



ANNUAL REPORT

2017 - 2018



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



ANNUAL REPORT 2017-2018

Patron

Prof. A. M. Paturkar
Vice-Chancellor

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Director, Extension Education & Training

Dr. G. V. Dhume

Technical Officer

Dr. S. P. Landge

Asst. Prof., Extension Education
& Technical Officer

Shri. P. M. Bagde

Junior Stenographer

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Directorate of Extension Education and Training

Maharashtra Animal & Fishery Sciences University, Nagpur - 440 001

Phone : 0712-2980014

www.mafsu.in

Email : mafsudet@yahoo.co.in

Toll Free No.: **1800-233-3268**



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 deposes 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 journal 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 field 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



INDEX

| | |
|--|----|
| 01. Executive Summary | 01 |
| 02. Mandate | 03 |
| 03. University Authorities | 04 |
| ▪ Organogram | 05 |
| ▪ Executive Council Member | 06 |
| ▪ Academic Council Member | 07 |
| ▪ Research Council Member | 10 |
| ▪ Extension and Continuing Education Council Member | 12 |
| 04. Establishment | 14 |
| 05. Introduction | |
| ▪ Bombay Veterinary College, Mumbai | 15 |
| ▪ Nagpur Veterinary College, Nagpur | 15 |
| ▪ College of Veterinary & Animal Sciences, Parbhani | 16 |
| ▪ College of Veterinary & Animal Sciences, Udgir | 16 |
| ▪ KNP College of Veterinary Science, Shirwal | 16 |
| ▪ Post Graduate Institute of Veterinary & Animal Sciences, Akola | 17 |
| ▪ College of Dairy Technology, Warud | 17 |
| ▪ College of Dairy Technology, Udgir | 18 |
| ▪ College of Fishery Science, Nagpur | 18 |
| ▪ College of Fishery Science, Udgir | 18 |
| ▪ Wildlife Research & Training Centre, Nagpur | 19 |
| 06. Education | |
| ▪ Higher Education | 20 |
| ▪ Faculty of Veterinary Science | 20 |
| ▪ Faculty of Dairy Technology | 21 |
| ▪ Faculty of Fishery Science | 21 |
| ▪ Post Graduate | 22 |
| ▪ PhD Degree | 22 |
| ▪ Degrees Awarded | 22 |
| ▪ Lower Education | 23 |
| ▪ Scholarships/ Fellowships | 25 |
| ▪ Hostel Accommodation | 29 |
| ▪ Library | 30 |
| ▪ Infrastructure | 31 |
| ▪ Student Welfare Activities | 35 |



| | |
|---|------------|
| 07. Human Resource Development | 39 |
| 08. Research | |
| ▪ Ongoing Research Projects | 40 |
| ▪ Completed Research Projects | 45 |
| ▪ Research Recommendations | 47 |
| ▪ Students Research | 52 |
| ▪ Staff Research | 72 |
| ▪ Research Publications | 82 |
| 09. Extension Education and Training | 107 |
| ▪ Training Organized for Field Officers | 108 |
| ▪ Training Organized for Farmers | 109 |
| ▪ Workshops/Seminars for Field Officers | 112 |
| ▪ Workshops/Seminars for Farmers | 113 |
| ▪ Adopted Villages | 114 |
| ▪ Hospital Activities | 115 |
| 10. Farm Activities | 120 |
| 11. Demonstrations Orgnized for Farmers | 126 |
| 12. Visit of Farmers & Staff Members | 128 |
| 13. Exhibitions | 129 |
| 14. Publications/Radio & TV Talks | 134 |
| 15. Websites | 135 |
| 16. Awards/ Honors / Recognitions | 136 |
| 17. Visits of Dignitaries | 144 |
| 18. Building and Constructions | 150 |
| 19. Accounts and Finance | 152 |



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

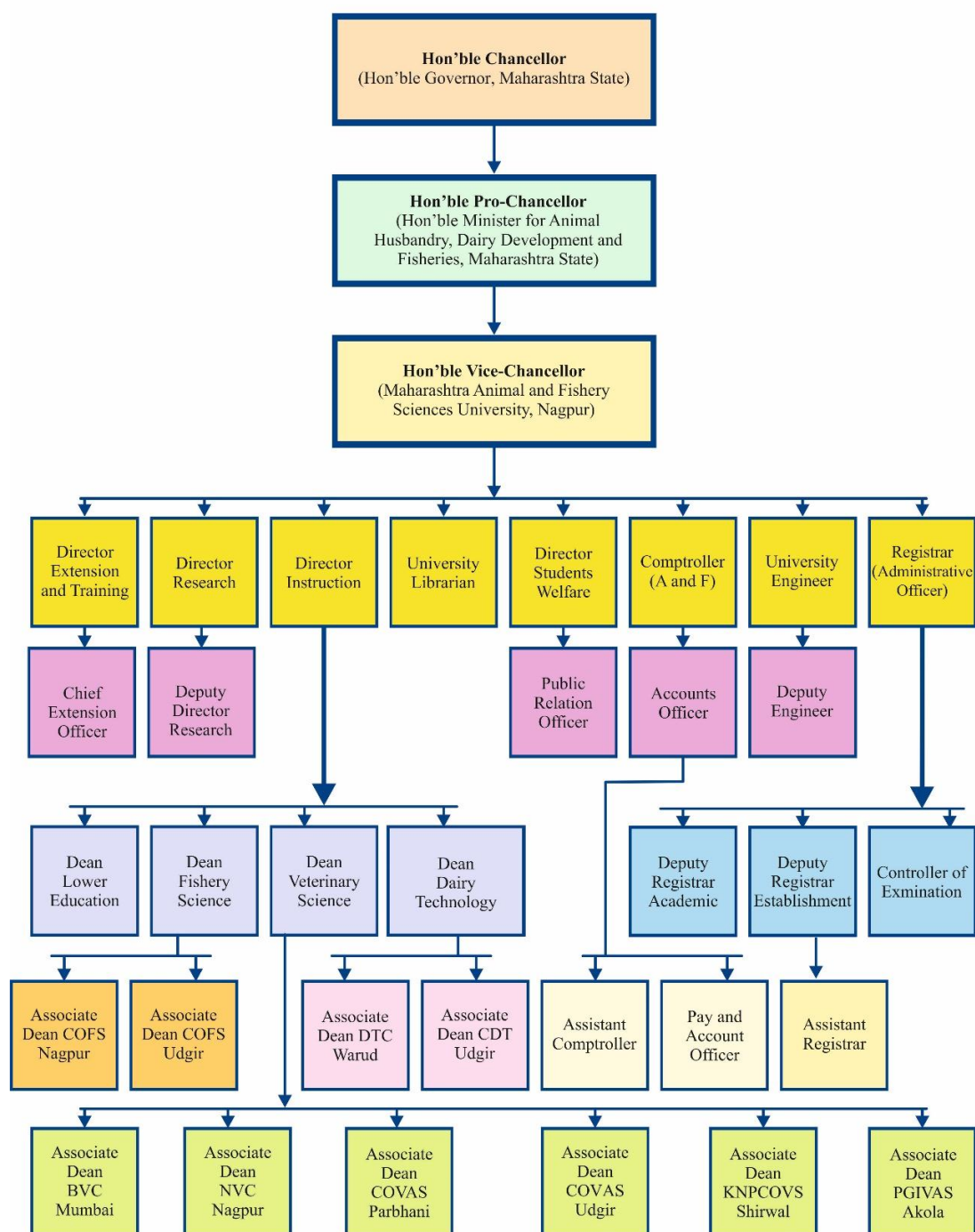
E) Other Authorities of the University

- 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 Prkalp, Hemalkasa, Gadchiroli- 442 710 | Member |
| 12 | Dr. Rahul Vedprakash Patil, Hon'ble MLA and Chairman, Shankar Sahakari Dudh 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, Bazarpeth, 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 |



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| 20 | Dr. N. P. Dakshinkar, Dean, Faculty of Veterinary Science, MAFSU, Nagpur-440001 | Member |
| | Dr. A. S. Bannaliker, 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. Bannaliker, Director of Research, MAFSU, Nagpur-440 001 | Member |
| 26 | Dr. A. S. Bannaliker, 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. Bannaliker, 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. Bannaliker, 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 |



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| 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. Bannaliker, 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. Ambadkar, 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. Bannaliker, Registrar, MAFSU, Nagpur-440 001 | Secretary |
| | Shri. N.K. Lonkar, Registrar, MAFSU, Nagpur-440 001 | |

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. Bannaliker 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. Bannaliker, 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 Mahamandal Ltd. Mendhi Farm, Pune – 411016 | Member |
| 11. | Dr. Arun Kumar Rawat, Director, Department of Biotechnology, Ministry of Science & Technology, GoI, 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 Dairy 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. Ramaligaswami 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, Deptt. 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, Worli Seaface, 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 Phule Krishi Vidyapeeth, 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 advice 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. Bannaliker, Director (Research), MAFSU, Nagpur- 440001 | Member |
| 3. | Dr. N. P. Dakshinkar, Dean, Faculty of Veterinary Science, MAFSU, Nagpur-440001 | Member |
| | Dr. A. S. Bannaliker, 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 Vasantao 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 Nandanpawar, Dy. Director (Prog.), Doordarshan Kendra, Worli Mumbai-400030 | Member |
| 29. | Dr. Dhananjay Parkale, Managing Director, Punyashloah 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 BSPCA 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 mashaal 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 also has well developed and equipped laboratories along with 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 half years 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 | 0 | 1 | 0 | 1 |



| | | | | | | | | | | | | | | | | | | |
|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|
| 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* | | | 59+2#+5*+10@ | | |
| 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# | | | 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 |
| 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 | 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 |
| SC | 0 | 2 | 2 | 1 | 0 | 1 | 1 | 0 | 1 | 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 |
| VJ/DT(a) | 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 |
| NT(d) | 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 | 2 | 0 | 2 |
| UNRESERVED | 0 | 1 | 1 | 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 | 2 | 1 | 3 |
| Total | 1 | 4 | 5 | 4 | 0 | 4 | 1 | 0 | 1 | 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 | | |
|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|------------|
| Gender | M | F | M | F | M | F | M | F | M | F | M | F | M | F | Total |
| 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, Shirwal | 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 | Total |
| 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 | Total |
| 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 | 7 | 9 | 16 |
| BVC, Mumbai | 4 | 13 | 2 | 2 | 2 | 0 | 2 | 0 | 4 | 0 | 0 | 0 | 14 | 15 | 29 |
| COVAS, Parbhani | 6 | 3 | 3 | 4 | 1 | 1 | 0 | 0 | 8 | 2 | 0 | 0 | 18 | 10 | 28 |
| PGIVAS, Akola | 4 | 3 | 2 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 8 | 5 | 13 |
| KNPCVS, Shirwal | 3 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 5 | 3 | 8 |
| COVAS, Udgir | 3 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 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 | 7 | 3 | 10 |
| BVC, Mumbai | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 5 | 0 | 5 |
| COVAS, Parbhani | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| PGIVAS, Akola | 2 | 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 |
| COVAS, Udgir | 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 Science, 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 persue M.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 | RKVY |
| 2 | Binocular Microscope with Camera | 4.33 | RKVY |
| 3 | ELISA Reader with Washer | 2.41 | RKVY |
| 4 | Electrolyte Analyser | 1.79 | RKVY |
| 5 | Somatic Cell Counter | 7.90 | RKVY |
| 6 | Atomic Absorption Spectrophotometer | 19.70 | RKVY |
| 7 | RT-PCR | 10.81 | RKVY |
| 8 | HaematologyAnalyser | 7.96 | RKVY |
| 9 | Refrigerated Centrifuge | 4.99 | RKVY |
| 10 | Ultra Low Freezer -80°C | 4.92 | RKVY |
| 11 | UV Spectrophotometer | 5.97 | RKVY |
| 12 | Analytical Weighing Balance | 3.74 | RKVY |
| 13 | Urine Analyser | 1.98 | RKVY |
| 14 | Water Purification System | 2.98 | RKVY |
| 15 | Auto Analyser | 2.95 | RKVY |
| 16 | Coagulometer | 1.97 | RKVY |
| 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 |
| 2 | PCR machine | 3.00 | ICMR |
| 3 | Electrophoresis unit | 1.50 | ICMR |
| 4 | Gel documentation unit | 4.46 | ICAR |
| 5 | CO2 Incubator | 4.48 | ICAR |
| 6 | Incubator-O ₂ , CO ₂ , N ₂ | 4.48 | ICAR |
| 7 | Binocular Microscope | 0.88 | ICAR |
| 8 | Compact Benchtop Cooling Centrifuge 'Remi' | 0.94 | ICAR |
| 9 | Urine Analyser | 0.54 | ICAR |
| 10 | Deep Freezer 170 lit. Cellfrost | 0.51 | ICAR |
| 11 | Geneamp Thermo cycler | 1.70 | ICAR |
| 12 | Ophthalmic microscope and ophthalmic surgical instruments set complete | 18.74 | RKVY Project |
| 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, Urethrocystoscopy, Oesophagoscopy set for small animals with all accessories. | 27.25 | |
| 23 | Laser surgical unit complete 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 | AICRP-National Research Centre on Pig (ICAR) |
| 4 | B.O.D.Incubator | 1.49 | |
| 5 | Desktop and Printer | 0.59 | |
| 6 | Post Mortem Instrument Sets | 0.70 | Funds provided by MAFSU, Nagpur for strengthening of infrastructure of Post mortem facility. |
| 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 | |



- **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 | Inhalant anaesthetic 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 | Vasant Rao Naik Krishi Vidyapeeth, Parbhani |
| 2. | Maharashtra State Inter University | Krida Mahotsava 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 | 466 |
| | Organizing functions | 16 | 160 | 90 | 250 |
| | Street Plays | 10 | 173 | 111 | 284 |
| | Door-to-door Campaigns | 15 | 244 | 126 | 370 |
| | Distribution of IEC Materials | 04 | 128 | 108 | 236 |
| | Distribution of Iron and/Folic Acid Tablets | 06 | 130 | 70 | 200 |
| Facilitating institutionalized Deliveries of women | | 03 | 33 | 17 | 50 |
| 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 | 240 |
| | Promoting use of solar Energy | 01 | 125 | 55 | 180 |
| | Energy conservation- a people's Movement (led Bulb sale campaign) | 02 | 155 | 75 | 230 |
| 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. UdgirDist 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. SnighaRachitaSamontre the students from College of Veterinary and Animal Science, Udgirwere 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 Vasantao 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. Bannaliker, 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. Tembhurne | 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 | RKVY 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 Gadchiroli district through scientific fisheries echnologies | 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 | Ayurvet 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. Galdhar Co. PI: Dr. Mrs R.S. Gandge Dr. H.Y Palampalle Dr.P.S. Masare, Dr.D.A.Pavalkar | 03.06.2016 | 1 Year | 1.95 | HKL Pharmaceutical sIndia 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 | PI.: Dr. B.N. Ambore, NVC, Nagpur | May 2017 | 1 year | 1.25 | Ayurvet 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, Deptt. of ARGO, NVC, Nagpur. | Nov 2016 | 1 year | 1.55 | Ayurvet 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&Salcohek for diarrhea of specific and non-specific origi | Dr. M. D Meshram | 2015-16 | 2 years | 4.08 | Dabur Ayurvet India |



| | | | | | | |
|--------------|--|--|------------|---------|--------------|---|
| 13 | To evaluate comparative therapeutic efficacy of AV/RMP/23 & Pachoplus against indigestion in dairy animals | Dr.M. D Meshram | 2015-16 | 2 years | 1.30 | Dabur Ayurved India |
| 14 | Efficacy of oral inorganic phosphorous preparation in management of osteomalacia 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 infection 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 partumanestrous and other cases of specific and non specific anestrous 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, Uttarakhand | 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 Pharmaceuti calKalol, 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>Cyamopsistetragonoloba</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 | | | | |



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| | 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 |



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| | 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 Panchgavya Ghrita (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. Nithinand 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 loctoacidosis 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> 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 | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | Project title | Clinical evaluation of different laparoscopic sterilization techniques in bitches | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Investigators | S. P. Salvekar and Dr. P. T. Jadhao | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



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| | 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 Theloressectoscopy 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 theloressectoscopy 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. Datir 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. Pendharkar Gandhar 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 | 1) Regular cleaning of hoof, foot bath with 5 percent CuSO ₄ or KMnO ₄ 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 | | |
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| 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 | : <ol style="list-style-type: none"> 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. |
| 2 | Title | : Comparative histomorphological and ultra-structural studies of mammary gland in sheep (<i>Ovisaries</i>) and goat (<i>Capra hircus</i>) |
| | Conclusions | : <ol style="list-style-type: none"> 1. The udder of she goat was larger than that of sheep, thus indicating greater milk production potential. The biometrical and micrometrical observations showed significant difference between the species. 2. The connective tissue was reduced in lactating stage and alveolar tissue increased predominantly. Alveolar secretion was acidophilic in lactating stage. Alveolar epithelial lining was composed of cuboidal cells having strong basophilic nuclei. 3. The numbers of secretory alveoli remain constant in lactating and non-lactating sheep as well as goat only the size increases in lactating stage in both the species. 4. The lactation might be influenced the activity of mammary epithelial cells which was reflected on the histological, histochemical and ultra-structural. 5. Cylindrical shaped teats were more prone to mastitis. |
| 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 1β (IL-1β) 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 |



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| | | 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. |
| 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>Pasteurelamultocida</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. |



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| 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"> All the 3 fungal biopesticides i.e. <i>Metarhiziumanisopliae</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 fungi can be recommended for tick control programmes, subject to the evaluation under field conditions. Herbal acaricide product (containing Neem oil, Karanj oil, Eucalyptus oil, Rohit Gawashand 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"> The incidence of bacterial infection (80.3%) was found more in skin infections of dog as compared to fungal infection (66.6%). The incidence of both infections observed were more in the dogs of 1-3 years age group male dogs than female dogs <i>Staphylococcus</i> spp. was the major bacterial cause (67.20%) of canine skin infection in dogs amongst <i>Staphylococcus</i> spp. Among mycotic agents' dermatophytes (20%) and yeast (22%) infections were in similar range. Gentamycin, Chloramphenicol and Vancomycin were found most suitable antibiotics in treatment of bacterial skin infections. Miconazole was the most effective antifungal drug and Nystatin had the poorest activity against dermatophytes. <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"> 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. Experimental antigen prepared from field strain found better than antigen prepared from ATCC strain in detecting <i>M. gallisepticum</i> antibodies. Optimum reaction of RSA was observed in serum dilution of 1:20 without cross reaction and false positive results. Sensitivity of ERSAA was found greater than ELISA in detection <i>M. gallisepticum</i> antibodies Comparative results of sensitivity of RSA by ERSA and CRSA antigen indicated that ERSA antigen is superior to CRSA antigen in detection of <i>M. gallisepticum</i> antibodies. |



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| 3 | Title | : | Seroprevalence of <i>Mycoplasma gallisepticum</i> and <i>Mycoplasma synoviae</i> in poultry |
| | Conclusions | : | <ol style="list-style-type: none"> 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 Vidharbha region of Maharashtra state. Age group studies revealed that 2week 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>Pasteurella multocida</i> and <i>Mannheimia hemolytica</i> in Sheep and Goats of Western Maharashtra, India |
| | Conclusions | : | <ol style="list-style-type: none"> 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>Enicostema littorale</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>Enicostema littorale</i> in both, ethanolic and aqueous extracts. Overall, nutritive values of leaves of <i>Costus pictus</i> were found better than that of <i>Enicostema littorale</i> Blum. Qualitative phytochemical analysis of aqueous and ethanolic extracts of both the plants revealed presence of phytoconstituents useful against diabetes. |



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| | | <ol style="list-style-type: none"> Phase-I study revealed that, the LD₅₀ cut of 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. 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. 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). 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. 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. 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"> 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. 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. The occurrence of spontaneous growths was most common in dogs between 5.1 to 9 years of age. Spontaneous growths occurred more in males than in females. However, the females had more cases of malignant growths than males. 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. Round cell tumors can easily be diagnosed by cytology. However, mesenchymal tumors have more chances of giving an inconclusive diagnosis. USG guided cytology was effective in diagnosing visceral lymphoma and tumors of reproductive system, while cytology of the spleen has limited diagnostic value. A quick stain can be effective for cytology as long as the cytopathologist is accustomed to the colourations observed. 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. 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"> 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. 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> |



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| | | <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 <i>Theileriaannulata</i> in cattle which can detect infection in chronic carrier stage and can be used as standard diagnostic method for detection of <i>Theileriaannulata</i> 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 bacterialspecies. |
| 6 | Title | Ameliorative effect of <i>Picrorhizakurroa</i> against <i>Lantana camera</i> toxicity in Wistar rats |
| | Conclusion | <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 3 rd week onwards till 28 th 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. |
| 7 | Title | Pathomorphological studies of gastrointestinal Parasitism in Osmanabadi Goats |
| | Conclusion | 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. |
| 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. |



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| | | <ol style="list-style-type: none"> 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>. 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. 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. |
| 2 | Title | Standardization of Flow Through Assay for Serodiagnosis of Cysticercosis in Pigs |
| | Conclusions | <ol style="list-style-type: none"> The overall prevalence of cysticercosis in slaughtered pigs of Deonar abattoir by post-mortem inspection was observed to be 0.33%. 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 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. The seroprevalence of cysticercosis by ELISA was found to be 6.4% with 88% sensitivity and 100% specificity. 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. |
| 3 | Title | Effects of Electron Beam Irradiation on The Quality of Pork Products Stored at Refrigeration Temperature |
| | Conclusions | <ol style="list-style-type: none"> 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. 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. |
| 4 | Title | Prevalence of <i>listeria monocytogenes</i> in ruminants and vectors at organized farm and its environment |
| | Conclusions | <ol style="list-style-type: none"> 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. 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). The seroprevalence for listeriosis was noted as 11.58 per cent in goats while none of the cattle serum turned positive for ALLO. 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 where of 4b (93.33%) and only one isolate revealed 1/2b serotype. |
| 5 | Title | Scenario of <i>orientia tsutsugamushi</i> infection in human and rodent population |
| | Conclusions | <ol style="list-style-type: none"> 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. |



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| | | <ol style="list-style-type: none"> 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. 3. Nested PCR targeting 56-kDa gene is more sensitive than conventional PCR for the detection of <i>Orientia tsutsugamushi</i> in rodent population. 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. |
| 6 | Title | Prevalence of Q fever in small ruminants and risk groups |
| | Conclusions | <ol style="list-style-type: none"> 1. Trans-PCR employing primers of set-II (<i>Trans1</i> and <i>Trans2</i>) 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). 2. Trans-PCR employing primers Set-I (<i>Trans3</i> and <i>Trans4</i>) revealing product size of 243bp is good test for detecting <i>Coxiella burnetii</i> vectors. Wherein 23.52 per cent prevalence is detected in ticks. 3. Always a battery of tests inclusive of molecular and serological assays for detection of cases of Q fever should be employed. 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. |
| 7 | Title | <i>In-vitro</i> efficacy of bacteriocins released by lactic acid bacteria to improve shelf life of meat. |
| | Conclusions | <ol style="list-style-type: none"> 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. 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. 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). 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. 5. The crude CFS obtained from <i>Lactococcus lactis</i> exhibited good antimicrobial activity against Gram positive and Gram negative pathogens upto three days. |
| 8 | Title | Comparative efficacy of whole cyst and cystic fluid antigens for detection of cysticercosis in pigs and humans |
| | Conclusions | <ol style="list-style-type: none"> 1. The prevalence of cysticercosis in pigs was estimated as 0.39%. 2. Cystic fluid antigen is found to be more efficacious for diagnosis of cysticercosis. 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. 4. The seropositivity of neurocystercosis among human epileptic patients was 12% and 24% for antibodies against WCA and CFA respectively. 5. The bands of 36kDa and 146kDa recognized by two seropositive pigs are specific for WCA and can be explored for diagnostic value. 6. The diagnostic potential of blood PCR needs to be revalidated by inclusion of large number of known positive cases of cysticercosis. 7. More studies with purified antigens are needed to rule out cross reactivity with other related parasites. |



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| 9 | Title | : Quality assessment of raw milk at dairy farm, transportation & retail shop |
| | Conclusion | : Adulteration of milk with water was present and that of 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 |
| | Conclusions | : 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 |
| | Conclusions | : 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. |



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| 9 | Title | : | Effect of partial replacement o maize with dried citrus pomace inconcentrate 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 | : | <p>The performance in commercial broiler chicks fed suboptimum level of calcium increased with supplementation of herbal vitamin D₃ and phytase enzyme. Addition of herbal vitamin D₃ 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.</p> <p>Further, addition of herbal vitamin D₃ 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.</p> |
| 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. |



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| | | <ol style="list-style-type: none"> 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. 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. |
| 2 | Title | PCR- RFLP of IGFBP-3 Gene in Madgyal Sheep |
| | Conclusions | <ol style="list-style-type: none"> 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. HaeIII restriction site found to be absent for 333 bp amplicon of IGFBP-3 gene of studied Madgyal sheep. 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. |
| 3 | Title | Cytogenetic and Molecular Analysis of Reproductive Disorders in cattle |
| | Conclusions | <ol style="list-style-type: none"> 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. 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 anestrus cows under investigation. 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. It was also observed that the percentage of fragile sites was higher in repeat breeder (40.38%) cows than that of anestrus cows (30%). The X chromosomal fragile sites were found to be higher in HF crossbred cows (16.66%) than indigenous (4.1%). 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. 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. 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. 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. |
| 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/lying and cleanliness score in Gir cows where as non-significant effect on body condition score of Gir cows. |



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| 2 | Title | : Growth performance of madgal 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 in increase 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 performance 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 improved the immune response, zinc retention and livability in broiler chickens. |



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| 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 affected 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 ($4\pm 1^{\circ}\text{C}$) 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 ($4\pm 1^{\circ}\text{C}$). 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 ($4\pm 1^{\circ}\text{C}$) 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 <i>chakali</i>. |
| | Conclusion | : Chicken <i>chakali</i> packaged under vacuum conditions had better keeping quality as compared to chicken <i>chakali</i> packaged under aerobic condition upto 30 day at ambient temperature. |
| 5 | Title | : Process development and quality evaluation of the quail meat enriched noodles |
| | Conclusions | : The acceptable quality of noodles was prepared with incorporation of 40% quail mince meat in wheat flour based noodles without adversely 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 ($35\pm 2^{\circ}\text{C}$). 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 | | |
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| 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 E. Coli followed by, Staphylococcus and Proteus 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 intramuscular 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 |



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| 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 conveniency 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 (FSHβ) 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. |



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| 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 where as 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 of 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 haemato-biochemical 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 operativemanagementby reducing the hospitalizationtime without affecting the hematobio-chemical parameters when compared toconventional method. Laparoscopic or conventional laparotomy salpingectomy can be an alternative method of sterilization in dogs where in 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 guaiphenesin, 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. |



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| | | <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 | Surgical management of urinary calculi by using different urethral approaches in dog. |
| | Conclusions | 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. |
| 8. | Title | Surgical management of long bone affections of thoracic limb in growing dogs. |
| | Conclusions | 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. |
| 9. | Title | Evaluation of guaifenesin-ketamine-xylazine anaesthesia for castration in donkeys |
| | Conclusions | 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. |
| 10. | Title | Clinical Evaluation of Terminalia arjuna on wound healing in caprine |
| | Conclusion | 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. |
| 11. | Title | Ovariohysterectomy under acepromazine – butorphanol -glycopyrrolate with Propofol anaesthesia in canine |
| | Conclusion | 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. |
| 12. | Title | Comparative evaluation of single and double stage diaphragmatic herniorrhaphy in buffalo |
| | Conclusion | 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. |



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| 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 to 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 | : | <ol style="list-style-type: none"> 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 | : | <ol style="list-style-type: none"> 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 | : | Studies on M Mode echocardiographic parameters in healthy German Shepherds |
| | Conclusions | : | <ol style="list-style-type: none"> 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 | : | Diagnostic and Therapeutic Management of Diabetes Mellitus in Canine |
| | Conclusions | : | <ol style="list-style-type: none"> 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. |



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| 4. | Title | : | Evaluation of essential oils as an adjunct therapy in the treatment of Lactoacidosis in goats (<i>Capra hircus</i>) |
| | Conclusions | : | <ol style="list-style-type: none"> 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 Theileriasis in Cattle using different Regimen |
| | Conclusion | : | A combination of buparvaquone and levamisole is having best results in treatment of Theileriasis 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 | : | <ol style="list-style-type: none"> 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 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 | | |
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| 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 Mehre |
| | 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 HpaI. 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 salmonella were seen on MacConkey's 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 | : | 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 befor parturition in animals. 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 deternimned by biochemical kits on Biochemical Semi Auto Analyzer. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | : | 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. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.E.3.Vetrinary Parasitology | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Name of Project | : | <i>In-vitro</i> studies with neem oil, eucalyptus oil, Kutajghanavati and Kutajarishta for controlling cacecal 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 comparision to controls. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8.E.4. Veterinary Microbiology | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Name of Project | : | Molecular Characterization of avain 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.Vetrinary 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 | : | Samples were analysed and results are given as tabulated below i) Hematology, Urine& Clinical chemistry Services (Under RFS): <table border="1"><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><tr><td>No</td><td>137</td><td>--</td><td>137</td></tr></table> <table border="1"><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><tr><td>No</td><td>244</td><td>02</td><td>--</td><td>246</td></tr></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 | -- |
| 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 | -- | 246 | | | | | | | | | | | | | | | | | | | | | | | | | |



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|---------------------------------------|------------------------|---------------------------------------|---|-------------|-----------------------|---------------------------------------|---------------|-------------|----|----|----|----|----|
| | | | <div>ii) Urine & Clinical chemistry Services (Under RFS):</div> <div>iii) Hispathology Services (Under RFS):</div> <table><tr><td>Type</td><td>HP slide examinations</td><td>Tissue processing and HP examinations</td><td>FNAC/Cytology</td><td>Grand Total</td></tr><tr><td>No</td><td>--</td><td>46</td><td>--</td><td>46</td></tr></table> | Type | HP slide examinations | Tissue processing and HP examinations | FNAC/Cytology | Grand Total | No | -- | 46 | -- | 46 |
| Type | HP slide examinations | Tissue processing and HP examinations | FNAC/Cytology | 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 | : | Four courses have been developed in Department of Pathology, Veterinary College, Parel, Mumbai and being offered to the field veterinarians. <div>1. Post Mortem Examination of Domestic Animals</div> <div>2. Diagnosis of Parasitic Diseases</div> <div>3. Techniques in Large Animal Surgery-I</div> <div>4. Techniques in Small Animal Surgery-I</div> | | | | | | | | | | |
| 3. | Name of Project | : | <i>In vivo</i> and <i>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 | : | <div>1. All the three herbal extracts viz., Ecto Z, Ecto C and Ecto A showed acaricide efficacy.</div> <div>2. Ecto C showed highest efficacy followed by Ecto Z, Ecto C.</div> <div>3. 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.</div> <div>4. All the three herbal extracts viz., Ecto Z, Ecto C and Ecto A showed residual acaricide effect and protected the animals upto 12 days.</div> | | | | | | | | | | |
| 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 | : | <div>• Objective of project is to monitor Egg, Meat and Fish Samples for pesticide residue, sold at different points in and around Mumbai city.</div> <div>• 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.</div> <div>• NABL reassessment audit has been successfully completed in the month of July 2017. NABL accreditation of laboratory is valid upto July 2019.</div> | | | | | | | | | | |
| 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 | : | <div>1. Use of Electron Beam Processing for Shelf Life Extension of Meat Products</div> <div>• 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.</div> | | | | | | | | | | |



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| | | <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 Salmonella 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- |



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| | | <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%), Erythromycin (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 CTXM 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 | <p>PI-Dr. S. P. Chaudhari, Associate Professor, Dept. of Veterinary Public Health, Nagpur Veterinary College, Nagpur</p> <p>Co-PI-</p> <ol style="list-style-type: none"> 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. Tembhurne, 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 | <p>Achievements:</p> <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. |



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| | | <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>Ornithonyssus bacoti</i>" (tropical rat mite) has been detected with potentials to transmit <i>Orientia tsutsugamushi</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 |



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|----|-----------------|---|---|
| | 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 identified positive with 58.62% positivity. Mitochondrial 16S r-RNA large subunit 1 sequence from Taenia solium cyst was submitted at NCBI Genbank 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. Coxiella 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. Kundlik Lokare 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 comming 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 75 per cent response and 50, 83.33, 100 and 58.33 per 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, Uttarakhand |
| | 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. |



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| 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 demonstration plots. Chemical analysis is in progress. Once fodder variety propogated to the farmers land response study will be done. |

Faculty of Fishery Science:

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|--|------------------------|---|---|
| 8.E.13 Fisheries Resources, Economics, Statistics & Extension Education | | | |
| 1 | Name of Project | : | Sustainable livelihood of tribal population in Gadchiroli 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, Gondwanda University, Gadchiroli |
| | Summary | : | The improved 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 Artical | 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 |
| 6 | Satya Prakash Mohapatra, S. D Ingole, S. V Bharucha, A. S Nagvekar, P. M Kekan and S. D Kharde | Measurements of Pregnanediol-3-glucuronide and urinary parameters in cyclic and early pregnant Murrah buffaloes | Journal of Entomology and Zoology Studies. 5(6): 656-658 |
| 7 | U. B. Kumbhar, S. U. Gulavane, S. M. Gaikwad, D. U. Lokhande, S. D. Ingole and G. Sachdeva | Relationship of ultrasonographic testicular biometry with body weight, scrotal circumference in pre and post pubertal Osmanabdi bucks | International Journal of Livestock Research 7(11): 206 - 214 |
| 8 | R. J. Chaudhari, S. U. Gulavane, M. N. Rangnekar, M. M. Gatne, S.D. Ingole and R.S. Jawale | Effect of endometritis diagnosed by cytology on reproductive parameter in postpartum crossbred cows | International Journal of Current Microbiology and Applied Sciences |
| 9 | P. Patel, S. D. Ingole, S. V. Bharucha and A.S. Nagvekar | Serum protein profile during different stages of gestation in crossbred calves | The Journal of Bombay Veterinary College. 23(2): 15-20 |
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| 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 |
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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 Ultrasonographic | 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 | |
| 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 | RKVY |
| 2 | Prevention and Therapeutic Management of Diseases Causing Reproductive Failure in Animals | 02.01.2018 to 06.01.2018 | 26 | RKVY |
| 3 | Prevention and Therapeutic Management of Diseases Causing Reproductive Failure in Animals | 15.01.2018 to 20.01.2018 | 26 | RKVY |
| 4 | Prevention and Therapeutic Management of Diseases Causing Reproductive Failure in Animals | 20.02.2018 to 25.02.2018 | 27 | RKVY |
| 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 Technology 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 datas (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 'Rabies zero 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 Production Technology' | 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. Bhore, 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 | Pethkaldongari, 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 hector
- Grazing land : 40.18 hectors



- **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 hector
- **Grazing land** : 5.15 hector
- **Land under any other purpose:** 6.56 hector
- **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 Hector
- Land under cultivation: 20 Hector
- 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 | 2,05,895 |
| 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 Hecter
- **Land under cultivation** : 1 Hecter
- **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/-

- **College of Dairy Technology, Udgir**

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 | Ghoti Dist 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 | Zilla Krushi Mohtsav, 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 & Dugdhotpadak Shetkari Melava | Shriji Pashukhadya 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. Loha 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-Krushik 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 | Krushik 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 | Krushik Mahotsav 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. | Agro-dhan 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



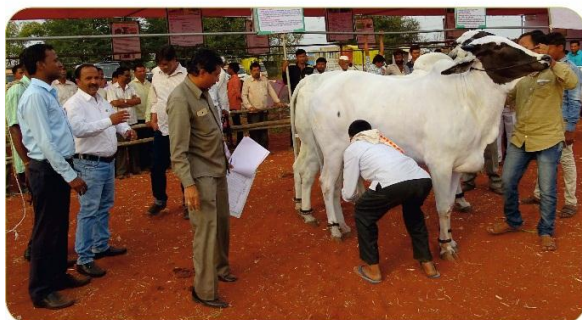
Staff guiding the farmers



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.



15

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. Bhavé* | 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. Gandge | Mrs. Vimal Shrinivas Kshirsagar Memorial Lady Veterinarian Award" | IVRI, Izatnagar. | 08.04.2017 |
| 9. | Dr. (Mrs.) R.S. Gandge | 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 | Bhubaneswar | 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 Pratishthan Umarkhed 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, Krishnaa 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, Krishnaa 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 (R.J.) | 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, Gujrat | 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 | Krishi Mauli 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 | Laxmikant Kokil 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 Jivan Kala Mandal, Parbhani 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. Annabhausahejayanti 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. VenkateswaraVety. 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. No. | 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 Gajarwar | Selecion to the post of captain in Remount of Veterinary Corps, Govt. of India. | - | Feb.2018 |
| 4 | Dr. AboliLakhpatri | First prize, Clinical Medicine in State Level Clinical Case Conference-2018 | Akola | 17.02.2018 |
| 5 | Miss Mohsina Shaikh | First prize, Animal Reproduction Gynaecology&Obstretics in State Level Clinical Case Conference-2018 | Akola | 17.02.2018 |
| 6 | Dr. Karen D Silva | Third prize, Animal Reproduction Gynaecology&Obstretics 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 Bhawe | 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



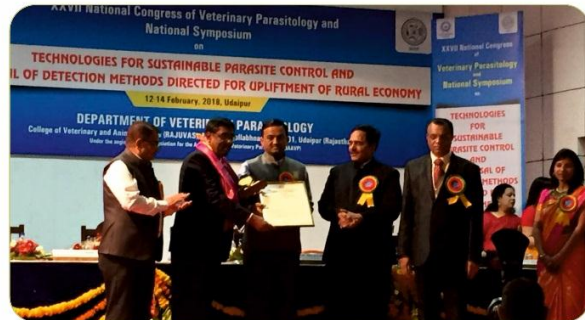
Dr. P. R. Balage receiving award



Felicitation of Dr. V. C. Ingle



Dr. M. S. Bawaskar receiving award



Dr. B. W. Narladkar receiving felicitations and Award



Dr. A. S. Ranade receiving Gold Coin



Dr. S. D. Ingle 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 | Felicitatation 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 | 12.06.2017 | Ingauration of Niche Area of Excellence on "Centre for Zoonoses" |
| 2. | Hon'ble Prof. A K Mishra, Vice Chancellor, MAFSU, Nagpur | | |
| 3. | Dr. S. N. S. Randhawa, Ex- director of research, GADVASU | 15.06.2017 to 16.06.2017 | Internal Review committee for NAE:Centre for Zoonoses |
| 4. | Dr Sahdeo Dey, Principal sci. IVRI, Bareilly | | |
| 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, Biomeriux, US | 10.11.2017 | Visit to Department & NAE-Centre for Zoonoses laboratory |
| 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 | |



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|-----|---|------------|---|
| 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, NIANP, Bangalore | 13.01.2018 | |
| 26. | Dr. Vikas D. Dighe, Scientist-D, NCPR & GT, Mumbai | 13.01.2018 | |
| 27. | Dr. M. N. Brahmabhatt, 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, Izzatnagar | 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. Mahadevi 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 Sigh, 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. Bannaliker, 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 Gawhare, 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. Laxmikant Ghode, 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 |



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|----|---|--------------------------------|--|
| 29 | Dr. Bruno Peronie (Italy) | 22.11.2017 to 24.11.2017 | For conducting veterinary orthopaedic surgery- Orthopedic Workshop on "Canine Fracture Repair Part- III" |
| 30 | Dr. Daniel Damur (Switzerland) | | |
| 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. Bannaliker, Director of Research and DI & Dean (FVS), MAFSU | 07.01.2018 | For inauguration function of RKVY training program |
| 38 | Dr. A. S. Bannaliker, 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. Paturkar, Hon'ble Vice Chancellor, Maharashtra Animal & Fishery Sciences, Nagpur, | 21.03.2018 | For Annual Social Gathering and College Visit |
| 45 | Dr. Shriniwas Vishwasrao, 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. Bannaliker, MAFSU, Nagpur | 25.05.2017 | For conducting ASRC meet. |



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|----|--|------------|---|
| 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 Cooperation | 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 BabuJagjivaramChhatravasYojna 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 spen layer sheds no. 2, 3, 4, & brooder sheds no. 1 of poultry science dept. at PGIVAS Akola. | 2.76 | RKVY & 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 | RKVY 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 | RKVY Project |
| 16 | Re-wiring of AP1 to AP6 qtrs & L1 to L6 Qtrs 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 | RKVY 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 Marath wadi Buffalo research project at COVAS, Udgir. | 61.00 | |
| 10 | Construction of Approach Road for hostel building at KNPVC Shirwal. | 141.00 | State Govt. Grant |
| 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 | |
| 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 | RKVY & 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 | RKVY & 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 RKVY scheme at College of Veterinary and Animal Sciences, Parbhani | 54.43 | RKVY & 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 | RKVY & URR |
| 29 | Construction of teaching Veterinary Clinical Complex for NVC, Nagpur. | 191.79 | RKVY & 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 | URR |
| 32 | Proposed renovation work for TVCC Goregaon Campus, Mumbai | 55.96 | RKVY |
| 33 | Providing Internal EI to Residential Bungalow Cum Office for Hon'ble Vice Chancellor MAFSU, Nagpur. | 20.29 | State Govt. Grant |
| 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 | 5,60,00,000 | 5,60,00,000 |
| 2. | Fishery Sciences College, Udgir | | |
| 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



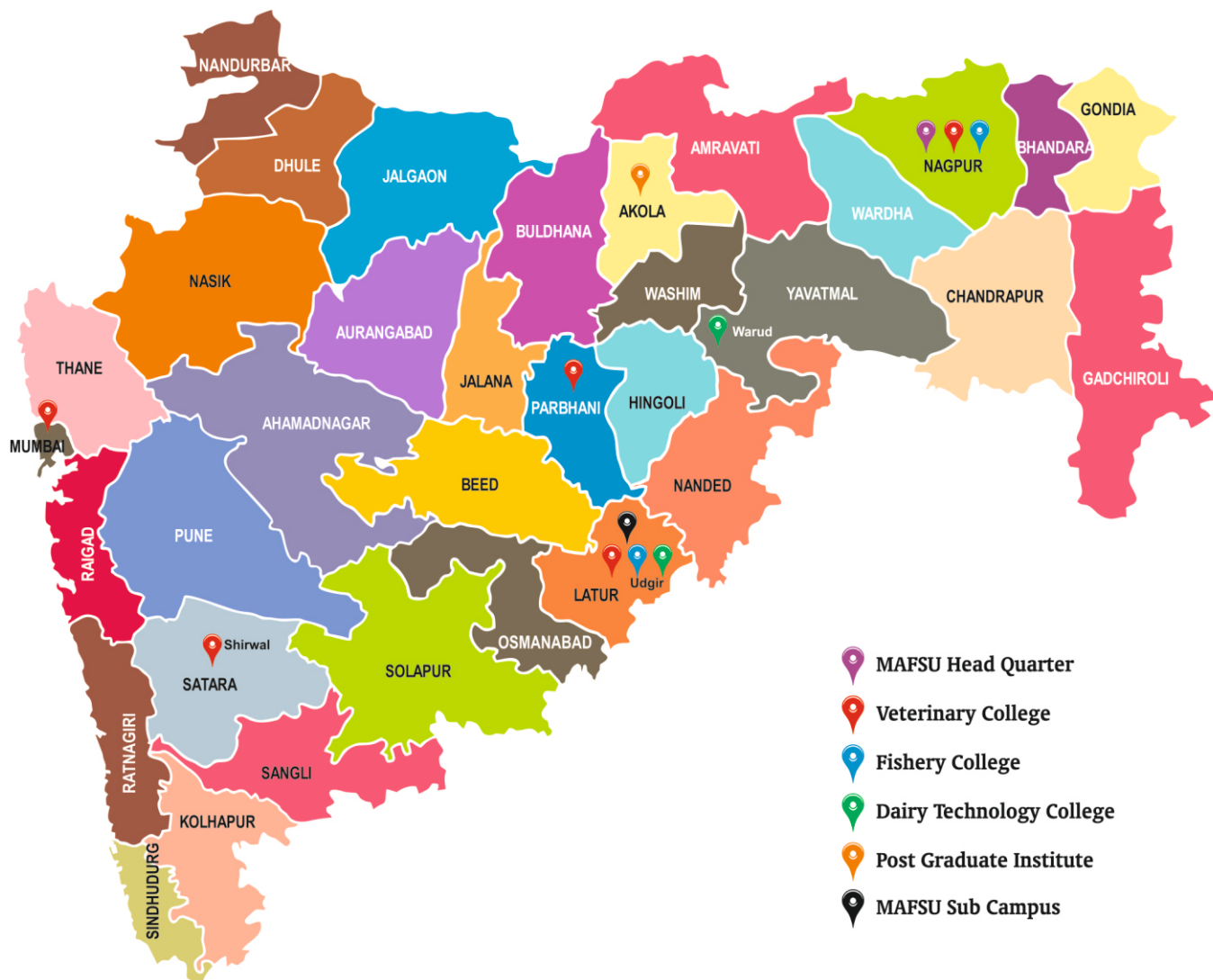
COLLEGE OF DAIRY TECHNOLOGY, UDGIR (Proposed Building)



COLLEGE OF FISHERY SCIENCE, NAGPUR



COLLEGE OF FISHERY SCIENCE, UDGIR



MAHARASHTRA ANIMAL AND FISHERY SCIENCES UNIVERSITY, NAGPUR

Futala Lake Road, Nagpur - 440 001

Phone : 0712-2511273 Email : registrarmafsu@yahoo.com Web : www.mafsu.in

Toll Free No.: 1800-233-3268