 2347-4580Vol5, Issue 11 Page No.53-58

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Sr. No.	Name of Author/s	Title of Research Artical	Name of the publication / Journal, Volume, Edition, page Nos. etc
316.	S.W. Belsare, S.S. Ghatge, Dr. J.G.K. Pathan and Nitin Jacob	Effect of Idol Immersion On Diurnal Water Quality Parameter In Futala Lake of Nagpur, India	Intl J of Sci Envi and Tech, Vol. 6, No 3, 2017, 1650 - 1659



317.	S. S.Ghatge , S W. Belsare, & S. S. Jadhav	Fish Diversity of Telangkhedi Lake, Nagpur	J of Natural Resource and Development 12 (2) 81-84, 2017
318.	S. S. Ghatge, S.W. Belsare, S. S. Jadhav & M.Rajankar	Freshwater Fish diversity of Navegaon Bandh, Gondia district, Maharashtra State	Journal of Indian Fisheries Association, 44(1) : 39-45, 2017
319.	Satyajit Belsare, H.S. Dhaker, A. Pawase, V. Joshi, S. Mohite and S. Shelke	Effect of Dietary Carbohydrate - Lipid Ratio on Growth, Body Composition and Digestive Enzyme Activities of Juvenile Goldfish (<i>Carassius auratus</i>)	Animal Nutrition and Feed Technology (2017) 17 : 43-53
320.	M. M. Girkar, S. S.Ghatge, S. N. Kunjir, A. T. Tandale & B. Bopanna	Impact of climate change on marine fisheries sector	Asian Journal of Environmentnment Science, Vol.12(2), Page No.129-134: 2017
321.	M. M. Girkar, V. B.Sutar, A. T. Tandale & S. N. Kunjir	Assessment of the physic-chemical parameters of Nideban reservoir, Udgir, district Latur	The Asian Journal of Animal Science, Vol.12(2), Page No.111-116:2017



9

EXTENSION EDUCATION AND TRAINING

Extension as a third important component for the Universities plays a key role in the transfer of technologies to the farmers. From its inception, MAFSU has strived hard in reaching the farmers for animal husbandry, dairy, and fisheries sector. In its efforts, the University is working for the effective extension work through its constituent colleges. The Directorate of Extension and Training is actively involved in planning, monitoring and execution of the various extension activities in the University.

Major extension activities through these colleges are participating in regional and national exhibitions, trainings and animal health camps including demonstrations for the farmers. Special extension programmes through the activities of National Service Scheme and involvement of other voluntary organizations are carried out in the form of campaigns, rallies, group discussions, trainings on value added milk and meat products, enrichment of poor quality fodder, quality production, treatment camps etc. On-farm demonstrations for livestock farmers were carried out throughout the State of Maharashtra by the faculty of Veterinary, Dairy Technology and Fisheries forms a unique way of technology dissemination.

Remarkable advancement in outreach of the fisheries activities can be gauged by large scale propagation of scientific inland fisheries especially in Vidarbha and Marathwada region of the state. Entrepreneurial ventures, especially by the local fishermen communities have given a significant impetus in growth of inland fish production in the State. The fish cooperative societies, self-help groups are also provided with fish seed produced by fishery colleges.

Good quality extension material is being regularly published through local news papers and magazines. The University along with its constituent colleges have published many good quality extension publications in the form of posters, leaflets, folders, technical bulletins and booklets on various important issues for the farmers. Experts from the University are regularly involved in All India Radio and Television programmes for guiding the farmers through these mediums. The University has a separate website as useful extension tools for its adult and continuing programmes. To boost up the spread of the various academic, research and extension activities from the University is publishing "MAFSU VARTA" on a quarterly interval. Extension approaches involving the technology transfer through MAFSU can be evident from the adoption of validated technology *viz.* loose housing system, composite silage making, dairy management software, etc. by the farmers across the State.

To support the extension activities through the use of audio-visual aids, the University and its constituent colleges has developed several audio visual aids. Farmer's queries through personal visits, telephones and mails are promptly resolved by the expert faculties of the University. All the constituent colleges of the University have 1-2 adopted villages for regular extension and allied activities. There is a regular follow-up of the activities being taken in these villages at the college level through weekly visits and these villages are serving the purpose of the laboratories for on filed extension activities on regular basis. Beside, the University is actively involved in the extension based research projects sanctioned by various agencies likes Indian Council of Agricultural Research (ICAR) under Tribal Sub Plan (TSP), Rajiv Gandhi Science and Technology Commission (RGSTC), Agricultural Technology Management



Agency (ATMA) etc. Collaborative programmes are being taken with Maharashtra Bank Self Employment Training Institute, MS Swaminathan Research Foundation in Wardha District.

9. A. TRAININGS

Sr. No.	Name of College	Trainings for Officers	Trainings for Farmers
1	BVC, Mumbai	03	10
2	NVC, Nagpur	03	26
3	COVAS, Parbhani	05	03
4	COVAS, Udgir	06	03
5	KNPCOVS, Shirwal	05	08
6	PGIVAS, Akola	01	05
7	DTC, Warud	00	01
8	CDT, Udgir	00	01
9	COFS, Nagpur	00	15
10	COFS, Udgir	00	02
	Total	23	74

9.A.1. SHORT TERM TRAINING COURSES FOR FIELD OFFICERS

- **Bombay Veterinary College, Mumbai**

Sr. No.	Title	Date	No. of Trainees	Sponsoring Agency
1.	Training Programme on small animal Laparoscopic Technique for Post Graduate Student	June 2017	01	Nil
2.	One day CE programme on "Emergency application in Critical Care Management" for UG, PG students	20.03.2018	250	PPAM
3.	One Day Training Programme on small animal Laparoscopic Technique for Internship Students	30.02.2018	06	Nil
		Total	257	

- **Nagpur Veterinary College, Nagpur**

Sr. No.	Title	Date	No. of Trainees	Sponsoring Agency
1	National Training Programme on "Host-Pathogen Interaction"	9.01.2018 to 13.01.2018	14	NAE project
2	National Training Programme on "Genomic & Zoonoses"	06.03.2018 to 10.03.2018	17	NAE project
3.	"Recent Trends in Poultry Production in Doubling Farmer's Income"	06.02.2018 to 09.02.2018	25	MANAGE, Hyderabad.
		Total	56	

- **College of Veterinary and Animal Sciences, Parbhani**

Sr. No.	Title	Date	No. of Trainees	Sponsoring Agency
1	Master Trainer's Training on 'Goat Farming'	11.07.2017 to 20.07.2017	51	MAVIM, Mumbai
2	Master Trainer's Training on 'Dairy Farming'	01.08.2017 to 10.08.2017	47	MAVIM, Mumbai
3	Master Trainer's Training on 'Poultry Farming'	14.08.2017 to 23.08.2017	26	MAVIM, Mumbai
4	Model Training Course on "Commercial Goat Farming"	05.10.2017 to 12.10.2017	20	DIRECTORATE OF EXTENSION, GOI, NEW DELHI
5	Lecture on "Estrus detection, mating systems and Pregnancy diagnosis in Goats" delivered and practical demonstration of Ultrasongraphic	05.10.17 to 12.10.2017	25	COVAS, Parbhani



pregnancy diagnosis in Goats given in "Commercial Goat Farming" for Field veterinarians			
		Total	169

- **College of Veterinary and Animal Sciences, Udgir**

Sr. No.	Title	Date	No. of Trainees	Sponsoring Agency
1.	Training under ASCAD for ALDO and LSS of Department of AH, Govt of Maharashtra on 'Disease control and diagnosis'	02.05.2017 to 06.05.2017	21	Department of Animal Husbandry, Govt. of Maharashtra under 'ASCAD' scheme
2.		08.05.2017 to 12.05.2017	19	
3.		18.05.2017 to 22.05.2017	19	
4.		22.05.2017 to 26.05.2017	17	
5.	Training on 'Diagnosis and control of animal diseases' for LDO and ACAH	31.05.2017 to 05.06.2017	16	Department of Animal Husbandry, Govt. of Maharashtra under 'ASCAD' scheme
6.		07.06.2017 to 12.06.2017	17	
		Total	109	

- **K.N.P. College of Veterinary Science, Shirwal**

Sr. No.	Title	Date	No. of Trainees	Sponsoring Agency
1	Prevention and Therapeutic Management of Diseases Causing Reproductive Failure in Animals	11.12.2017 to 16.12.2017	15	RKVV
2	Prevention and Therapeutic Management of Diseases Causing Reproductive Failure in Animals	02.01.2018 to 06.01.2018	26	RKVV
3	Prevention and Therapeutic Management of Diseases Causing Reproductive Failure in Animals	15.01.2018 to 20.01.2018	26	RKVV
4	Prevention and Therapeutic Management of Diseases Causing Reproductive Failure in Animals	20.02.2018 to 25.02.2018	27	RKVV
5	One day training programme on "Advanced Diagnostic Techniques in Veterinary Medicine"	22.03.2018	60	PPAM Mumbai
		Total	154	

- **Post Graduate Institute of Veterinary and Animal Sciences, Akola**

Sr.No	Title	Date	No. of Trainees	Sponsoring Agency
1	Prevention and control of important diseases of livestock: Present and future perspectives' under IEC	26.03.2018	66	Deptt. of Animal Husbandry, Akola
		Total	66	

9. A. 2. SHORT TERM TRAINING COURSES ORGANIZED FOR FARMERS

- **Bombay Veterinary College, Mumbai**

Sr. No.	Title	Date	No. of Trainees	Sponsoring Agency
1.	Short-term Poultry Training Course	10.07.2017 to 14.07.2017	28	Nil
2.	Goat Training	26.07.2016	60	Nil
3.	Goat Training	17.12.2016	62	Nil
4.	Goat training	28.04.2017	55	Nil
5.	Goat training	13.07.2017	66	Nil
6.	Dairy Training	13.02/2017	19	Nil
7.	Milk processing and value addition	06.12.2017 to 08.12.2017	8	Nil
8.	Hygienic meat production and Processing	14.03.2018 to 16.03.2018	10	Nil



9.	Clean Milk Production	03.12.2018	20	Nil
10.	Modern Goat Farming	06.03.2018 to 08.03.2018	16	Nil
Total		344		

- Nagpur Veterinary College, Nagpur**

Sr. No.	Title	Date	No. of Trainees	Sponsoring Agency
1	Milk Processing & Value Addition	11.10.2017 to 13.10.2017	19	LPT, NVC, Nagpur
2	Milk Processing & Value Addition	10.01.2018 to 12.01.2018	08	LPT, NVC, Nagpur
3	Scientific Goat Farming Training	03.04.2017 to 07.04.2017	70	Self Funded
4	Scientific Goat Farming Training	19.06.2017 to 23.06.2017	70	Self Funded
5	Scientific Goat Farming Training	18.08.2017 to 22.08.2017	63	Self Funded
6	Scientific Dairy Farming Training	12.09.2017 to 16.09.2017	35	Self Funded
7	Scientific Dairy Farming Training	18.09.2017 to 22.09.2017	52	ATMA, Dist. Chandrapur
8	Scientific Goat Farming Training	30.10.2017 to 03.11.2017	37	ATMA, Dist. Chandrapur
9	Scientific Goat Farming Training	14.11.2017 to 18.11.2017	59	Self Funded
10	Scientific Dairy and Goat Farming	19.11.2017	200	NSS, NVC, Nagpur
11	Scientific Dairy Farming Training	27.11.2017 to 01.12.2017	44	Self Funded
12	Scientific Goat Farming Training	05.02.2018 to 09.02.2018	59	Self Funded
13	Scientific Dairy Farming Training	20.02.2018 to 24.02.2018	28	Self Funded
14	Scientific Dairy Farming	05.03.2018 to 09.03.2018	35	ATMA, Dist. Chandrapur
15	Scientific Goat Farming"	12.03.2018 to 16.03.2018	27	ATMA, Dist. Chandrapur
16	Training on Scientific Dairy, Poultry and Goat Farming	27.03.2018	145	NSS, NVC, Nagpur
17	Commercial Poultry Farming	16.05.2017 to 20.05.2017	26	Self Funded
18	Commercial Poultry Farming	11.05.2017 to 15.05.2017	42	Self Funded
19	Commercial Poultry Farming	01.08.2017 to 05.08.2017	37	Self Funded
20	Commercial Poultry Farming	29.08.2017 to 31.08.2017	40	Self Funded
21	Commercial Poultry Farming	03.10.2017 to 07.10.2017	44	Self Funded
22	Commercial Poultry Farming	10.10.2017 to 12.10.2017	60	Self Funded
23	Commercial Poultry Farming	01.11.2017 to 03.11.2017	55	Self Funded
24	Commercial Poultry Farming	04.12.2017 to 06.12.2017	83	Self Funded
25	Commercial Poultry Farming	26.12.2017 to 30.01.2018	51	Self Funded
26	Commercial Poultry Farming	05.03.2017 to 09.03.2017	53	Self Funded
Total		1441		

- College of Veterinary & Animal Sciences, Parbhani**

Sr. No.	Title	Date	No. of Trainees	Sponsoring Agency
1	Goat management skills	15.07.2017	80	COVAS, Parbhani & MAVIM, Mumbai
2	Dairy management skills	08.08.2017	70	COVAS, Parbhani & MAVIM, Mumbai
3	Dairy business strategies	19.03.2018	150	NSS, COVAS, Parbhani
Total		300		



- **College of Veterinary & Animal Sciences, Udgir**

Sr. No.	Title	Date	No. of Trainees	Sponsoring Agency
1	Scientific Goat Farming	20.06.2017 to 22.06.2017	12	Paid Training
2	Profitable Dairy Farming	28.07.2017 to 03.08.2017	14	Paid Training
3	Commercial poultry farming	13.12.2017 to 15.12.2017	14	Paid Training
Total		40		-

- **K.N.P. College of Veterinary Science, Shirwal**

Sr. No.	Title	Date	No. of Trainees	Sponsoring Agency
1	Scientific Dairy Farming	19.07.2017 to 21.07.2017	26	-
2	Modern Goat Farming	03.08.2017 to 05.08.2017	42	-
3	Commercial Poultry Farming	22.08.2017 to 24.08.2017	11	-
4	Modern Goat Farming	14.09.2017 to 16.09.2017	19	-
5	Modern Goat Farming	20.12.2017 to 22.12.2017	19	-
6	Modern Dairy Farming	29.01.2018 to 31.01.2018	15	-
7	Modern Goat Farming	07.02.2018 to 09.02.2018	26	-
8	World Women's Day	10.03.2018	38	-
Total		196		

- **Post Graduate Institute of Veterinary & Animal Sciences, Akola**

Sr. No.	Title	Date	No. of Trainees	Sponsoring Agency
1	Commercial Goat rearing	02.05.2017 to 06.05.2017	26	Paid training
2	Commercial Poultry Farming	18.09.2017 to 22.09.2017	23	Paid training
3	Commercial Poultry Farming	04.12.2017 to 08.12.2017	21	Paid training
4	Commercial Goat rearing	04.01.2018 to 09.01.2018	56	Paid training
5	Commercial Poultry Farming	29.01.2018 to 02.02.2018	15	Paid training
Total		141		

- **Dairy Techology College, Warud**

Sr. No.	Title	Date	No. of Trainees	Sponsoring Agency
01	Dairy Business & Demonstration on Paneer mfg.	22.02.2018	300	ATMA, Washim

- **College of Dairy Technology, Udgir**

Sr. No.	Title	Date	No. of Trainees	Sponsoring Agency
1.	Milk and Milk Product: Processing Technologies & Equipments	07.02.2018 to 09.02.2018	69	ATMA

- **College of Fishery Science, Nagpur**

Sr. No.	Title	Date	No. of Trainees	Sponsoring Agency
1.	Culture-based fisheries in small reservoirs	29.05.2017 to 02.06.2017	22	Paid training
2.	Freshwater fish seed production	07.08.2017 to 11.08.2017	15	Paid training
3.	Freshwater aquaculture	03.10.2017 to 07.10.2017	20	Paid training
4.	Value-Added Fish Products	09.10.2017 to 11.10.2017	20	Paid training
5.	Freshwater fish culture vis-à-vis water & Soil quality	30.10.2017 to 07.10.2017	20	Paid training
6.	Preparation of Value-added fish products	06.11.2017 to 08.11.2017	24	STRC, Gadchiroli
7.	Fresh water fish culture	06.11.2017 to 08.11.2017	25	STRC, Gadchiroli



8.	Freshwater Fish Culture	26.12.2017 to 28.12.2017	18	DST, New Delhi
9.	Freshwater Fish Culture	29.12.2017 to 31.12.2017	20	DST, New Delhi
10.	Preparation of value-added fish product	10.01.2018 to 12.01.2018	19	DST, New Delhi
11.	Fresh water fish culture	10.01.2018 to 12.01.2018	22	STRC, Gadchiroli
12.	Freshwater Fish Culture	21.01.2018 to 23.01.2018	18	DST, New Delhi
13.	Preparation of value-added fish product	11.02.2018 to 13.02.2018	22	DST, New Delhi
14.	Freshwater Fish Culture	21.02.2018 to 23.02.2018	18	DST, New Delhi
15.	Preparation of value-added fish product	09.03.2018 to 11.03.2018	21	DST, New Delhi
Total		304		

• **College of Fishery Science, Udgir**

Sr. No.	Title	Date	No. of Trainees	Sponsoring Agency
1.	Freshwater fish seed production.	08.08.2017 to 10.08.2017	22	Paid Training programme
2	Culture-based Fisheries in small Reservoirs	26.02.2018 to 28.02.2018	24	Agriculture Technology Management Agency, Latur
Total		46		

9.A.3. WORKSHOP/ SEMINARS ORGANIZED FOR FIELD OFFICERS

Name of College	Title	Date	No. of Participants	Sponsoring Agency
BVC, Mumbai	World Zoonoses Day organized at Deonar Abattoir, Gowandi	15.07.2017	20	VPH BVC
	One-day 'BVC- IVRI- ICMSF' technical meet on Microbial Food Safety Management Bombay Veterinary College, Parel Mumbai -12	08.12.2017	45	VPH BVC and IVRI, Pune
NVC, Nagpur	Organized Regional Level One Day Workshop cum Group Discussion on "Role of Women in Doubling the Farmers Income in Animal Husbandry Sector" for the Women Veterinarians and Women Entrepreneurs in A.H. Sector.	08.03.2018	104	Department of Vet. & A.H. Extension Education in collaboration with Virbac Animal Health
	Workshop and hands-on training on "Emergency applications in Critical Care Management" in association with the Pet Practitioners of Mumbai are organizing an outreach E-training.	18.03.2018	60	Pet Practitioners Association, Mumbai
	Seminar on "Emergency applications in Critical Care Management" in association with the Pet Practitioners of Mumbai are organizing an Outreach CE training	19.03.2018	180	Pet Practitioners Association, Mumbai
	National Postgraduate students' conference on Peeping in Poultry Paradigm	25.04.2018 to 26.04.2018	63	Private Agency
COVAS, Parbhani	Recent trends in Veterinary Immunology and Biotechnology for doubling farmers' income through livestock health and production	07.12.2017	148	Indian Society for Veterinary Immunology and Biotechnology
	Doubling the milk production through modern technology	05.03.2018 to 07.03.2018	48 Seva das (Field Assistants appointed by BAIF)	Bhartiya Agro Industrial Foundation (BAIF)



COVAS, Udgir	One day Workshop on 'Avian Influenza : Preparedness, Surveillance & Contingency Procedures'	28.06.2017	59	Under ASCAD Govt. of India
	One day Technical seminar on 'Rabieszero by 2030' on the occasion of world rabies day	28.09.2017	65	-
KNPCVS, Shirwal	XXIII Annual Convention of Indian Society for Veterinary Immunology and Biotechnology & National Conference on "Challenges in Livestock and Poultry Production- Solutions with Biotechnology"	19.04.2017 to 21.04.2017	150	-
	Workshop on "Elbow and Hip Radiography"	18.01.2018 to 19.01.2018	30	-
	Veterinary Orthopedic Workshop on "Canine Fracture Repair Part- III"	22.11.2017 to 24.11.2017	35	-
PGIVAS, Akola	Seminar on "Antimicrobial Resistance in Animals: Awareness to Action" on occasion of World Veterinary Day-2017	30.04.2017	104	PGIVAS Akola Alumni Association
	2 nd Clinical case conference on Recent Trends of Clinical Case Management In Veterinary Practice	17.02.2018	188	Various company/Firms
		Total	1309	

9.A.4. WORKSHOP/ SEMINARS ORGANIZED FOR FARMERS

Name of College	Title	Date	No. of Participants	Sponsoring Agency
BVC, Mumbai	Work shop for farmers on "Scientific Goat Farming" on the occasion of "Agriculture Education Day"	03.12.2017	15	BVC, Mumbai
	Clean Milk Production and demonstration of various milk products	06.11.2017	50	At Dhanivari (Getipada) Tq. Dahanu (Thane)
	Clean Milk Production	25.01.2018	30	ILFC,BVC, Mumbai
	One day Training programme for farmers & meat sellers (Kisan Mela)	14.03.2018	48	ICAR
	Management of Canine Reproduction for Dog Breeder	16.12.2017	47	Self
NVC, Nagpur	Organized Regional Level One Day Workshop cum Group Discussion on "Role of Women in Doubling the Farmers Income in Animal Husbandry Sector" for the Women Veterinarians and Women Entrepreneurs in A.H. Sector.	08.03.2018	104	NVC, Nagpur in collaboration with Virbac Animal Health
COVAS, Parbhani	Clean Milk Production	03.12.2017	70	COVAS, Parbhani
	Dairy Farming	23.03.2017	46	COVAS, Parbhani
	Goat Farming	25/03/2017	38	COVAS, Parbhani
COVAS, Udgir	Fodder production and management	15.09.2017	60	--
	Fodder production and management	07.12.2017	55	--
	Scientific dairy farming	22.01.2018	21	Virbac Pvt Ltd
	Scientific dairy farming	03.02.2018	65	Virbac Pvt Ltd
	Scientific dairy farming	27.02.2018	80	Virbac Pvt Ltd
KNPCVS, Shirwal	Mahila Melawa	10.03.2018	38	-



PGIVAS, Akola	One day goat farmers' workshop	07.08.2017	400	ATMA, Akola
DTC, Warud	New India Manthan Prog.: Sankalp se Siddhi	23.08.2017	28	CDT, Warud
	Five one Day Workshops: Upliftment of Milk Producers	08.04.2018 to 06.05.2018	300	CDT, Warud (Ongoing)
CDT, Udgir	One day workshop on 'Clean Milk Production and Milk Products ProductionTechnology'	03.12.2017	53	CDT, Udgir
COFS, Nagpur	"Status of District Fisheries Federations in Vidarbha"	28.08.2017	40	VDB, Nagpur
	Freshwater aquaculture	05.11.2017	23	STRC, Gadchiroli
	Preparation of value added fish products	05.11.2017	23	STRC, Gadchiroli
	Fresh water fish culture	28.12.2017	25	STRC, Gadchiroli
	Fresh water fish culture	29.12.2017	26	STRC, Gadchiroli
	Fresh water fish culture	13.01.2018	22	STRC, Gadchiroli
	Fresh water fish culture	21.02.2018	23	STRC, Gadchiroli
	Preparation of value added fish products	22.02.2018	20	STRC, Gadchiroli
	Fish culture and post harvest management	12.03.2018	26	STRC, Gadchiroli
	Fish producers and buyers meet	13.03.2018	30	STRC, Gadchiroli
COFS, Udgir	Fresh water fish culture	10.07.2018	32	COFS, Udgir
Total			1838	

9. B. ACTIVITIES IN ADOPTED VILLAGES

The following activities are usually conducted in the adopted villages for transfer of latest technologies for the farmers.

1. Guidance through technical trainings
2. Animal Health Camps
3. Ambulatory clinical services
4. Study tour of farmers to College
5. Capacity building for women farmers
6. Demonstrations, group discussions on relevant technologies
7. Routine farm based extension activities
8. Special developmental programmes to be implemented for the farming community

Name of College	Name of Adopted Village (s)
Bombay Veterinary College, Mumbai	Arivali, Tq. Panvel, Dist. Sindhudurg
Nagpur Veterinary College, Nagpur	Borgaon, Tq. & Dist. Nagpur
College of Veterinary & Animal Sciences, Parbhani	Rumna, Tq. Gangakhed, Dist. Parbhani
KNP College of Veterinary Science, Shirwal	1) Jawale, Tq. Khandala, Dist. Satara 2) Bhongawali, Tq. Bhor, Dist. Pune
College of Veterinary & Animal Sciences, Udgir	Kodali and Dongershelki, Tq. Udgir, Dist. Latur
College of Dairy Technology, Warud	Moha, Tq. Pusad, Dist. Yavatmal
College of Dairy Technology, Udgir	Vadhwana (Khu), Tq. Udgir, Dist. Latur
College of Fishery Science, Nagpur	Pethkalongari, Tq. & Dist. Nagpur
College of Fishery Science, Udgir	Nawandi, Tq. Udgir, Dist. Latur



9.C. HOSPITAL ACTIVITIES

- **Bombay Veterinary College, Mumbai**

Sr. No.	Section	Hospital	Ambulatory Clinic	Animal Health Camps (6)	Total
a	Medicine	50,000	-	360	50360
b	Surgery	984	-	-	984
c	Gynaecology	3029	1000	-	4029
d	Artificial Insemination	-	-	-	-
e	Vaccination	-	2000	2198	4198
f	Deworming	-	500	500	1000
g	Spraying	-	50	50	100
h	Other	7272	500	500	8272
	Total	61253	4050	3608	68943

- **Nagpur Veterinary College, Nagpur**

Sr. No.	Section	Hospital	Ambulatory Clinic	Animal Health Camps (10)	Total
a	Medicine	18,095	615	2500	21,210
b	Surgery	11,429	135	111	11,675
c	Gynaecology	2,222	180	414	2,816
d	Artificial Insemination	45	16	52	113
e	Vaccination	3,399	-	400	3,799
f	Deworming	1,695	150	450	2,295
g	Spraying	200	100	200	500
h	Other	1319	-	420	1,739
	Total	38,404	1,196	4547	44,147

- **College of Veterinary & Animal Sciences, Parbhani**

Sr. No.	Section	Hospital	Ambulatory Clinic	Animal Health Camps (4)	Total
a	Medicine	4,134	295	375	4,804
b	Surgery	2,658	148	198	3,004
c	Gynaecology	553	51	111	715
d	Artificial Insemination	56	10	0	66
e	Vaccination	60	-	440	500
f	Deworming	28	-	0	28
g	Spraying	-	-	0	0
h	Other	-	-	0	0
	Total	7,489	504	1124	9,117

- **College of Veterinary & Animal Sciences, Udgir**

Sr. No.	Section	Hospital	Ambulatory Clinic	Animal Health Camps (24)	Total
a	Medicine	5005	1241	390	6636
b	Surgery	1342	291	104	1737
c	Gynaecology	529	700	352	1581
d	Artificial Insemination	55	-	0	55
e	Vaccination	44	1245	3039	4328
f	Deworming	-	3419	2285	5704
g	Spraying	-	2912	975	3887
h	Other if any (specify)	-	-	0	0
	Total	6975	9808	7145	23928



- K.N.P College of Veterinary Science, Shirwal

Sr. No.	Section	Hospital	Ambulatory Clinic	Animal Health Camps (21)	Total
a	Medicine	1760	119	219	2098
b	Surgery	1313	28	127	1468
c	Gynaecology	725	93	291	1109
d	Artificial Insemination	155	-	0	155
e	Vaccination	107	-	1608	1715
f	Deworming	115	-	970	1085
g	Spraying	-	-	381	381
h	Other if any	486	-	0	486
	Total	4661	240	3596	8497

- Post Graduate Institute of Veterinary & Animal Sciences, Akola

Sr. No.	Section	Hospital	Ambulatory Clinic	Animal Health Camps (7)	Total
a	Medicine	3532	111	159	3802
b	Surgery	1692	08	18	1718
c	Gynaecology	424	55	60	539
d	Artificial Insemination	-	01	1	2
e	Vaccination	315	1114	728	2157
f	Deworming	346	-	294	640
g	Spraying	13	-	17	30
h	Other if any	28	-	0	28
	Total	6350	1289	1277	8916

- College of Dairy Technology, Udgir (Organized in collaboration with COVAS, Udgir)

Sr. No.	Section	Animal Health Camps (2)
a	Medicine	69
b	Surgery	21
c	Gynaecology	68
d	Artificial Insemination	0
e	Vaccination	284
f	Deworming	417
g	Spraying	417
	Total	1276



TRAININGS



Dr. N. P. Dakshinkar, Associate Dean addressing the farmers



Expert guiding the participants



Participants of Scientific Dairy Training Programme



Dr. A. U. Bhikane delivering lecture at Osmanabad



Dr. H. S. Birade, Dean, PGIVAS, Akola addressing the gathering



Participants of the training programme on poultry farming



Dr. P. G. Wasnik, Associate Dean addressing the participants



Distribution of poultry birds to trainees during training



SEMINARS



Dr. Bernard Duverney delivering lecture



Inauguration of conference by Hon'ble Dr. K. Venkateshan (IPS),
Commissioner of Police, Nagpur City



Dr. A. S. Ranade, Associate Dean addressing the participants



Dr. Erica speaking on basics of ECG



Inauguration of the National Conference at the hands of dignitaries



Felicitations of guests during seminar for field veterinarians



ISO 9001: 2015 Certification Awareness lecture at NVC, Nagpur



Expert guiding dog breeders



CAMPS



Expert examining animal in camp



Staff of BVC, Mumbai vaccinating the animals at Deonar Abattoir



Expert examining animal



Examination of horse in the camp



Vaccination of animals in camp



Examination of Buffalo during health camp



Expert performing Surgical intervention in the camp



Spraying of animals for deticking



10

FARM ACTIVITIES

- **Bombay Veterinary College, Mumbai**
- 1. Name of farm: **Instructional livestock farm complex Goregaon, Mumbai**
 - **Year of establishment:** 1974
 - **Mandate:**
 1. Practical demonstration to students of B.V.SC. &AH to improve skill
 2. To provide platform for carrying out research
 3. To conduct scientific goat and dairy training to farmers /entrepreneurs/ Unemployed youth as per demand
 4. Conservation of Murrah buffalo breed
 5. Research to improve productivity of these animals by developing site specific technology.
 - **Total land** : 35 acres
 - **Land under cultivation** : 15 acres
 - **Grazing land** : 1.5 acres
 - **Land under any other purpose** : 18.5 acres
 - **Livestock strength on 31st March 2018**

Cattle	Buffalo	Sheep	Goat	Poultry
25	28	67	53	384
 - **Receipt from farm in Rs.**

Sale of milk	1130295
Goat & dairy training	450000
Sale of fodder stumps/seed	28750
Sale of animal/s (Sheep & Goat)	169970
Sale of eggs	227888
Poultry trainings	70000
Any other item- bakrieid, feed donation, sale of coconut etc.	50000
Total	21,26,903

2. Name of Farm – Cattle Breeding Farm &Dangi Cow Research Station, Igatpuri, Dist. Nashik

- **Year of establishment:** Year 1946
- **Mandate** : To Study the Dangi Breed & Defined its Characters
- **Total land** : 88.60 Hector
- **Land under cultivation** : 22 hecter
- **Grazing land** : 40.18 hecctors



- **Land under any other purpose** : 1.5 acre
- **Livestock strength on 31st March 2018:** Cattle: 103
- **Receipt from farm in Rs.**

Sale of milk	3,26,790
Goat & dairy training	16,000
Sale of fodder stumps/seed/farm produce	26,100
Sale of animal/s (Sheep & Goat)	2,19,500
Total	5,88,390

- **Nagpur Veterinary College, Nagpur**
 1. **Name of farm:** Cattle Breeding Farm, Nagpur
 - **Year of establishment:** 1890
 - **Mandate:**
 1. Performance studies of indigenous germ plasm i.e. Gaolao cattle, Nagpuri buffalo.
 2. Demonstration centre for dairy farming and fodder production / conservation
 3. To provide educational facilities for UG, PG & Ph D Degree/ Research Programme
 - **Total land** : 20.26 hectares
 - **Land under cultivation** : 8.55 hecter
 - **Grazing land** : 5.15 hecter
 - **Land under any other purpose:** 6.56 hecter
 - **Livestock strength on 31st March 2018:**

Cattle	Buffalo	Sheep	Goat
34	52	05	61

- **Receipt from farm in Rs.:**

Sale of milk	24,46,890
Sale of Farm produce	82,438
Goat sale	84,425
Animal sold by auction	1,31,900
Total	27,45,653

2. **Name of Farm: Poultry Research and Training Centre, Nagpur**

- **Year of establishment** : 1971
- **Mandate** : Teaching, Research and Extension
- **Livestock strength on 31st March 2018:** 578 (Poultry Birds)
- **Receipt from farm in Rs.:**

Sale of Eggs	4,04,093
Sale of Birds	1,32,900
Poultry Trainings	9,29,500
Total	14,66,493

- **College of Veterinary & Animal Sciences, Parbhani**

1. **Name of farm: Red Kandhari Research Instructional Farm, Parbhani**

- **Year of establishment** : 1972
- **Mandate** : Conservation and preservation of Red Kandhari Cattle breed.



- **Total land** : 120 acres
- **Land under cultivation** : 105 acres
- **Grazing land** : 8 acres
- **Land under any other purpose** : 7 acres
- **Livestock strength on 31st March 2018:**

Cattle	Buffalo	Sheep	Goat	Horse
70	31	56	84	01

- **Receipt from farm in Rs.**

Sale of milk	2,76,600
Sale of fodder stumps/seed	1000
Sale of animal/s (Cattle, Sheep & Goat)	5,33,150
Any other item- bakrieid, feed donation, sale of coconut, Auction of Tamarind etc.	19,200
Total	8,29,950

- **College of Veterinary & Animal Sciences, Udgir**
 1. **Name of farm** : Cattle Breeding Farm (ILFC), COVAS, Udgir
 - **Year of establishment** : 1952
 - **Mandate:**
 1. Conservation of Deoni animals.
 2. Conservation of Osmanabadi goat
 3. Fodder production

	Udgir farm (in Ha)	Sunegaon farm (in Ha)
Total land	236.06	93.23
Land under cultivation	39.00	08.00
Irrigated Land	08.00	04.00
Reserved pasture Land	30.00	35.00
Grazing land	48.00	20.00
Barren Land	111.06	26.23

- **Livestock strength on 31st March 2018**

Sr. No.	Cattle	Buffalo	Sheep	Goat
1.	47	29	49	22

- **Receipt from farm in Rs.**

Sale of milk	5,54,857
Goat & dairy training	46,000
Sale of animal/s (Sheep & Goat)	99,390
Sale of Farm produce	3220
Sale of DHN 6 stumps	2,16,450
Total	9,19,917



2. Name of farm: MAFSU Sub-Centre, Udgir

- Year of establishment : 2003
- Mandate : **First phase Mandate**
 1. Development of Deoni cattle and Marathwadi buffalo.
 2. Development of Osmanabadi goat.
 3. Poultry Research and Training Centre.
 4. Fodder Development and Research centre

Second phase Mandate

1. Establishment of Bio-Technology Centre.
2. Establishment of Veterinary Science Training Centre.

- Total land : 18.0 Acre
- Land under cultivation : 18.0 Acre
- Livestock strength on 31st March 2018:

Cattle	Buffalo	Goat	Poultry
38	70	58	350

- Receipt from farm in Rs.

Sale of milk	794409
Sale of fodder stumps/seed	15650
Sale of animal/s (Sheep & Goat)	27186
Total	8,37,245

• K.N.P. College of Veterinary Science, Shirwal

1. Name of farm: Livestock Farm Complex (LFC) Shirwal.

- Year of establishment : 1992
- Mandate : Conservation and improvement of Khillar cattle, Pandharpuri buffalo and Sangamneri goat at the Station as well as in the field
- Total land: 28 Hectar
- Land under cultivation: 20 Hectar
- Livestock strength on 31st March 2018:

HF	Cattle (Khillar)	Buffalo	Sheep	Goat	Horse
10	18	25	26	22	02

- Receipt from farm in Rs.:

Sale of milk	4,87,298
Goat & dairy training	1,09,000
Sale of fodder stumps/seed	48,515
Sale of animal/s (Livestock)	1,36,385
Sale of broiler, turkey, ducks	1,98,576
Sale of concentrate bags	1950
Poultry trainings	22,000
Any other item- eggs	2,05895
Total	12,09,619



- **Post Graduate Institute of Veterinary & Animal Sciences, Akola**
 1. **Name of Farm: Purnathadi Buffalo Unit**
 - **Year of establishment** : 2008-09
 - **Mandate** : To provide facility for teaching, research, extension activities to students, researchers.
 - **Total land** : 17 acres
 - **Land under cultivation** : 3.5 acres
 - **Grazing land** : 10 acres
 - **Livestock strength on 31st March 2018:**

Cattle	Buffalo	Poultry
02	24	2200

 - **Receipt from farm in Rs.:**

Sale of milk	73,600
Goat & dairy training	1,23,000
Livestock auction (Buffaloes)	83,000
sale of eggs	3,99,000
Poultry trainings	88,500
Total	7,67,100
- 2. **Name of farm: Berari Goat and Deccani Sheep Research Demonstration & Training Centre, Borgaon Manju**
 - **Year of establishment** : During British Regime
 - **Mandate** : Conservation of Berari Goats
 - **Total land** : 153 Hectar
 - **Land under cultivation** : 1 Hectar
 - **Grazing land** : 100 Hectors
 - **Livestock strength on 31st March 2018:** Goat - 128
 - **Receipt from farm in Rs.:**

Sale of fodder stumps/seed	31,000
Total	31,000
- **Dairy Technology College, Warud**
 1. **Name of farm: Students Training Dairy Plant**
 - **Year of establishment** : 2009-10
 - **Mandate** : Teaching, Hands on Training & Extension
 - **Expenditure on Manufacture of milk products:** Rs 5, 59,252/-
 - **Sale of Milk products** : Rs 6, 73,192/-
 - **Profit from sale of milk products:** Rs 1, 13,940/-
 1. **Name of farm: Students Training Dairy Plant**
 - **Year of establishment** : 2012-13
 - **Mandate** : Teaching, Hands on Training & Extension



- **Expenditure on Manufacture of milk products:** Rs 4,89,589/-
- **Sale of Milk products :** Rs 5,64,749/-
- **Profit from sale of milk products:** Rs 75.160/-

- **College of Fishery Science, Nagpur**
 1. **Name of farm:** Fish Seed Production Unit and Fish Farm, COFS, Nagpur

Year of establishment :	2008
Mandate :	Freshwater Fish seed production and rearing
Total land :	29840 sq.mtr.
Land under cultivation :	8025 sq.mtr.
Livestock strength on 31st March 2018: Fish - 840 kg	
Receipt from farm in Rs.:	
Sale fish seed (47 lakhs)	77890
Fish trainings	71000
Total	148890

- **College of Fishery Science, Udgir**
 1. **Name of farm:** Seed Production Unit and Fish Farm, COFS, Udgir
 - **Year of establishment :** 2011
 - **Mandate :** Teaching, Research and Extension
 - **Total land :** Fish Culture Ponds 0.45 ha
 - **Livestock strength on 31st March 2018:** Fish 250 kg
 - **Receipt from farm in Rs:** 41700/-



11

DEMONSTRATIONS

DEMONSTRATIONS ORGANIZED FOR FARMERS

Various types of demonstrations were given to farmers during training programmes, visits of farmers to institutes and also during scientists visit to farms or adopted villages or as per demand of farmers all around during the year. Demonstrations like Silage, Azolla cultivation, Preparation of concentrate mixture and Urea treatment of poor quality roughages, parasitic control, Brooding management of broiler chicks, Incubation and Hatchery management, Milk Processing & Value addition, Hydroponics; Vermicompost, Tagging, Milk Adulteration Test, CMT Test, Cow Milk, Cow Urine and Cow Dung Cake Processing & Packaging, Quality Control of Egg and Egg Products, Clean Milk Production & Adulteration detection, balanced feed preparation in poultry, DHN6 Cultivation, Demonstration on deworming and spraying, Cultivation and management of various fodder varieties, Loose housing system, Goat farming farm practices and selection of goat, Age Determination, Osmanabadi Breed Identification, Manufacturing of dairy products at Cottage Level, Paneer Making Technology, Freshwater Fish Culture, Preparation of value added fish product, Operation FRP, carp hatchery etc. were given to farmers throughout the year.

Sr. No.	Name of College	No. of Demonstrations	No. of Participants
1	Bombay Veterinary College, Mumbai	10	320
2	Nagpur Veterinary College, Nagpur	42	2265
3	College of Veterinary & Animal Sciences, Parbhani	06	231
4	College of Veterinary & Animal Sciences, Udgir	101	2608
5	KNP College of Veterinary Sciences, Shirwal	13	376
6	Post Graduate Institute of Veterinary & Animal Sciences, Akola	2	36
7	Dairy Technology College, Warud	12	607
8	College of Dairy Technology, Udgir	4	130
9	College of Fishery Sciences, Nagpur	4	86
10	College of Fishery Sciences, Udgir	1	22
	Total	195	6681



DEMONSTRATIONS



Demonstration on preparation of value added fish products



Milk testing demonstration to farmers



Training and Demonstration on “Value added fish products”



Dr. S. P. Landge interacting with trainees



Demonstration on milk processing and value addition



Trainees visit to layer farm



Demonstration on selection of fishes at COFS, Nagpur



Demonstration on vaccination in poultry during training



12

VISIT OF FARMERS AND STAFF

Farmers regularly visited the various institutes of MAFSU individually and in groups to acquire the information and technical knowledge of various animal husbandry activities including that of value added animal products, poultry and fisheries. Staff members visited various places to guide the farmers, for trainings, for giving demonstrations at field level.

Sr. No.	College	No. of Farmers Visited to Institute	No. of Field Visit of Staff
1.	Bombay Veterinary College, Mumbai	430	39
2.	Nagpur Veterinary College, Nagpur	3054	108
3.	College of Veterinary & Animal Sciences, Parbhani	878	234
4.	College of Veterinary & Animal Sciences, Udgir	617	132
5.	KNP College of Veterinary Science, Shirwal	2035	71
6.	P.G. Institute of Veterinary & Animal Sciences, Akola	1131	65
7.	Dairy Technology College, Warud (Pusad)	152	17
8.	College of Dairy Technology, Udgir	09	09
9.	College of Fishery Science, Nagpur	680	164
10.	College of Fishery Science, Udgir	180	20
	Total	9166	859



13

EXHIBITIONS

Sr.No.	Name of College	Participation in exhibitions
1	Bombay Veterinary College, Mumbai	3
2	Nagpur Veterinary College, Nagpur	8
3	College of Veterinary and Animal Sciences, Parbhani	2
4	College of Veterinary & Animal Sciences, Udgir	8
5	KNP College of Veterinary Science, Shirwal	8
6	Post Graduate Institute of Veterinary & Animal Sciences, Akola	5
7	Dairy Technology College, Warud	1
8	College of Dairy Technology, Udgir	6
9	College of Fishery Science, Nagpur	3
10	College of Fishery Science, Udgir	4
	Total	48

- **Bombay Veterinary College, Mumbai**

Sr. No.	Title	Place	Date	No. of visitors	Organized / Participated
1	Cattle Judging	K. V. K. Baramati	15.01.2018 to 22.01.2018	1000	Participated by Dr. R. S. Deshmukh
2	Cattle Judging	GhotiDist Nashik	23.02.2018	1000	Participated by Dr. R. S. Deshmukh
3	Dangi Animal Fair	Ghoti	Feb. 2018	More than 100	Participated

- **Nagpur Veterinary College, Nagpur**

Sr. No.	Title	Place	Date	No. of visitors	Organized / Participated
1	9 th Agrovision Exhibition 2017	Reshimbagh Ground, Nagpur	10.11.2017 to 13.11.2017	1500 Farmers	Participated
2	ZillaKrushiMohtsav, ATMA	Chandrapur	16.01.2018	300 Farmers	Participated
3	Livestock Exhibition and Animal Judging Camp cum Cattle Fair organised by DAHO, Chandrapur	Warora, District – Chandrapur	22.02.2018	500 Farmer	Participated
4	Vidarbha Agro Expo - 2017	Kuldeep Mangal Karyalay, Kanhan, Tal. - Parsioni, Dist. - Nagpur	28.04.2017	150 Farmer	Participated
5	ANUMOL Project	Dharampeth Science College, North Ambazari Road, Nagpur	07.01.2018	180 Farmer	Participated



6	Livestock & Poultry Exhibition cum Livestock Farmers Meet	Fetari, Dist. Nagpur	12.02.2018	200 Farmer	Participated
7	Zilla Krushi Mohtsav, ATMA	Gadchiroli	17.02.2018	200 Farmer	Participated
8	Livestock Exhibition &DugdhotpadakShetkariM elava	ShrijiPashukhadya Industries, At. Po. Umri, Tal. Saoner, Dist. Nagpur	21.01.2018	Around 500	Participated

• **College of Veterinary and Animal Sciences, Parbhani**

Sr. No.	Title	Place	Date	No. of visitors	Organized / Participated
1	MKV Exhibition	MKV Campus, Parbhani	18.05.2017	240	Participated
2.	Malegaon Yatra	Malegaon, Nanded	17.12.2017	194	Participated

• **College of Veterinary and Animal Sciences, Udgir**

Sr. No.	Title	Place	Date	No. of visitors	Organized / Participated
1.	Purebred Animal Judging	Mahadev Yatra, Deoni	09.04.2017	-	Participated
2.	Exhibition on structure of DNA and Human genome project arranged by Dept of AGB	COVAS, Udgir	25.04.2017	87	Organized
3.	Exhibition Stall and Purebred Animal Judging	Jalkot, Dist. Latur	03.12.2017	735	Participated
4.	Exhibition Stall and Purebred Animal Judging	Malegaon, Tq. Lohar Dist. Nanded	17.12.2017	1950	Participated
5.	Exhibition Stall and Purebred Animal Judging	Udgir, Dist. Latur	03.01.2018	650	Participated
6.	Purebred Animal Judging	Devarjan, Tq. Udgir	26.01.2018	-	Participated
7.	Purebred Animal Judging	Siddheshwar Yatra, Latur	16.02.2018	-	Participated
8.	Purebred Animal Judging	Mahadev Yatra, Deoni	29.03.2018	-	Participated

• **K.N.P. College of Veterinary Science, Shirwal**

Sr. No.	Title	Place	Date	No. of visitors	Organized / Participated
1	Agriculture Exhibition & Livestock Show	Pune	10.09.2017 to 13.09.2017	More than 1000	Participated
2	Livestock Show	Warnanagar Kolhapur	17.10.2017	Livestock Judging 150 farmers	Participated
3	KISAN Exhibition	Moshi Pune	13.12.2017 to 17.12.2017	More than 5000	Participated



4	Livestock Show	Sewagiri Maharaj Devasthan Trust, Pusegaon	21.12.2017	Livestock Judging 200 farmers	Participated
5	Sahyadri Exhibition	Village Shirwal, Dist. Satara	12.01.2018 to 16.01.2018	More than 1000	Participated
6	Krushak Exhibition	Baramati, Dist. Pune	21.12.2017	Livestock Judging 150 farmers	Participated
7	Agri & Flower Exhibition	Bhuinj, Satara	23.01.2018 to 25.01.2018	More than 500	Participated
8	Sharad-Krushi Exhibition	Lonand, Dist. Satara	20.02.2018	Livestock Judging 100 farmers	Participated in Judging

• Post Graduate Institute of Veterinary and Animal Sciences, Akola

Sr. No.	Title	Place	Date	No. of visitors	Organized / Participated
1	Agro-Vision-2017	Nagpur	12.11.2017	3000	Participated
2	Agro-Tech 2017	Dr. PDKV, Akola	27.12.2017 to 29.12.2017	1198	Participated
3	Krushi Mahotsav	Dr. PDKV, Akola	30.03.2018 to 31.03.2018	350	Participated
4	Male Goats Exhibition and sale	PGIVAS, Akola	24.08.2017 to 02.09.2017	500	Organized and Participated
5	Agri. Exhibition	Malegaon Dist. Nanded	17.12.2017	2000	Participated and acted as a member of livestock judging competition

• Dairy Technology College, Warud

Sr. No.	Title	Place	Date	No. of visitors	Organized / Participated
1	Krushi Mohostav 2018 organized by ATMA Washim	Washim	21.02.2018 to 25.02.2018	3000	Participated

• College of Dairy Technology, Udgir

Sr. No.	Title	Place	Date	No. of visitors	Organized / Participated
1.	Animal & Bird exhibition 2017-18, organized by the Department of Animal Husbandry, Latur	Jalkot	03.12.2017	115	Participated
2.	PashuPradarshani, organized by Zilha parishad Nanded at Malegaon	Shri KshetraKhandoba Yatra at Malegaon Distt. Nanded	17.12.2017	166	Participated
3.	Agrodhhan Exhibition - 2017	Latur	24.12.2017 to 25.12.2017	126	Participated
4.	Dairy Exhibition	Udgir	03.01.2018	127	Organised



5.	Dairy Exhibition	Ghonsi, Tq. Udgir, Dist. Latur	17.03.2018	—	Organised
6.	JilhaKrushiMahotsava	Latur	24.03.2017 to 28.03.2017	413	Participated

• **College of Fishery Science, Nagpur**

Sr. No.	Title	Place	Date	No. of visitors	Organized / Participated
1.	Agro-Tech Exhibition	Deekshabhoomi Nagpur	29.10.2017 to 01.11.2017	750	Participated
2.	Agrovision - 2017	Reshimbag Ground, Nagpur	10.11.2017 to 14.11.2017	860	Participated
3	Anulom Exhibition	Dharampeth Science College, Nagpur	07.01.2018	175	Participated

• **College of Fishery Science, Udgir**

Sr. No.	Title	Place	Date	No. of visitors	Organized / Participated
1	Fisheries Exhibition	Sardar Vallabhbhai Patel High School, Udgir	01.10.2017	80	Participated
2.	Agriculture and Animal Exhibition	Malegaon, Dist. Nanded	16.12.2017 to 18.12.2018	500	Participated
3	Fishery & Vet. Exhibition	Umarga Manna, Tq. Udgir	21.11.2017	70	Organized
4	Pashupradarshan at Hawagi Swami yatra, Udgir	Udgir	04.01.2018	200	Participated



EXHIBITIONS



MLA Shri. Sudhakar Bhalerao visited exhibition stall



Staff guiding the farmers



Visit of Hon'ble Nitinji Gadkari to MAFSU Stall



Farmer visit to College stall in Exhibition



Experts judging animals



Expert faculty guiding the visitors



Experts guiding the farmers visiting the stall



Farmers visiting the stall



14

PUBLICATIONS / RADIO & TV TALKS

Extension Publications Abstract:

Name of college	Leaflets/ Booklets	Books	Local Publication (News-paper)	Publications (Periodicals)	Radio Programmes	T.V. Talks
Bombay Veterinary College, Mumbai	9	2	7	1	31	12
Nagpur Veterinary College, Nagpur	00	01	11	06	07	02
College of Veterinary & Animal Sciences, Parbhani	04	05	36	13	06	08
College of Veterinary & Animal Sciences, Udgir	02	00	26	04	06	04
KNP College of Veterinary Science, Shirwal	02	-	54	10	60	04
Post Graduate Institute of Veterinary & Animal Sciences, Akola	07	00	11	18	11	06
Dairy Technology College, Warud (Pusad)	05	00	03	00	02	00
College of Dairy Technology, Udgir	02	—	04	01	—	01
College of Fishery Science, Nagpur	11	-	02	-	06	-
College of Fishery Science, Udgir	-	-	04	-	-	-
Total	42	8	158	53	129	37

Directorate of Extension and Training is regularly publishing official newsletter of the University, "MAFSU VARTA". The newsletter is quarterly published mentioning salient activities of MAFSU carried out through all the constituent colleges, farms, directorates, headquarter offices/divisions. Four publications were released *viz.* April-June 2017, July-September 2017, October-December 2017 & January-March 2018. These publications are available on MAFSU website.



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WEB SITE

Addresses of College Website:

The MAFSU website is restructured to suit the need of all the stakeholders including the farming community. Apart from all information related with the education, research and extension, it has some unique features like extension literature in the form of posters, books and manuals 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 publication like MAFSU VARTA besides Godhuli, Jalcharika illustrative booklets for dairy and fisheries. All institutes of MAFSU are linked with the University website.

All the institutions of the University have a website. The list is given below.

1. MAFSU University : www.mafsu.in
2. Bombay Veterinary College, Mumbai : www.bvc.org.in
3. Nagpur Veterinary College, Nagpur : www.nvcnagpur.net.in
4. College of Veterinary and Animal Science, Parbhani : www.covaspbn.co.in
5. KNP Veterinary College, Shriwal : www.knpvc.in
6. College of Veterinary and Animal Science, Udgir : www.vcudg.in
7. Post Graduate Institute of Veterinary & Animal Sciences, Akola : www.pgivasakola.in
8. Dairy Technology College, Warud (Pusad) : www.cdtpusad.in
9. College of Dairy Technology, Udgir : www.cdudgir.in
10. College of Fishery Science, Nagpur : www.cofsnagp.org
11. College of Fishery Science, Udgir : www.cofsu.in



16

AWARDS, HONOURS AND RECOGNITIONS

A. Faculty Awards/ Achievements

- **Bombay Veterinary College, Mumbai**

Sr. No.	Name of Faculty	Name of Award / Achievement with details	Place	Date
1.	Dr. S. D. Ingole	Prof. M N Razdan Memorial Mid-Career Award	XXVI Annual Conference of SAPI at College of Veterinary Science, Bidar, Karnataka	21.12.2017
2.	V.M. Vaidya, A.M. Paturkar, R.J. Zende and R. N. Waghmare	Best poster presentation award	Krantisinh Nana Patil College of Veterinary Science, Shirwal	17.04.2017 to 19.04.2017
3.	V.M. Vaidya, A.M. Paturkar R.J. Zende, R. N. Waghmare and S.S. Bhave*	Best oral presentation award	College of Veterinary Science, Tirupati	11.10.2017 to 13.10.2017
4.	Dr. D.P. Kshirsagar (Scientist)	Innovative Young Scientist Award	Nashik, Maharashtra	23.11.2017
5.	Dr. C. N. Galdhar	Certificate of Merit at ISVM Conference	Orissa	01.02.2018 to 03.02.2018
6.	Dr.S.U.Gulavane	Lead Paper	College of Vet Sci, Hyderabad	21.11.2017
7.	Dr.S.U.Gulavane	Lead Paper	College of Vet Sci, Parbhani	05.12.2018 to 06.12.2018
8.	Dr. (Mrs.) R.S. Gadge	Mrs. Vimal Shrinivas Kshirsagar Memorial Lady Veterinarian Award"	IVRI, Izatnagar.	08.04.2017
9.	Dr. (Mrs.) R.S. Gadge	Appreciation award from MIEF, Delhi.	Seth GS Medical College - KEM, Mumbai	02.02.2018

- **Nagpur Veterinary College, Nagpur**

Sr. No.	Name of Faculty	Name of Award / Achievement with details	Place	Date
1.	Dr. S.V. Chopde, Dr. M.R. Jawale, Dr. A. D. Deshmukh, Dr. S.B. Kawitkar, Dr. A.P. Dhok	Best poster presentation second prize	COVAS, Hyderabad	21.11.2017 to 22.11.2017
2.	Dr. Shubhangi R. Warke	First Best Poster Presentation Award during XV Biennial Conference and National Symposium organized by Indian association of Women Veterinarians	Hyderabad	21.11.2017 to 22.11.2017



3.	Dr. Uma. M. Tumlam	Second Best Poster Presentation Award during XV Biennial Conference and National Symposium organized by Indian association of Women Veterinarians	Hyderabad	21.11.2017 to 22.11.2017
4.	Dr. R.Y. Charjan	Dr. G. Rajeshwar Rao Memorial Award and Medal for Applied Anatomy Including Biomechanics	Bhubaneshwar	21.12.2017 to 23.12.2017
5.	Dr. Kranti P. Kharkar	Recognition: Letter of appreciation for recognize as an outstanding participant of the Winter School	ICAR - Central Institute for Research on Cattle, Grass Farm Road Meerut Cantt, Meerut	21.12.2017
6.	Dr. Kadam M M	State level KrushiGouravPuraskar	Bhau Saheb Mane Krishi PratishtanUmarkhed Dist. Yewatmal	09.01.2018
7.	Dr. Sariput P. Landge	Best Oral Paper Presentation Award at IVEF Conference	Shivamogga, Karnataka	29.01.2018 to 31.01.2018
8.	Dr. P. A. Tembhurne	Best Poster presentation award at IAVMI conference	Tirupati	29.01.2018 to 31.01.2018
9.	Dr. A. R. Patil	Best Poster Award- XV Biennial Conference and National Symposium on " Role Of Women Veterinarians In Enhancement Of Livestock Productivity, Health & Welfare"	College of Veterinary Science, Hyderabad	21.11.2017 to 22.11.2017
10.	Dr. S. V. Upadhye, Dr. S. B. Akhare & Dr. S. P. Salvekar	Best Paper Award (Avian Section) (Gold Medal)	Tirupati	16.12.2017
11.	Dr. A. D. Patil	ISACP award for the Best article on "Canine Reproduction and Breeding" in Indian Journal of Canine Practice – 2017	Gannawaram, NTR, College of Veterinary Science, Gannavaram, Krishna dt., AP	07.02.2018
12.	Dr. M. S. Bawaskar	Prof. S. S. Honnapagoll Young Scientist Award - 2017	XV th annual convention of ISACP, held at NTR, College of Veterinary Science, Gannavaram, Krishna dt., AP	07.02.2018 to 09.02.2018
13.	Dr. B. M. Gahlod	Best Paper Award (Avian Section) (Gold Medal)	Tirupati	16.12.2017
14.	Dr. S. K. Sheetal	G.B. Singh Memorial Award by Indian Society for the Study of Animal Reproduction for Best Paper	Kolkata	09.02.2018



• College of Veterinary & Animal Sciences, Parbhani

Sr. No.	Name of Faculty	Name of Award / Achievement with details	Place	Date
1	Dr. P. V. Nandedkar	Awarded with first prize as Best Poster Presentation in XXIV th Annual Convention and National Conference of Indian Society of Veterinary Immunology and Biotechnology & One Day Satellite Seminar for Veterinary Officers On Recent Trends in Veterinary Immunology and Biotechnology for Doubling Farmers' Income through Livestock Health and Production (5-7th December 2017)	Parbhani	07.12.2017
2	Dr. B W Narladkar	IAAVP Fellow award for contributions in the field of Veterinary Parasitology	Veterinary College Udaypur (RJ.)	12.02.2018
3.	Dr. M. F. Siddiqui	Best Oral Presentation Award at Vanbandhu College of Veterinary Science, Navsari (Gujrat).	SKUAST-K, Shuhama, Alusteng, Srinagar	19.05.2017
4.	Dr. V.K. Munde	Best Paper Award	Junagadh Agricultural University, Gujarat	03.02.2018
5	Dr. S. V. Londhe	"Bharatratna Dr Radhakrishnan Gold Medal Award" for his excellence in respective field on the occasion of 46 th National Unity Conference on 5 th Sept. 2017, at Chennai.	Chennai	05.09.2017
6	Dr. G. R. Gangane& Dr. S.D. Moregaonkar	Best Poster Presentation Award III during XXIV Annual Convention and National Conference of Indian Society for Veterinary Immunology and Biotechnology	College of Veterinary & Animal Sciences, MAFSU, Parbhani	05.12.2017 to 07.12.2017
7	Dr. M. V. Dhumal	Certificate of Excellence Award from International Journal of Livestock research	--	15.03.2017
8	Dr. M.G. Nikam	Certificate of Excellence Award from International Journal of Livestock research	--	15.03.2017
9	Dr N. M. Markandeya	<i>Krishi Mauli</i> Award 2017(Appreciation memento) by Shri Swami Samarth agricultural development and research charitable trust, Nasik for contributions under animal husbandry sector	Nashik	25.04.2017
10	Dr N. M. Markandeya	<i>LaxmikantKokil</i> Irrigation write up award 2017 (Rs 2000, certificate and book Gifts) by Maharashtra irrigation Sahyog for informativescript write up.	Parbhani	19.12.2017



11	Dr. N. M. Markandeya	Dr Ramchandra Parnekar memorial Dyan-Vidyan Award 2018 (Rs 11000/-,Memento, citation) by <i>Jivan Kala Mandal, Parbhani</i> for contributions to cow science.	Sailu (Parbhani)	25.02.2018
12	Dr S. U. Digraskar	Best Veterinary Academician Award 2017	Pune	04.06.2017
13	Dr. V. D. Aher	Pashuvaidyak Bhushan" award at the hands of Mayor of Parbhani Municipal Corporation, Parbhani on the occasion of Shri. Annabhausathejayanti at Parbhani	Parbhani	01.08.2017

• **College of Veterinary & Animal Sciences, Udgir**

Sr. No.	Name of Faculty	Name of Award / Achievement with details	Place	Date
1.	Dr. A. U. Bhikane	Kartavya Bhushan Puraskar, Marathwada Sahitya Parishad	Udgir	25.04.2017
2.	Dr. A. U. Bhikane	Jivhala Lokbhushan Puraskar, Jivhala Group, Udgir	Udgir	03.12.2017
3.	Dr. M. M. Vaidya	Certificate of Appreciation for outstanding contribution to the quality of journal from International Journal of Livestock Research	-	31.03.2018

• **K.N.P. College of Veterinary Science, Shirwal**

Sr. No.	Name of Faculty	Name of Award / Achievement with details	Place	Date
1	Dr. Smita R. Kolhe	Young Extension Worker Award by Society of Agriculture Innovation for Development	Ranchi	14.05.2017 to 16.05.2017
2	Dr A.V. Khanvilkar	Excellence in Extension Award, by Astha Foundation and GRISAAS 2017	Udaipur Rajasthan	02.12.2017 to 04.12.2017
3	Dr M.B. Amle Dr K.P. Khillare Dr M.N.Rangnekar	"Best Poster Presentation Award 2017 by Indian Society for Veterinary Immunology & Biotechnology	ISVIB Conference Parbhani	07.12.2017
4	Dr. R. S. Ghadge	2 nd prize in poster presentation at Indian Society for Medicine conference	Bhuvaneshwar	01.02.2018 to 03.02.2018
5	Dr. B. P. Kamdi	Young Scientist Award at International Congress on Canine Practice by Indian Society for Advancement of Canine Practice	Sri. Venkateshwara Veterinary University Gannawaram, AP	07.02.2018 to 09.02.2018

• **Post Graduate Institute of Veterinary & Animal Sciences, Akola**

Sr. No.	Name of Faculty	Name of Award / Achievement with details	Place	Date
1	Dr. R. S. Ingole	Best Oral Presentation Award	National conference of NCBB	29.09.2017



- **Dairy Technology College, Warud**

Sr. No.	Name of Faculty	Name of Award / Achievement with details	Place	Date
1	Dr. Chitra Gupta	Appreciation certificate for Ph.D. Research Work	NDRI, Karnal	10.03.2018

B. Students Award/Achievements

- **Bombay Veterinary College, Mumbai**

Sr. No.	Name of Student	Name of Award / Achievement with details	Place	Date
1.	Shraddha Sirsat	Best Oral Presentation Award	XXVI Annual Conference of SAPI at College of Veterinary Science, Bidar, Karnataka	21.12.2017
2.	R. G. Shende	Mahindra Pal Zoonoses award	College of Veterinary Science, Tirupati	11.10.2017 to 13.10.2017

- **Nagpur Veterinary College, Nagpur**

Sr. No.	Name of Student	Name of Award / Achievement with details	Place	Date
1.	PreetiBramhapurkar and Pooja Acharya	Travel Grant Award at ISVBT Conference	Parbhani	2017
2.	Dr. Sakshi P. Chawre	Best Oral Presesntation Award - XV Annual Conference of IAVPHS and National symposium on "Intersectoral Approaches to Combat Zoonoses Strategies and Challenges"	College of Vety. Sci., Shri. Venkateswara Vety. Uni., Tirupati (A.P.)	11.10.2017 to 13.10.2017
3.	Dr. Kalyani A. Shrotri	Best Oral Presesntation Award-- XV Biennial Conference and National Symposium on Role Of Women Veterinarians In Enhancement Of Livestock Productivity, Health & Welfare	College of Veterinary Science, Hyderabad	21.11.2017 to 22.11.2017
4.	Dr. Kalyani R. Thakur	Late. Ramabai and BalchandraNisal Award for Topper in MVSc in Veterinary Medicine from Vidarbha region	Nagpur	10.03.2018
5	Miss Ninoska Pereira	Gold Medal for Best Paper Presentation	PDKV, Akola	17.02.2018

- **College of Veterinary & Animal Sciences, Parbhani**

Sr. No.	Name of Student	Name of Award / Achievement with details	Place	Date
1	Neelam Singh	Best Paper Presentation Award in Second Clinical Conference at PGIVAS, Akola	Akola	20.02.2018
2	P.R. Balage	Best Clinical Case Report Presentation at ICAR, Pune on A rare case of "Successful surgical repair of	Pune	05.05.2017



		bilateral contracted flexor tendon in a cow calf."		
3	P.R. Balage	First prize in the research project Titled: "A novel surgical technique for bilateral contracted tendon" at the 12 th Maharashtra state inter university research convention Avishkar-2017 at MPKV, Rahuri.	MPKV, Rahuri.	15.01.2018 to 17.01.2018

• **College of Veterinary & Animal Sciences, Udgir**

Sr. No.	Name of Student	Name of Award / Achievement with details	Place	Date
1.	Mr. Manoj Pande	Ranked third at National Level Quiz competition organized by Virback Pvt. Ltd. for Vet students	-	20.11.2017
2.	Mr. Ashish Ransing	Best Student Clinical Case Presentation Award	Akola	17.02.2018

• **K.N.P. College of Veterinary Science, Shirwal**

Sr. N o.	Name of Student	Name of Award / Achievement with details	Place	Date
1	Miss. Shaikh Mohasina	5 th rank for Best NSS volunteers amongst 400 girls in AVHAN 2017	Shivaji University Kolhapur	01.06.2017 to 10.06.2017
2	Dr. Karen D'Silva	Best Clinical Case Paper Award	TANUVAS, Chennai	03.08.2017 to 04.08.2017
3	Dr. Omkar Gajarlwar	Selection to the post of captain in Remount of Veterinary Corps, Govt. of India.	-	Feb.2018
4	Dr. AboliLakhpati	First prize, Clinical Medicine in State Level Clinical Case Conference-2018	Akola	17.02.2018
5	Miss Mohsina Shaikh	First prize, Animal Reproduction Gynaecology&Obstetrics in State Level Clinical Case Conference-2018	Akola	17.02.2018
6	Dr. Karen D Silva	Third prize, Animal Reproduction Gynaecology&Obstetrics in State Level Clinical Case Conference-2018	Akola	17.02.2018
7	Dr. Karen D Silva	Bombay Gorakshak Mandali Scholarship	Betegaon / Kandivali Mumbai	2017-18
8.	Dr. S.S. Mali	Bombay Gorakshak Mandali Scholarship	Betegaon / Kandivali Mumbai	2017-18
9.	Dr. S.S. Mali	Emerging Veterinarian Award	Mahavet Technical Summit, Pachgani	25.02.2018

• **Post Graduate Institute of Veterinary & Animal Science, Akola**

Sr. No.	Name of Student	Name of Award / Achievement with details	Place	Date
1	Dr. Harshada Game	Second prize for best clinical case presentation award during second clinical case conference on 'Recent trends of clinical case management in Veterinary Practice' for Students and Field Veterinarians in Medicine Session	PGIVAS, Akola	17.02.2018



2	Dr. Harkaal Satish	Second prize for best clinical case presentation award during second clinical case conference on 'Recent trends of clinical case management in Veterinary Practice' for Students and Field Veterinarians in Gynaecology Session	PGIVAS, Akola	17.02.2018
3	Neha Prasad Bhave	Second prize for best clinical case presentation award during second clinical case conference on 'Recent trends of clinical case management in Veterinary Practice' for Students and Field Veterinarians in Surgery Session	PGIVAS, Akola	17.02.2018

- **Dairy Technology College, Warud**

Sr. No.	Name of Student	Name of Award / Achievement with details	Place	Date
1	A team of 20 students with two staff members	<ul style="list-style-type: none"> • Received 41 trophies • Overall 3rd position among all the participated eight universities in All India Inter-University Youth Festival (Reverie) 2017-18 	NDRI, Karnal	23.03.2018 to 25.03.2018



Awards



Dr. P. R. Balage receiving award



Felicitation of Dr. V. C. Ingle



Dr. M. S. Bawaskar receiving award



Dr. B. W. Narladkar receiving felicitation and Award



Dr. A. S. Ranade receiving Gold Coin



Dr. S. D. Ingole receiving award by Dr. M. L. Madan



Dr. Mukund Kadam receiving the Puraskar



Dr. A. D. Patil receiving the award



17

VISITS OF DIGNITARIES

- **Bombay Veterinary College, Mumbai**

Sr. No	Name of Dignitary with designation	Date	Purpose
1.	Gurpreet Gnewal Kang, University of Edenburg, School of Veterinary Medicine.	08.11.2017	To look about the facilities available at ILFC, Goregaon.
2.	Dr. A. M. Paturkar, Hon'ble Vice chancellor, MAFSU	03.02.2018	Felicitation ceremony
3.	Dr. A M Paturkar, Associate Dean, BVC Mumbai	16.06.2017	Official

- **Nagpur Veterinary College, Nagpur**

Sr. No.	Name of Dignitary with Designation	Date	Purpose
1.	Hon'ble Dr. N. S. Rathod, DDG (Edu) ICAR, New Delhi		
2.	Hon'ble Prof. A K Mishra, Vice Chancellor, MAFSU, Nagpur	12.06.2017	Inauguration of Niche Area of Excellence on "Centre for Zoonoses"
3.	Dr. S. N. S. Randhawa, Ex- director of research, GADVASU	15.06.2017	
4.	Dr Sahdeo Dey, Principal sci. IVRI, Bareilly	to 16.06.2017	Internal Review committee for NAE:Centre for Zoonoses
5.	Dr. M. D. Gupte, Chairman, ICAR-ICMR expert committee on zoonoses		
6.	Dr. Prashant Joshi, Head Clinical Medicine , IGGMC, Nagpur	17.07.2017	"Human Trypanosomiasis- A case study" (celebration of world zoonoses day)
7.	Hon'ble Shri Vishwas Deshmukh, Secretary Animal Husbandry	29.07.2017	Departmental visit
8.	Dr. U. D. Gupta, Director, JALMA, Agra		
9.	Dr. Anjnelu, Rtd., PS and Head LPT, IVRI, Bareilly	21.08.2017	Departmental visit
10.	Dr. B. M. Naveena. Sr Sci, NRCM, Hyderabad		
11.	Dr. V. P Singh Director NIHSAD	24.08.2017	Departmental visit
12.	Dr. K. N. Bhilegaonkar, I/C IVRI, Pune	24.08.2017	Departmental visit
13.	Dr. Mohan Wani, Scientist-G, NCCS, Pune	28.08.2017	Departmental visit
14.	Dr. Amresh Kumar, Ex Dean / VC, College of Veterinary Sciences, G.B. Pant University of Agriculture and Technology, Pantnagar, U.S. Nagar, Uttarakhand	28.08.2017	Academic
15.	Dr. M. D. Gupte, Director, ICMR-Chairman, Epidemiology and NIE, Chennai	22.09.2017	Visit to NAE laboratory
16.	Dr Anoop Chakraborty, Director of Research, AAU, Guwahati	28.09.2017	Visit to Department & NAE-Centre for Zoonoses laboratory
17.	Dr. NirupamaDange, IAS	02.11.2018	Visited Poultry research and training Centre, NVC, Nagpur
18.	Dr. Vikrant Dutta, Biomerieux, US	10.11.2017	
19.	Dr. Vijay Ghuge, Nisrgamitra, NGO, Nagpur	16.11.2017	
20.	Dr. A. G. Baruah, Professor, AAU, Guwahati	22.11.2017	
21.	Dr. Karunanidhi, Area Manager, Alembic	18.12.2017	
22.	Dr. Yogesh Shouche, Scientist-G, NCCS, Pune	09.01.2018	



23.	Dr. Placid E. D'Souza, Professor & Head, Dean, College of Veterinary Science and Director of Centre of Excellence, Parasitology	10.01.2018	Acted as an Expert lecturer National National Training Programme on "Host Pathogen Interaction" conducted under NAE - Centre for Zoonoses
24.	Dr. Mohan Wani, Scientist-G, NCCS, Pune	11.01.2018	
25.	Dr. Atul Kolte, Scientist, NIAP, Bangalore	13.01.2018	
26.	Dr. Vikas D. Dighe, Scientist-D, NCPR & GT, Mumbai	13.01.2018	
27.	Dr. M. N. Brahmbhatt, Registrar, Anand Agriculture University, Gujarat	17.01.2018	To Conduct final viva-voce exam on in-service Ph.D. students
28.	Dr. D. L. Nauriyal, Ex Vice President, ISVM	08.03.2018	Visited Ruminology Laboratory
29.	Dr. S. K. Dey, Principle Scientist, Medicine Division, IVRI, Izzatnager	10.03.2018	Visited Department of Medicine
30.	Dr. S. N. S. Randhawa, Research Advisor, GADVASU, Ludhiana	10.03.2018	Visited Department of Medicine
31.	Dr. Erika Steppat, Expert in Small Animal Emergency and Critical Care, Sydney Institute TAFE, Australia	18.03.2018	"Emergency applications in Critical Care Management" workshop at TVCC
32	Dr. Gupte, Chairperson, ICMR, New Delhi	28.03.2018	Visited Department of Medicine and reviewed UG and PG laboratories

• **College of Veterinary & Animal Science, Parbhani**

Sr. No	Name of Dignitary with designation	Date	Purpose
1	Dr. Anil Gore, Mentor of DBT Star College Scheme nominated by Department of Biotechnology, Ministry of Science and Technology, Govt. of India	02.02.2018 to 03.02.2018	To review the progress of DBT Star College Scheme
2	Dr. N. M. Kamble, Post-Doctoral Scientist, The Pirbright Institute, Biotechnology and Biological Sciences Research Council (BBSRC), Pirbright, UK	16.02.2018	Visited & delivered a lecture on 'Biotechnology in Veterinary Sciences' during 'Celebrating life and work of Charles Darwin' (Birth 12 February 1882)
3	Dr. Mohan Wani, Scientist, DBT-National Centre for Cell Science, Pune	27.09.2017	Lecture on 'Role of NCCS in Biomedical Research'
4	Dr. Vikas Dighe, Scientist - D & Head, National Center for Preclinical Reproductive and Genetic Toxicology, ICMR-National Institute for Research in Reproductive Health, Mumbai	27.09.2017	Lecture on 'Characteristics of Mesenchymal Stem Cells and its therapeutic use in an animal model of rheumatoid arthritis'

• **College of Veterinary & Animal Science, Udgir**

Sr. No	Name of Dignitary with designation	Date	Purpose
1.	Dr. V. V. Kulkarni, Director, NRC on Meat, Hyderabad	22.07.2017	Official visit
2.	Shri. Mahadevji Jankar, Hon'ble Minister, Animal Husbandry, Dairy and Fishery Development, Govt. of Maharashtra	16.08.2017	Inauguration of research scheme, PM hall and girls hostel
3.	Prof. A. K. Misra, Hon'ble Vice-Chancellor, MAFSU, Nagpur		
4.	Shri. Sudhakar Bhalerao, Hon'ble MLA, Udgir		
5.	Dr. B. A. Satale, Member of Executive Council, MAFSU, Nagpur	29.01.2018	Inauguration of Backyard Poultry demonstration unit and visit to Fodder Cafeteria established by Mafsu Sub-centre Udgir



• K.N.P. College of Veterinary Science, Shirwal

Sr. No	Name of Dignitary with designation	Date	Purpose
1	Prof. S. Thilagar, Honorable Vice- Chancellor, TANUVAS, Chennai	17.04.2017	XXIII Annual Convention of Indian Society for Veterinary Immunology and Biotechnology & National Conference on "Challenges in Livestock and Poultry Production- Solutions with Biotechnology"
2	Dr. R K Singh, Director, IVRI, Izatnagar, UP		
3	Dr. S. N. Puri, Ex VC, CAU, Imphal		
4	Dr. M. L. Madan, Hon'ble Former DDG ICAR and Vice Chancellor PDKV Akola & Pt. Dindayal Upadhyay University of Veterinary Sciences, Mathura.		
5	Prof. A. K. Misra, Hon'ble Vice Chancellor, MAFSU, Nagpur,		
6	Dr. A. S. Bannalikar, Director of Research, MAFSU, Nagpur		
7	Dr. K. S. Palaniswami, Vice President ISVIB		
8	Dr. A. Thangavelu, Secretary, ISVIB.		
9	Dr. Mohan Wani, Scientist, NCL, Pune		
10	Dr. Sanjay Gawkare, Executive Member, MAFSU Nagpur		
11	Dr. Line Pieneda and Dr. Swamy Haladi from Trouw Nutrition Pvt.Ltd., Netherland	18.05.2017	College Visit
12	Padmashree Dr. Sharad P. Kale, Former Associate Director, Bioscience Group, BARC Mumbai & Director Symbiosis Center for Waste Resource Management	13.06.2017	For programme "World Environment Day"
13	Dr. K.N. Bhilegaokar, Principal Scientist & Station Incharge IVRI Training and Education Centre, Pune	13.06.2017	For programme "World Environment Day"
14	Dr Vijay Makheja, Executive Committee, Poultry Federation of India	03.07.2017	Round table on quality parameters for an edible egg and its importance in human diet
15	Dr Pradip Naik, DSM Nutritional Products		
16	Mr. Vinay Hastak, National QA Head McDonalds		
17	Dr Javeed Mulani, Vista Foods		
18	Dr. N. P. Dakshinkar, DI & Dean (FVS), MAFSU, Nagpur	24.07.2017	College Visit
19	Dr. Shirish Nigam, Managing Director, EW Nutrition India Pvt. Ltd.	25.07.2017	Programme for budding vets
20	Dr. K. N. Bhilegaokar, Dr. Aaithal and Dr. Das, IVRI Training and Education Centre, Pune	08.08.2017	For Workshop
21	Dr. N. C. Prakash Reddy, Head, Regulatory and Technical, M/s Boehringer Ingelheim Pvt. Ltd	22.08.2017	For Seminar
22	Visit of Shri. Anup Kumar, Hon'ble Vice Chancellor, MAFSU Nagpur	07.09.2017	Visit to KNPCVS Shirwal
23	Mr. O P Singh, Managing Director, Huvepharma Sea Pvt. Ltd.	13.10.2017	For "World Egg Day" Programme
24	Mr. Vikas Deshmukh, Hon. Secretary, Govt. of Maharashtra		
25	Dr. S. V. Vaidya, Noble Agrovet Pvt. Ltd.		
26	Dr. LaxmikantGhode, Zydus Animal Health Pvt. Ltd.		
27	Dr Shivkumar Patil, General Manager, Rahuri Semen Station, NDDB Dairy Services, Rahuri, Dist. Ahmednagar	09.11.2017	For Seminar
28	Mr. Ritesh Tiwari, Manager Operations, Rahuri Semen Station, Rahuri, Dist. Ahmednagar	09.11.2017	For Seminar



29	Dr. Bruno Peronie (Italy)	22.11.2017	For conducting veterinary orthopaedic
30	Dr. Daniel Damur (Switzerland)	to 24.11.2017	surgery- Orthopedic Workshop on "Canine Fracture Repair Part- III"
31	Dr. Matthias Frank (Germany)		
32	Dr. Bernard Duverney, Head of Farrier company, Geneva (Switzerland)	13.11.2107	For lecture "Therapeutic Shoeing in Racing Horses"
33	Advocate Meghana Shende and Advocate Poornima Bamne, Session Court, Khandala, Dist Satara	10.11.2017	For seminar
34	Shri. Narhar K. Deshpande, Soft Skills, Selling Skills and Behavioural Trainer, Mumbai.	08.12.2017	For seminar
35	Dr. Wolfgang Lauber, USA	18.01.2018 to 19.01.2018	For workshop radiography hip & elbow dysplasia in GSD
36	Mr. Mahadeo Jankar, Hon'ble Minister for Animal Husbandry, Dairy & Fishery Development, M.S	03.01.2018	Visit to College
37	Dr. A. S. Bannalikar, Director of Research and DI & Dean (FVS), MAFSU	07.01.2018	For inauguration function of RKVY training program
38	Dr. A. S. Bannalikar, Director of Research and DI & Dean (FVS), MAFSU	20.01.2018	For inauguration function of RKVY training program
39	Dr.V.L. Deopurkar, Ex Dean and Director of Instructions, MAFSU, Nagpur	20.01.2018	For the function of RKVY training program
40	Dr D.M. Chavan, Additional Commissioner, A.H. Dept, Govt of Maharashtra	20.01.2018	For the function of RKVY training program
41	Dr. Wolfgang Lauber, Germany	18.01.2018 to 19.01.2018	For the seminar on "Elbow & Hip Radiography"
42	Mr. Sanjay Desai, Secretary, German Shephard Dog Federation	18.01.2018 to 19.01.2018	For seminar on "Elbow & Hip Radiography"
43	Professor Lacchman Das Singla, Ludhiana	21.02.2018	For seminar on the occasion of Late Dr. B.L. Purohit Memorial Oration
44	Dr. A. M. Patarkar, Hon'ble Vice Chancellor, Maharashtra Animal & Fishery Sciences, Nagpur,	21.03.2018	For Annual Social Gathering and College Visit
45	Dr. ShriniwasVishwasrao, Retd. Asst. Professor, Veterinary Surgery & member of PPAM	22.03.2018	For Training programme
46	Dr. Dinesh Vinherkar, Pet Practitioner Mumbai	22.03.2018	For Training programme
47	Dr. Erica Steppat, Clinician, Australia	22.03.2018	For seminar on "Advanced diagnostic Techniques in Veterinary Medicine"

• Post Graduate Institute of Veterinary & Animal Science, Akola

Sr. No	Name of Dignitary with designation	Date	Purpose of visit
1	Visit of, Prof. A. K. Mishra, HVC and Dr. N. P. Dakshinkar Dean and DI Mafsu, Nagpur	08.04.2017	Regarding land acquisition for establishment of UG college
2	Visit of Director of Research, Dr. A.S. Bannalikar, MAFSU, Nagpur	25.05.2017	For conducting ASRC meet.



3	Dr. Vinod Harne, renowned Equine Veterinarian, Doha, Qatar	12.07.2017	Delivered lecture on 'Embryo Transfer Technology' in equines for staff and students
4	Sri. Sanjayji Dhotre Saheb, Hon'ble MP, Akola parliamentary constituency	24.08.2017	Inauguration of Male goats exhibition
5	Sri. Randhirji Sawarkar Saheb, Hon'ble MLA, Akola East constituency	24.08.2017	Inauguration of Male goats exhibition
6	Sri. Vijayji Agrawal Saheb, Hon'ble Mayor, Akola Munic. Corp.	24.08.2017	Inauguration of Male goats exhibition
7	Dr. V. Ravinder Reddy, Dean & DI (Vet.), Sri P.V. N.R.T.S. Univ. Vet., Ani. & Fishery Sci., Rajendranagar, Hyderabad	31.08.2017	Visited Poultry Training and Demonstration Center, Department of Poultry Science, PGIVAS, Akola
8	Dr Vikas Vohra, Principal Sci., NBAGR, Karnal	01.09.2017	Delivered lecture "Buffalo Diversity in India"
9	Shri. Ajay Lakhane, commissioner, Akola Municipal Corporation	07.10.2017	To discuss the animal birth control program
10	Dr. G. P. Rane, Joint Regional Commissioner of Animal Husbandry, Office of the Commissioner, Pune	08.10.2017	Meeting regarding RKVY Project
11	Dr. D. B. Mondal, Principal Scientist, Division of Animal Health, IVRI, Izzatnagar, Bareilly (U.P.)	22.01.2018	Delivered lecture to teaching staff and students

• **Dairy Technology College, Warud**

Sr. No	Name of Dignitary with designation	Date	Purpose
1	Hon'ble EC member Mr. Rajesh Wankhede on Hon'ble Executive Council Member, MAFSU, Nagpur	01.12.2017	Visit to Mauli Girls Hostel and College of Dairy Technology, Warud
2.	Hon'ble Mr. Korde, Deputy Collector, Washim	27.11.2017	Visited to Students Training Dairy Plant College of Dairy Technology, Warud
3	Hon'ble EC member Mr. M.N. Dogre on Hon'ble Executive Council Member, MAFSU, Nagpur	08.02.2017	Visit to Mauli Girls Hostel and College of Dairy Technology, Warud

• **College of Dairy Technology, Udgir**

Sr. No	Name of Dignitary with designation	Date	Purpose of visit
1	Dr. Sharangowda B. Patil (Associate Dean) Dr. H. Manjunatha (Special Officer) of Dairy Science College visited CDT, Udgir.	16.05.2017	Visit to dairy plant of college and other facilities
2.	Dr. R. R Bhatkar, Executive Council Member, MAFSU	05.07.2017	Overview and Progress of the institute
3.	Dr. Dakshinkar, Director of Instruction & Dean (Veterinary) along with University Engineer, MAFSU, Nagpur	10.07.2017	Overview and Progress of the institute

• **College of Fishery Science, Udgir**

Sr. No	Name of Dignitary with designation	Date	Purpose of visit
1	Shri. Rajiv Bhatkar, Executive Council Member, MAFSU, Nagpur	11.06.2017	To review college activities



VISITS OF DIGNITARIES



Visit of Hon'ble Vice-Chancellor Shri. Anoop Kumar (IAS) to TVCC



Visit of Dr. Anil Gore to TVCC, COVAS, Parbhani



Dr. V. V. Kulkarni visiting laboratory at COVAS, Udgir



Visit of Hon'ble Rajesh Wankhede to college



Hon'ble Vice Chancellor, Prof. A. M. Paturkar visited college



Mrs. Nanda Jichkar, Hon'ble Mayor, Nagpur addressing the staff during visit to University H.Q.



18

BUILDING AND CONSTRUCTIONS

18.1. Completed Works:

Sr. No.	Particulars of work	Total Cost (Rs. In Lacs)	Funding Agency
1	Construction of S.C. Girl's Hostel under Babu Jagjivaram Chhatravas Yojna for Maharashtra Animal & Fishery Sciences University, Nagpur.	279.37	B.J.C.Y.
2	Providing Parking shed for 2 Wheeler & 4 Wheeler vehicle cutting of staging ground for MAFSU, Nagpur	63.53	University Receipt
3	Construction of Drivers rest room at MAFSU, Nagpur	14.42	University Receipt
4	Electrification of Drivers rest room at MAFSU, Nagpur	1.64	State Govt. Grant
5	Electrification work for 2 wheeler & 4 wheeler parking shed at MAFSU, Nagpur.	4.94	U.R.R.
6	Repairs & black topping to existing road in the premises of COVAS, Parbhani.	13.90	College Revenue Receipt
7	Renovation of "E" type Quarter of KNPVC, Shirwal.	28.00	State Govt. Grant
8	Repair & black topping to road at D.T.C. Warud	20.00	State Govt. Grant
9	Renovation of electrical installation & switchgears of TVCC building Dean office, pathology dept. at PGIVAS, Akola.	2.82	ICAR Grant
10	Renovation of electrification to old open layer sheds no. 2, 3, 4, & brooder sheds no. 1 of poultry science dept. at PGIVAS Akola.	2.76	RKVV & ICAR Grant
11	Providing & Installation of Furniture for Girl's Hostel building under BJCY at Nagpur.	28.42	University Receipt
12	Repair work at N.C.C. office & stud form for NVC Nagpur.	5.00	State Govt. Grant
13	Construction of Layer shed poultry farm at PGIVAS, Akola.	9.63	RKVV Project
14	Furnishing work for existing International Hostel building at MAFSU, Nagpur. Civil work	16.90	University Revenue Receipt
15	Electrification of new constructed layer shed at PGIVAS, Akola.	2.04	RKVV Project
16	Re-wiring of AP1 to AP6 qtrs & L1 to L6 Qters at NVC, Nagpur.	3.96	University Revenue Receipt
	Total	497.33	

18.2. Ongoing works:

Sr. No.	Particulars of work	Total Cost (Rs. In Lacs)	Funding Agency
1	Repairs of boys Gokul Hostel at COVAS Parbhani.	70.06	ICAR Grant
2	Repairs of Electrical work in boys Gokul Hostel at COVAS, Parbhani	20.95	ICAR Grant



3	Renovation of existing Dr. Panjabrao Deshmukh statue & Entrance Hall for NVC Nagpur.	9.39	ICAR Grant
4	Modification work at premises of administrative building at PGIVAS, Akola	9.93	ICAR Grant
5	Upgradation of road at PGIVAS Akola	9.84	RKVV Project
6	Construction of Loose Housing for Marathwadi Buffalo research Project at College of Veterinary & Animal Science, Udgir.	66.57	M.V.K.
7	Construction of security gate at KNPVC, Shirwal.	17.73	State Govt. Grant
8	Renovation of existing Conference and H.V.C. Toilets for MAFSU including Elec. Work	7.91	
9	Construction of laboratory building for Marathwadi Buffalo research project at COVAS, Udgir.	61.00	
10	Construction of Approach Road for hostel building at KNPVC Shirwal.	141.00	
11	Renovation of UG & PG Hostel at Parel, B.V.C. Mumbai.	279.00	
12	Renovation of Anatomy, medicine, animal genetics, laboratory at Parel, B.V.C. Mumbai.	133.78	
13	Construction of Guest house at COVAS Udgir	520.00	
14	Construction of Administrative building for College of Fishery Science, Nagpur.	354.41	State Govt. Grant
15	Construction of V.C. Residence at MAFSU, Nagpur.	253.52	
16	Construction for Boys Hostel for 300 students at Goregaon campus BVC, Mumbai.	1061.97	
17	Construction of 1 st floor to existing Girl's hostel building at Goregaon campus, BVC, Mumbai.	400.00	
18	Construction of 400 meter Compound wall adjacent to express way at Goregaon campus, BVC, Mumbai.	21.80	
19	Construction of 3 rd floor to existing Girl's hostel building at Parel Campus at BVC, Mumbai.	213.00	
20	Construction of Girl's Hostel at COVAS, Udgir.	528.09	
21	Repair and renovation of existing building of teaching Veterinary Clinical Complex for NVC, Nagpur	40.93	RKVV & URR
22	Construction of Canteen for Nagpur Veterinary College at Seminary Hills Nagpur	19.58	URR
23	Proposed Renovation work for TVCC Goregaon Campus, Mumbai	55.96	RKVV & URR
24	Construction of College Canteen at College of Veterinary and Animal Sciences, Parbhani	17.75	URR
25	Construction of Training Hall at TVCC and Renovation of TVCC under RKVV scheme at College of Veterinary and Animal Sciences, Parbhani	54.43	RKVV & URR
26	Construction of Post Mortem Hall at College of Veterinary and Animal Sciences, Parbhani	20.07	URR
27	Construction of Pig shed at KNP Veterinary College, Shirwal, Dist. Satara	32.42	ICAR & URR
28	Renovation of Electrical Installation to TVCC Building Goregaon Campus at Bombay Veterinary College, Mumbai.	13.10	RKVV & URR
29	Construction of teaching Veterinary Clinical Complex for NVC, Nagpur.	191.79	RKVV & URR
30	Providing electrification to 3 rd floor on existing girls hostel building at Bombay Veterinary College, Mumbai.	13.94	State Govt. Grant
31	Construction of Post Mortem room at Bombay Veterinary College, Mumbai	22.62	
32	Proposed renovation work for TVCC Goregaon Campus, Mumbai	55.96	
33	Providing Internal EI to Residential Bungalow Cum Office for Hon'ble Vice Chancellor MAFSU, Nagpur.	20.29	
	Total	4738.79	



19

ACCOUNTS AND FINANCE

19.1. State Government Grants for the year 2017-2018

Sr. No.	Particulars	Amount Received (in Rs.)	Expenditure (in Rs.)
A	NON PLAN		
1.	Salary & Allowance	66,46,13,000	66,46,13,000
2.	Pension	21,62,04,000	21,62,04,000
3.	Contingency	3,63,18,000	3,63,18,000
	TOTAL Rs. (A)	91,71,35,000	91,71,35,000
B	PLAN		
1.	Fishery Sciences College, Nagpur		
2.	Fishery Sciences College, Udgir	5,60,00,000	5,60,00,000
3.	Dairy Technology College, Udgir		
	TOTAL Rs. (B)	5,60,00,000	5,60,00,000
	TOTAL Rs. (A) + (B)	97,31,35,000	97,31,35,000

19.2. Indian Council of Agricultural Research, New Delhi Grants 2017-2018

Sr. No.	Particulars	Received Amount (in Rs.)	Expenditure (in Rs.)
1	ICAR Development Grant	6,47,63,000	6,37,89,325
2	NAE project on Centre for Zoonoses	59,84,000	59,83,000
	Total Rs.	7,07,47,000	6,97,72,325



BOMBAY VETERINARY COLLEGE, MUMBAI



NAGPUR VETERINARY COLLEGE, NAGPUR



COLLEGE OF VETERINARY AND ANIMAL SCIENCES, PARBHANI



KRANTISINH NANA PATIL COLLEGE OF VETERINARY SCIENCE, SHIRWAL



COLLEGE OF VETERINARY AND ANIMAL SCIENCES, UDGIR



POST GRADUATE INSTITUTE OF VETERINARY & ANIMAL SCIENCES, AKOLA



COLLEGE OF DAIRY TECHNOLOGY, WARUD



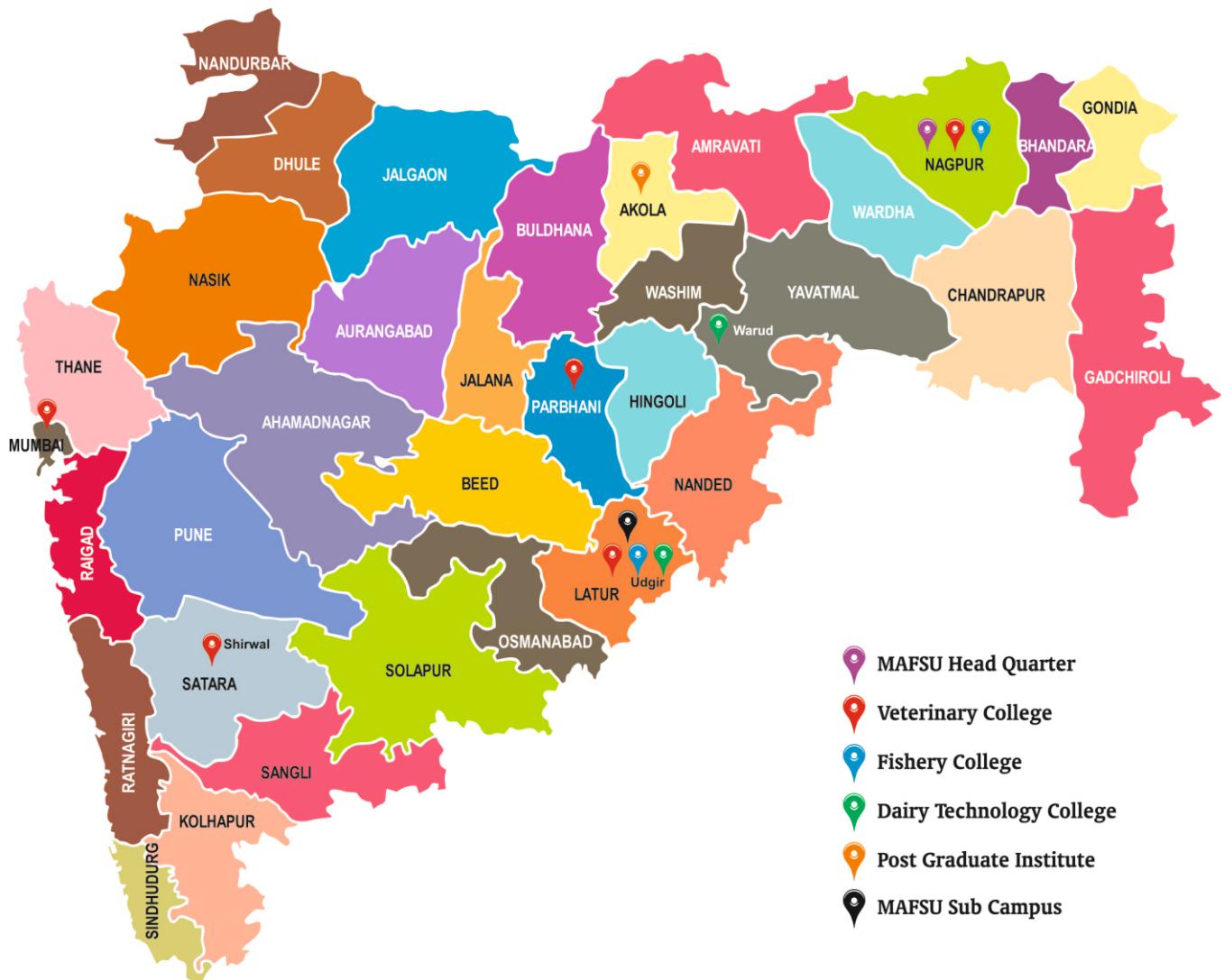
COLLEGE OF DAIRY TECHNOLOGY, UDGIR (Proposed Building)



COLLEGE OF FISHERY SCIENCE, NAGPUR



COLLEGE OF FISHERY SCIENCE, UDGIR



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