ANNUAL REPORT
2016-2017

MAHARASHTRA ANIMAL AND FISHERY SCIENCES UNIVERSITY, NAGPUR

ANNUAL REPORT 2016-2017

Patron

Prof. A. M. Paturkar
Vice-Chancellor

Editorial Board

Dr. A. P. Somkuwar
Director, Extension Education & Training

Dr. G. V. Dhume
Technical Officer

Dr. S. P. Landge
Asst. Professor, Extension Education & Technical Officer

Shri. P. M. Bagde
Junior Stenographer

PUBLISHED BY

Directorate of Extension Education and Training
Maharashtra Animal & Fishery Sciences University, Nagpur - 440 001

Phone : 0712 2980014, Fax : 0712 2511282

www.mafsu.in
Email : mafsudet@yahoo.co.in
Toll Free: **1800-233-3268**

Preface

Prof. A. M. Paturkar
Vice- Chancellor

I take this privilege to present the Annual Report of Maharashtra Animal & Fishery Sciences University for the year 2016-17 highlighting some of the important and significant achievements in the field of teaching research and extension activities of the university.

At the outset I am happy to state that the Indian Council of Agricultural Research have ranked Maharashtra Animal & Fishery Sciences University 16th amongst Agricultural University of the country and first in the state amongst the Agricultural Universities for the year 2016-17.

Imparting education through quality educational infrastructure is the motto of the university. Efforts are being made to improve the basic infrastructure to inculcate more hands-on training for the students. Job readiness and providing the technically trained manpower to the industry and other sector is being targeted to improve the employability of the students passing from the university. The university is poised to deliver the real benefits to the society through its students, research and extension endeavors. Livestock management and Diary Production is a two years diploma course being offered by the faculty of Lower Education for promoting entrepreneurship through affiliated 101 diploma schools recognized by the University in the State.

The Govt. is providing financial assistance to economically poor and backward class students as freeships and scholarships. The students of constituent colleges of the University have consistently registered excellent performance at All India ICAR-JRF test. During the year 2016-17, total of 46 students have qualified the test wherein 7 students were awarded with the JRF fellowship and 2 students bagged the institutional fellowship of CIFE, Mumbai. University is encouraging the students to participate in various students' welfare activities *viz.* Inter-University Sports/cultural festival/Avishkar (Research competitions), NSS activities. Special NSS camps are being organized at village level for disseminating the various technologies developed by the University.

I am please to inform that Hon'ble Trilochan Mohapatra the Director General and Secretary of Department of Agriculture Research and Education, ICAR delivered the convocation address on the Eighth Convocation of University held on 9th March 2017. The convocation was presided over by Shri. Chennamanemi Vidyasagar Rao, Hon"ble Chancellor of the University and Governor of Maharashtra. Hon"ble Chief Minister of Maharashtra Shri. Devendra Fadnavisji, Minister of Animal Husbandry and Pro Chancellor of the University, Shri Mahadevraoji Jankar, District Guardian Minister Shri Chandrashekhar Bawankuleji and graced the function as guest of honour.

In the 8th convocation 815 students were conferred the degrees among them were 567graduates, 237 Post-graduates and 11 Doctoral candidates students. Apart from this, 48 gold medals & 16 Silver medals were awarded for the outstanding academic performance to meritorious students. In this grand ceremony, MAFSU conferred its first ever Honorary Doctorate of Science (D.Sc.) degree upon Shri MohanJi Bhagwat, Sarsangh Chalak and an alumni of Nagpur Veterinary College for his outstanding contribution towards gaushalas, conservation of indigenous cow breeds and promotion of organic farming.

It is pride a moment for the university to share that 36 sponsored research projects with a total outlay of Rs. 3349.75 lakhs funded by various national, state and private agencies are in progress. A total of 16 research projects worth Rs. 774.95 lakhs were completed during the year 2016-17.

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 33 exhibitions and 367 farmer's scientist's interactions guided by the faculty of the University, 202 demonstrations were organized at the farmer's field. Hospital and ambulatory services are provided for medical treatment, surgical operations, Gynecological examinations and artificial inseminations. Total 1,57,120 cases were treated during the year through the college dispensaries and through the various animal health camps, 103 programmes on Akashwani and Doordarshan were presented on Animal Husbandry, Dairy Technology, Poultry, Fisheries.

The engineering department of the University has successfully completed work worth Rs. 667.44 lakhs. This wing of the University is now handling ongoing civil works worth Rs. 502.15 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.

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. I am also thankful to Hon'ble Executive Council for constructive support and suggestions for improving the functioning of the University.

Prof. A. M. Paturkar

INDEX

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.

Recently the Indian Council of Agricultural Research have ranked Maharashtra Animal & Fishery Sciences University as 16th amongst Agricultural University of the country, first in the state amongst the Agricultural Universities.

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) while 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.

The students of constituent colleges of the University have consistently registered excellent performance at All India ICAR-JRF test. During the year 2016-17, a total of 46 students have qualified the test and 7 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 students' welfare activities *viz*. Inter-University Sports/cultural festival/Avishkar (Research competitions), regular and special NSS activities as a learning experience.

To receive a professional degree is a dream of students and particularly the medal winning ones. Convocation provides this opportunity to the students. The Eighth Convocation of University was held on 9th March 2017. The graduates of 2014-15 & 2015-16 wre awarded in this convocation. The convocation was presided over by Shri. C. Vidyasagar Rao, Hon'ble Chancellor of the University and Governor of Maharashtra. Hon'ble Chief Minister of Maharashtra Shri. Devendra Fadnavisji, Minister of Animal Husbandry, Dairy Development & Fisheries Development and Pro-Chancellor of the University, Shri Mahadevraoji Jankar, Guardian Minister of Nagpur Shri Chandrashekhar Bawankuleji were the guest of honour and graced the function. Dr. Trilochan Mohapatra, Director General and Secretary of Department of Agriculture Research and Education, ICAR, delivered the convocation address. A total of 815 candidates from Veterinary, Dairy Technology and Fishey Science including 567graduates, 237 Post-graduates and 11 Doctoral candidates received their degrees. Apart from these 48 gold medals & 16 Silver medals were conferred upon the meritorious students for their outstanding academic performance. In this grand ceremony, MAFSU conferred its first ever Honorary Doctorate of Science (D.Sc.) degree upon Dr. Shri Mohanji Bhagwat for his outstanding contribution towards gaushalas, conservation of indigenous cow breeds and promotion of organic farming.

Research is an integral part of the University work and during 2016-17 a total of 36 sponsored research projects funded by various national, state and private agencies with a total outlay of Rs. 3349.75 lakhs were in progress. A total of 16 research projects worth Rs. 774.95 lakhs were completed during the report year.

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 in Sangli & Nagpur districts have been sanctioned to the University.

The University participated in 33 exhibitions and fairs with 367 farmer's scientist's interactions and 202demonstrations 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 1,57,120 cases including vaccinations through these services. Expert faculties from the University have delivered guidance using Electronic Mass Medias like radio and television through 103 programmes on animal husbandry, dairy technology, poultry and fisheries sector both in regional and State level radio and television stations.

The University has successfully completed the infrastructural work worth Rs. 667.44lakhs. This wing of the University is now handling ongoing works worth Rs. 502.15lakhs.

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 education in diverse branches of Veterinary Medicine, Animal Sciences, Fishery Sciences and Dairy Technology for further advancement in learning and prosecution of research in these areas.
- To undertake extension programmes in these sciences to benefit rural farmers in cooperation and in close coordination with state departments of Animal Husbandry, Dairy development and Fisheries, Govt. of Maharashtra, NGOs.
- To provide techno-businessmen to generate direct employment.
- To train unemployed youth for employment generation.

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)

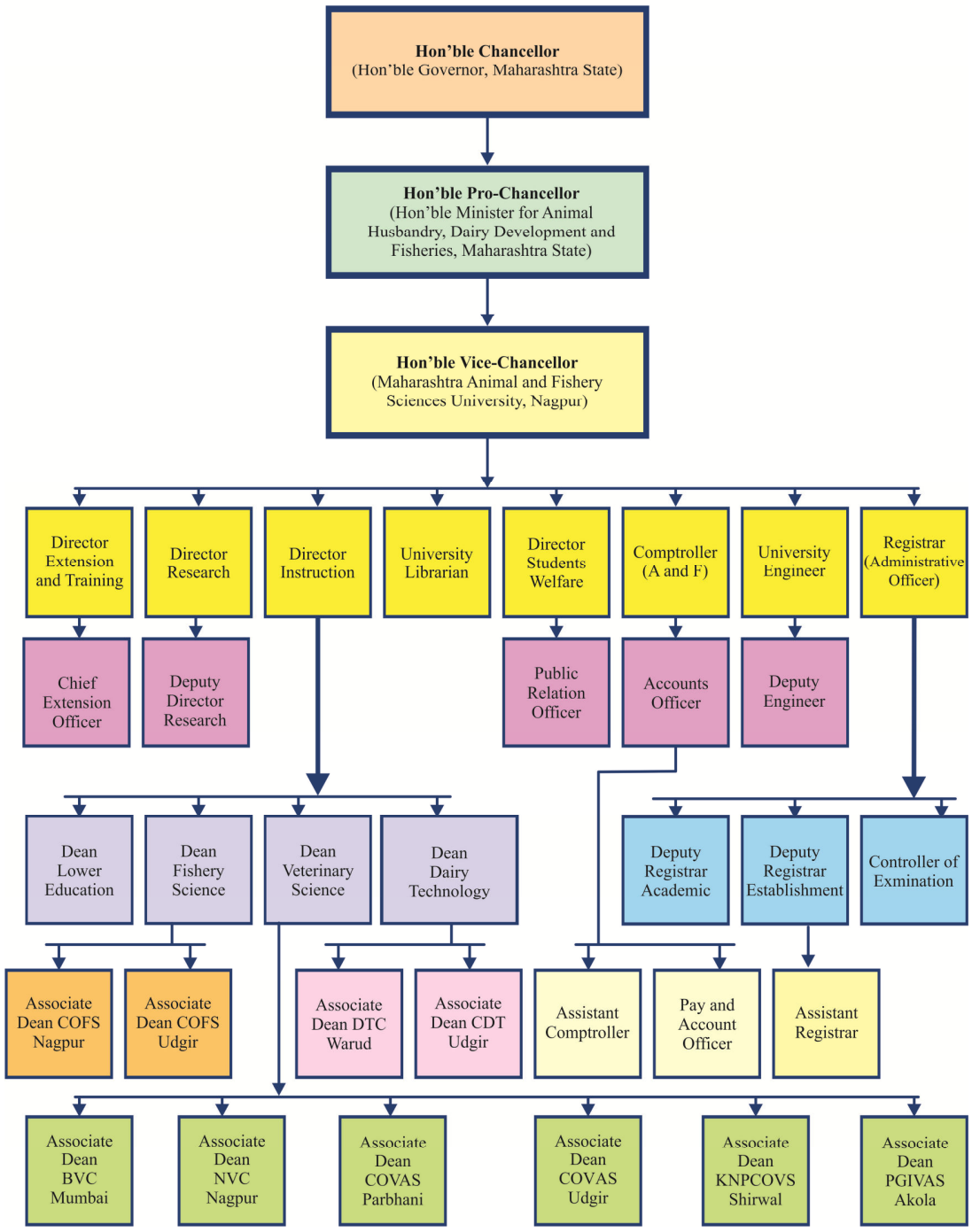
- Faculty of Veterinary & Animal Sciences -18
- Faculty of Dairy Technology - 06
- Faculty of Fisheries - 06

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

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
2016-17

Sr. No	Name/Designation	
1	Prof. A. K. Misra, Hon'ble Vice-Chancellor, Maharashtra Animal & Fishery Sciences University, Nagpur- 440 001	Chairman
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 & Field Director, Navegaon Nagzira Wild Life Sanctuary, Gondia - 441614	Member
	Conservator of Forests (Working Plan) Near Govt. Press, Zero Miles, Civil Lines, Nagpur - 440 001	Member
7	Shri. Arunkumar Narayanrao Patil, Managing Director, Dairyplant.com E/603, Nirman Palace, Andheri (East), Mumbai- 400 093	Member
8	Dr. V.V. Kulkarni, Director, National Research Centre on Meat, Hyderabad - 500092	Member
9	Dr. Sanjay K. Gavkare. General Manager (Technical), Ventri Biologicals, Venkateshwara Hatcheries Pvt. Ltd., Pune- 411 025	Member
10	Dr. Rajiv Raman Bhatkar Aquaculture and Fisheries Consultant, 9, Pushkar, Dadar (W), Mumbai - 400 028	Member
11	Dr. (Smt) Mandakini Prakash Amte Lok Biradari Prakalp, Hemalkasa, Gadchiroli- 442 710	Member
12	Dr. Rahul Vedprakash Patil Hon'ble MLA and Chairman, Shankar Sahakari Dudh Vyawsayik Sanstha, CIDCO, Aurangabad-430110	Member
13	Shri. Rajesh Gajanan Wankhede Om Gurudev Chandani Chowk, A/P: Sawada, Tal: Raver, Dist: Jalgaon - 425 502	Member
14	Shri. Baburao Uttam Bhosale A/P Shivajinagar, Tal. Kadegaon, Dist. Sangali - 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
20	Dr. M. V. Joshi, Dean, Faculty of Veterinary Science, MAFSU, Nagpur-440 001	Member
	Dr. A. S. Bannalikar, Dean, Faculty of Veterinary Science, MAFSU, Nagpur-440 001	Member
	Dr. N. P. Dakshinkar, Dean, Faculty of Veterinary Science, MAFSU, Nagpur-440001	Member
21	Dr. N. N. Zade, 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. R. S. Dalvi, Dean, Faculty of Fishery Sciences, MAFSU, Nagpur-440 001	Member
	Dr. P. T. Jadhao, Dean, Faculty of Fishery Sciences, MAFSU, Nagpur-440 001	Member
24	Dr. N. N. Zade, Director of Extension, MAFSU, Nagpur-440 001	Member
25	Dr. A. S. Bannalikar , Director of Research , MAFSU, Nagpur-440 001	Member
	Dr. M. V. Joshi , Director of Research , MAFSU, Nagpur-440 001	Member
26	Shri V. V. Rane, Registrar, MAFSU, Nagpur-440 001	Secretary
	Dr. A. S. Bannalikar, 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 2016-17

Sr. No	Name / Designation	Status
1	Prof. A. K. Misra] Hon'ble Vice-Chancellor, Maharashtra Animal & Fishery Sciences University, Nagpur- 440 001	Chairman
2	Dr. M. V. Joshi, Director of Research , MAFSU, Nagpur-440 001	Member
	Dr. A. S. Bannalikar, Director of Research, MAFSU, Nagpur-440 001	Member
3	Dr. N. N. Zade, Director of Extension & Training, MAFSU, Nagpur-440 001 Maharashtra Animal & Fishery Sciences University, Nagpur-1	Member
	Dr. A. P. Somkuwar, Director of Extension & Training, MAFSU, Nagpur-440 001	Member
4	Dr. M. V. Joshi, Dean, Faculty of Veterinary Science, MAFSU, Nagpur-440 001	Member
	Dr. N. P. Dakshinkar, 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. R. S. Dalvi, Dean, Faculty of Fishery Science , MAFSU, Nagpur-440 001	Member
	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
12	Dr. A. S. Bannalikar, Associate Dean, KNP College of Veterinary & Animal Sciences, Shirwal, Satara-412801	Member
	Dr. A. S. Ranade, Associate Dean, KNP College of Veterinary & Animal Sciences, Shirwal, Satara-412801	Member
13	Dr. R. S. Dalvi, Associate Dean, College of Fishery Sciences, Nagpur-440 001	Member
	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. A. P. Somkuwar, 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. M. R. Patil, Associate Dean, Dairy Technology College, Udgir Dist - Latur -413517	Member
18	Dr. R. N. Dhore, Head of Department, Animal Nutrition, P.G. Institute of Veterinary & Animal Sciences, Akola-444104	Member
	Dr. A. D. Deshmukh, Head of Department, Animal Nutrition, Nagpur Veterinary College, Seminary Hills, Nagpur-440 006	Member
19	Dr. A. S. Bannalikar, Head of Department, Veterinary Microbiology, KNP College of Veterinary & Animal Sciences, Shirwal, Dist. Satara-412801	Member
20	Dr. R.S. Dalvi, Head of Department, Veterinary Anatomy, Histology & Embryology, Nagpur Veterinary College, Seminary Hills, Nagpur - 440 006	Member
21	Dr. S. S. Kulkarni, Head of Department, Veterinary Physiology, College of Veterinary & Animal Sciences, Udgir, Dist. Latur- 413517	Member
22	Dr. N.P. Dakshinkar, Head of Department, Clinical Veterinary Medicine including Ethics and Jurisprudence Nagpur Veterinary College, Nagpur-440006	Member
	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
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
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
30	Dr. A.M. Paturkar, Head of Department, Veterinary Public Health, Bombay Veterinary College, Parel, Mumbai-400012	Member
31	Dr. U. D. Umrikar, Head of Department, Animal Breeding and Genetics including Biostatistics, Bombay Veterinary College, Parel, Mumbai -400012	Member
	Dr. M. P. Sawane, Head of Department, Animal Breeding and Genetics including Biostatistics, Bombay Veterinary College, Parel, Mumbai -400012	Member
32	Dr. J.M. Chahande, Head of Department, Livestock Production and Management, Nagpur Veterinary College, Nagpur - 440006	Member
	Dr. M. F. Siddiqui, Head of Department, Livestock Production and Management, College of Veterinary & Animal Sciences, Parbhani- 431402	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. Vaishali V. Banthiya, Head of Department, Veterinary and Animal Husbandry Extension, Nagpur Veterinary College, Nagpur-440006	Member
	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. R. S. Walse, Head of Department, Computer Science, Mathematics and Statistics, Dairy Technology College, Warud (Pusad), Dist-Yeotmal-445204	Member
39	Shri. G. N. Narnaware, Head of Department Dairy Economics, Extension & Management, Dairy Technology College, Warud (Pusad), Dist-Yeotmal-445204	Member
40	Dr. A. R. Sarode, Head of Department Dairy Microbiology, College, Warud (Pusad), Yeotmal-445204	Member
41	Shri. B. R. Kharatmol, Head of Department, Fisheries Biology, College of Fishery Science, Nagpur-440001	Member
42	Shri. S. S. Belsare, Head of Department, Aquaculture, College of Fishery Science, Nagpur-440001	Member
43	Shri. A. T. Tandale, Head of Department, Fisheries Processing Technology & Microbiology, College of Fishery Science, Udgir-413517	Member
44	Shri. S. B. Gore, Head of Department, Fisheries Engineering, College of Fishery Science, Nagpur-440001	Member
45	Dr. P. A. Telvekar, Head of Department, Fisheries Resources, Economics, Statistic & Extension Education, College of Fishery Science, Nagpur-440001	Member
46	Dr. J.G.K. Pathan, Head of Department, Fishery Hydrography, College of Fishery Science, Nagpur-440001	Member
47	Shri. V. V. Rane, Registrar, MAFSU, Nagpur-440 001	Secretary
	Dr. A. S. Bannalikar, 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.a	Veterinary Anatomy, Histology & Embryology	1.b	Veterinary Physiology
1.c	Veterinary Biochemistry including Clinical Biochemistry	1.d	Veterinary Pharmacology and Toxicology
1.e	Veterinary Parasitology	1.f	Veterinary Microbiology & Biotechnology
1.g	Veterinary Pathology	1.h	Veterinary Public Health
1.i	Animal Nutrition	1.j	Animal Breeding & Genetics including Biostatistics
1.k	Livestock Production & Management	1.l	Livestock Products Technology
1.m	Animal Reproduction, Gynecology and Obstetrics	1.n	Veterinary Surgery and Radiology
1.o	Clinical Veterinary Medicine including Ethics and Jurisprudence	1.p	Veterinary Epidemiology & Preventive Medicine
1.q	Veterinary & Animal Husbandry Extension	1.r	Poultry Science

3.D.2. Faculty of Dairy Technology

a	Dairy Technology	b	Dairy Engineering
c	Dairy Chemistry, Biochemistry and Food Technology	d	Dairy Microbiology
e	Dairy Economics, Dairy Extension and Management	f	Computer Science, Mathematics and Statistics

3.E.3. Faculty of Fisheries

a	Fisheries Biology	b	Aquaculture
c	Fisheries Technology	d	Fisheries Engineering
e	Fisheries Resources, Economics, Statistics and Extension Education	f	Fishery Hydrography

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 advice the Vice-Chancellor and Executive Council on all research matters. The Vice-Chancellor is the ex -officio Chairman and Director of Research is ex-officio secretary to the Research Council.

Research Council Members 2016-17

Sr. No.	Name & Address	Status
1.	Hon'ble Vice Chancellor, Maharashtra Animal & Fishery Sciences University, Nagpur-440001	Chairman
2.	Dr. N. P. Dakshinkar, Director of Instruction & Dean (Faculty of Veterinary Science) MAFSU, Nagpur - 440 001	Member
3.	Dr. N. N. Zade, Director, Extension Education & Training, MAFSU, Nagpur - 440 001	Member
4.	Dr. N. N. Zade, Dean, Faculty of Lower Education, MAFSU, Nagpur - 440 001	Member
5.	Dr. R. S. Dalvi, Dean, Faculty of Fishery Science, MAFSU, Nagpur - 440 001	Member
6.	Dr. S. P. Changade, Dean, Faculty of Dairy Technology, MAFSU, Nagpur - 440 001	Member
7.	Dr. Dinesh T. Bhosle, Former Chairman CLAFMA 111, Mittal Chambers, 11th Floor, 228 Nariman Point, Mumbai - 400021	Member
8.	Dr. H. D. Sarma, SO(G), RBHSD Bhabha Atomic Research Centre, Bio-Science Group, Trombay, Bombay - 400085	Member
9.	Dr. D. D. Parkale, Managing Director, Punyashlok Ahilyadevi Maharashtra Mendhi Va Sheli Vikas Mahamandal Ltd. Mendhi Farm, Pune - 411016	Member
10.	Dr. Arun Kumar Rawat, Director, Department of Biotechnology, Ministry of Science &Technology, GoI, New Delhi - 110003	Member
11.	Dr. Vijay Makhija, Member, Poultry Federation of India, Regional Marketing and Communication APAC-ANH, DSM Nutritional Products, Ambernath (E) Thane - 421501 (Mumbai)	Member
12.	Dr. R. D. Kokane, Member, Indian Diary Association, Vikhroli (E), Mumbai- 400083	Member
13.	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
14.	Commissioner Agriculture, M.S. Commissionerate of Agriculture, Central Building, Pune - 411001	Member
15.	Commissioner of Animal Husbandry, M.S. Deptt.of Animal Husbandry, Opposite Spicer College, Aundh, Pune- 411007	Member
16.	Commissioner of Dairy Development, M.S. New Administrative Building, Worli Seaface, Mumbai - 400018	Member
17.	Commissioner of Fisheries, M.S. Taraporewala Aquarium, NetajiSubhash Road, Charni Road, Mumbai - 400002	Member
18.	Director of Research, Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, Ratnagiri - 415712	Member

19.	Director of Research, Marathwada Agriculture University, Parbhani - 431402	Member
20.	Director of Research, Mahatma PhuleKrishiVidyapeeth, Rahuri - 413722	Member
21.	Director of Research, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola - 444104	Member
22.	Associate Dean, Nagpur Veterinary College, Seminary Hills, Nagpur - 440006	Member
23.	Associate Dean, Bombay Veterinary College, Parel, Mumbai - 400 012	Member
24.	Associate Dean, College of Veterinary & Animal Sciences, Parbhani-431 402	Member
25.	Associate Dean, College of Veterinary & Animal Sciences, Udgir, Latur-413517	Member
26.	Associate Dean, KNP College of Veterinary Sciences, Shirwal, Dist. Satara-412 801	Member
27.	Associate Dean, PG Institute of Veterinary & Animal Sciences, Akola-444104	Member
28.	Associate Dean, College of Dairy Technology, Pusad, District Yeotmal-445 204	Member
29.	Associate Dean, College of Dairy Technology, Udgir, District Latur- 413 517	Member
30.	Associate Dean, College of Fishery Science, Telangkhedi, Nagpur - 440 001	Member
31.	Associate Dean, College of Fishery Science, Udgir, District Latur - 413 517	Member
32.	Dr. A. S. Bannalikar, Director of Research, MAFSU, Nagpur- 440 001	Secretary

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 2016-17

Sr. No.	Name & Designation	Status
1.	Prof. A. K. Misra, Hon'ble Vice-Chancellor, MAFSU, Nagpur-440001	Chairman
2.	Dr. A. S. Bannalikar, Director (Research), MAFSU, Nagpur- 440001	Member
3.	Dr. N. P. Dakshinkar, Director, Director (Instructions) & Dean (Faculty of Veterinary Science), MAFSU, Nagpur-440001	Member
4.	Dr. N. N. Zade, Dean, Faculty of Lower Education, MAFSU, Nagpur-440006	Member
5.	Dr. S.P. Changade, Dean, Faculty of Dairy Technology, Warud, Ths. (Pusad), District : Yavatmal - 445 204	Member
6.	Dr. R. S. Dalvi, 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, 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 & Animal Sciences, Shirwal, Dist-Satara-401802	Member
18.	Associate Dean, Dairy Technology, Warud, Ths. (Pusad), Yavatmal - 445 204	Member
19.	Associate Dean, College of Dairy Technology, Udgir, District Latur - 413 517	Member
20.	Associate Dean, College of Fishery Sciences, Nagpur - 440001	Member
21	Associate Dean, College of Fishery Sciences, Udgir, District Latur - 413 517	Member
22.	Director of Extension Education, Dr. Panjabrao Krishi Vidyapeeth, Akola - 444 004	Member
23.	Director of Extension Education Dr. Balasaheb Sawant Krishi Vidyapeeth, Dapoli, Distt - Ratnagiri - 415712	Member
24.	Director of Extension Education Vasantrao Naik Marathwada Agriculture University, 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. Exrension), ICAR, New Delhi	Member
27.	Dr. A. V. Harikumar, Senior Manager (AH), NDDB, 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, Punyashloh Ahilyadevi Sheep & Goat Development Board, Pune	Member
30.	Dr. Dinesh T. Bhosale Past-Chairman of CLFMA of India, CLFMA of India, Nariman Point, Mumbai - 400 021	Member
31.	Dr. Ravindra Hari Patil Entrepreneur in Poultry Breeding & Hatchery Business, Jalgaon - 425002	Member
32.	Dr. G.S. Rajorhia, Vice President IDA, Urban Estate, Karnal-132 001	Member
33.	Dr. P. Sivaswaroop, Regional Director, IGNOU, Regional Centre, Amravati Road, Nagpur- 440033	Member
34.	Shri. Ashok Mankar, 196, 'Krutarth', Medical Square, Untakhana, Nagpur-440 009	Member
35.	Dr. Sharad N. Bharsakale, Shri Krupa Poultry Feed, F-38, MIDC, Amaravati	Member
36.	Shri. Sunil Mansinghka Chief Coordinator, Go-Vigyan Anusandhan Kendra, Mahal, Nagpur-440 032	Member
37.	Dr. N. N. Zade, Director, Extension & Training, MAFSU, Nagpur-440001	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	04	07
2.	Bombay Veterinary College, Mumbai	128	84	44
3.	Nagpur Veterinary College, Nagpur	109	80	29
4.	College of Veterinary & Animal Sci., Parbhani	116	60	56
5.	College of Veterinary & Animal Sci., Udgir	80	40	40
6.	KNP College of Veterinary Science, Shirval	85	45	40
7.	Post Graduate Institute of Vet& Ani. Sci., Akola	51	29	22
8.	Dairy Technology College, Warud (Pusad)	36	14	22
9.	Dairy Technology College, Udgir, Dist. Latur	18	08	10
10.	College of Fishery Science, Nagpur	16	10	06
11.	College of Fishery Science, Udgir	15	09	06
12.	Cattle Breeding Farm, Igatpuri	04	04	00
13.	Cattle Breeding Farm, Nagpur	04	04	00
14.	Cattle Breeding Farm, Udgir	04	03	01
15.	Cattle Breeding Farm, Borgaon Manju (Akola)	04	02	02
16.	University Sub-Centre, Udgir	04	03	01
	Total	**685**	**399**	**286**

4. B. NON TEACHING OFFICER / EMPLOYEES

Sr.No.	Establishment	Sanctioned	Filled	Vacant
1.	University Head Quarter, Nagpur	169	66	103
2.	Bombay Veterinary College, Mumbai	231	112	119
3.	Nagpur Veterinary College, Nagpur	163	85	78
4.	College of Veterinary & Animal Sci., Parbhani	163	80	83
5.	College of Veterinary & Animal Sci., Udgir	122	44	78
6.	KNP College of Veterinary Science, Shirval	143	58	85
7.	Post Graduate Institute of Vet & Ani. Sci., Akola	79	29	50
8.	Dairy Technology College, Warud (Pusad)	48	29	19
9.	Dairy Technology College, Udgir, Dist. Latur	19	05	14
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	09	21
13.	Cattle Breeding Farm, Nagpur	34	18	16
14.	Cattle Breeding Farm, Udgir	25	10	15
15.	Cattle Breeding Farm, Borgaon Manju (Akola)	37	14	23
16.	University Sub-Centre, Udgir	13	06	07
	Total	**1315**	**581**	**734**

Total strength = (A+B) = 685 + 1315 = 2000

5

INTRODUCTION

5.A. BOMBAY VETERINARY COLLEGE, MUMBAI

Bombay Veterinary College was established in 1886, when British were ruling India. Horses and bullocks were the major means of transportation in those days. Horses were also required in military. 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.

Bombay Veterinary College possesses two campuses; Parel 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 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. Over the years the Institute has developed liaison with the educational institutes, private sectors and industry. The expanse of Mumbai in British era was limited upto Sion and Bandra Island. However, now mumbai is expanded many times what it was in the beginning of 20th century. Hence, development at Goregaon campus through institutions of various veterinary and animal husbandry related activities and providing services to the farmers and animal owners on large scale is in focus of the institute.

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.

Various extension services are provided to the rural farmers through organization of various trainings, demonstrations, animal health camps and NSS activities. Regular visits to 5 villages viz. Tarankhop, Johe, Tembhri, Ajivali and Awas of Raigadh District under "Mera Gaon, Mera Gaurav" scheme is implemented every month. Some of the services that are routinely provided to the field & practising veterinarians include routine checking of clinical specimens for microbiological, parasitological, bio-chemical profile, providing diagnostic facilities such as sonography, laparoscopy, X-rays examination, analysis of feed, consultancy to pharmaceutical & feed industry. Besides, short term training programmes on various aspects of veterinary medical treatment and animal husbandry are organized periodically.

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 from 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.

Students are also encouraged to participate in extra-curricular activities such as NCC, NSS, animal health camps to provide expertise services to adopted villages, development of personality and communication skill, sports and cultural activities. 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 provide adequate opportunities to the students to acquire skills pertaining to management and health care aspects of livestock as well as poultry and equines. Besides these activities, the hands on training to students, livestock owners, farmers, unemployed youths, rural women and small entrepreneurs are also arranged throughout the year. There are three hostels (one each to accommodate UG boys, girls and PG students). One more hostel for girls is on the verge of completion. Students also have an exposure to production of ready to eat products from milk and meat.

In the recent past, ICMR and ICAR, New Delhi has approved a project on "Center for Zoonoses" under Niche Area of Excellence the umbrella of this college wherein infrastructure as well as instruments / equipments have been procured from the financial assistance received from the ICAR. The training programmes for the field veterinarians / farmers are regularly arranged. Experts are deputed from time to time for attending wild life cases under the jurisdiction of institute as a commitment for saving endangered species. Wild Life 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. The Animal Ambulance facility has been made available for transportation of ailing livestock from their doorstep to the clinics. College has Poultry Science Research and Training Centre for imparting training for the benefits of students and farmers. This centre has been developed under RKVY Project. The college has established the "Goat Farmers Club" and "Poultry Farmers Club" for providing solution to personnels involved in this sector.

During this year, the collaboration with certain national as well as international institutes have been established by certain departments for faciliting and / or exchange of research ideas by the college. Similarly, with the collaboration of Ayurvet and MAFSU, Nagpur installation of first Hydroponic machine at Instructional Livestock Farm Complex of the college was done on 25th April 2016.

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, 5 years w.e.f. 1995-96 and 5.5 years after 10+2 pattern w.e.f. 2016-17; 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. The college is also offering Ph.D. degree in some disciplines. By considering the demand of supporting staff for their veterinary dispensaries, private poultries, milk collection centres & for enhancing self-employmment, college is undertraking Livestock Management & Dairy Production Diploma in 19 schools. The college is also conducting extra-mural research projects for addressing area-based problems for drawing concrete solutions. During P.G. programme, students also undertaking research in their respective disciplines which are also need based.

For taking the technology to farmer's doors, for making change in knowledge, skill and behaviour extension activities like celebration of days, adopted village scheme, Mera Gaon Mera Gaurav, health camps, trainings, demonstrations are routinely organised. For covering large mass, academic staff member's delievering their scientific inputs through radio, TV, CDs, DVDs and social media like WatsApp. Also, experts attend large

number of telephonic calls for advice. With the formation of Maharashtra Animal & Fisheries Sciences University, Nagpur this college is now a constituent unit of MAFSU.

5.D. 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 institutions 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 2016-17 as usual was excellent. Out of the total 32 students completing their B.V.Sc. & A.H. this year, three (>15%) were selected for ICAR JRF.

The institute made a significant progress towards infrastructure development during the year under report. A grant of Rs. 9.25 Lakh received from ICAR was utilized fully for strengthening the facilities required for teaching, research and students' amenities. The institute also took up the work of campus beautification and as a part of this the duck pond, fountain and installation of mashal was all set in front of the TVCC building.

One RKVY project on "Prevention and therapeutic management for diseases causing reproductive failures in animals" that was sanctioned during 2014-15 with a total outlay of Rs. 132 Lakh is in progress. Also the research project entitled "Association of Sperm Mitochondrial Functional Markers with Semen quality traits in Murrah buffalo" sanctioned during 2015-16 with a toatal outlay of Rs. 30 Lakh by ICAR is in progress.

The institute continued to be active in carrying out extension education work during the year 2016-17 through organization of training programmes for farmers, entrepreneurs and veterinarians, health camps, participations in exhibitions, farmer's visits, radio talks, television programmes, publication of popular articles etc. This year, a total of 17 training programmes were organized for farmers and entrepreneurs on different topics *viz.* modern goat farming, modern dairy farming, commercial poultry farming, farming of other avian species and milk and milk products processing. A total of 563 farmers and entrepreneurs were trained in these programmes. One technical refresher training and diagnostic imaging training organised for Livestock Development Officers and Assistant Commissioners of Department of Animal Husbandry in which a total of 42 officers were trained. National Model Training Course on "Use of ICT Tools & Communication Skills for strengthening Livestock Extension Services" for state functionaries was organised. This training programme was sponsored by Ministry of Agriculture, Cooperation & Farmers Welfare, New Delhi. Besides this, the institute also organized two workshops on "Equine Surgery" and "Fundamental in Veterinary Orthopaedics-Part II" for field veterinarians.

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

The College of Veterinary & Animal Sciences, Udgir was established on 17th Sept., 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 library has been strengthened by various facilities like e-library, CeRA facility for easy access of e-resources to PG students and staff members, intranet facility to strengthen internal communication for effective academic liason. The Boys' hostel facility has been strengthened and forfeited with solar water heater, water purifiers and entertainment facility. Gymkhana facilities are strengthened with a well established gymnasium, playgrounds, musical instruments, etc. Training and Placement cell has been working efficiently to guide and assist the students in getting job placement.

A well facilitated Teaching Veterinary Clinical Complex is imparting diagnostic services to livestock owners even in surrounding districts of Maharashtra and border region of Karnataka state. Facility of in patients

ward has been created, facilitating observations and post operative treatment in In-patient wards, saving transport cost of livestock, as well as care and follow up of ailing animals.

To disseminate technologies, a livestock museum, alongwith various demonstration units *viz*. Azolla, Vermi-compost, Bio-energy, fodder variety have been created at Cattle breeding farm. The college staffs is providing expert consultancy services to Siddharth Zoo, Aurangabad, Gorakshan centres, various farms and units as well.

From 2016 PG programme in all and PhD programme in some disciplines has been started. The College has completed 8 externally funded (State / Centre) research projects and 27 agency research schemes, so far.

The various departments of college have done remarkable research work in various fields viz., Climatic studies, Osteomalacia in buffaloes, diabetes mellitus in buffaloes, PPR in goats, Dermatomycosis in cattle, Leucoderma in buffalo, Babesiosis in cattle, Shelter management, DNA rabies vaccine, general anaesthesia in canines, molecular characterization of *Clostridium chauvoei*, water deprivation, milk performance recording system in Deoni, mycotoxin binder, induction of post partum estrus, mineral profile, etc.

The most specific development in the department department of Physiology is that it has its own IMD approved observatory, making the college unique. The records in observatory have proved helpful in furnishing data to researchers in the institute and outside also. It is helpful for the climatic considerations of animal physiology. The department has therefore been successful in heading the research by the study of animals in the climatic perspective, with an intention to determine the climatic profile of the region for suggesting the modifications in management, disease control and fodder development.

The college is also providing services for analysis of clinical and research samples for study of blood constituents with aid of expertise and sophisticated analysers.

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

Post Graduate Institute of Veterinary and Animal Sciences (PGIVAS) was established in the year 1970 under administrative and financial control of Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola, 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 all eleven departments were metamorphosed and started functioning as an independent constituent Institute of newly formed Maharashtra Animal and Fishery Sciences University, Nagpur, renamed as Post Graduate Institute of Veterinary and Animal Sciences (PGIVAS), Akola

The institute has 15.47 hectors 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 have well developed & equipped laboratories alongwith Poultry Farm, Purnathadi Buffalo Instructional Unit and Teaching Veterinary Clinical Complex (TVCC, Hospital). In current year, there are 24 M. V. Sc. and 03 Ph.D. students undergoing their degree programme. The institute library is having good collection of reference books, journals etc. The library is also having OPAC system for efficient and easy searching the books as well as intranet and internet facility to students with 10 computer sets. 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.

Research areas are identified on the basis of field problems of immediate importance, value tech generation is urgent requirement. Such research areas include cattle, dairy, poultry farming etc. for optimum productivity of livestock and better health cover related to various animal species. The research in these areas is conducted by the faculty or with the help of PG and Ph.D. students. Institute has developed some novel technologies like Pelleted complete feed for goat, Embriyo Transfer Technology calf produced, 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.

Institute has developed good rapport with local farmers and livestock keepers through implementation of various extension programmes like Farmers Training Programme, Demonstration, Radio talks, Animal Health Camps, Extension programmes were implemented through extramural projects and Agriculture Training Management Agency (ATMA), Akola.

This year one day farmers training programmes, Dharmala Swachhata Abhiyan- (awareness cum demonstration programmes for cleanliness of common livestock water tank) in villages of Akola district, Radio talks (Kisanwani Programme), Animal Health Camps in Trible area under TSP Project and publication of leaflets, booklets, books etc. were undertaken with aegis of ATMA, Akola.

5.G. COLLEGE OF DAIRY TECHNOLOGY, WARUD

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. Construction of the administrative building of the Institute was completed 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. College has well developed classroom with teaching aids using ICT technologies. Since last 10 years at least 10 students per year are qualifying JRF offered by ICAR through entrance. College students are participating in Avishkar, Indradhanushya & Ashwamedh, inter-university research, cultural and sports events organized at state level every year. The deserving students of the College are awarded the various scholarships and free ships instituted by the Government of India.

Till date college has completed research projects worth Rs. 225 lakhs from various funding agencies like DBT, DST and RGSTC etc. With the received grants college departments has developed state of art equipment facilities like HPLC, TPA analyzer, AAS, Rheomat etc. College is running its PG program since last four years and a batch of 4 PG students is recently passed out.

The college has organized 35 extension training programs during the report period. Faculty from the institute is regularly engaged in various extension activities *viz*. workshops, on farm demonstrations, radio talks etc.

College has its own Students Training Dairy Plant which is run by staff and students. As per IVth Dean Syllabus a complete semester of the students of B. Tech. (DT) is to be spent in training dairies to develop production and practical skills among them. At present plant is having the capacity to process 300 lit/hr milk, but due to fluctuation in availability of milk and milk collection volumes; daily milk processing of 30-100 liters/day is done with manufacture of various traditional indian dairy products.

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). College started functioning in the small building of COVAS, Udgir as temporary arrangement. 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.

College is offering B. Tech. (Dairy Technology), a four year degree course based on ICAR pattern and having the intake capacity including ICAR sponsored 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 one industrial training at multi-product dairy plant all over the country. College has adopted Vth Deans' syllabus from this year to newly admitted students. Beside this for efficient education, institute provides facilities such as internet, intranet, website, sport grounds and its equipments. Facilities for the students *viz*. transport, tea/coffee, photocopy, lamination, spiral binding, Wifi campus, Optical Fiber Cable, CCTV, etc. are made available.

College library has collection of 3843 books. In addition to this, library is dealing with 18 research and extension related monthly magazines and periodicals, 14 Marathi and English news papers. The books and magazines for competitive examinations are also available in the library. Department of Computer Science consists of 34 computers and all are with internet facility and made available for staff/students of institute. The class rooms are equipped with audio visual aids such as LCD projector, plasma TV and Interactive white boards with internet facility-2MBPS through optical fiber. College gymkhana has good collection of sport materials for national and western games. Play grounds for outdoor games basketball, volleyball, badminton, kabaddi, kho-kho are available in the premises. The facilities for indoor games such as Table-Tennis, Chess and Carrom are also made available to the students. For overall development of students different programs viz. Shree Ganesh festival, College foundation day, Fresher's function and orientation programme for newly admitted students and farewell function for the final year outgoing students are being organized.

To execute the different extension activities such as trainings/workshops for milk producer, rural unemployed youth and rural women empowerment, a small Training and Extension cell was developed at the college. The training hall is well equipped with various extension aids , like moving trans-slide, LCD Projector, flex boards, khoa machine, juice dispenser, Sound system, Television; 03 glass fabricated Models, 14 Rollup banners, 12 Informative charts, 20 eco solvent boards etc. Further it is point out that, two students from the first batch of the college secured 1st and 3rd rank in All India Entrance Examination for Post Graduate Studies conducted by ICAR during 2012, 2nd rank 2013, 3rd rank during 2014 and 5th rank in ICAR AIEEA 2015-16.

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, thus, is an important tool to alleviate rural poverty. Keeping this in view, the Government of Maharashtra established the College of Fishery Science at Nagpur in October, 2006 under the Maharashtra Animal and Fishery Sciences University (MAFSU), Nagpur. 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.

Since its inception, the College of Fishery Science, Nagpur is striving to impart quality education among the Bachelor of Fisheries Science (B.F.Sc.) students so as to develop their professional competency to cater growing needs of the aquaculture and fish processing industry in the state. In this context, the college has created and strengthened the facilities for teaching and conduct of hands on training for B.F.Sc. students. The college has established the circular hatchery during its year of inception for conducting of practical demonstrations on freshwater breeding and seed production, for the students as well distribution of fish seed among fish farmers of the region. The college has like field laboratory; feed storage room, student's accommodation room etc. on fish farm facilities. The other equipments the college has procured include refrigeration trainer, Automatic Protein/fat estimation system and PCR unit etc. The classrooms are equipped with modern audio-visual aids like with LCD projectors and computers. The 1300 books with college library are transferred to central library facility of the

University during 2016-17. The renovation of fish product preparation laboratory and fish smoking unit at the college has been a facility to impart knowledge on the fish preservation and preparation of value added fish products. The creation of 'Magur' fish seed hatchery at college fish farm has facilitated the production and rearing of 'Magur', which is on the verge of extinction.

Circular Carp Hatchery help in rearing of fish seed in farm ponds an the students are actively involved in the fish breeding, rearing, water quality management, feed management and fish health management. It has also made a provision to fish farmers and fishermen of the region.

The seven batches of B.F.Sc. students (total 130) have been graduated from this college so far. The college students have regularly excelled in the All India Post Graduate Entrance Examination (AIEE-PG) conducted by ICAR, New Delhi and many of them are pursuing their master degree from Central Institute of Fisheries Education, Mumbai and various fisheries colleges in the country.

The College of Fishery Science, Nagpur has undertaken research schemes involving development and refinement of fish farming technologies with view to focus on local region.

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 six batches have been passed out from its inception. The college building is furnished with state - of - art design including total six departments, lecture halls, well equipped laboratories, Library as per the ICAR's norms, Fish Museum, Computer cell, Fisheries Information Centre, Examination hall, Office section, meeting hall. Facility of Gymnasium is also created for students where indoor games are provided.

Integrated Ornamental Fishery Unit and Value Added Fish Product Development Centre are established in financial assistance with National Fisheries Development Board, Hyderabad. These units are mainly established to conduct extension activities such as training program, demonstration etc.

College is offering four years Batchelor of Fishery Science (B.F.Sc.) degree course which includes total eight semesters. In academic year 2016-17, college has adopted the syllabus recommended by V Deans Committee for first year students. Final year students have completed Hands on Training programme at College and In plant training at Ratnagiri as well as at Mumbai and Surat under Fish Processing Technology module and Aquafarming module, respectively. Total four intramural projects are being carried out.

Under the campaign of Maharashtra Animal & Fishery Sciences University, Nagpur, College of Fishery Science, Udgir has organized Farmers Awareness Campaign in farmers suicide affected area of Marathwada region. Farmers were advised to adopt integrated farming practices like poultry cum duck cum fish culture, to increase income levels. In 2016-17, the campaign was conducted in 16 villages namely Ankole, Chincholirao, Gangapur, Kandapur, Savargaon, Shirur, Uti, Vasangaon, Chincholiraowadi, Valsangvi, Aambegaon, Bodka, Aajni, Morewadi, Tiwatgyal and Kolapa in Latur district. Technical guidance was provided to the farmers by the college experts.

On the occasion of World Fisheries Day i.e. on 21/11/2017, Farmers Scientist Forum was established by the college. The programme was organized at Maharashtra Fish Seed Centre, Kesapuri, Tq. Majalgaon, Dist. Beed. Many farmers have actively participated in the interaction session with experts.

One day workshop on "Mission Fingerling Stocking" was organized at College of Fishery Science, Udgir in joint collaboration with Regional Deputy Commissioner of Fisheries, Latur Region on 24/03/2017. Total 170 fishermen and fish farmers from Latur, Nanded, Osmanabad and Hingoli District were present in the workshop. In addition to this, various extension activities like workshop, farmer meet, exhibition, field demonstrations, and lectures were organized by the college to impart technical knowhow to the farmers and entrepreneurs.

6

EDUCATION

6. A. HIGHER EDUCATION

Maharashtra Animal and Fishery Sciences University is imparting five years degree as Bachelor of Veterinary Science and Animal Husbandry (B.V.Sc. & A.H.), 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.

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 of faculties; 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 students 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 2016-17

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	5	4	9	6	5	11	5	4	9	5	2	7	4	2	6	25	17	42
ST	3	2	5	3	3	6	3	1	4	3	1	4	3	1	4	15	8	23
VJ/DT(a)	2	0	2	1	2	3	0	2	2	1	1	2	1	0	1	5	5	10
NT(b)	2	0	2	1	1	2	1	1	2	0	1	1	0	1	1	4	4	8
NT(c)	1	1	2	2	1	3	1	1	2	1	1	2	2	0	2	7	4	11
NT(d)	1	0	1	2	0	2	1	1	2	1	0	1	1	0	1	6	1	7
OBC	9	4	13	6	10	16	9	4	13	7	3	10	7	3	10	38	24	62
UR	25	15	40	31	19	50	29	13	42	23	11	34	20	13	33	128	71	199

NRI/FN/ PIO Quota (Exclusive) @	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	1	1	2
NRI/FN/ PIO vacant seats filled through State Merit	0	0	0	1	0	1	1	0	1	1	0	1	3	2	5	6	2	8
GOA**	0	0	0	2	1	3	0	0	0	0	0	0	2	1	3	4	2	6
J&K#	1	0	1	0	1	1	0	0	0	0	0	0	0	0	0	1	1	2
VCI*	6	0	6	7	0	7	4	0	4	2	1	3	2	0	2	21	1	22
Total	**55**	**26**	**81**	**63**	**44**	**107**	**54**	**27**	**81**	**44**	**21**	**65**	**45**	**23**	**68**	**261**	**141**	**402**

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

PIO : Person of Indian Origin **NRI :** Non Residiential Indian **FN :** Foreign National **UR :** Unresrved

6. A. 2. Faculty of Dairy Technology

Admission Strength, Admitted Students for B.Tech (DT) Degree Course for the year 2016-17

Cast Category	**CDT, UDGIR**			**DTC, WARUD**			**TOTAL**		
Intake Capacity	**30+5*+1#**			**30+5*+1#**			**60+10*+2#+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	1	1	2	2	2	4
VJ/DT(a)	1	0	1	1	0	1	2	0	2
NT(b)	1	0	1	0	1	1	1	1	2
NT(c)	0	1	1	1	0	1	1	1	2
NT(d)	1	0	1	0	0	0	1	0	1
OBC	3	2	5	4	2	6	7	4	11
UNRESERVED	11	4	15	9	6	15	20	10	30
NRI / FN / PIO@	0	0	0	1	0	1	1	0	1
ICAR Quota*	2	0	2	2	0	2	4	0	4
Total	**23**	**9**	**32**	**22**	**11**	**33**	**45**	**20**	**65**

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

6. A. 3. Faculty of Fishery Science

Admission Strength, Admitted Students for B. F. Sc. Degree Course for the year 2016-17

Category	COFS, NAGPUR			COFS, UDGIR			TOTAL		
Intake Capacity	30+5*+1#			30+5*+1#			60+10*+2#+10@		
Gender	M	F	T	M	F	T	M	F	T
SC	3	1	4	3	1	4	6	2	8
ST	2	0	2	1	1	2	3	1	4
VJ/DT(a)	0	1	1	1	0	1	1	1	2
NT(b)	0	1	1	1	0	1	1	1	2
NT(c)	1	0	1	0	1	1	1	1	2
NT(d)	0	0	0	1	0	1	1	0	1
OBC	3	3	6	3	2	5	6	5	11
Unreserved	3	12	15	11	4	15	14	16	30
ICAR Quota*	2	0	2	2	0	2	4	0	4
Total	**14**	**18**	**32**	**23**	**9**	**32**	**37**	**27**	**64**

M=Male, F= Female, T = Total : * ICAR, # J&K, @ 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 2016-17

Cast Category	NVC, NAGPUR			BVC, MUMBAI			COVAS, PARBHANI			COVAS, UDGIR			KNPCVS, SHIRWAL			PGIVAS, AKOLA			TOTAL		
Intake Capacity	32+8*+4#+ 10**			42+12*+1#			41+12*+1#			28+3*+1#			31+5*+1#			31+9*+4#			205+49*+12#+10** +10@		
Gender	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
SC	1	4	5	2	3	5	1	3	4	1	2	3	1	3	4	0	2	2	6	17	23
ST	1	1	2	2	1	3	2	1	3	0	1	1	1	1	2	2	0	2	8	5	13
VJ/DT(a)	1	0	1	0	1	1	0	1	1	1	0	1	1	0	1	1	0	1	4	2	6
NT(b)	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
NT(c)	0	1	1	1	1	2	0	1	1	1	0	1	1	0	1	0	1	1	3	4	7
NT(d)	0	1	1	1	0	1	0	0	0	0	0	0	0	1	1	0	0	0	1	2	3
OBC	1	3	4	4	3	7	6	0	6	1	0	1	1	1	2	3	2	5	16	9	25
UNRESERVED	8	6	14	6	15	21	10	6	16	3	3	6	7	5	12	3	7	10	37	42	79
NRI/FN/PIO@ vacant seats converted	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
ICAR Quota*	2	1	3	5	1	6	5	0	5	2	0	2	2	0	2	1	0	1	17	2	19
State Govt. In Service#	2	0	2	0	0	0	1	0	1	1	0	1	0	0	0	2	0	2	6	0	6
Total	**16**	**18**	**34**	**21**	**27**	**48**	**25**	**12**	**37**	**10**	**6**	**16**	**14**	**11**	**25**	**12**	**12**	**24**	**98**	**86**	**184**

M=Male, F= Female, T = Total

Note : * ICAR, # State Govt In-service, @ NRI/FN/PIO and Animal Biotechnology**

6.A.5. Faculty of Veterinary Science

Admission Strength, Admitted Students for Ph.D. Degree Course for the year 2016-17

Cast Category	NVC, NAGPUR			BVC, MUMBAI			COVAS, PARBHANI			PGIVA, AKOLA			KNPCVS, SHIRWAL			COVAS, UDGIR			TOTAL		
Intake Capacity	21+3*+1#			24+5*+3#			11+1*=12			11+3*+4#			6			6			79+12*+8#+10@		
Gender	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
SC	2	3	5	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	3	3	6
ST	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
VJ/DT(a)	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1
NT(c)	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1
NT(d)	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
OBC	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
UNRESERVED	0	1	1	1	0	1	1	0	1	2	0	2	2	0	2	1	0	1	7	1	8
Total	**3**	**4**	**7**	**3**	**0**	**3**	**3**	**0**	**3**	**2**	**1**	**3**	**2**	**0**	**2**	**1**	**0**	**1**	**14**	**5**	**19**

M=Male, F= Female, T = Total

* ICAR, **#** State Govt. Inservice and @NRI/FN/PIO

6.A.6. Degrees Awarded

Academic Year 2016-17

B. V. Sc. & A. H.

Name of College	Open		OBC		SC		ST		VJ/DT/NT		SBC		Total Students		
Gender	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
BVC, Mumbai	20	24	4	8	1	3	0	1	2	2	0	0	27	38	**65**
NVC, Nagpur	20	14	6	5	6	8	0	1	8	1	0	0	40	29	**69**
COVAS, Parbhani	22	9	2	2	3	4	2	0	4	3	0	0	33	18	**51**
COVAS, Udgir	9	4	2	2	1	2	3	0	1	0	0	0	16	08	**24**
KNPCVS, Shirval	9	7	4	0	1	1	0	1	1	1	0	0	15	10	**25**
Total	**80**	**58**	**18**	**17**	**12**	**18**	**5**	**3**	**16**	**7**	**0**	**0**	**131**	**103**	**234**

B. Tech (D.T.)

Name of College	Open		OBC		SC		ST		VJ/DT/NT		SBC		Total Students		
Gender	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
CDT, Warud	10	9	8	7	5	3	3	0	7	2	1	0	34	21	**55**
DTC, Udgir	29	5	8	1	0	0	0	0	8	0	0	0	45	6	**51**
Total	**39**	**14**	**16**	**8**	**5**	**3**	**3**	**0**	**15**	**2**	**1**	**0**	**79**	**27**	**106**

B. F. Sc.

Name of College	Open		OBC		SC		ST		VJ/DT/NT		SBC		Total Students		
Gender	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**Total**
COFS, Nagpur	1	1	2	1	2	1	1	2	1	-	2	-	9	5	**14**
COFS, Udgir	2	1	6	-	1	1	-	-	1	1	1	-	11	3	**14**
Total	**3**	**2**	**8**	**1**	**3**	**2**	**1**	**2**	**2**	**1**	**3**	**-**	**20**	**8**	**28**

M.V.Sc.

Name of College	Open		OBC		SC		ST		VJ/DT/NT		SBC		Total Students		
Gender	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total
NVC, Nagpur	8	2	2	2	3	2	1	0	4	0	0	0	18	6	**40**
BVC, Mumbai	11	9	3	2	2	2	3	0	1	3	2	2	22	18	**24**
COVAS, Parbhani	11	2	0	0	2	0	0	0	2	0	0	0	15	2	**17**
COVAS, Udgir	6	0	1	0	0	0	0	0	1	0	0	0	8	0	**8**
KNPCVS, Shirwal	5	7	2	1	0	1	0	0	2	0	0	0	9	9	**18**
PGIVAS, Akola	8	3	5	3	0	2	0	0	0	0	1	0	14	8	**22**
Total	**49**	**23**	**13**	**8**	**7**	**7**	**4**	**0**	**10**	**3**	**3**	**2**	**86**	**43**	**129**

Ph.D.

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

6.A.7. EIGHTH CONVOCATION

The Eighth Convocation of Maharashtra Animal & Fishery Sciences University, Nagpur for conferment of Degrees on successful candidates of the examinations held in the academic year 2014-15 and 2015-16 was organized on 9th March 2017. The Convocation was presided over by Hon'ble Governor of Maharashtra and Chancellor MAFSU, Nagpur, Shri. Chennamaneni Vidyasagar Rao**.** Hon'ble Chief Minister of Maharashtra, Shri Devendra Fadnavisji, Minister of Animal Husbandry and Pro-Chacellor of MAFSU, Shri Mahadeoraoji Jankarji, Guardrian Minister, Nagpur Shri Chandrashekhar Bawankuleji were the Guests of Honour and graced the function. Director General and Secretary of Department of Agriculture Research and Education, ICAR, Trilochan Mohapatra delivered the convocation address.

The Maharashtra Animal and Fishery Sciences University (MAFSU) conferred its first ever honourary Doctorate of Science (DSc) degree upon RSS Chief Shri. Mohanji Bhagwat for his 'outstanding' contribution towards gaushalas, conservation of indigenous cow breeds and organic farming, in this convocation.

Total 815 degrees awarded to graduates of all three faculties. Total 648 candidates were awarded from Veterinary faculty, comprising of 400 with B. V. Sc. and A. H., 237 with M. V. Sc and 11 with Ph. D. degrees. Similarly, from Dairy Technology 103 and Fishery faculty 64 candidates were awarded with B. Tech. (D.T.) and B.F. Sc. degrees respectively.

Besides the conferment of degrees, the University also awarded gold and silver medals to the students for their meritorious performances. A total 64 medals including 48 gold and 16 silver medals were awarded for outstanding academic performance at B.V.Sc. & A.H., M.V.Sc., B.F.Sc and B.Tech. degree programmes

EIGHTH CONVOCATION-2017

LIST OF RECIPIENTS OF VARIOUS MEDALS FOR 2014-15

Gold Medals & Silver Medals :

Sr. No.	Name of Medal	Name of Student & College Name
	M. V. Sc. (Gold Medals)	
1	Mahrashtra Animal and Fishery Sciences University Gold Medal	Surwade Nita Prakash, KNPCVS, Shirval
2	Venkateshwara Hatcheries Gold Medal	Yeskal Amitkumar Prabhudas, NVC, Nagpur
3	Late Shri. Atmaram Zanzad (Saokar) Gold Medal	Bhale Chandrakant Tukaram, COVAS, Parbhani
4	Dr. B. P. Madrewar Gold Medal	Surwade Nita Prakash, KNPCVS, Shirval
	M. V. Sc. (Silver Medals)	
5	Prof. Dr. Bharati Ashok Talvelkar Silver Medal	Devhane Nitin Dongarsing, KNPCVS, Shirval
	B. V. Sc. & A. H. (Gold Medals)	
1	Mahrashtra Animal and Fishery Sciences University Gold Medal	Chaple Ashwini Rameshrao, NVC, Nagpur
2	Prof. Dr. Krishna Shankar Deshpande Gold Medal	Chaple Ashwini Rameshrao, NVC, Nagpur
3	Dr. R. T. Desai Gold Medal	Chaple Ashwini Rameshrao, NVC, Nagpur
4	Venkateshwara Hatcheries Gold Medal	Chaple Ashwini Rameshrao, NVC, Nagpur
5	Late Dr. Dilipsingh Rangilal Memorial Gold Medal	Chaple Ashwini Rameshrao, NVC, Nagpur
6	Veterinary Anatomy Gold Medal	Chaple Ashwini Rameshrao, NVC, Nagpur
	B. V. Sc. & A. H. (Silver Medals)	
7	Late Dr. B. L. Purohit Memorial Silver Medal	Chaple Ashwini Rameshrao, NVC, Nagpur

8	Late Sau. Kausalyabai Digamber Harne Commemorative Silver Medal	Chaple Ashwini Rameshrao, NVC, Nagpur
9	Late Shri Rambhau Bhagwanji Gorle Memorial Silver Medal	Chaple Ashwini Rameshrao, NVC, Nagpur
10	Dr. Krishnarao Anand Gowardhan Silver Medal	Chaple Ashwini Rameshrao, NVC, Nagpur
B. V. Sc. & A. H. (Gold Medals)		
1	Dr. V. A. Sapre Gold Medal	Tista Joseph, NVC, Nagpur
2	Indian Society for Veterinary Surgery Gold Medal	Tista Joseph, NVC, Nagpur
B. V. Sc. & A. H. (Silver Medals)		
3	Late Dr. A. S. Kaikini Memorial Silver Medal	Tista Joseph, NVC, Nagpur
B. V. Sc. & A. H. (Gold Medals)		
1	Dr. V. B. Hukeri Gold Medal	Palamate Parmeshwar Sunil, COVAS, Udgir
2	Dr. S. R. Kumthekar Gold Medal	Palamate Parmeshwar Sunil, COVAS, Udgir
B. V. Sc. & A. H. (Gold Medals)		
1	Dr. B. Panda Gold Medal	Doctor Anuska Hemang, BVC, Mumbai
B. V. Sc. & A. H. (Silver Medals)		
2	Late Shri. Devidasrao Narharrao Deshpande Memorial Silver Medal	Doctor Anuska Hemang, BVC, Mumbai
B. V. Sc. & A. H. (Gold Medals)		
1	Veterinary Pharmacology & Toxicology Gold Medal	Ashish Kumar Tripathi, NVC, Nagpur
B. V. Sc. & A. H. (Silver Medals)		
2	Dr. S. G. Narayankhedkar Silver Medal	Ashish Kumar Tripathi, NVC, Nagpur
B. V. Sc. & A. H. (Gold Medals)		
1	Late Dr. B. L. Purohit Commemorative Gold Medal	Karve Sanjana Abhay, BVC, Mumbai
2	Late Dr. Manoharsingh Devishingh Chauhan Memorial Gold Medal	Shagufta Abdi Ahmad, BVC, Mumbai
B. F. Sc. (Gold Medals)		
1	Maharashtra Animal and Fishery Sciences University Gold Medal	Shubhra Yadav, COFS, Nagpur
B. Tech. (D.T.) (Gold Medals)		
1	Maharashtra Animal and Fishery Sciences University Gold Medal	Kate Parmeshwar Eknath, CODT, Udgir
2	Late Sudhakarrao Naik, Ex-Chief Minister (M.S.) Gold Medal	Kate Parmeshwar Eknath, CODT, Udgir
3	Guruvarya Shri Narrayanrao Bajad Smruti Gold Medal	Kate Parmeshwar Eknath, CODT, Udgir
4	Tapaswini Savitribai Meshram Gold Medal (for Gramin Girl Students)	Mudiraj Priti Satish, CODT, Warud

LIST OF RECIPIENTS OF VARIOUS MEDALS FOR 2015-16

Gold Medals & Silver Medals :

Sr.No.	Name of Medal	Name of Student & College Name
M. V. Sc. (Gold Medals)		
1	Mahrashtra Animal and Fishery Sciences University Gold Medal	Debi Prasad Mishra, COVAS, Parbhani
2	Venkateshwara Hatcheries Gold Medal	Agashe Jayanti Laxmanrao , PGIVAS, Akola
3	Smt. Subhadra Ninawe Gold Medal	Narayan R., NVC, Nagpur
4	Late Shri. Atmaram Zanzad (Saokar) Gold Medal	Wanve Pranitkumar Sahasram, PGIVAS, Akola
5	Dr. B. P. Madrewar Gold Medal	Rajeev Jeenger, BVC, Mumbai
6	Late Dr. Rutuja Ramesh Bansod Gold Medal	Thakur Kalyani Rohit, NVC, Nagpur

M. V. Sc. (Silver Medals)		
1	Prof. Dr. Bharati Ashok Talvelkar Silver Medal	Satya Prakash Mohapatra, BVC, Mumbai
B. V. Sc. & A. H. (Gold Medals)		
1	Mahrashtra Animal and Fishery Sciences University Gold Medal	Pai Shivangi Devdas, BVC, Mumbai
2	Prof. Dr. Krishna Shankar Deshpande Gold Medal	Pai Shivangi Devdas, BVC, Mumbai
3	Dr. V. A. Sapre Gold Medal	Pai Shivangi Devdas, BVC, Mumbai
4	Dr. B. Panda Gold Medal	Pai Shivangi Devdas, BVC, Mumbai
5	Late Dr. B. L. Purohit Commemorative Gold Medal	Pai Shivangi Devdas, BVC, Mumbai
6	Venkateshwara Hatcheries Gold Medal	Pai Shivangi Devdas, BVC, Mumbai
7	Late Dr. Manoharsingh Devishingh Chauhan Memorial Gold Medal	Pai Shivangi Devdas, BVC, Mumbai
8	Veterinary Pharmacology & Toxicology Gold Medal	Pai Shivangi Devdas, BVC, Mumbai
B. V. Sc. & A. H. (Silver Medals)		
1	Late Shri. Devidasrao Narharrao Deshpande Memorial Silver Medal	Pai Shivangi Devdas, BVC, Mumbai
B. V. Sc. & A. H. (Gold Medals)		
1	Dr. V. B. Hukeri Gold Medal	Rohit Singh, NVC, Nagpur
2	Dr. R. T. Desai Gold Medal	Rohit Singh, NVC, Nagpur
3	Indian Society for Veterinary Surgery Gold Medal	Rohit Singh, NVC, Nagpur
B. V. Sc. & A. H. (Silver Medals)		
1	Late Sau. Kausalyabai Digamber Harne Commemorative Silver Medal	Rohit Singh, NVC, Nagpur
2	Dr. S. G. Narayankhedkar Silver Medal	Rohit Singh, NVC, Nagpur
3	Late Shri Rambhau Bhagwanji Gorle Memorial Silver Medal	Rohit Singh, NVC, Nagpur
4	Dr. Krishnarao Anand Gowardhan Silver Medal	Rohit Singh, NVC, Nagpur
B. V. Sc. & A. H. (Gold Medals)		
1	Veterinary Anatomy Gold Medal	Bendigeri Siddhant Arun, KNPCVS, Shirval
B. V. Sc. & A. H. (Silver Medals)		
1	Late Dr. B. L. Purohit Memorial Silver Medal	Bendigeri Siddhant Arun, KNPCVS, Shirval
B. V. Sc. & A. H. (Gold Medals)		
1	Dr. S. R. Kumthekar Gold Medal	Dadke Anand Rajshekhar, COVAS, Udgir
B. V. Sc. & A. H. (Silver Medals)		
1	Late Dr. A. S. Kaikini Memorial Silver Medal	Dadke Anand Rajshekhar, COVAS, Udgir
B. V. Sc. & A. H. (Gold Medals)		
1	Late Dr. Dilipsingh Rangilal Memorial Gold Medal	Pereira Ninoska Conrad, NVC, Nagpur
B. F. Sc. (Gold Medal)		
1	Maharashtra Animal & Fishery Sciences University Gold Medal	Megha P. , COFS., Nagpur
B. Tech. (D.T.) (Gold Medal)		
1	Maharashtra Animal & Fishery Sciences University Gold Medal	Tambade Pramod Bhivasen, CODT, Udgir
2	Late Sudhakarrao Naik, Ex-Chief Minister (M.S.) Gold Medal	Tambade Pramod Bhivasen, CODT, Udgir
B. Tech. (D.T.) (Gold Medal)		
1	Tapaswini Savitribai Meshram Gold Medal (for Gramin Girl Students)	Pawar Rupali Mahadev, CODT, Udgir
2	Guruvarya Shri Narrayanrao Bajad Smruti Gold Medal	Chilbule Amit Madhukar, CODT, Udgir

EIGHTH CONVOCATION CEREMONY

Hon'ble Dignitaries on occasion of Eighth Convocation of MAFSU

Hon'ble Governor of Maharashtra Shri C. Vidyasagar Rao conferring Honourary Doctorate of Science degree upon RSS Chief Hon'ble Shri Mohanji Bhagwat

Hon'ble Governor of Maharashtra and Chancellor of University Shri C. Vidyasagar Rao addressing during Convocation

Hon'ble Chief Minister of Maharashtra Shri Devendra Fadnavis addressing the students

Student showing her medals

Students enjoying their success during Convocation

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 2006-07at 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 is little modified by inclusion of 200 marks Artificial Insemination subject in second year of diploma curriculum.

Diploma schools of private education societies 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 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 (2016-17)	Student intake capacity / admitted (1st yr) (2016-17)		Number of students received diploma in year (2016-17)
			intake capacity	admitted	
1	7 colleges	101	101x60= 6060	5037	1822

Distribution of Lower Education schools.

Throughout the Maharashtra State One Hundred One diploma schools were awarded recognition to run the diploma course of Lower Education for the academic year 2016-17.

(i) Constituent colleges wise distribution of schools

Sr.No.	Controlling Veterinary / Dairy Colleges	Schools
1	Nagpur Veterinary College, Nagpur	16
2	Bombay Veterinary College, Mumbai	16
3	KNP, College of Veterinary Scince, Shirwal	17
4	College of Veterinary & Animal Sciences, Parbhani	19
5	College of Veterinary & Animal Sciences, Udgir	14

6	Post Graduate Institute of Veterinary & Animal Sciences, Akola	13
7	Dairy Technology College, Warud (Pusad)	06
	Total	**101**

(ii) Region and District wise distribution of schools

District wise distribution of diploma schools					
Region: Nagpur		**Region: Amravati**		**Region: Aurangabad**	
Nagpur	03	Yavatmal	03	Aurangabad	06
Wardha	02	Amaravati	04	Ahamadnagar	11
Bhandara	05	Akola	04	Jalna	02
Gondia	04	Washim	01	Hingoli	04
Gadchiroli	01	Buldhana	02	Parbhani	01
Chandrapur	01				
Region: Nashik		**Region: Mumbai**		**Region: Pune**	
Dhule	02	Thane	01	Pune	02
Nashik	04	Raigarh	01	Satara	04
Jalgaon	02	Sindudurgu	01	Kolhapur	05
				Sangli	05
Region: Latur				Solpur	01
Bid	04	Usmanabad	02		
Nanded	07	Latur	06		
				Total	**101**

Students on Roll (Lower Education) (2016-17):

Category	**I year**		**II year**	
	Male	**Female**	**Male**	**Female**
Open	2141	286	1220	146
OBC	542	55	366	59
SC	762	203	577	122
ST	307	83	250	58
VJ/DT (a)/NT	591	67	802	109
Total	**4343**	**694**	**3215**	**494**

Students admitted college wise during 2016-17

College/Region	**Category**	**I Year**		**II Year**	
		Male	**Female**	**Male**	**Female**
Bombay Veterinary College, Mumbai (Mumbai/Konkan)	Open	220	10	87	03
	OBC	162	26	98	15
	SC	99	28	101	17
	ST	74	17	114	07
	Others	112	13	115	11
	Total	**667**	**94**	**515**	**53**
Nagpur Veterinary College, Nagpur (Eastern Vidarbha)	Open	346	108	222	64
	OBC	29	00	43	12
	SC	102	45	99	36
	ST	89	45	55	26
	Others	16	02	13	02
	Total	**582**	**200**	**432**	**140**
College of Veterinary and Animal Sciences,	Open	523	49	374	36

Parbhani (Marathwada)	OBC	89	05	30	02
	SC	97	26	52	12
	ST	15	01	06	02
	Others	84	08	25	11
	Total	**808**	**89**	**487**	**63**
College of Veterinary and Animal Sciences, Udgir (Marathwada)	Open	241	22	187	17
	OBC	70	11	57	06
	SC	147	31	85	14
	ST	03	00	02	00
	Others	176	26	499	66
	Total	**637**	**90**	**830**	**103**
Krantisingh Nana Patil College of Veterinary Science, Shirwal (Western Maharashtra)	Open	601	68	310	21
	OBC	44	04	25	04
	SC	92	05	44	04
	ST	08	00	02	00
	Others	42	05	25	01
	Total	**787**	**82**	**406**	**30**
Post Graduate Institute of Veterinary and Animal Sciences, Akola (Western Vidarbha/Khandesh)	Open	164	20	18	00
	OBC	108	06	87	14
	SC	166	48	136	28
	ST	60	10	22	00
	Others	73	05	54	11
	Total	**571**	**89**	**317**	**53**
Dairy Technology College,Warud (Pusad)	Open	46	09	22	05
	OBC	40	03	26	06
	SC	59	20	60	11
	ST	58	10	49	23
	Others	88	08	71	07
	Total	**291**	**50**	**228**	**52**

6.C. SCHOLARSHIPS / FELLOWSHIPS

Scholarships / Fellowships are awarded to as many students as possible. Following are details for the year 2016-17. The Department of Science and Technology, Govt. of India is providing inspiration scholarship. Besides, private organizations are also providing scholarship to the students.

6.C.1. Bombay Veterinary College, Mumbai

Sr.No.	Name of Scholarship / Free-ship	Number of Students		Total Amount (Rs.)
		Boys	Girls	
1	VJNT-GOI Scholarship	18	07	4,88,450
2	ST-GOI Scholarship	04	03	1,84,525
3	SC-GOI Scholarship	15	08	6,21,565
4	OBC-GOI Scholarship	20	05	4,40,100
5	SBC-GOI Scholarship	00	01	10,035
6	VJNT-GOI Freeship	06	04	1,34,740
7	ST-GOI Freeship	05	04	1,68,045
8	SC-GOI Freeship	10	13	3,25,015
9	OBC-GOI Freeship	09	18	4,33,025
10	NTS	18	05	5,30,000
11	ICAR JRF	02	00	2,12,500
12	Minority	03	01	73,930

13	Merit Cum Means Scholarship	01	01	31,700
14	Handicapped scholarship	00	01	22,300
15	Central sector	01	00	10,000
16	Private scholarship (BARTI,Pune)	01	01	6,00,000
	Total	**113**	**72**	**42,85,930**

6.C.2. Nagpur Veterinary College, Nagpur

Sr.No.	Name of Scholarship / Free-ship	Numbers of Students		Total Amount (Rs.)
		Boys	Girls	
1	VJNT-GOI Schoarship	20	08	3,18,285
2	ST-GOI Schoarship	09	01	1,61,075
3	SC-GOI Schoarship	14	14	3,70,440
4	OBC-GOI Schoarship	38	18	6,13,480
5	VJNT- GOI Freeship	05	08	1,34,865
6	ST-GOI Freeship	02	03	77,320
7	SC-GOI Freeship	05	16	2,08,530
8	OBC-GOI Freeship	19	08	3,07,405
9	SBC-GOI Freeship	01	01	23,360
10	NTS	17	01	4,32,000
	Total	**130**	**78**	**26,46,760**

6.C.3. 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 Sholarship	27	16	7,51,060
2	ST - GOI Sholarship	07	02	2,24,160
3	SC - GOI Sholarship	25	17	11,32,882
4	OBC - GOI Sholarship	28	06	7,28,080
5	SBC - GOI Sholarship	01	-	22,605
6	VJNT - GOI Freeship	07	04	1,86,945
7	SC - GOI Freeship	07	05	2,21,280
8	OBC - GOI Freeship	09	06	2,39,805
9	SBC - GOI Freeship	01	-	19,155
10	NTS	13	03	3,28,000
11	Minority	09	01	2,00,840
12	CSS	-	02	20,000
13	Privare Scholarship S.J.F.	01	-	13,200
	Total	**135**	**62**	**40,88,012**

6.C.4. 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	18	09	5,13,930
2	SC-GOI Scholarship	03	-	76,985
3	OBC-GOI Scholarship	11	05	3,05,655
4	SBC-GOI Scholarship	-	01	20,675

5	VJDT-GOI Freeship	05	01	1,16,200
6	SC-GOI Freeship	04	04	1,42,760
7	OBC-GOI Freeship	08	01	1,49,435
8	SBC- GOI Freeship	01	-	19,155
9	Minority	01	-	21,000
	Total	**51**	**21**	**13,65,795**

6.C.5. 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	18	10	5,06,990
2	ST-GOI Scholarship	07	-	1,54,000
3	SC-GOI Scholarship	13	08	4,23,495
4	OBC-GOI Scholarship	20	02	3,58,190
5	SBC-GOI Scholarship	01	01	33,630
6	VJDT-GOI Freeship	03	01	60,420
7	SC-GOI Freeship	01	01	32,210
8	OBC-GOI Freeship	08	05	1,75,565
9	SBC- GOI Freeship	01	01	32,210
10	NTS	04	01	1,20,000
11	Minority	02	-	20,000
12	Private scholarship	01	-	10,000
	Total	**79**	**30**	**19,26,710**

6.C.6. 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 Freeship	0	1	29, 350
2.	SC-GOI Freeship	0	1	29, 350
	Total	**0**	**02**	**58,700**

6.C.7. 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	10	04	2,34,370
2	ST-GOI Scholarship	02	01	58,515
3	SC-GOI Scholarship	10	07	3,42,185
4	OBC-GOI Scholarship	14	06	3,56,500
5	ST-GOI Freeship	01	01	29,560
6	OBC-GOI Freeship	02	01	45,015
7	NTS	01	01	48,000
	Total	**40**	**21**	**11,14,145**

6.C.8. College of Dairy Technology, Udgir

Sr.No.	Name of Scholarship / Free-ship	Number of Students		Total Amount (Rs.)
		Boys	Girls	
1	VJNT-GOI Scholarship	12	1	1,77,505
2	ST-GOI Scholarship	1	1	35,150
3	SC-GOI Scholarship	6	2	1,49,420

4	OBC-GOI Scholarship	15	2	2,38,895
5	VJNT-GOI Freeship	1	1	30,210
6	ST-GOI Freeship	-	1	15,105
7	SC-GOI Freeship	-	2	30,210
8	NTS	5	-	120,000
9	Minority	1	-	-
	Total	**41**	**10**	**7,96,495**

6.C.9. 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	SBC-GOI Freeship	0	0	-
11	NTS	3	3	54,000
	Total	**33**	**29**	**8,21,697**

6.C.10. 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	10	02	1,50,160
2.	ST-GOI Scholarship	02	00	35,210
3.	SC-GOI Scholarship	08	05	1,99,365
4.	OBC-GOI Scholarship	17	07	2,76,890
5.	VJDT-GOI Freeship	00	01	4,105
6.	ST-GOI Freeship	01	00	12,105
7.	SC-GOI Freeship	02	01	36,315
8.	OBC-GOI Freeship	04	01	52,525
9.	SBC- GOI Freeship	00	01	12,105
10.	NTS	01	00	24,000
11.	ICAR JRF	10	02	1,50,160
12.	Minority	02	00	35,210
13.	Private scholarship	08	05	1,99,365
	Total	**65**	**05**	**11,87,515**

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	15	Nil	02	Nil
COVAS, Parbhani	01	Nil	Nil	Nil
KNP COVS, Shirwal	13	Nil	03	Nil

COFS, Nagpur	02 CIFE, Mumbai, Institutional Fellowship	Nil	Nil	Nil
COFS, Udgir	02	Nil	Nil	Nil
DTC, Warud	13	Nil	02	Nil
Total	**46**	**Nil**	**7**	**Nil**

6. D. HOSTEL ACCOMMODATON

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	70	Girls Hostel, Parel	12	24
	P.G. Hostel, Parel Campus	43	64	Girls Hostel, Goregaon	16	61
NVC, Nagpur	UG Hostel	104	180	UG/PG Hostel	16	48
	PG Hostel	14	28			
COVAS, Parbhani	U.G. Hostel (Gokul)	92	157	Vrundavan	62	93
	P.G. Hostel (Gokul)	30	35			
COVAS, Udgir	U.G. Hostel	60	87	NA		
	P.G. Hostel		05	NA		
KNPCVS, Shriwal	Subhanmangal Boys Hostel	78	95	Krantijyoti Girls Hostel	21	51
PGIVAS, Akola	P. G. Hostel	-	-	Rajmata Jijau Girls Hostel	10	16
DTC, Warud	Aadinath Boys Hostel	09	23	Mauli Girls Hostel	08	12

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 also.

Details of Libraries of MAFSU

Sr. No.	College	Item	Number of Books Available	New Books Purchased / Added	Amount Spent Rs.
1.	MAFSU University	Books	31,838	1834	1,87,774/-
		Journals	76	37	1,12,255/-

	Library, Nagpur	Other Publications (Thesis & Bound Volumes)	7,824	100	-
		Electronic Database	218	-	-
2.	Bombay Veterinary College, Mumbai	Books	20,010	-	-
		Journals	-	10	-
		Other Publications	1364	86	-
		Electronic Data base	-	-	-
3.	College of Veterinary and Animal Science, Parbhani	Books	8515	-	-
		Journals	972	-	-
		Other Publications	769	17	-
		Electronic Database	02	-	-
4.	College of Veterinary and Animal Science, Udgir	Books	5654	210	1,49,886
		Journals	-	-	-
		Other Publications	270	-	-
		Electronic Database	-	-	-
5.	KNP College of Veterinary Science, Shirwal	Books	6918	03	-
		Journals	06	00	-
		Other Publications	40	10	-
		Electronic Database	-	-	-
6.	PG Institute of Veterinary and Animal Sciences, Akola	Books	2478	-	-
		Journals	08	-	-
		Other Publications	25	-	-
		Electronic Database	-	-	-
7.	College of Dairy Technology, Warud	Books	7540	-	-
		Journals	08	-	-
		Other Publications	140	-	-
		Electronic Database	-	-	-
8.	Dairy Technology College, Udgir	Books	3843	-	-
		Journals/magazines/ periodicals	18	07	14,190
		Other Publications	-	-	-
		Electronic Database	-	-	-
9.	College of Fishery Science, Udgir	Books	3941	80	3375
		Journals	4	-	-
		Other Publications	-	-	-
		Electronic Database	-	-	-

6. F. INFRASTRUCTURE / EQUIPMENTS

- **Bombay Veterianry College, Mumbai**

Sr. No.	Infrastructure/Name of Equipments	Amount (in Lakhs)	Name of scheme/ Budget received from
1.	Deep Freeze	1.24	ICAR
2.	Analytical Weighing Balance	0.66	ICAR
3.	Vertical deep freezer (-20)	0.88	ICAR
4.	Micropipettes	0.55	ICAR

5.	Carl Ziess Stemi 305 Stereo Zoom	1.05	ICAR
6.	Digital weighing balance	0.80	ICAR
7.	Fully automated Biochemistry analyser	7.08	ICAR
8.	Color Measurement Analyzer	14.98	ICAR
9.	Refrigerated Centrifuge	4.98	ICAR
10.	Liquid handling set	0.98	ICAR
	Total	**33.24**	

- **Nagpur Veterinary College, Nagpur**

Sr. No.	Infrastructure/Name of Equipments	Amount (in Lakhs)	Name of scheme/ Budget received from
1.	Thermal Cycler	2.97	DST
2.	Refrigerated High Speed Centrifuge	2.99	DST
3.	Deep Fridge	1.47	DST
4.	Homogeniser	1.53	DST
5.	Electrophoresis & blotting apperartus	2.95	DST
6.	Deep freez (-20^{o}C)	1.47	ICAR
7.	Biosafety Class II B2 cabinet with 100% exhaust/ virus burnout unit (02 nos)	5.00	ICAR
8.	MALDI-TOF (01)	125.00	ICAR
9.	Gel Documentation	2.95	ICAR
10.	Laminar Air Flow Vertical	0.87	ICAR
11.	Examination table, stool, Almirah, Chair	0.76	ICAR
12.	Surgical equipments	2.15	ICAR
13.	Haemodialysis	7.87	ICAR
14.	Computed Radiography	8.75	ICAR
	Total	**166.73**	

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

Sr. No.	Infrastructure/Name of Equipments	Amount (in Lakhs)	Name of scheme/ Budget received from
1.	Manual mini semi automatic poultry processing plant	2.45	ICAR
	Total	**2.45**	

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

Sr. No.	Infrastructure/Name of Equipments	Amount (in Lakhs)	Name of scheme/ Budget received from
1.	Flurocent Microscope	16.98	RKVY
2.	Biosefty Cabinae	11.35	
3.	Laminar Flow vertical	1.65	
4.	Renovation of Biotech Laboratory Dept Of Animal Reproduction	3.00	
5.	Air Conditioners	4.55	
6.	Workstations	6.00	
7.	Workstation Chairs	3.00	
8.	LCD Screen	2.49	
9.	Audio System	1.00	
10.	LCD Projector	0.65	

11.	Display Laptop and printers	3.00	
12.	Real Time PCR	7.84	ICAR
13.	Refrigerated centrifuge	2.83	
14.	Deep Freeze -20	1.29	
15.	Bowl Chopper	1.94	
	Total	**69.66**	

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

Sr. No.	Infrastructure/Name of Equipments	Amount (Rs. in Lakhs)	Name of scheme/ Budget received from
1.	Repairs of roads & black topping in the college campus	10.00	State Government Fund
2.	Semi-automatic Rotary Microtome	2.36	Star College Scheme, DBT, New Delhi
	Total	**12.36**	

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

Sr. No.	Infrastructure/Name of Equipments	Amount in Rs.	Name of scheme/ Budget received from
1.	Layer Shed	12.00	RKVY
	Total	**12.00**	

- **Dairy Technology College, Warud**

Sr. No.	Infrastructure/Name of Equipments	Amount in Rs.	Name of scheme/ Budget received from
1.	Oil free Air compressor	0.56	ICAR
2.	X-tenda, Monitor & CPU	0.77	ICAR
	Total	**1.33**	

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.

Inter University / Inter State/ National Level Games, Sports, Research, Cultural Competitions

Sr. No.	Sports / Games Name	Games / Sports	Date	No. of Students Participated		Host Institute
				Boys	Girls	
1.	Chess-2016-17 (M)	West Zone Inter University Tournament	23.10.2016 to 27.10.2016	05	-	Barkatullah University, Bhopal
2.	Badminton	West Zone Inter University Tournament	24.10.2016 to 27.10.2016	05	05	Swami Ramanand Teerth Marathwada University, Nanded

3.	Indradhanushya-2016-17 (M/W)	Maharashta State Inter University Cultural Youth Festival	05.11.2016 to 09.11.2016	20	15	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad
4.	Krida Mahotsav-2017 (M/W) (Maharashta State Inter University)	Volley ball(M/W)	27.11.2016 to 01.12.2016	12	11	Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani
		Basket ball(M/W)		12	12	
		Kabaddi (M)		11	-	
		Kho-Kho (M)		12	-	
5	Avishar-2016	Maharashta State Inter University Research Convention	27.01.2017 to 29.01.2017	09	02	Swami Ramanand Teerth Marathwada University, Nanded
6	Malkhamb-2016 (M)	All India Basis	01.02.2017 to 05.02.2017	05	-	Panjab Univerity, Chandigarh
7	Table-Tennis (2016-17)	West Zone Inter University Tournament	05.02.2017 to 08.02.2017	04	05	Gujrat University, Ahmedabad
8	Archery-2016-17	All India Inter University	15.02.2017 to 19.02.2017	01	-	Krishna University, Machilipatnam
				96	**50**	

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

Name of Activity	No. of activities	No. of NSS participants			Detail of Activity
		Male	Female	Total	
Blood Donation Camps	6	227	39	266	
Tree Plantation	1321	625	308	933	
Education & Health Awareness/ Camps Programme, if any :					
Disaster Management Training	1	70	28	98	400
Self Defense Training for Girls	6	0	177	177	177
School Dropout Survey conducted, if any	1	24	6	30	-
Road Safety Campaign/ Camp	1	35	10	45	-
Yoga Training/Demonstration if any	10	292	175	467	467
Pulse Polio Immunization	2	70	28	98	Beneficiaries - 98
Eye check-up	1	68	47	115	Beneficiaries - 200
Health Camps/Dental Check up	10	303	213	516	Beneficiaries - 508
Awareness on Prevention of diseases - Program, rallies/ street plays door to door campaign Distribution of IEC Material, if any	21	289	121	410	Beneficiaries- 1400
Voters Awareness Programmes	1	40	25	65	Beneficiaries - 200
Swachha Bharat, People's involvement and sustainability					
Swachha Bharat Abhiyan	173	769	398	1167	Cleaning of college, Hospital premises and at adopted village

Defecation Free Campaign: Motivation resulting into construction of Toilets/ activity for construction of toilet	1	42	20	62	Beneficiaries - 50
Programmes on Conservation of water/ Water Harvesting/ watershed development	10	221	127	348	729
Shramadan Programme	2	97	44	141	141
Programmes on Employment Generation Strategies / career Counselling	10	221	127	348	729
Skill Development Training	2	97	44	141	141
Vittiya Saksharata Abhiyan (VISAKA)	Programme was organized at all colleges, adopted villages and local markets	576	243	819	2349

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

Students Performance in NCC

Sr. No.	Type of Examination	Number of Students Passed	Camps Place	Number of Students Participated	
				Male	Female
1.	**'B'** Certificate Examination	41	Nagpur	24	17
2.	**'C'** Certificate Examination	35	Nagpur	24	15
3			CATC, Wardha	01	03
4			CATC, MLA Hostel, Nagpur	02	-
5			CATC, MLA Hostel, Nagpur	05	01
6			CATC, MLA Hostel, Nagpur	13	10
7			CATC, Saoner	03	05
8			NIA, Patna	10	06
9			RDC, New Delhi	03	02
10			CATC, MLA Hostel, Nagpur	14	01

NIC-National Integration Camp; **NER-**North Eastern Region; **CATC-** Combined Annual Training Camp; **RDC-**Republic Day Camp

The highlights of the 1 (MAH) Remount and Veterinary Squadron, NCC Unit is as under

1) During the year 2016-17, 6 Combined Annual Training camps, one NIC camp and one Republic Day camps were held at various places where are cadets participated. ANO Capt N.C Nandeshwar accompanied the cadets to Patna NIC. Many cadets achieved prizes for various events such as Elocution, Singing, Essay writing, Cross Country Race etc.
2) The highlight of NCC activities is the participation of 5 cadets in Republic Day Camp held at New Delhi from 28th Dec., to 7th Feb 2017. These cadets participate in various equestrian competitions and Prime Ministers rally. Sgt. Nupur Poharkar achieved a Bronze medal in Hacks event.
3) International Yoga day was celebrated at the terrace of Nagpur Veterinary College, Nagpur on 21st June, 2016
4) Our cadets participated in 8th Convocation Ceremony of MAFSU held at Vasantrao Deshpande Hall, Nagpur on 09th March 2017.

5) Cadets participated in social awareness rally at the adopted village at Borgaon and also carried out programmes under Swachch Bharat Abhiyan and Vittiya Saksharta Abhiyan.

6) ANO Lt. Shiny Joy attended the NCC Officers Refresher Training Course NCCORT-17 at Meerut Canntt from 17 Oct to 15 Nov 2016.

STUDENTS WELFARE PROGRAMMES

Shubham Komarewar receiving first prize in Spot Photography during Indradhanushya -2016

Student Participation in Avishkar- 2016

Students of Bombay Veterinary College, Mumbai receiving third prize in the group event of 'Mime'

Students participated in the All India Basis Inter University "Malkhamb 2016"

Students participation in NSS National Integration Camp

Students participation in University Selection Trials for Indradhanushya

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.

Conference/Symposium/Workshop/Summer and Winter Institute/Seminar/Short term training courses etc. attended by the faculty members

Sr. No.	Name of the college	Number of faculty under training
1	Bombay Veterinary College, Mumbai	45
2	Nagpur Veterinary College, Nagpur	159
3	College of Veterinary And Animal Sciences, Parbhani	32
4	Krantisinh Nana Patil College Of Veterinary Science, Shirwal	42
5	College of Veterinary And Animal Sciences, Udgir	21
6	Post Graduate Institute Of Veterinary & Animal Sciences, Akola	53
7	Dairy Technology College, Warud	21
8	College of Dairy Technology, Udgir	03
9	College of Fishery Science, Nagpur	07
10	College of Fishery Science, Udgir.	13
	Total	**396**

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 always maintained a close liaison with the animal, dairy and fishery industries and is striving towards developing a system that continuously scans the needs of the industries and forecasts the solutions, to the eminent 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	Budget Rs. In Lakh
1	Department of Biotechnology, Govt. of India, New Delhi	06	93.86
2	Indian Council of Agricultural Research, New Delhi	12	1000.32
3	Rashtriya Krishi Vikas Yojana, Govt. of Maharashtra	02	283.57
4	Forest Development Corporation of Maharashtra Ltd., Govt. of Maharashtra	04	1917.51
5	Science & Technology Resource Centre,Gondwana University, Gadchiroli	01	36.80
6	Private Agency Scheme	11	17.69
	Total Number of Projects	**36**	**3349.75**

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

Sr. No.	Name of the college	No. of Project	Budget Rs. In Lakh
1	Bombay Veterinary College, Mumbai	10	717.07
2	Nagpur Veterinary College, Nagpur	11	2244.92
3	College of Veterinary & Animal Science, Parbhani	08	92.60
4	KNP College of Veterinary Science, Shirwal	03	161.00

5	Post Graduate College of Veterinary & Animal Sciences, Akola	03	97.36
6	College of Fishery Science, Nagpur	01	36.80
	Total	**36**	**3349.75**

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

- **Department of Biotechnology (DBT), New Delhi**

Sr. No.	Name of Scheme	Name of P. I. & Institution	Year of Start	Duration	Budget Rs. in Lakhs
1	Designing Novel Nanobiotechnological Systems for Effective Delivery of Selected Indigenous Herbs with Potent Antitubercular Activity	P.I.: Dr. Alka Pravin Mukne, Asstt. Prof. Bombay College of Pharmacy. P.I.: Dr. A. S. Bannalikar BVC, Mumbai Co.PI: Dr. R. R. Pharande BVC, Mumbai	June 2013	3 yrs due to delayed release of funds of 2015-16 in 2016-17 project extended to June 2017	3.75
2	Molecular epidemiology of ticks and tick-borne disease, host resistance and development of novel pathogen vaccines	Dr. S.W. Kolte	June 2014	3 years	1.11
3	Star college scheme	Dr B.L. Kumawat	March 2016	3 years	11.00
4	Star College Scheme for Strengthening of Life Science and Biotechnology Education and Training atUndergraduate Level.	Dr.P.V.Nandedkar Dr.G.R.Gangane Dr.B.M.Kondre	Nov. 2015	02 years	9.00
5	"Strengthening of Life Science and Biotechnology Education and Training at undergraduate level under Star College Scheme"	Dr.P. V. Nandedkar	Nov. 2015	3 years	58.00
6	Star College Scheme	Dr.P.V.Nandedkar	Nov. 2016	03 years	11.00
					93.86

- **Indian Council of Agricultural Research, New Delhi**

Sr. No.	Name of Scheme	Name of P. I. & Institution	Year of Start	Duration	Budget Rs. in Lakhs
1	Revolving Fund Scheme entitled, "Establishment of diagnostic laboratory for animals and birds"	Dr. S. D. Moregaonkar &Dr. M. L. Gatne Bombay Veterinary College, Parel, Mumbai	June 2000	10 years	4.95
2	Outreach programme on monitoring of drug residues and environmental pollutants.	Dr. M.M. Gatne Bombay Veterinary College, Parel, Mumbai	Aug. 2009	8 years	6.75

3	All India Co-ordinated Research Project on Post Harvest Technology.	Dr. R. J. Zende, Associate Professor, Dept. of Veterinary Public Health Bombay Veterinary College, Parel, Mumbai	Nov. 2009	10 years	335.77
4	Monitoring of Pesticide Residues at National Level.	Dr. R. J. Zende, Assoc. Professor, Dept. of Veterinary Public Health Bombay Veterinary College, Parel, Mumbai	July 2009	10 years	255.00
5	Outreach Programme On Zoonotic Diseases- PI	Dr. V.M. Vaidya, Asstt. Prof., Department of Veterinary Public Health Bombay Veterinary College, Parel, Mumbai	Nov. 2009	10 years	73.00
6	ICAR Network project on "Outreach Programme On Zoonotic Diseases"	Dr. S. P. Chaudhari Nagpur Veterianry College, Nagpur	March 2010	8 years	7.50
7	ICAR - Niche Area of Excellence Project on Centre for Zoonoses	Dr. S. P. Chaudhari Nagpur Veterianry College, Nagpur	March 2015	3 years	64.02
8	Establishment of community based animnal husbandry practices in the tribal villages of Gadchiroli District of Maharashtra State	Dr. M. S. Patil, Assistant Professor, Deptt. of ARGO, Nagpur Veterianry College, Nagpur	Dec. 2014	5 years	32.33
9	Association of Sperm mitochondrial functional markers with semen quality traits in Murrah buffalo under ICAR Extramural scheme	S.N. Jadhav Assistant Professor Department of biochemistry	Jan. 2016	2 years	30.00
10	Estimation of methane emission under different feeding system and development of mitigation strategies	Dr. A. P. Dhok Assistant Professor Animal Nutrition, Nagpur Veterianry College, Nagpur	Aug 2009	8 years	79.00
11	Balancing the ration of lactating buffaloes to increase the productivity and reduced methane emission and providing livelihood security through livestock keeping in tribal area of Melghat (Dist- Amravati) MS	Dr. A. P. Dhok Assistant Professor Animal Nutrition, Nagpur Veterianry College, Nagpur	Aug 2009	8 years	80.00
12	Experiential Learning Unit on Goat- Setting up of goat Unit.	Dr. Siddiqui MBA, Bombay Veterinary College, Mumbai	March 2016	1 years	32.00
				Total	**1000.32**

- **Rashtriya Krishi Vikas Yojana, Govt. of Maharashtra, Mumbai**

Sr. No	Name of Scheme	Name of P. I. & Institution	Year of Start	Duration	Budget Rs. in Lakhs
1	Establishment of training and demonstration centre on commercial poultry farming under MAFSU	Dr. M. M. Kadam Nagpur Veterianry College, Nagpur	July 2014	3 Years	153.57
2	Prevention and therupatic management for diseases causing reproductive failures in animals	K.P.Khillare, KNP College of Veterinary Science, Shirval, Dist. Satara	March 2015	3 Years	130.00
				Total	**283.57**

- **Forest Development Corporation of Maharashtra Ltd.**

Sr No	Name of Scheme	Name of P. I. & Institution	Year of Start	Duration	Budget Rs. in Lakhs
1	Establishment of Wildlife Research & Training Centre at Gorewada Zoo & Rescue Centre, Nagpur	Dr. N. P. Dakshinkar, Professor, Nagpur Veterianry College, Nagpur	June 2013	Contd.	1874.00
2	Dairy Development through Implementation of *Heat Synchronization* Demonstrations in Cattle and Buffaloes in Nagpur District.	Dr. S. P. Landge Assistant Professor, Nagpur Veterianry College, Nagpur	Aug. 2016	1 Year	1.50
3	Expression, localization and modulatory effect of adipokines in ovary of cyclic buffaloes"	Dr. M. B. Gupta, Assistant Professor, Deptt. of Physiology NVC, Nagpur	Sept. 2016	3 years	41.01
4	Documentary on use OF Medicinal plants in Animal Diseases	Dr.S.R.Rajurkar, I/C Professor, Department of Vet.Pharmacology & Toxicology, COVAS,Parbhani	Oct. 2016	1 year	01.00
				Total	**1917.51**

- **Science & Technology Resource Centre, Gondwana University, Gadchiroli**

Sr. No.	Name of Scheme/ Title of Project	Name of P. I. & Address of Institution	Year of Start	Duration	Rs. in Lakhs
1.	Sustainable livelihood of tribal population in Gadchirloi district through scientific fisheries technologies.	Shri. R. H. Rathod, College of Fishery Science, Nagpur	May 2016	02 years	36.80
				Total	**36.80**

- **Private Agency Scheme**

Sr.No	Name of the Scheme	Name of the PI & Institution	Year of Start	Duration	Budget Rs. in Lakhs	Funding Agency
1	Studies on the anthelmintic efficacy of aherbal galactogogue on performance of milking bovines	Dr. G. P. Bharkad, Bombay Veterinary College, Mumai	Aug. 2014	3 years	3.25	M/s. KP Phytoextractions Pvt Ltd.
2	Epidemiology of infectious bronchitis in chicken with special refence to molecular characterization and pathogenicity trial of the isolate	V. S. Dhaygude KNP College of Veterinary Science Shirval, Dist. Satara	June 2016	2 years	0.65	B. V. Rao Research Foundation / WPC' 96
3	Studies on laboratory and acceptance testing of OZOO Mommy Oil (Intra mammary formulation)	P.I.: Dr.R.V.Gaikwad, Dr.C.N.Galdhar Bombay Veterinary College, Mumai	June 2016	1 year	1.95	HKL PharmaceuticalsIndia Pvt. Ltd. Mumbai
4	Comparative pharmacokinetic studies and comparative anti-parasitic efficacy of two oral fenbendazole products	Dr. R. P. Limsay, Dept. of Vet. Pharmacology & Toxicology, NVC, Nagpur	Sept. 2015	2 years	4.16	Virbac Animal Health Pvt. Ltd., Mumbai
5	'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 Nagpur Veterianry College, Nagpur	Nov. 2016	1 year	1.55	Ayurvet Ltd., Badi, Himachal Pradesh
6	Efficacy of Herbal oral and Gel Formulations in Treatment of Skin Affections in Dogs and Cattle"	Dr. B. N. Ambore Nagpur Veterianry College, Nagpur	March 2017	1 Year	1.25	Ayurvet Ltd., Badi, Himachal Pradesh
7	"Evaluation of Prophylactic and Therapeutic Efficacy of Salcochek and Salcochek Pro against Escherichia coli-induced infection in broiler chicks.	Dr. S.W. Hajare, Dept. of Pharmacology, PGIVAS,Akola	Oct. 2017	6 months	1.28	Ayurvet Ltd., Badi, Himachal Pradesh
8	Efficacy of polyherbal drugsagainst tympany & indigestion in bovine	Dr. Syed A. M., Hospital Registrar, TVCC, COVAS, Parbhani	Oct. 2016	6 months	1.00	Rakesh pharmaceuticals, Kalol, Dist: Gandhinagar (Guj)
9	Efficacy of polyherbal drugsagainst post parturientdisorders and anestrous in bovine	Dr. Mane P. M., Hospital Registrar, TVCC, COVAS, Parbhani	Oct. 2016	6 months	1.00	Rakesh pharmaceuticals, Kalol, Dist: Gandhinagar (Guj)

10	Evaluation of AVIFLORA as a balance gut flora in broiler chicken	Dr. N.C. Dudhe, Assistant Professor, Dept. of VPH, COVAS,Parbhani	Mar. 2017	1 Year	0.60	AV Vet Nutritional Services Pvt. Ltd. & VHL group, Pune
11	Role of herbal and mineral preparations in reproductive health management	K.P.Khillare, KNP College of Veterinary Science, Shirval	Jan. 2017	1 Year	1.00	Ayurvet Ltd., Badi, Himachal Pradesh
				Total	**17.69**	

8.B. COMPLETED RESEARCH PROJECTS

8.B.1. Funding Agencywise Number of Completed Research Projects in 2015-16

Sr. No.	Name of the funding agency	No. of Projects	Budget Rs. in Lakh
1	Department of Biotechnology, New Delhi	02	167.70
2	Indian Council of Agricultural Research, New Delhi	03	281.43
3	Rashtriya Krishi Vikas Yojana, Govt. of Maharashtra, Mumbai	02	179.68
4	Bhaba Atomic Research Centre, Mumbai	01	24.41
5	Government of Maharashtra	01	100.00
6	Other Agency Schemes	06	18.10
7	National Innovation Foundation	01	3.63
	Total	**16**	**774.95**

8.B.2. Institute wise number of completed research projects

Sr. No.	Name of the institute	No. of Project	Budget Rs. in Lakh
1	Bombay Veterinary College, Mumbai	06	321.10
2	Nagpur Veterinary College, Nagpur	05	247.70
3	College of Vet. & Ani. Sciences, Parbhani	01	1.14
4	College of Veterinary & Animal Sciences, Udgir	01	100.00
5	Post Graduate Institute of Veterinary & Animal Sciences, Akola	03	105.01
	Total	**16**	**774.95**

8.B.3. DETAILS OF RESEARCH PROJECTS

8.B.3.a. Funding Agencywise Completed Research Projects

- **Department of Bio Technology, Govt. of India, New Delhi**

Sr. No.	Name of Scheme	Name of P. I. & Institution	Year of Start	Duration	Rs. In Lakhs
1	DBT-HRD Program in Animal Biotechnology	Dr. V. C. Ingle	April 2009	7 years	110.00
2	Translation Centre for Molecular Epidemiology of Listeria monocytogenes	Dr. N. V. Kurkure	Aug. 2012	5 years	57.70
				Total	**167.70**

- **Indian Council of Agricultural Research, New Delhi**

Sr. No.	Name of Scheme	Name of P. I & Institution	Year of Start	Duration	Rs. in Lakhs
1	Estimation of methane emission under different feeding system and development of mitigation strategies	Dr. A. P. Dhok	May 2009	8 yrs	79.00
2	Balancing the ration of lactating buffaloes to increase the productivity and reduced methane emission and providing livelihood security through livestock keeping in tribal area of Melghat (Dist- Amravati)	Dr. A. P. Dhok	July 2012	5 yrs	
3	Preservation and handling techniques for porcine skin for production of biological bandages.	Dr. R. J. Zende, Associate Professor, Department of Veterinary Public Health	Aug. 2011	7 years	202.43
	Adoptive trials and popularization/commercialization of model retail outlet for production of hygienic		Sept. 2013	4 years	
	Detection of food-borne pathogens by LAMP (Loop Mediated Isothermal Amplification)		March 2014	3 years	
	Development and standardization of protocol for extraction of Chondroitin Sulphate from cartilage of buffaloes		April 2014	3 years	
	Development and standardization of a process protocol for Extraction of Collagen from pig.		April 2014	3 years	
				Total	**281.43**

- **Rashtriya Krishi Vikas Yojna, Govt. of Maharashtra, Mumbai**

Sr. No.	Name of Scheme	Name of P. I. & Institution	Year of Start	Duration	Rs. in Lakhs
1	Establishment of Training and Demonstration Centre on Commercial Poultry Farming under MAFSU	Dr. S.J.Manwar, Associate Professor & Head, Dept. of Poultry Science, PGIVAS, Akola	Sept. 2014	3 years	101.15
2	Establishment of training cetre for field veterinarians for reproductive health management of livestock through assisted reproductive technologies.	Dr S U Gulavane Department of ARGO, Bombay Veterinary College, Parel-12	Oct. 2014	3 years	78.53
				Total	**179.68**

- **Bhaba Atomic Research Centre, Mumbai,**

Sr. No.	Name of Scheme	Name of P. I & Institution	Year of Start	Duration	Rs. In Lakhs
1	Estimation of hormonal profile, metabolites and milk composition during lactation in bovines and validation of Bovine growth Hormone RIA kit.	Dr. J.R. Khan Dr. S.D. Ingole, Bombay Veterinary College, Mumbai.	May 2013	3 years	24.41
				Total	**24.41**

- **Marathwada Vikas Karyakram, Govt. of Maharashtra, Mumbai**

Sr. No.	Name of Scheme	Name of P. I. & Institution	Year of Start	Duration	Rs. In Lakhs
1.	Strenghening of Teaching veterinary clinical complex,	Dr. A.U.Bhikane COVAS,Udgir	Oct. 2010	7 years	100.00

- **Private Agency Scheme**

Sr. No.	Name of Scheme	Name of P. I. & Institution	Year of Start	Duration	Funding Agency	Rs. in Lakhs
1	Study on Organic Calcium in Layers	PI- Dr. D. N. Desai Department of Poultry Science, Bombay Veterinary College	Dec. 2015	5 months	M/s. Orffa Animal nutrition Pvt. Ltd.	5.50
2	The Development of PCR based diagnosis of *Mycoplasma* sp. in Poultry	P.I.: Dr. Mrs. S. B. Majee	Jan. 2014	2 years	Huvepharm a (SEA) Pvt Ltd, Pune	6.60
3	"Efficacy evaluation of heat ameliorating activity and immune modulatory properties of Ayucee and Stresroak with other marketed brands in broiler".Ayurvet company Sponsored Res. Trial	Dr. S. M. Wankhede Assistant Professor & Head, Dept. of Animal Nutrition	July 2017	1 year	Ayurvet	1.31

4	Effect of supplementation of panbonis 20 at graded levels on performance and orphometric traits of tibia of broiler chickenAlivira company Sponsored Res. Trial	Dr. S. M. Wankhede Assistant Professor & Head, Dept. of Animal Nutrition	Dec. 2017	1 year	Ayurvet	2.55
5	Study on Comparative Efficacy of certain Mycotoxin Binder Products in Experimentally Induced Combined Mycotoxicosis in Broiler	Dr.G.R.Gangane College of Veterinary & Animal Sciences, MAFSU, Parbhani	March 2016	1 year	M/s. Ayurvet Ltd. Baddi (HP)	1.14
6	Ovarian response after treatment with janova in postpartum anestrous	Dr. S. K. Sahatpure Associate Professor & Head Department of ARGO, NVC, Nagpur	2016-2017	1 year	Dabur Ayurvet	1.00
					Total	**18.1**

- **National Innovation Foundation**

Sr. No.	Name of Scheme	Name of P. I. & Institution	Date of Start	Duration	Rs. In Lakhs
1	*In vitro*&*in vivo* acaricide efficacy of some herbal extracts against ticks of cattle	Dr. G. P. Bharkad, Bombay Veterinary College, Mumbai	June 2014	3 years	3.63

8.C. RESEARCH RECOMMENDATIONS

15th Joint Annual Science Research Council Meeting (For the year 2016-17) was held on 20th to 22nd June, 2017 a University Head Quarter, MAFSU, Nagpur under the Chairmanship of Prof. A. K. Misra, Hon'ble Vice-Chancellor, MAFSU, Nagpur. The Joint Annual Science Research Council approved the following research recommendations.

1.	**Project Title**	**Substitution of maize with soybean hulls in the concentrate mixture of growing buffalo calves.**
	Investigators	Mr. S. K. Diwate and Dr. A. D. Deshmukh
	Name of the college	NVC, Nagpur.
	Recommendation	It is recommended to use soyabeen hulls in place of corn as an energy source in the concentrate mixture with the addition of Cellulase enzyme @ 4 g/d for economical raising of growing buffalo claves.
2.	**Project Title**	**Utilization of soybean hulls replacing maize in the concentrate mixture of lactating buffaloes.**
	Investigators	Miss. Priyanka Tonde and Dr. A. P. Dhok
	Name of the college	NVC, Nagpur.
	Recommendation	It is recommended to replace corn upto 50 percent with soybean hulls as an energy sorce in the concentrate mixture of lactating buffaloes for economical milk production.
3.	**Project Title**	**Effect of replacement of maize with dry bakery waste with or without lysophospholipid in broiler diet.**

	Investigators	Miss. B.R. Prabhale and Dr. B. N. Ramteke
	Name of the college	BVC, Mumbai.
	Recommendation	Replacement of maize with dry bakery waste at 50% level with supplementation of lysophospholipid @ 0.05% in broiler diets, results in better growth performance providing higher margin of profit.
4.	**Project Title**	**Assessment of cinnamon (*Cinnamomum cassia*) powder as phytobiotic growth promoter in broilers.**
	Investigators	Mr. S. D. Chavanand Dr. K.Y. Deshpande
	Name of the college	COVAS, Parbhani.
	Recommendation	Supplementation of 0.12% Cinnamon powder through diet is recommended for better growth, FCR and antioxidant properties in broiler chicken.
5.	**Project Title**	**Supplementation of black pepper (*Piper nigrum*) powder as growth promoter in broiler chicken.**
	Investigators	T. S. Phad and Dr. K. Y. Deshpande
	Name of the college	COVAS, Parbhani.
	Recommendation	Supplementation of black pepper @ 0.1% in diet is recommended for improved growth performance, immune response and profitability of broiler production.
6	**Project Title**	**Effect of feeding various levels of guar meal on performance of layers.**
	Investigators	Ms. Rathod Bhagyashri Shivaji and Dr. Percy E. Avari
	Name of the college	BVC, Mumbai.
	Recommendation	Replacement of soybean meal with roasted guar meal up to 20% level is recommended in the layer diet.
7	**Project Title**	**Effect of Calcium pidolate on egg production and egg quality during last phase of production cycle with reducing levels of inorganic calcium.**
	Investigators	Ms. Joshi Neha Rajivand Dr. Ms. Deepashree N. Desai
	Name of the college	BVC, Mumbai.
	Recommendation	Supplementation of Calcium pidolate @ 500 g/T is recommended in layer diet for reducing the number of broken eggs.
8	**Project Title**	**Evaluation of two different emulsifiers for different sources of oils in broiler diets.**
	Investigators	Mr. Chavan Gajanan Devrao and Dr. Percy E. Avari
	Name of the college	BVC, Mumbai
	Recommendation	It is recommended to use emulsifier having HLB value of 7 @ 350 g/T in broiler diet containing oil with HLB value of 7 to 10 to ensure better utilization.
9	**Project Title**	**Studies on performance of broiler, meat quality and immune status as influenced by essential oil.**
	Investigators	Dr. Kundur P. R. and Dr. Dhumal M. V.
	Name of the college	COVAS, Parbhani
	Recommendation	A) Supplementation of essential oil extracted from garlic @ 200mg/kg of feed is recommended for better production parameters in broilers. B) Supplementation of essential oil extracted from garlic @ 100mg/kg of feed and essential oil extracted from neem @ 100mg/kg of feed is recommended for improvement of oxidative stability, economical gain and immune status of broilers.
10	**Project Title**	**Studies on effect of different levels of xylanase enzyme on performance of broiler**
	Investigators	Dr. Gade D. S. and Dr. Dhumal M. V.
	Name of the college	COVAS, Parbhani

	Recommendation	Supplementation of xylanase enzyme @ 100g/ton of wheat based diet is recommended for improvement in production, performance, litter quality, livability and profitability of broiler production.
11	**Project Title**	**Effect of "Emulso V" Emulsifier on Production Performance of Broiler Chicken.**
	Investigators	Dr. Lonkar V. D. and Dr. Mote C.S.
	Name of the college	KNPCVS, Shirval.
	Recommendation	Combination of *Glycerol monostearate, Sucrose fatty acid ester and Sorbitan fatty acid ester* as an emulsifier may be used @150 g /T in broiler diet with reduced Metabolic Energy to the tune of 50 Kcal/Kg of feed.
12	**Project Title**	**Assessment of quality of chicken nuggets treated with garlic extract at refrigerated storage.**
	Investigators	Satish Yadav & Dr. S. R. Badhe
	Name of the college	BVC, Mumbai.
	Recommendation	Water used in emulsion preparation can be replaced with 50% garlic extract (50 ml garlic extract ±50 ml of water) to extend the shelf life of chicken nuggets upto 14 days under refrigeration condition (4±1) without any adverse effects on sensory qualities.
13	**Project Title**	**A Comparative Study of Adoption of Dairy Husbandry Practices (DHPs) in Conventional and Loose Housing System (LHS) by Dairy Farmers in Western Maharashtra.**
	Investigators	Pawade Pawan Arvindrao and Dr. Sariput P. Landge
	Name of the college	NVC, Nagpur.
	Recommendation	The loose housing system is recommended for rearing of dairy cattle considering the advantages such as low capital requirement for building the shed, efficient utilization of feed and water, lower requirement of labour, lower incidence of mastitis, other illnesses, lameness and infertility and ease in heat detection.
14	**Project Title**	**Association of sperm mitochondrial functional markers with semen quality traits in Murrah Buffalo.**
	Investigators	Dr. S. N. Jadhav, Dr. A. K. Barate, Dr. V. R. Patodkar
	Name of the college	KNP College of Veterinary and Animal Science, Shirval, Satara
	Recommendation	Phenotypic quality of fresh & cryop reserved semen of Murrah buffalo is affected by alteration in mitochondrial functional markers including increased production of reactive oxygen species by sperm mitochondria, increased lipid peroxidation of sperm membrane, poor antioxidant defence mechanism in spermatozoa and alteration in gene expression in mitochondrial respiratory genes controlling mitochondrial activity in buffalo spermatozoa.
15	**Project title**	**Molecular epidemiology of *Peste-des-petitis-ruminants virus* in and around Nagpur.**
	Investigators	Narayan R. and Tembhurne P. A.
	Name of the college	Nagpur Veterinary College, Nagpur
	Recommendation	The Present study recommends that for detection of PPRV in field samples by RT-PCR technique targeting both the M and N genes should be employed.
16	**Project title**	**Studies on thyroid profile in cats with special reference to Radio Immuno Assay.**
	Investigators	Dr. Purvi Naik and Dr. C. N. Galdhar
	Name of the college	Bombay Veterinary College, Mumbai.

	Recommendation	While using BRIT manufactured human based RIA kit for detection of tT4 (total Thyroxin) and fT4 (free thyroxin) in felines, the procedure recommended by the manufacturer should be modified by doubling the volume of standards (supplied with kits) and serum samples (Test samples) and halving the results obtained.
17	**Project title**	**Evaluation of various therapeutic protocols for the treatment of osteomalacia in buffaloes.**
	Investigators	A. S. Jadhav and Dr. A. U. Bhikane
	Name of the college	College of Veterinary & Animal Science, Udgir.
	Recommendation	1. Osteomalacia in buffaloes can be tentatively diagnosed and differentiated from TRP on the basis of normal body temperature accompanied by progressive stiff gait, arching of back and kneeling and can be further confirmed by radiological examination. 2. Administration of 50 ml buffered phosphorus preparation intravenously for first two days followed by intravenous administration of 25 ml of same preparation for next days and subsequent administration of50 gm mineral mixture BID orally till recovery is effective and economical method of treatment of osteomalacia in buffaloes.
18	**Project title**	**Clinico-therapeutic studies on oxalic acid toxicity in cattle due to *Anagallisarvensis.***
	Investigators	H. B. Musale and Dr.S. U. Digraskar.
	Name of the college	College of Veterinary & Animal Sciences, Parbhani.
	Recommendation	For effective treatment of *Anagallis arvensis* toxicity in cattle, calcium borogluconate (25%) 450 ml i/v OD and lime water (10%) @ 1 lit. BID orally along with standard supportive treatment (DNS 25 ml/kg bw i/v in divided doses, Inj. Furosemide 1-2 mg/kg bw i/m, anti-histaminics, anti-inflammatory, haemostatics, B-complex and purgatives) is recommended.
19	**Project title**	**Augmentation of reproductive performance in repeat breeding cross bred cows.**
	Investigators	A.B. Korade and Dr. M. B. Amle
	Name of the college	KNP College of Veterinary Science, Shirval.
	Recommendation	For achieving the estrus response and conception rate that in cows under field condition, prostaglaudin F2 alpha is administered @ 500 mg intramuscularly may be reduced down to half i.e. 250 mg and administered by intra-vulvosubmucosal route.
20	**Project title**	**Clinical evaluation of Platelet Rich Plasma on fracture healing in Caprine.**
	Investigators	Shinde Kushal Shantaram and Dr. V. D. Aher
	Name of the college	College of Veterinary & Animal Science, Parbhani.
	Recommendation	Administration of autologous platelet rich plasma at fracture site on 0, 3rd and 7th day of immobilization by applying plaster of paris cast accelerates the fracture healing in caprine.

8.D. MEMORANDUM OF UNDERSTANDING :

A memorandum of Understanding have been signed between Maharashtra Animal & Fishery Scienes University, Nagpur and Genext Genomics Pvt. Ltd. 103, Abhayankar Nagar, Nagpur for development of lateral flow/ELISA detection not for the early diagnosis of therileriosis in cattle at Nagur Veterinary College, Nagpur. The validity of the MoU is of three years.

8.E. STUDENT'S RESEARCH :

8.E.1. Veterinary Anatomy			
1	**Title**	:	**Gross Anatomical and Histomorphological Studies of Testis in Goat (Capra Hircus)**
	Conclusions	:	The size, Leydig cells, Sertoli cells, Germ cells and diameter of seminiferous tubule and biometrical parameters except density were higher in the left testis as compared with right. The histochemical and histoenzymic properties varied between the different components of right and left testicle. The Seminiferous tubules of the testis were composed of Sertoli cells, Spermatogonia, Spermatocytes and Spermatids in different stages of differentiation.
2	**Title**	:	**Comparative Morphological Studies of Dentition in Domestic Animals**
	Conclusions	:	On the basis of gross morphological study, the teeth dimension was helpful in studying the differences in species and can be utilized for sex determination in pig. Ratio of crown and root was highest in cattle, next is pig and lowest in dog. Size and shape of the teeth can be determined by odontometry. Radiography shows that dentine of pig and cattle have same level radiopacity.
3	**Title**	:	**'Histological and histochemical studies on cerebrum, cerebellum, pons and medulla oblongata in Goat *(Capra hircus)***
	Conclusions		Cerebrum showed progressive granulation followed by mild pigmentation on myelin sheath. The myelin sheath was found to undergo splitting and cytoplasm of oligodendrocyte appeared as electron dense which subsequently appeared as projected myelin balloons. The neurons of the certebellum were found to undergo complete degeneration with total shrinkage of mitochondria and cell was considered as apoptic with advancement of age.
4	**Title**		**Histomorphological and Histochemical studies on gut associated lymphnoid tissue of Khaki Campbell breed of Duck *(Anas platyrhynchos)***
	Conclusions		The histomorphological study on gut associated lymphatic tissue was carried on 30 Khaki Campbell breed of duck in different age groups. The lymphatic tissue was observed in three different forms, the diffuse, solitary and lymphatic follicles. The distribution of lymphatic tissue was more or less similar but there was decline in the older age birds. The study conclude that the mucosa of the duckis protected by special immune mechanism for effective defence attack on antigen.
5	**Title**		**Gross Anatomical and morphological studies on Hooves in Equines *(Equus caballus)* in different age groups.**
	Conclusions		The hind hoof toe was more steeper than the forelimb hoof in all age groups. There was no influence of age on the heel angle.
6	**Title**	:	**Comparative gross anatomical and histomorphological studies on small intestine in sheep (Ovis aries) and goat (Capra hircus)**
	Conclusions	:	Ileum was comparatively smaller and straight than the other segments of the small intestine. The average values for the biometrical parameters showed no significant different between both the species. The wall of the small intestine showed tunica mucosa, tunica submucosa, tunica muscularis and serosa. The micrometrical observations showed non significant difference. The reaction for the glycogen and netural muccopoploy saccharides was observed intense to moderate in bothe species.
8.E.2 Veterinary Physiology			
1	**Title**	:	**Monitoring the reproductive status in buffaloes by evaluating urinary pregnanediol-3-glucoronide and creatinine**
	Conclusions	:	Evaluation of urinary pregnanediol-3-glucoronide (PdG) levels would be useful for studying reproductive seasonality, pregnancy and parturition in buffaloes, although more research is needed to be done in this aspect in future.

2	**Title**	:	**Serum enzymes, some macro and micro elements during lactation in buffaloes.**
	Conclusions	:	The relationship of the serum enzymes i.e. AST and ALT, macro-elements i.e. sodium, potassium and microelements i.e. iron and zinc during lactation in buffaloes was statistically non-significant.
3	**Title**	:	**Certain serum trace minerals and citamines in lactating and non-lactating Pandharpuri buffaloes.**
	Conclusions	:	The present data reveals that there was significant effect of lactation on the levels of serum zinc and vitamin D3 with the values in lactating and non-lactating Pandharpuri buffaloes viz. zinc in ppm(1.01±0.20, 2.02±0.32) and vitamin D3 in ng/ml (109.87±10.02, 69.37±6.01).There was no significant effect of lactation on the levels of serum iron, copper, selenium, vitamin C and vitamin E with the values in lactating and non-lactating Pandharpuri buffaloes viz. iron in ppm (1.58±0.25, 2.17±0.33), copper in ppm (2.71±0.48, 2.37±0.62), selenium in ppm (0.163±0.00, 0.165±0.00) and vitamin C in µg/ml (2.60±0.24, 2.28±0.48), vitamin E in µg/ml (2.61±0.36, 2.40±0.23).Significantly lower value of serum zinc (ppm) and higher values of vitamin D3 (ng/ml) were observed in lactating than non-lactating Pandharpuri buffaloes. However, non-significantly lower values were reported in the concentration of serum iron and selenium whereas higher values were reported in the concentration of serum copper, vitamin C and vitamin E in lactating than non-lactating Pandharpuri buffaloes.
8.E.3 Animal Nutrition			
1	**Title**	:	**Effect of supplementation of bypass protein with or without bypass fat on lactation performance of crossbred cows**
	Conclusions	:	It is concluded that supplementation of bypass protein @ 500 g replacing equal amount of concentrate mixture along with bypass fat @ 100 g per cow per day is beneficial in improving milk production, milk composition, nutrient intake, feed efficiency and also cost effective
2	**Title**	:	**Effect of of bypass fat supplementation on performance of growing calves**
	Conclusions	:	It is concluded that supplementation of bypass fat @60g per calf per day is beneficial for improving the overall growth performance of calves in terms of weight gain, efficiency of feed utilization and increased digestibility of nutrients and such supplementation is cost effective. The supplementation of bypass fat @30g per calf per day is also beneficial for economical calf rearing but profit margin is less when compared with supplementation of bypass fat @60g per calf per day.
3	**Title**	:	**Effect of replacement of maize with dry bakery waste with or without lysophopholipid in broiler diet**
	Conclusions	:	It is concluded that Dry Bakery Waste can be includedin broiler diets upto 50% level replacing maize with or without lysophospholipid supplementation @0.05 and 0.1% level to obtain improved growth performance and higher profit from the birds.
4	**Title**	:	**Utilization of soybean hulls replacing maize in the concentrate mixture of lactating buffaloes**
	Conclusions	:	It is concluded that soybean hulls can replace corn upto 50 percent as an energy source in the concentrate mixture of lactating buffaloes for economical milk production.
5	**Title**	:	**Replacement of maize with soybean hulls in the concentrate mixture of growing buffalo calves with or without enzyme supplementation**
	Conclusions	:	It is concluded that soybean hulls can replace corn as an energy source upto 100 percent in the concentrate mixture for economical raising of growing buffalo calves.
6	**Title**	:	**Utilization of sugarcane press mud cake as a source of calcium and phosphorous in broiler chicken diet with or without phytase**
	Conclusions	:	It was concluded from this study that inclusion of sugar cane press mud cake up to 15 per cent in the diet of broilers as a source of calcium and phosphorous with phytase enzyme does not have any adverse effect on performance. The observations on body weight, gain in weight, cumulative feed consumption, feed conversion efficiency, serum phosphorous and Bone mineralization study indicated significant effect of treatment over corn soybean diet, which

			support the performance. Further, sugar cane press mud cake is an economical cheaper source than di calcium phosphate which can increase the profit margin in broiler sector.
7	**Title**	:	**Effect of supplementation of some critical amino acid on low protein maize soya based diet on performance of broiler chicken**
	Conclusions	:	Broiler chicken fed the amino acid fortified, 10% low crude protein diet than BIS 2007 had growth performance similar to chicks fed the positive control diet (BIS 2007). L- Glycine supplementation in a low- crude protein, amino acid supplemented diet consistently improved FCR of 0- to 21-d-old broiler chicks. Blood urea nitrogen in L- Glycine supplemented group was better than that of group containing 10% low protein fortified with critical amino acid. The observations on body weight, gain in weight, feed consumption, cumulative feed consumption and feed conversion efficiency study indicated significant effect of treatment over corn soybean diet, which support the performance. Further, amino acid fortified diet is economical because synthetic amino acids are cheaper source of protein with good bioavailability than soybean meal which can increase the profit margin in broiler rearing without any adverse effect.
8	**Title**	:	**Effect of urea treated soybean straw based total mixed ration (tmr) on nutrient utilization and methane emission in buffaloes**
	Conclusions	:	It is concluded that due to urea treatment of soybean straw, CP content was substantially improved. It is therefore the urea treatment of soybean straw may be undertake to improve DMI and palatability.The 5 percent of urea at 30% moisture level and 21 days maturation period may adaptable for urea treatment of the soybean straw. Treated soybean straw can be used 60:40 ratio in TMR for buffaloes feeding without any adverse effect.It is also conceded that methane production from ruminant can also be reduce due to feeding of urea treated soybean straw based TMR compare to as such feeding of straws by farmer.
9	**Title**	:	**Effect of full fat soya and sorghum stover based total mixed ration on methanogenesis in buffaloes**
	Conclusions	:	It is concluded that feeding of full fat soya and sorghum stover based total mixed ration with 60:40 roughage to concentrate ratio showed a significant role on reducing methane production without affecting the digestibility and utilization of different nutrients by the animal. The digestibility of nutrients increased symmetrically due to full fat soya. All the ruminal parameters were in the normal range except TCA ppt indicating more synthesis of microbial protein in the rumen beneficial effects of feeding full fat soya and sorghum stover based total mixed ration on ruminal microflora. Overall findings in the present study, the feeding of full fat soya and sorghum stover based total mixed ration has no positive effects on body weight gain, rumen parameter, dry matter intake as well as digestibility of different nutrients.
10	**Title**	:	**Assessment of cinnamon (*Cinnamomum cassia*) powder as phytobiotic growth promoter in broilers**
	Conclusions	:	It can be inferred that the inclusion of cinnamon powder at the rate 0.12 per cent in the ration of broilers was beneficial; it improved feed efficiency thereby improving the performance of birds.
11	**Title**		**Supplementation of black pepper (*Piper nigrum*) powder as growth promoter in broiler chicken**
	Conclusions		It may be concluded that black pepper supplementation up to 0.1% level improved growth performance, immune response and thereby improving the profitability of broiler production.
12	**Title**		**Performance of broiler chicken fed *Moringa oleifera* leaf meal supplemented diet**
	Conclusions		It may be concluded that inclusion of 2% per cent *Moringa oleifera* leaf meal in broiler ration is beneficial in improving cumulative body weights, feed conversion ratio, decreasing serum cholesterol levels and betterment of economics of broiler production.
8.E.4 Animal Genetics and Breeding			
1	**Title**	:	**Cytogenetic Analysis of Breeding Bucks of Osmanabadi and Boer Breeds**
	Conclusions	:	The QFQ banding technique was found to be simplest banding technique for the karyological evaluation of breeding bucks. However, it was noted that the goat chromosomes do not

			present the brilliant fluorescence. Therefore, comparative study with that of other species chromosomes Q banding would be worthwhile for future research work in order to obtain the better or optimal Q banding pattern of goat chromosomes.
2	**Title**	**:**	**Comparative Cytogenetic Studies of Mithun and MithunX Cattle crosses.**
	Conclusions	**:**	The diploid chromosome number in mithun was found 2n=58, consisting of 28pairs of autosome and one pair of sex chromosome. The diploid chromosome number in mithun x cattle cross was found 2n=59, intermediate between mithun and cattle. In all the acrocentric autosomes in mithun and mithun x cattle crossbreds, presence of stained centromere was clearly observed. However, no distinct centromeric staining was observed in sub-metacentric and metacentric chromosomes. No chromosome abnormalities were found either in number or morphology of any animals under the present study.
3	**Title**	:	**Genetic polymorphism of β-casein (csn2) in zebu and hf x zebu crossbreds**
	Conclusions	:	Present study suggested that increased exotic germplasm inheritance in crossbreeding program will increase the frequency of A1 allele in the population.The low exotic germplasm inheritance in crossbreeding programme will lowers the frequency of A1 allele and fixes the A2 allele in the crossbred population which considered as beneficial for human health.The findings of the present study regarding increase of A1 allele in the Zebu x HF crossbred population with the increase of exotic germplasm suggest the need of careful selection of exotic or crossbred breeding bulls followed by proper screening for A1A2 locus before their use for artificial insemination under genetic improvement scheme by Government of Maharashtra to avoid any future public health implications. Considering the increasing trends of crossbred cattle population for higher milk production and positive relationship of A2 variant with milk performance trait, there is an immediate need to study the association of A2 allele with milk production and performance trait in crossbred population of Maharashtra so that the existing genetic variability in beta casein locus of crossbred population may be exploited in near future for genetic selection. Further to validate the present findings a screening of large crossbred population with various level of exotic germplasm inheritance is must to draw a sound breeding policy to minimize the propagation of A1 allele in the crossbred population and to prevent the future health hazards.
4	**Title**	:	**Study of polymorphism in α-lactalbumin & β-actoglobulin genes in marathwadi buffalo**
	Conclusions	:	α-Lactalbumin gene showed monomorphic genotype (BB) in Marathwadi buffaloes. β-Lactoglobulin gene was observed in monomorphic pattern (AB) in Marathwadi buffalo. The mean values for protein, fat and Lactose content in Marathwadi buffalo were lower than earlier reports. The monomorphic genotype AB observed for β-LG gene in Marathwadi buffaloes obviously indicates the presence of AA and BB genotypes in population of Marathwadi buffaloes. The present study is tested only on small number of animals. Hence screening larger population of Marathwadi buffaloes with respect to genotyping of α-LA and β-LG genes is required to explore the association of these genes with milk production traits In Marathwadi buffaloes.
8.E.5 Department of Veterinary Parasitology			
1	**Title**	**:**	**Prevalence of Gastrointestinal tract parasitic infections in domestic ruminants of Udgir (Maharashtra State)**
	Conclusions	:	Faecal examination of 999 cattle, 861 buffaloes, 753 sheep and 740 goats, during August 2015 to July 2016 revealed Strongyles sp, *Strongyloides* sp, *Trichuris* sp, *Moniezia expansa , Moniezia benedeni , Eimeria sp ,* mixed infection and *Toxocara sp* (Only in cattle and buffaloes) . Seasonal fluctuations were observed in all the host species for all the parasites. However, in monsoon showed the highest infection in cattle as compare to other seasons. Age-wise analysis of gastrointestinal parasitic infections showed various trends of infection. In cattle and buffalo calves higher and in sheep and goats all ages showed higher prevalence. Sex-wise analysis indicated slight higher (statistically non significant) in males than female among cattle, buffalo, sheep and goat. Breed-wise analysis of gastrointestinal parasitic infections in Red Khandhari and and

			Deoni cattle, Murrahand and Marathwadi buffalo, sheep and goats all showed parasitic infections. Losses due to parasitic infections in terms of milk, meat and wool productions from cattle, buffalo, sheep and goats were recorded as Rs.718.0 lakh / year. This indicates that there is need to find out solution for control the parasitic diseases of livestock.
2	**Title**	:	**Evaluation of Herbal Acaricide preparation against tropical cattle tick, *Rhiphicephalus microplus***
	Conclusions	:	The herbal preparation containing the crude oils at the concentrations *Cymbopogon maritini* 0.05g/ml, *Eucalyptus gloulus* 0.05g/ml, *Azadirachta indica* 0.03g/ml ml, *Pongamia glabra* 0.03g/ml and *Cinnamomum camphora* 0.02g/ml were evaluated as ovicidal and oviposition deterrent against cattle tick *Rhipicephalus microplus*. Results @ concentration of 20g/L of water were maximum and exerted 100% ovicidal effect. There was no mortality in treated group. The treated females laid the eggs as 220 ±20.698 against 1167 ±139.175 female from control. The numbers of eggs hatched out of 100 were 0 ± 00 and 95 ±1.050 in treated and control groups, respectively. It was concluded that herbal preparation was ovicidal as well as oviposition deterrent.
8.E.6 Department of Poultry Science			
1	**Title**	:	**Effect of feeding various levels of Guar meal on performance of layers**
	Conclusions	:	The supplementation of guar meal replacing soybean meal at 20% level on part basis could be an effective substitute for soybean meal, but not superior to soybean meal in terms of performance. Moreover, the use of Guar meal replacing soybean meal at 20% level is economically beneficial in layers.
2	**Title**	:	**Effect of Calcium Pidolate on egg production and egg quality during last phase of production cycle with reducing levels of inorganic Calcium**
	Conclusions	:	Using calcium at 4% level in layer dietduring the last phase of production recorded better performance & profits. It is also noted that the supplementation of calcium pidolate did not prove to be effective in overcoming the effects of reduced level of calcium in the layer diet during the last phase of production cycle.
3	**Title**	:	**Evaluation of three different emulsifiers for different sources of oils in broiler diets**
	Conclusions	:	Emulsifier having a blend of glycerol polyethylene glycol ricinoleate having HLB value of 7 was found to be useful in broiler diets containing soybean oli or ricebran oil for better production performance and increasing profit margins. However, supplementation of any blend of glycerol polyethylene glycol ricinoleate in this study was not beneficial in broiler diets containing Bergafat.
4	**Title**	:	Comparative Performance of Naked Neck and Normal Feathered Commercial Broilers Chicken During Summer Season
	Conclusions	:	The stuty concluded that there were no significant differences among the broiler birds of different strains reared with or without feed restrictions on carcass traits while the Ross (Na) adlib diet achieves better growth performance whereas Cobb-400 adlib diet gives higher net profit.
5	**Title**		**Studies on performance of broiler, meat quality & immune status as influenced by essential oil**
	Conclusion		From the study it can be concluded that supplementation of garlic @ 200mg/kg of feed is beneficial for the production parameters. However, supplementation of garlic and neem essential oil @ 100mg/kg of feed alone in broiler ration is beneficial from the point of oxidative stability, economical gain and immune status of commercial broiler chickens.
6	**Title**		**Studies on effect of different levels of xylanase enzyme on performance of broiler**
	Conclusion		Thepresent study concluded that the profitability per bird was higher with xylanase supplemented groups (both) as campared to unsupplemented control groups. However the supplementation of xylanase in the diet @ 100g/ton of feed resulted in highest profitability.

7	**Title**	:	**Effect of supplementation of *moringa oleifera* leaf powder on performance of broilers**
	Conclusions	:	The supplementation of *Moringa oleifera* leaf powder in broiler diets at 2-4 g/kg of feed is found to improve growth performance. Moreover, supplementation of *Moringa oleifera* leaf powder @ 2g/kg feed proved to be most beneficial in terms of growth and economic returns. Supplementation of *Moringa oleifera* leaf powder also helped in improving immunocompetence and gut health of broilers.
8	**Title**		**Effect of heat stress alleviating agents on performance of broilers**
	Conclusions		Chromium picolinate alone or combination of nutritional agents during heat stress bird showed better performance in terms of higher body weight, weight gain and better feed conversion ratio when compared to control group. More ever chromium picolinate supplemented groups showed higher net profit than other groups.
9	**Title**		**Effect of dietary supplementation of l-threonine on performance of broilers**
	Conclusions		The broiler ration containing L-threonine level above NRC recommendation improved body weight, weight gain and feed conversion ratio as compared to the control diet and threonine deficient diet without any adverse effect. Economically, L-threonine supplemented 10% above NRC recommendation have given better performance, better immunity, reduce cholesterol, numerically increases ND and IBD antibody titters as compared to NRC level and threonine deficient diet. However, L-threonine supplementation numerically higher carcass traits and reduces cholesterol level.
8.E.7 Livestock Production Management			
1	**Title**	**:**	**Effect of feeding frequency on growth performance of Osmanabadi kids during summer season**
	Conclusions	**:**	There was significant effect of feeding frequency on growth, feeding and water intake and behaviour performance of Osmanabadi kids during summer season.
2	**Title**	**:**	**Udder and teat measurements and their correlation with milk yield of Murrah buffaloes.**
	Conclusions	**:**	The occurrence of bowl shaped udders and the cylindrical teat were maximum
3	**Title**	**:**	**Performance of sirohi kids under hot & humid climate of sindhudurg district**
	Conclusions	**:**	The growth performance with respect to body weight gain and body measurements of Sirohi kids under hot and humid climate was found to be slightly affected.The feed intake was found to be proportionately increased with increase in age and weight of Sirohi kids in hot and humid climate.The health status of Sirohi kids in hot and humid climate on the basis of cortisol level and blood parameters was found to be normal.The behavior of Sirohi kids in hot and humid climate was found to be normal.
4	**Title**	**:**	**Effect of Azolla meal supplementation on Health status and economics in Osmanabadi does**
	Conclusions	:	The crude protein content in azolla meal is higher as compared to goat pellets.Azolla meal upto 25 % in the concentrate supplementation in does ration is beneficial.Improvement in Haematological parameters indicates beneficial effect on health of the does.Biochemical parameters such as Total protein and BUN are within normal range which indicates no adverse effect of azolla meal in does.Azolla meal supplementation in the diet of does was economically beneficial.
5	**Title**	:	**Morphometric Characterization of Red Kandhari Cattle in their breeding tract**
	Conclusions	:	The highly significant effect of sex on all traits under study is in confirmation with the universally accepted fact of superior performance of male over female. The non-significant effect of district on body growth and development may lead to conclusion that genetically the Red Kandhari Breed is stabilized population which does not respond to some genetic and non-genetic variations.
6	**Title**	:	**Studies on Production and Reproduction Performance of Tharparkar Cattle at Organized Farm**
	Conclusions	:	Tharparkar cattle at Livestock Research Station, Chandan, Jaisalmer, RAJUVAS, Bikaner may be classified as pure and good herd of Tharparkar for future breeding and further improvement of the breed.

7	**Title**	:	**Study on Growth Performance and Behaviour Pattern of --- Sangamneri Goat Under Different Rearing Systems**
	Conclusions	:	There was a significant effect of different rearing systems on growth performance and total feed intake of Sangamneri goats. The growth performance and daily total feed intake was significantly higher in stall feeding with concentratesupplementation and browsing with concentrate supplementation group than browsing group. The average rumination and resting (idling and sleeping) time of goats are significantly higher in stall feeding system than browsing systems, indicating animals under stall feeding were more comfortable than other groups. The average daily water intake (lit/day) and average behavioural parameters like total feeding (browsing and grazing), drinking and walking time of goats were ignificantly higher under browsing and browsing with concentrate supplementation group than stall feeding with concentrate supplementation group. The rearing systems do not affect the weekly average defecating and urinating behavior of Sangamneri goats.The rearing systems does not show much variation in body condition score (BCS) of Sangamneri goats. The results of various parameters viz. growth, feed intake, behavioural observation exhibited like rumination and resting (idling and sleeping) by Sangamneri goats under stall feeding were better than browsing systems.
8	**Title**	:	**Comparative performance of Pandharpuri Buffalo calves under different rearing systems.**
			There was non-significant difference observed for the body weight, daily growth rate, and daily average feed consumption under loose rearing system as compared to conventional rearing system. The water intake of Pandharpuri buffalo calves is higher in loose rearing system than, that of conventional rearing system. Is indicating that, the Pandharpuri buffalo calves under loose rearing were more comfortable and found stress free. The physiological parameters like rectal temperature, respiration rate, pulse rate of Pandharpuri buffalo calves under conventional rearing system and loose rearing system did not show significant difference. The both conventional and loose rearing system does not affect the haematological parameters like haemoglobin content and White blood cells (WBC), Red blood cells (RBC) and Packed cell volume (PCV). In cleanliness score of Pandharpuri buffalo calves under loose rearing was highly significant ($P<0.01$) than conventional rearing system.This system shows more clean and comfortable in loose rearing system than, conventional rearing system. Rearing of Pandharpuri buffalo calves by conventional or loose rearing system does not affect the rumination and standing duration. Buffalo calves show more comfort in open area than, shaded area further siting/idling, self-licking, grooming was significant in loose rearing system than, that of conventional rearing system.
8.E.8 Livestock Products Technology			
1	**Title**	:	**Assessment of quality of chicken nuggets treated with garlic extract at refrigerated storage.**
	Conclusions	:	From the present study it is concluded that garlic extract possess good antimicrobial as well as antioxidants properties. 50% Garlic extracts prepared chicken nuggets are self stable without change in physiochemical properties under refrigerated storage.
2	**Title**	:	**Assessment of storage stability garlic extracts treated paneer at refrigeration temperature.**
	Conclusions	:	From the present study it is concluded that garlic extract possess good antimicrobial as well as antioxidants properties. 50% Garlic extracts prepared paneer are self stable without change in physiochemical properties under refrigerated storage.

3.	**Title**	:	**"Process standardization of chevon enriched noodles"**
	Conclusions	:	The acceptable quality of chevon noodles were prepared with incorporation of 20% chevon mince in wheat flour and 30% chevon mince in rice flour based noodles without adversely affecting the sensory attributes and physico-chemical characteristics.Protein content of the product was improved due to addition of chevon mince in flour based noodles.Chevon noodles made with incorporation of 20% chevon mince in wheat flour and 30% chevon mince in rice flour based noodles were acceptable for a period of 48 days when packed aerobically in LDPE and stored at 35±2° C.Chevon noodles made with incorporation of 20% chevon mince in wheat flour based noodles are more cost effective as compared to 30% chevon mince in rice flour based noodles.
8.E.9 Veterinary & Animal Husbandry Extension			
1	**Title**	**:**	**Study of Indigenous Technical Knowledge (ITKs) on Dairy Husbandry Practices followed by Tribal Dairy Farmers in Palghar Dist. of Maharashtra.**
	Conclusions	**:**	Majority (70%) of farmer's belong to old age group, having high (57.5%) illiteracy rate and had medium (61.67%) level of family size.Tribal farmers of the study area had deep knowledge regarding indigenous practices. A total of 84 ITKs were documented under different areas of breeding, feeding, health care and management practices. Compatibality of ITKs with local situtation and knowlegde, availiblity of herbal plants, cost effectiveness of ITKs and avaliblity of traditional/local healers were among the most important suitablity factors which determine the use of ITKs by tribal farmers of Palghar.
2	**Title**	**:**	**An Exploratory Study of Dairy Farming Practices in Nanded District of Maharashtra**
	Conclusions	**:**	Majority (60.83%) of the dairy farmers were middle aged, illiterate, medium family size and possess small land holding.Dairy farmers of Nanded District possess low knowledge regarding scientific health care and management practices Dairy as a main source of family livelihood along with agriculture was the major strength of farmers towards dairy farming. Undeveloped dairy cooperative network, poor productivity of local breeds, negligiance and poor implementation of government policies were the major weakness of dairy farming.High cost of feed and medicines, non avaliblity of veterinary staff and lack of knowledge regarding scientific dairy practices were among the main constraints faced by the dairy farmers.
3	**Title**		**'A Comparative Study of adoption of Dairy Husbandry Practices (DHPs) in Conventional and Loose Housing System (LHS) by Dairy Farmers in Western Maharashtra'**
	Conclusions		It is recommended to use loose housingsystem for dairy animals for its attributes like low capital requirement for shed, low incidences of mastitis, illness, lameness and infertility, high efficiency in utilization of feed, concentrates, utilization of drinking water, utilization water for other activities and labour utilization and ease in heat detection and expansion of dairy farm .
4	**Title**	:	**Information needs of buffalo dairy entrepreneurs of peri-urban area in Marathwada region of Maharashtra state"**
	Conclusions	:	Majority of respondents were of middle age group, educated upto higher secondary school level, possessing medium herd size, annual income, social participation, information sources, market orientation and possessed medium level of knowledge and adoption of buffalo management practices. In relation to information needs, respondents expressed marketing and others as most important information need, in particular break-even point and break-even analysis were the most needed, followed by demand and supply, traditional practices and government guidelines. Insurance policies and competitors in the market were ranked last. The respondents expressed health as second most important information need. In particular, difference between healthy and diseased animal was on top priority followed by vaccination, different diseases and their first aid, pest management, production losses due to diseases, diseases and symptoms and care during vaccination in descending order. After marketing and health respondents expressed housing as most important information need with waste management been the most important followed by management during different seasons, construction of shed, farm layout, selectionof site and pre-requisites

			for starting buffalo enterprise in descending order.
5	**Title**		**Information Needs of Osmanabadi Goat Entrepreneurs in Marathwada region of Maharashtra state**
	Conclusions		Training should be imparted to the goat entrepreneurs on regular interval particularly focussing on, breeding, health aspect, nutritional, managemental, housing and marketing. Training on regular interval, preferably of short duration should imparted focussing on the practical know-how, farm visit, economics and comprising of sharing the success stories by the goat entrepreneurs of that region. Extension material (in Audio-visual forms) should be designed in simple, lucid and self-explanatory language. it should made available to the entrepreneurs through authentic ,reliable training agencies like Extension .Directorate of veterinary Universities and the Government approved training agencies .
8.E.10 Veterinary Public Health			
1	**Title**	**:**	**Studies on Prevalence of Trichinellosis in Pigs, Rodents and Humans**
	Conclusions	**:**	PCR assay analysis of diaphragm samples of pigs and rodents showed the prevalence of 0.86% and 6.02%, respectively which was confirmed same as observed in HCl-pepsin digestion assay. The comparative study of HCl-pepsin digestion, PCR and ELISA methods noted that the ELISA could detect more number of positive samples of *Trichinella* than the first two methods. Thus, ELISA assay can be used for the screening of large number of animal (pigs, rodents, etc.) and human sera samples.
2	**Title**	**:**	**Sero-prevalence of Cysticercosis in Pigs in Maharashtra State**
	Conclusions	**:**	Out of 172 pig sera samples analyzed using ELISA, FTA and western blot, the seroprevalence of cysticercosis was observed to be 8.5%, 7.5% and 6.98%, respectively. The sensitivity of ELISA, FTA and western blot reported to be 100%, 100% and 75% respectively, while specificity found to be almost similar. It indicates from the study that western blot found less sensitive than ELISA and FTA. FTA can be used to monitor occurrence of porcine cysticercosis, as pig acts as intermediate host to transmit the disease.
3	**Title**	**:**	**Detection of *E.coli* using loop-mediated isothermal amplification (lamp) method in animal origin foods**
	Conclusions	**:**	It was observed that LAMP was 10 times more sensitive than conventional PCR in terms of detection limits.The LAMP method gives results similar to that of gold standard microbiological culture method due to its rapidness, swiftness, sensitivity, specificity, easiness and cost-effectiveness. Therefore, it can be recommended as a field test for disease diagnosis and improving food sanitation, maintaining food safety as well as developing international trade.
4	**Title**		**Scenario of *Listeria Monocytogenes* in Clinical Cases of Small Ruminants and Human Contacts**
	Conclusions		Isolation and identification of *Listeria monocytogenes* by two step enrichment in UVM and plating on PALCAM agar proves satisfactory combination for isolation of *Listeria monocytogenes* revealing 3 from goats and 2 from sheep. All isolates of *Listeria monocytogenes* turned highly pathogenic by *in-vitro* assays including molecular techniques exhibiting presence of hlyA, plcA, actA, and iap gene.The isolates were found to be multidrug resistant. The LLO based ELISA recorded positivity of 11.11%, 16.96% and 7.5% in reproductive disorders of goats, sheep and human respectively.The technique of adsorption of sera with SLO seems to be significant in ruling out the cross reactivity with LLO .
5	**Title**		**Magnitude of scrub typhus among humans & Rodents in and around Nagpur**
	Conclusions		Nested PCR is found to be more efficacious than conventional PCR in diagnosis of scrub typhus.Serodiagnosis based on IgM ELISA using scrub typhus detect™ ELISA kit (In Bios International, USA) was found to be of value in detecting antibodies.Conventional PCR is found to be more useful in detection of *Orientia tsutsugamushi* from blood and tissue samples of rodents than nested PCR.There is perpetuation of the *Orientia tsutsugamushi* in and around Nagpur region among human as well as rat population.

6	**Title**		**Biochemical and Molecular Characterization of Common Food Borne Organisms in Pork and Chicken**
	Conclusions		Preston enrichment broth and mCCDA agar is satisfactory media for isolation of *Campylobacter* spp. under microaerophilic condition. Likewise EMB, PALCAM, XLD are satisfactory media for isolation of E. *coli*, *Listeriamonocytogenes* and *Salmonella* spp. respectively for routine laboratory protocols.In the present investigation food borne pathogen with biochemical variations are reported thus recommends use of set of tests for characterization and confirmation of isolates. Highly pathogenic nature of the *Campylobacter*, *E. coli*, *L. monocytogenes* and Salmonella isolates obtained from food animals in the region is a matter of concern from public health point of view.The highly resistant nature of the isolates to the antibiotics signifies entry of residues in food chain which is alarming situation and needs special attention.
7	**Title**		**"Serodiagnosis of Cysticercosis in Pigs and Humans"**
	Conclusions		Serodiagnosis based on indirect ELISA employing SA and ESA are found to be more efficacious.Lower and medium kDa protein fragments seem to have diagnostic value for cysticercosis.The diagnostic potential of blood PCR needs to be revalidated by inclusion of large number of known positive cases of cysticercosis.Attempt should be made for purification of antigens employing LLGP to rule out cross-reaction with other related tissue parasites.The study also demands inclusion of CSF as parallel sample for diagnostic purpose.
8	**Title**		**"Seroepidemiology of Brucellosis in organised farms**
	Conclusions		In this study, overall sero-prevalence for brucellosis observed as out of 416 animals comprising of 347 cattle and 69 buffaloes was 7.78% (27/347) and 11.59% (8/69) respectively by both RBPT and ELISA suggesting exposure of these animals to the pathogen The pathogen was isolated from clinical samples indicating that the disease is actively circulating the farm.Always the set of tests including the serodiagnostic along with antigen detecting tests should be used for detection brucellosis.
9	**Title**		**Management of effluent from unorganized poultry dressing unit**
	Conclusion		Physical characters of poultry dressing unit effluent were affected by alum treatment in relation to colour, odour, total solids (TS) and turbidity. Chemical characters of poultry dressing unit effluent were affected by alum treatment in relation to hardness, pH, BOD and COD. Poultry dressing unit and alum treatment affect physical and chemical characters of poultry dressing unit effluent. The physical and chemical characters of poultry dressing unit effluent differ significantly ($P< 0.05$) amongst poultry dressing units. Microbial analysis of poultry dressing unit effluent revealed the presence of coliform, *Staphylococcus* sp. and *Clostridium* sp.The poultry dressing unit effluent values of pH and COD were found to be within permissible limits of IFC guideline values in samples before and after alum treatment. The alum treatment was found to be effective in removing physical and chemical impurities except BOD, but not effective on microbial parameters.
10	**Title**		**Studies on disposal of Poultry slaughter waste by alkaline hydrolysis**
	Conclusion		Poultry slaughter waste contains high microbial load which is a source of bacteria of public health significance *viz*, *E.coli, Salmonella Spp.* and *Clostridium Spp.*3M NaOH at 150^0C for 24 hours completely hydrolyses poultry slaughter waste consisting of feathers, viscera, shank, head, etc. Alkali hydrolysis of poultry slaughter waste by using 3M NaOH at 150^0 for 24 hours reduces 100 percent bacterial load. The hydrolysate of poultry slaughter waste is having low Moisture, high Total Protein, Fat and Ash percentages thereby increasing utility of the same as feed supplement. The hydrolysate of poultry slaughter waste was having high N (Nitrogen), P (Phosphorous) and K (Potassium) values thereby increasing utility of the same as organic fertilizer.
11	**Title**	:	**Phylogrouping and antimicrobial resistance analysis of extraintestinal pathogenic *Escherichia coli* isolated from poultry species**
	Conclusions	:	Poultry birds and raw chicken harbor multidrug resistant, ESBL type *E. coli* as well as ExPEC and these strains may be transmitted to human via food chain.

8.E.11 Department of Veterinary Pathology			
1	**Title**	:	**Clinico-Pathological Studies on Canine Mammary Tumor and Effect of Ficus Racemosa Tender Fruit Extarct on N-Nitroso-N-Methylurea Induced Mammary Tumors in Rats**
	Conclusions	:	**Conclusions from Part I study:** 1. Approximately 2/3rd of CMTs were of malignant type and remaining tumors were benign. Approximately ½ of the patients with malignant CMTs died due to tumor or post neoplastic complications such as anemia, cachexia, respiratory failure etc. 2. Old age group (9-12year) was found to be more prone to malignant CMTs, whereas, dogs from age group '6-8 years' were suffered from benign tumors. Labrador and ND were most susceptible breeds in study regions. Un-spayed dogs were more prone to high grade malignant tumors. 3. CMTs caused neutrophilic leukocytosis and anemia in tumor patients. It caused reduction in serum total proteins and albumins in both the varieties of tumors. Hemato-biochemical examination did not offered significant information regarding tumor prognosis. 4. Unlike human breast cancer (80%) the ER expression was low i.e. 52% in canine tumor. In present study expression ER and PR was observed in both nuclear & cytoplasmic regions which could be of prognostic value. Nuclear expression of HER2 might be useful in risk assessment. 186 ER expression was more in Grade I tumors & Her2 expression was more in Grade II and III malignant tumors. 5. AgNOR was found to be better for differential diagnosis of malignant tumors. High grade tumors often have high AgNOR counts. High AgNOR and Her2 in reoccurring malignant tumors might indicate their role in tumor progression. 6. ER negative tumors had 9.01 times death risk as compared to ER positive tumors. Her2 negative tumor was at 4.7 time death risk when compared to Her2 positive tumors. Grade III tumors were at 10.49 times more risk of dying than Grade I tumor. **Conclusions from Part II:** 9. Fracemosa tender fruit extract has some cytotoxic and anticancer activity on MCF7 cell line at dose 80 ng/ ml concentration. 10. All epithelial tumors showed strong ER beta expression (100%), therefore it can be used as ER beta positive model. 11. The hydro-ethanolic extract of Ficus racemosa had some preventive effects on NMU induced tumors at hight dose.
2	**Title**	:	**Clinicopathological Study of Diabetes Mellitus in Canines and Effect of Ficus Racemosa Fruits Extract on Induced Diabetes in Rats**
	Conclusions	:	Occurrence of diabetes mellitus in canies at BSPCA, hospital, Parel was 0.5% in a period of study. The ethanolic extract of Ficus racemosa fruit can be an effective tool in treatment of diabetes mellitus and lowering blood glucose level in alloxan induced diabetic wistar rats.
3	**Title**	:	**Studies on Risk Factor Analysis of Renal Disorders in Dogs and Effect of *Carica Papaya* Seed and Leaves Extracts on Nephrotoxic Rats.**
	Conclusions	:	Clinical examinations, laboratory data and screening of postmortem reports can be used as a primary tool for noting the occurrence of renal disorders for risk factor analysis in dogs. The ethanolic extract of *Carica papaya* seed at high doses can be considered as an effective tool in treatment of nephrotxicity and lowering BUN and creatinine level in cisplatin induced nephrotoxic wistar rats.
4	**Title**	:	**Effect of *Bacillus subtilis* as a probiotic on pathology of *Eimeria* infection in broiler**

	Conclusions	:	Broilers fed with *bacillus subtilis* supplemented diet showed a significant performance in terms of body weight & FCR, improvement in growth performance, also reduced the colonisation of *Eimeria* and lesions induced by coccidiosis when compared with the broilers which did not supplemented with any probiotic or antibiotic hence, concluded that *Bacillus subtilis* can be used as alternative control strategy for avian coccidiosis.
5	**Title**		**Assessment of cytokine expression of mice challenged with *Listeria monocytogenes***
	Conclusions		Adopted *Listeria monocytogenes* strains replicates fast as compared to standard EGDe strains in mice in decreasing order of $CdCl_2$ adopted> EGDe> EtBr adopted> BC.adopted.Adopted *Listeria monocytogenes* strains induce added lesions as compared to standard EGDe strains in the decreasing order of $CdCl_2$ adopted> EtBr adopted> BC adopted> EGDe.TNF-α and IFN-γproduction was higher in mice challenged with adopted strain of *Listeria monocytogenes* as compared to standard EGDe strains in the decreasing order of $CdCl_2$ adopted> EtBr adopted> BC adopted> EGDe.The pathogenicity and virulence of adopted strains of *Listeria monocytogenes* is more as compared to standard EGDe strains in the decreasing order of $CdCl_2$ adopted> EtBr adopted> BC adopted> EGDe
6	**Title**		**Toxicopathological study of melamine in broilers**
	Conclusions		Melamine addition @ 1%, 2% and 3% in feed of broilers for 28 days causes: i) Decreased body weight, anorexia and increased mortality in broilers. ii) Biochemical and haematological parameters are altered whereby there is decrease in Kidney Function Tests along with anaemia & lymphocytopaenia. iii) Gross and histopathological observations very conclusively prove that the kidneys are the main target organs of melamine toxicity in broilers.Melamine toxicity in broilers may lead to neoplastic changes in kidneys and needs further research taking into consideration the breeding birds and the risk of melamine adulteration in poultry feed.The broiler is a good model for study of melamine toxicity.
7	**Title**	**:**	**Pathology of equines used for antisnake venom production**
	Conclusions	:	The hyperimmunization of animals for the production of antisnake venom was not varied the haematological and biochemical status of animals except few alterations like increases level of totalprotein,globulin and ALT.
8	**Title**	**:**	**Effect of *boerhaavia diffusa* in experimental melamine toxicity in japanese quails *(coturnix coturnix japonica)"***
	Conclusions	:	The birds fed *Boerhaavia diffusa* along with melamine improves feed consumption, body weight, haematological parameters, biochemical parameters, gross and histopathological observations suggesting hepatoprotective, nephroprotective, cardioprotective, neuroprotective and hematinic properties of *Boerhaavia diffusa* during melamine toxicity.
9	**Title**	**:**	**Effect of *butea monosperma* on imidacloprid induced toxicity in japanese quails (*coturnix coturnix japonica*)**
	Conclusions	**:**	*Butea monosperma* exhibited hepatoprotective, nephroprotective and immunomodulatory effect during imidacloprid toxicity.
10	**Title**	**:**	**Effect of *andrographis paniculata* against experimental chlorpyrifos toxicity in japanese quails *(coturnix coturnix japonica)"***
	Conclusions	**:**	*Andrographis paniculata* @ 5 g/kg of feed showed more beneficial effect during experimental chlorpyrifos toxicity@ 15 mg/kg in feed compared to @ 20mg/kg in japanese quails.
11	**Title**	**:**	**Effect of *andrographis paniculata* on induced monensin sodium toxicity in japanese quails (*coturnix coturnix japonica*)**
	Conclusions	**:**	*Andrographis paniculata* @ 5 g/kg of feed found more beneficial during experimental monensin sodium toxicity@ 150 mg/kg in feed in japanese quails and can be used as feed additive.
12	**Title**	**:**	**Pathological investigations of metacestodiosis in slaughtered caprines of marathwada region**
	Conclusions	:	The overall prevalence of Metacestodiosis in slaughtered Caprines of Marathwada region was 42.14%. Amongst various types of Metacestode infections in goats, Cysticercosis ranked first followed by mixed infection and Hydatidosis. The prevalence of Metacestodiosis in goats found

			to be increased with the advancement of age. The Metacestode infection in goats was predominantly found in omentum, followed by liver, mesentery, muscles, intestine, rumen, lung and gall bladder as evidenced by varying sized cyst in respective organs. The pathologies of Metacestodiosis in Caprines were characterised by varying sized, numbered cysts and mild to moderate histoarchitectural alterations in exposed organs. The projected economic losses as a result of Metacestode infection in goats of Marathwada region of Maharashtra state approximately estimated to a tune of Rs. 4356597/- especially due to condemnation of edible organs.
13	**Title**	**:**	**Amelioration of ochratoxicosis in broilers with *achyranthes aspera***
	Conclusions	:	Ochratoxin @ 100 ppb and 200 ppb through feed daily reduced body weight, feed intake and slightly increased F.C.R. values. Reduced Haemoglobin, PCV, TEC and significant leucocypenia and delayed blood clotting reflected that ochratoxin has deleterious effect on haematopoetic system. Biochemical estimations recorded supports the fact that ochratoxin elicits nephrotoxic and mild hepatotoxic effect. Ochratoxin hampered both humoral and cell mediated immunity in ochratoxicated birds. Ochratoxin produced histopathological alterations in kidneys, liver, bursa of Fabricius, spleen and intestines. 20 % aqueous extract of *Achyranthes aspera* @ 1% of feedshowed ameliorative effect against induced ochratoxicosis in birds dosed @ 100 ppb and 200 ppb respectively daily for 30 days
14	**Title**	**:**	**Clinico-Pathological Studies on Black Quarter in Cattle**
	Conclusions	:	The breed wise prevalence of BQ was found highest in non-descript cattle (42.86%) followed by local breeds Deoni (35.71%) and Red Kandhari (19.05%). Histopathological lesions observed in affected skeletal muscles were extensive haemorrhages and marked inflammatory response predominantly containing neutrophilic infiltration in spaces between muscle fibers indicating haemorrhagic necrotizing myositis leading to architectural disruption of myofibrils. The conventional microbiological isolation and identification techniques as well as molecular tools like PCR and MALDI-TOF MS revealed the involvement of Clostridium septicum and Clostridium tertium along with Clostridium chauvoei in black quarter.
15	**Title**	**:**	**Pathology of viral immunosuppressive diseases in poultry**
	Conclusions	:	The present research work was undertaken to study the pathology of viral immunosuppressive diseases from the spontaneous outbreaks recorded in poultry in and around college region in Satara and Pune district of western Maharashtra. 1. Growing broilers between 2 to 5 week were reported with infection of IBD virus leading to acute mortality and immunosuppression of birds. This further makes presence of secondary viral or bacterial diseases leading to mortality. 2. The use of histopathological technique is an easy way to confirm the diagnosis of IBH by confirming the presence of inclusion bodies in hepatic tissue. 3. IBDV was the causative agent of a highly immunosuppressive Gumboro disease of the domestic fowl. Among the viral proteins, VP2 is the major structural protein and its hypervariable region (474 bp) is a good target for the molecular techniques applied for IBDV detection by RT-PCR. 4. Further studies are required to determine whether the commercial vaccines would be able to accord protection against FAdV serotypes. Such studies can help in minimizing economic losses to poultry farmers as both diseases can cause considerablemortality.
16	**Title**	:	**Clinicopathological investigations of clinical and subclinical theileriosis in bovines with reference to metabolic disorders.**
	Conclusions	:	1. Pathomorphological study of theileriosis infected erythrocytes revealed many ring shaped piroplasms and very few comma or rod shaped piroplasms are found with microscopic examination. 2. Pathomorphological features such as anisocytosis, poikilocytosis, microcytosis, hypochromasia indicating severe degenerating anaemia, polychromasia and basophilic stippling indicating regenerative anaemia and crenation indicating parasitic toxaemia were noticed in the erythrocytes of theileriosis infected cattle.

			3. The histological examination of biopsy of prescapular lymph nodes of theileriosis infected cattle revealed variable pathological lesions comprised of focal and diffuse oedematous changes, occasional congestion, focal lymphocytolysis including apoptotic lymphocyte, fibrinous deposits in depopulated foci of lymphocytes. 4. PCR technique was highly specific in the diagnosis of theileriosis in both clinical and subclinical cases. 5. Presence of metabolic disorders like hypocalcemia, hypophosphatemia, ketosis etc. in both clinical and subclinical cases of theileriosis or vice versa was observed in cattle resulting into anemia and metabolic stress.
8.E.12 Department of Veterinary Microbiology			
1	**Title**	:	**Detectionof Mycoplasmosis in poultry by conventional & MolecularTechnique**
	Conclusions	:	The incidence of *M. gallisepticum* infection was found to be 5.55% .Molecular method viz. PCR was found useful to confirm *Mycoplasma gallisepticum* at species level.Disc diffusion assay was found to be easy and rapid method for qualitative screening of susceptibilities of MG isolates.Microbroth dilution method was found more accurate and useful fordetermination of MICs of antibiotics against MG.
2	**Title**	:	**Characterization of avian pathogenic Escherichia coli associated with complicated chronic respiratory disease.**
	Conclusions	:	Association of *Escherichia coli* with chronic respiratory disease was observed in 45.58% cases with overall incidence of 12.15% in respiratory tract infection. *Escherichia coli* isolates associated with chronic respiratory disease could be recovered from choanal swabs.Correlation of presence of bla_{TEM} gene and plasmid profile was observed with resistance to ampicillin seen in AST.Further studies focussing on evaluation of PCR analysis of various suitable genes associated with the virulence and antibiotic resistance on a larger numbers of clinical isolates will produce valuable data useful in molecular epidemiology.
3	**Title**	:	**Molecular Detection of Mycoplasma synoviae in poultry.**
	Conclusions	:	Species specific16S *rRNA* based PCR was found to be useful for detection of MSdirectly in the clinical specimens.Surface variable lipoprotein-haemagglutinin *vlhA gene* based PCR assay was found to be useful for detection MS strains variation originating from different geographical regions.Cultural isolation was found to be difficult and less sensitive, time consuming and costly.Thus, it is suggested that the true prevalence of MS may best be reflected by PCR results.
4	**Title**	:	**Molecular diagnosis of avian mycoplasmosis employing various PCR assays.**
	Conclusions	:	Phenol/chloroform method was found to be better over rapid heat freeze method in yielding better concentration and quality (integrity and purity) of DNA extracted.The *16S rRNA* based genus specific PCR was found to be sensitive and useful for screening the clinical specimens in large numbers at genus level. Multiplex PCR wasn't as sensitive and accurate as that of PCR-RFLP and nested PCR.The nested PCR targeting MG specific *16S rRNA*was found to be more specific although required more time and reagent. Overall incidence of avian mycoplasmosis observed was 15.15 % caused by MG (09.69 %) and MS (4.24 %).It is suggested that more extensive studies for evaluation of PCR-RFLP analysis of various mycoplasmal species for field isolates/ clinical specimens will help to generate valuable data useful in molecular epidemiology.
5	**Title**	:	**Molecular characterization of PPR Virus**
	Conclusions	:	PPRV was isolated from Fetri nasal swab and confirmed by RT-PCR of M gene.
6	**Title**	:	**Molecular epidemiology of PPR Virus in and around Nagpur**
	Conclusions	:	Multiple gene analysis shall be carried out to confirm PPRV from field samples. The virus may be circulating in adjescent districts of Maharashtra and Madhya Pradesh due to animal trade.Collection of nasal secretions on ink free news paper could be a good choice for sample collection.

7	**Title**	**:**	**Detection of Brucellosis by Serological and Molecular Techniques in bovines**
	Conclusions	:	Seropositivity with RBPT in cattle and buffaloes was higher in Ahmednagar. BCSP 31 PCR is a useful techniques in direct detection of Brucella spp in serum. iELISA test combined with PCR were found to be best in screening of Brucellosis.
8	**Title**	**:**	**Characterization of Escherichia coli from endometritis cows with reference to drug resistance and Virulence gene.**
	Conclusions	:	E.coli were highly sensitive to Enrofloxacin, Chloramphenicol and Ceftriaxone, while complete drug resistance was observed against Ampicillin, Amoxycillin and Tetracycline. Prevalence of drug resistance genes tetA(18.75%),tetB(43.75%) and blacmy (18.75%) was observed in E.coli isolated from healthy as well as endometritis and pyometra cases in cows.High prevalence of fimH gene was observed in E.coli isolated from cases of Endometritic and pyometra cases in cows.Low but emerging prevalence of stx1 and stx2 genes was detected in E.coli isolates from healthy and endometritis cows.
8.E.13 Veterinary Pharmacology and Toxicology			
1	**Title**	**:**	**Hazardous potential of endocrine disruptors on reproduction in male Zebrafish**
	Conclusions	**:**	The aim of thestudy was screening of hazardous potential of endocrine disruptor on reproduction in male zebrafish model. From the present study it can be concluded that fipronil has the potential to affect the reproduction in male zebrafish as revealed through the spawn count, per cent fecundity and per cent mortality. A significant increase in per cent abnormality has also been observed. The reduction in spawn count is the major parameter which addresses the action of endocrine disruption in male zebrafish by fipronil. Zebrafish model has proved to be a very good model for screening of potential EDCs.
2	**Title**	**:**	**Possible antiangiogenic synergism between eugenol and tyrosine kinase receptor inhibitor in murine**
	Conclusions	**:**	The aim of the study was assessing the possible anti angiogenic synergism between Eugenol and tyrosine kinase receptor inhibitor in murine model, which was considered as key step in the evaluation of drugs for their anti-cancer potential From the *in vivo* assay it can be concluded that Eugenol has anti-angiogenic effect and it showed beneficial effect when given in combination with standard drug in murine model. The results of effect of Eugenol alone and in combination with SU5416 when considered, taking into account VEGF, Hb concentration and neo-vascularization reveals possible anti-angiogenic synergism between eugenol and SU5416. Further extensive studies for assessing the utility of this combination in tumour induced model of murine is required for use as clinical remedies.
3	**Title**	:	**Anthelminic evaluation of *Brassica nigra* Linn. in goats.**
	Conclusions	:	The study revealed that both the aquesous seeed eextract and seed oil of B. Nigra bears the good antihelmintic properties.
4	**Title**		**Comparative pharmacokinetic studies and comparative anti-parasitic efficacy of two oral fenbendazole preparations.**
	Conclusions		The elimination half life (t1/2β), and mean residence time (MRT) of fenbendazole observed longer in sustained release treatment groups indicating that active drug is remaining in the body for long and same is reflected in antiparasitic efficacy, which was found better in sustained release treatment groups.The antiparasitic efficacy in both the age groups shown by sustained release preparation was better as compared to conventional one.Overall, the sustained release fenbendazole preparation shown favorable pharmacokinetic behaviour and significant antiparasitic efficacy than the conventional fenbendazole preparation.
5	**Title**	:	**Evaluation of antidiarrhoeal activity of polyherbal leaf formulation in mice and goats**
	Conclusions	:	The polyherbal leaf formulation (PF3) has potent antidiarrhoeal activity with considerable margin of safety. Thus, PF3 decoction of *Andrographis paniculata, Bryophyllum pinnatum* and *Dalbergia sissoo* could be a potential compound in the clinical application of diarrhoea in goats.

6	**Title**	**:**	**Repeat dose toxicity evaluation of *Morinda Citrifolia* Linn. Fruit extract coated Gold Nano particles in wistar rat**
	Conclusions	:	*Azadirachta indica* leaf extract can be used to produce gold nanoparticles by biological reduction method and gold nanoparticles can be coated with *Morinda citrifolia* fruit extract.There is no significant toxicity in entire dosage, from hematology aspect but slight immune stimulation seen upto 14th day of experiment (TLC and neutrophil) in both GNPs and coated GNPs doses with no relation to dose and coating.From serum biochemical value aspect, no specific dose related toxicity is observed in any of the treatment except for liver function tests which signifies interaction and bioaccumulation of coated GNPs in liver upto 14th day but proper excretion by kidney filtration units. On gross and histopathological examination, very minimal alterations are observed in liver and kidney in a dose dependant manner related to toxicity and all other organs studied are found to be normal.There is no significant effect in change in body weight in rats.A chronic toxicity trial is appealed to understand the extent of toxicity. Proper size and concentration of GNPs should be dosed and GNPs counts on biodistribution and accumulation should be measured to evaluate exact toxic effect and extent of toxicity.
7	**Title**		**In VitroAnthelmintic Activity And Clinical Efficacy Of Composit Polyherbal Formulation In Naturally Worm Infested Goats**
	Conclusion		10 % Composite Polyherbal Formulation (CPHF) containing fruit peels of *Punica granatum*, seeds of *Coriandrum sativum* and *Annona squamosa* in aqueous extract form either single dose once or daily dose continue for 28 days or its combination at 10 % level with albendazole is desirable for reducing the worm load in naturally worm infested goats, for which treatment should be continued up to 28h days.Single treatment with 10% Composite Polyherbal Formulation in combination with albendazole for 28 day highly effective in reducing worm load than CPHF anole at single dose and or its 28 day treatment is desirable against *Strongyles* infection in goats.CHPF treatment had significant effect in improving hematobiochemical profile in worm infested goats, where the treatment was highly effective on 28th day. The aqueous extract of fruit peels of *Punica granatum*, seeds of *Coriandrum sativum* and *Annona squamosa* alone and in combination had significant anthelmintic activity against *Pheretima posthuma in vitro.Punica granatum* fruit peels, seeds of *Annonasquamosa* and *Coriandrum sativum* had significant extraction yield in aqueous solution in which the glycosides, sugar and proteins were present and the alkaloids, sterols, saponins and amino acids were absent in all plant extracts, whereas tannin was absent in *Annonasquamosa* and the terpenoids, emodins and flavonoids in both the *Annonasquamosa* and *Coriandrum sativum* extract
8	**Title:**		**Repeat Dose Toxicity Evaluation Of *Syzygium Cumini* Linn. Leaf Extract Coated Gold Nano Particles In Wistar Rats**
	Conclusion		*Azadirachta indica* leaf extract can be used to produce gold nanoparticles by biological reduction method successfully.GNPs synthesized using plant extract with various sizes and shapes can be satisfactorily coated with leaf extract of *Syzygium cumini* using biological method. Alterations in hematological and blood biochemical parameters suggest mild effects of GNP and *Syzygium cumini* coated GNPs. However long term toxicity studies need to be conducted for further confirmation. Significant histopathological changes were noticed in liver and kidneys of GNPs and *Syzygium cumini* coated GNPs treated rats.However long term toxicity studies need to be conducted for further confirmation.
9	**Title**	**:**	**Effect of *Morinda Citrifolia* Linn. on Broiler Birds exposed to summer-Hot climatic condition**
	Conclusion	:	The aqueous extraction yield of *M. citrifolia* leaf powder was found to be 20%. The extract was reddish brown, semisolid and sticky in consistency and was found enriched with alkaloids, glycosides, tannins, sterols, anthraquinones, flavonoids, saponins, amino acids and protein constituents.

			Though the use of noni leaf powder at 6 and 12 % level in feed no doubt has beneficial effects, its 6% level may offer much efficacy against humoral and cell mediated immune responses. Hence, the use of 6 % level of noni leaf powder for 42 days is most efficient and useful as immunomodulator and for improving production performance and protecting effects against kidney dysfunction than at 12 % level in feed of broilers for health benefits.
10	**Title:**		***In vitro* and *in vivo* anthelmintic studies on *Moringa oleifera Lam*. in naturally worm infested goats.**
	Conclusion	:	The aqueous extracts of Moringa oleiferaleaf, bark & their combined treatment at dose of 300 mg/Kg once daily for 28 days was desirable in decreasing worm load and improving health status in naturally worm infested goats with mixed parasitic infestation.
			The aqueous leaf and bark extracts of Moringa oleifera and their extract combination at dose of 300 mg/Kg once daily for 28 days did not alter SGOT, SGPT & BUN but slight altered Creatinine level with significant positive effect on haemoglobin profile such as Hb, TEC and TLC in worm infested goats. The aqueous Moringa oleifera leaf, bark and combined leaf and bark extract was effective in vitro in causing paralysis and death of earthworm indicating its anthelmintic activity**.**The extraction yield of leaf and bark of Moringa oleifera was significant in aqueous solutions and found to be 20% & 12% respectively. In aqueous leaf extract of Moringa oleifera the alkaloids, glycosides, tannins, saponins, carbohydrates, phenols, trepenoids, proteins, amino acids and Sterols were present & anthraquinone was absent. All above phytochemicals were present in aqueous Moringa oleifera leaf, bark and combined leaf and bark extract.
8.E.14 Clinical Medicine, Ethics & Jurisprudence			
1	**Title**	**:**	**Studies on thyroid profile in cats with special reference to Radio immuno assay**
	Conclusions	**:**	The mean± SE serum concentration of Triiodothyronine (tT3 ng/ml), total Thyroxine (tT4 ng/ml) and free Thyroxine (fT4pg/ml) were 0.45±0.08, 21.98±2.94 and 24.4±2.24 respectively in healthy cats by using Radio Immune Assay. This established data may be used as reference data forfuture studies in assessment of feline thyroid function in India.Study recorded non-significant alterations in total Triiodothyronine (tT3), Total Thyroxine (tT4), free Thyroxine (fT4) and complete blood count except total leucocyte count.in healthy and non-thyroidalillnesses suffering cats. However, a significant alteration in AST, ALT, BUN, creatinine and cholesterol in healthy and non-thyroidal illnesses suffering cats was recorded.
2	**Title**	**:**	**Quantitative and qualitative assessment of colostral immunoglobulin in mares and its impact on newborn foals**
	Conclusions	**:**	1) Foals are born without any immune protection as the immunoglobulin does not cross the epitheliochorial equine placenta. The immune protection of equine foals during first 4-8 weeks after birth is normally conferred by the ingestion of maternal colostrum at birth. 2) Quantitive and qualitative assessment of mare colostrum should be checked before administering the colostrum to the foals. If the quality of colostrum is poor the foals could be administered with good quality colostrum (already tested) from the colostrum bank to protect the foals from neonatal infections and neonatal Isoerythrolysis. 3) Combination of good quality colostrum feeding and plasma transfusion (after cross matching) prevents common major postnatal infectious disease however chronic and endemic infection like *Rhodococcus equi* are difficult to prevent inspite of colostrum feeding and plasma transfusion.
3	**Title**	**:**	**Therapeutic management of non-regenerative anemia in canines**
	Conclusions	**:**	Darbepoietin is effective for treatment of Non-regenerative anemia and is recommended in dogs @ 0.45 µg/kg bw.Darbepoietin increased iron utilization resulting in significantly increased in hemoglobin by 29.58%. Response of regeneration of RBCs was found higher in canines treated by Darbepoietin followed by Nandrolone decanoate. The patients with non-regenerative anemia due to renal failure did not recover with conventional hematinic treatment while those due to other causes improved with it.

4	**Title**	:	**Prostatic affections & their therapeutic management in canine**
	Conclusions		The age-wise and breed-wise incidence was observed highest in the middle age group dogs (>5 to 10 years) and incidence of benign prostatic hyperplasia was observed highest amongst various prostatic affections. The most common clinical signs observed in all prostatic affectins were sanguineous fluid dripping from the tip of urethra, hematuria, constipation and difficult urination. In cultural examination of prostatic fluid, *E.coli* was recovered most commonly followed by Klebsiella spp. Heamto-biochemical investigations revealed neutrophilia and lymphopenia in prostatitis and significant increase in serum prostatic acid phosphates in benign prostatic hyperplasia. Tab. Finasteride was found effective in treating benign prostatic hyperplasia in canines.
5	**Title**		**Evaluation of oral rehydration therapy in adult cattle**
	Conclusions		Oral rehydration therapy with homemade formula is effective, safe and economical vis-à-vis intravenous fluid therapy in correcting dehydration in cattle. Hence, it is recommended for animals suffering with mild dehydration.Oral rehydration therapy can be undertaken by the livestock keepers if trained.
6	**Title**	**:**	**Evaluation of various therapeutic protocols for the treatment of osteomalacia in buffaloes**
	Conclusions	:	Osteomalacia is one of the commonly encountered metabolic disorders in drought affected Marathwada, in local high yielding buffaloes in their mid to late lactation, pregnancy and exclusive feeding of dry roughages are important causal factors for osteomalacia. It can be tentatively diagnosed on the basis of typical signs such as progressive emaciation, stiff gait, arching of back and kneeling on carpal joints and can be confirmed on severe hypophosphatemia and radiological findings. The combined treatment with parenteral buffered phosphorus preparation and mineral mixture proved most effective and economic for treatment of osteomalacia in buffaloes. There is need to educate farmers from the disease prone area to provide optimum quantity of concentrates and mineral supplementation to dairy buffaloes for prevention of phosphorus deficiency syndromes in view of phosphorus deficiency in the soil and forages in the disease prone area.
7	**Title**	:	**Therapeutic Management of Canine Parvoviral Infection with special reference to Bovine Colostrum Powder**
	Conclusions	:	Bovine Colostrum Powder can be used for the treatment of Canine Parvoviral Infection along with antibiotic combination Ceftriaxone – Tazobactum.
8	**Title**	**:**	**Clinico-therapeutic studies on oxalic acid toxicity in cattle due to *Anagallis arvensis***
	Conclusions	:	The plant *Anagallis arvensis* was found to contain very high (viz.; 13.63±0.20% oxalic acid on dry matter basis. Affected cattle exhibited typical clinical signs, further haematological and biochemical parameters were in pertiment to oxalic acid toxicity. Urine analysis of affected cattle revealed moderate increase in specific gravity, presence of epithelial casts, rhomboid calcium oxalate crystals and proteinuria. Analysis of rumen fluid of Anagallis arvensis toxic cattle indicated acidic pH, and significantly reduced density and activity of ruminal microflora. Parenteral calcium borogluconate and oral lime water therapy along with standard supportive regimen is recommended for the effective treatment of oxalate toxicity in cattle.

8.E.15 Department of Surgery and Radiology			
1	**Title**	:	**Clinical Evaluation of Full Thickness Skin Mesh Grafts for Repair of Superficial Wounds in Dogs**
	Conclusions	:	Preparation of the recipient bed depends on the type of injury and the presence or absence of infection in the wound. Skin graft by both the methods can be carried out with ease and requires no specialized instruments. As compared to suturing of the skin graft, use of n-butyl-2-cyanoacrylate tissue adhesive takes less intra-operative time. Post-operative care and management is very important and success of the skin graft depends on it. Both the methods of skin grafting show good aesthetic appearance as the donor site was selected from a known area. Use of immunomodulators / immunosuppressants has a limited role on the acceptance or rejection of skin grafts.
2	**Title**	:	**Comparative Evaluation of Butorphanol Tartrate and Propofol as Constant Rate Infusion in Laparoscopic Ovariectomy in Canine**
	Conclusions	:	The anaesthetic combination of Diazepam-Propofol-Isoflurane along with CRI of either of propofol or of butorphanol appears to be safe and effective combinations. These combinations induced and maintained good to excellent quality of anaesthesia, thus enabling the surgeon to perform comfortably. In both the groups, smooth and rapid recovery in most of dogs was seen with the CRI of Butorphanol or Propofol.Laparoscopic ovariectomy under CRI of anaesthesia (Propofol or Butorphanol tartrate) could be performed as a day care surgery, allowing faster recovery and reducing the cost of postoperative management.
3	**Title**	:	**Comparison of Isoflurane and Sevoflurane in Dexmedetomidine-Propofol Induced General Anaesthesia for Laparoscopic Ovariohysterectomy in Cat.**
	Conclusions	:	Dexmeditomedin-Propofol-Isoflurane and Dexmeditomedin-Propofol-sevoflurane was safe, excellent quality and hence efficacious for clinical use for laparoscopic ovariohysterectomy in cats requiring general anesthesia. Laparoscopic ovariohysterectomy is feasible for mass sterilization in cats. Neither of the combination affected physiological and haemato-biochemical parameters significantly. Hence this combination isrecommended for laparoscopic procedures in cats. Though Dexmedetomidine - Propofol-Isoflurane and Dexmedetomidine - Propofol-Sevofluraneboth produce good quality anaesthesia in cats uring laparoscopic ovariohysterectomy, the combination of Dexmedetomidine - Propofol-sevoflurane produced better anaesthesia during laparoscopic ovariohysterectomy in cats.
4	**Title**	:	**A Clinical Study on the use of Conjunctival Pedicle Graft for the treatment of Corneal Ulcers in Canine**
	Conclusions	:	Conjunctival pedicle graft is an effective treatment for medically unresponsive and complicated corneal ulcers in dogs. Conjunctival pedicle graft helps in healing of deep corneal ulcers and also globe threatening lesions such as corneal perforations, thus maintaining the aesthetic appearance of the eyeball. Causes for corneal ulceration in dogs included in the study were trauma, bacterial keratitis caused by Staphylococcus spp., inadequate corneal protection due to tear deficiencies and anatomical predisposition in brachycephalic dogs.
5	**Title**	:	**Clinical evaluation of Tramadol-Dexmedetomidine-propofol anaesthesia for ovariohysterectomy in bitches**
	Conclusions	:	Tramadol – dexmedetomidine propofol combination could be effectively tolerated as Total Intravenous Anaesthesia (TIVA) in dogs at different dose rates producing rapid, smooth, safe anaesthesia with uneventful recovery without alteration in physiological and haemato-biochemical parameters. The dexmedetomidine at the dose of 10µg produced for profound/excellent sedation, analgesia with muscle relaxation and can be recommended as most effective sedative for propofol anaesthesia during major surgeries. Dexmedetomidine combinations with tramadol produce synergistic analgesic effect which was beneficial for pain management during recovery.

6	**Title**		**Studies of adjunct chemotherapeutic combination for the treatment of cutaneous tumour in Dogs**
	Conclusions		Radical surgery is effective for large sized superficial tumours but has limited utility in senile and poor anaesthetic risk patients. The intravenous administration of adjunct chemotherapeutic combination of Doxorubicin and Cyclophosphamide after surgical excision of tumour for the malignant cutaneous tumours is effective modality without many alterations in clinical and haemato-biochemical parameters. The intravenous administration of adjunct chemotherapeutic combination of Doxorubicin and Cyclophosphamide or administration of single chemotherapeutic agent produces the systemic toxic effects with the symptoms of anaemia, vomiting, anorexia, alopecia and dullness with more or less severity.
7	**Title**		**Studies on nanoparticle assisted methotrexate for therapeutic management of mammary tumours in dog**
	Conclusions		Intratumoural administration of ZnO nanoparticle - Methotrexate complex resulted in partial regression of mammary tumour (52.88%) with minimal side effects on vital body parameters. The haematobiochemical parameters were mostly unaltered in surgical group. In Group III, neutropenia, lymphocytosis, monocytopenia and significant increase in BUN and Serum Alkaline phosphatase was noticed. Intratumoural administration of ZnO nanoparticle-Methotrexate Complex showed meagre side-effects such as vomiting for short duration. The mean Serum progesterone values were found to be decreased in bitches affected with mammary gland tumours.
8	**Title**	:	**Clinical efficacy of *Euphorbia Hirta* and *Balanites Aegyptica* ointments on wound healing in goats.**
	Conclusions	:	The cases of wounds in goats can be effectively treated by using 10% (w/w) ethanolic extract (with antiseptic, antibacterial, anti-inflammatory, haemostatic and immunomodulatory properties)ointment prepared from whole plant of *Euphorbia hirta* and 10% (w/w) ethanolic extract ointment prepared from leaves of *Balanites aegyptica*. Histochemically, *E. hirta* had greater efficacy as compared to *B. aegyptica* in wound healing.Haematological and biochemical study could not revealed much alterations during progressive wound healing process, as all values remained within the normal physiological limits. Results of clinical observations are considered to be of valuable help to evaluate the wound healing property during present scientific study.
9	**Title**	:	**Efficacy of curcumin and polyherbal ointments on wound healing in Bovine**
	Conclusions	:	The cases of the wounds in bovine can be treated well by using topical application of 2.5% curcumin ointment and polyherbal ointment as well.The wound contraction was better in wounds treated with 2.5% curcumin ointment followed by polyherbal ointment.Hematological values were within the normal physiological limits.The collagen deposition in curcumin ointment group was more and well organized in comparison with polyherbal group.From this scientific study it was concluded that the 2.5% curcumin ointment could be a better option for wound healing in bovine as compared to polyherbal ointments.
10	**Title**	:	**Optimization of anaesthestic protocol for castration in buck**
	Conclusions	:	Hence, from the results obtained in the present study it can be concluded that 0.2% Ropivacaine is comparatively superior than 2% lignocaine HCl because throughout the study it was found that pain and inflammation associated with0.2% Ropivacaine was less than animals treated with 2% lignocaine HCl.
11	**Title**	:	**Comparative efficacy of Green synthesized silvernano particle and povidone iodine ointments on wound healing in canine**
	Conclusions	:	Green synthesized *Cassine glauca* silver nanoparticles (200 nM/g) ointment isbetter option for wound healing in canine than povidone iodine ointment and it is an excellent preparation with antiseptic, antibacterial, anti-inflammatory, anti-oxidant hematinic, astringent and immunomodulatory properties which is safe and eco-friendly method for treating of wounds in canine.
12	**Title**		**Clinical evaluation of platelet rich plasma on fracture healing in caprine**
	Conclusion		The incidence of fracture in fore limb (66.72%) observed more than hind limb (33.28%).The overall incidence of fracture was observed more in females than males.Most common etiology

			was automobile accident followed by trapping of leg in narrow spaces. Plaster of paris cast was found effective method for immobilization of fracture one in long bone closed fracture in goat. The overall observation revealed early and excellent weight bearing in PRP treated group B, compared to control group A.Radiographically fracture healing was faster in goats of group B treated with autologous platelet rich plasma compared to goats of group A treated with plaster of paris cast alone.Highly Significant increase in value of mean serum alkaline phosphatase was noticed on 14th day in group B compared to significant increase in group A.
13	**Title**		**Clinical evaluation of platelet rich fibrin on wound healing in caprine**
	Conclusion:		The procedure of preparation of platelet rich fibrin (PRF) gel was found to be quick, economic and simple.The wound contraction percentage and histopathological evaluation revealed significantly rapid healing in platelet rich fibrin treated group as it enhanced rapid epithelization and scar formation on wound healing Platelet Rich Fibrin (PRF) was found a suitable wound healing biomaterial in caprine.
14	**Title**	**:**	**Ultrasonographic evaluation & management of surgical affections of teat in bovine**
	Conclusions	:	Clinical examinations like palpation, probing helps to assess teat affections and provide tentative diagnosis.In the present study, ultrasound examination was found helpful to diagnose and confirm the type of affections of teat such as, teat fibrosis, membranous obstruction and occlusion of teat and inflammation of the teat in bovines. Ultrasound of the teat is a non invasive technique that is easily performed.Ultrasound interpretation requires expertise. It is crucial to use ultrasound to assess the pathological changes for the diagnosis and management of various teat affections in bovine.Teat lacerations, suture in two layers of Ploiglactin-910 (Vicryl), as it provoked mild tissue reaction. Teat fistula, careful dissection to freshen the teat canal mucosa and skilful approximation of the tissue achieved good results.
15	**Title**	**:**	**Surgicotherapeutic management of anterior segment affections of eyeball in bovine**
	Conclusions	:	Anterior segment affections of eyeball were noted in 62 (59.61%) cases out of total 104 cases of eyeball affections in bovine in the two years duration. Chemotherapy with Inj. Mitomycin-C after surgical excision of localized eye growth as plaque, Papilloma, non invasive carcinoma & Squamous cell carcinoma at initial stage is trend effective (87.5%) to present recurrence. Vision saving techniques such as excision of growth followed by Membranoplasty and chemotherapy should be encouraged to avoid extirpation and loss of eye by proper extension education to the farmers and livestock owners.The most common cause of anterior segment affections of eye was trauma. The foremost initial signs noted in the disorders of eye were excessive tears, opacity and discoloration of conjunctiva.Clinical and opthalmoscopic examination are mandatory and lead to proper diagnosis of anterior segment affections such as corneal opacity, corneal ulcer, foreign bodies and chemosis. Specific diagnostic tests such as lacrimal drainage test to detect disturbances of lacrimal apparatus, Schirmer's tar strip test to evaluate excess tears due to irritation and infection and fluorescent strip test detected corneal ulcer. These were helpful for early & accurate diagnosis of non-neoplastic affections of eyeball.
16	**Title**	**:**	**Diagnosis of reticular affections in bovine by computed radiography & ultrasonography.**
	Conclusions	:	1) Occurrence of various reticular affections was observed in an average age group of 5.6 years, commonly observed in females more than males. 2) Correlation of clinical and haematological analysis helps in the diagnosis of reticular affections. 3) Clinical examination of the affected animals showed the presence of tachycardia, elevated respiratory rate and rectal temperature along with suspended ruminal motility as compared to normal physiological values. 4) Haematological parameters revealed anaemia, decreased haemoconcentration and marked neutrophillia, lymphocytopenia and eosinophilia. 5) Radiography is an efficient technique for identifying metallic and non-metallic foreign bodies inside and outside the reticulum and the position of the foreign body is the most reliable indicator for diagnosing traumatic reticuloperitonitis , whereas, ultrasonography rarely identifies metallic objects including magnets.

			6) Radiography does not reveal any evidence of changes in frequency and amplitude of reticular contractions. On the other hand, ultrasonography is the best method to observe changes in reticular motility. It also helps to identify morphological changes in region of cranial, ventral or caudal reticular wall. 7) In radiography, gas/ fluid interfaces may or may not suggest the presence of intra-abdominal abscess. In contrast, ultrasonography aids visualization of fibrinous inflammatory changes & confirmatory diagnosis of reticular abscesses. 8) Topography of the thoraco-abdominal viscera and related changes that occur in reticular affections can be well assessed by ultrasound examination using 3.5 MHz convex transducer. 9) The ultrasound examination of intercostal spaces of the left side was found to obtain sufficient ultrasound observations of the thoraco-abdominal organs to diagnose the presence of reticular affections. 10) Presence of reticular contractions at 4th - 5th intercostal spaces indicates cranial displacement of the reticulum, thus confirming diaphragmatic hernia. 11) Ultrasound interpretation requires expertise. It is crucial to use ultrasound to assess the pathological changes for the diagnosis and management of traumatic reticuloperitonitis and diaphragmatic hernia in animals.
17	**Title**	:	**Comparative study of sevafluorane and isoflurane as gaseous anaesthesia in canine**
	Conclusions	:	1. Atropine Sulphate can be used routinely as an anticholinergic preoperatively. 2. Tramadol is useful as a premedicant for providing intraoperative and post operative analgesia. 3. The recovery time needed with Sevoflurane maintenance is comparatively lesser than that of Isoflurane maintenance but the quality of recovery is similar with both the drug. 4. However, the overall anaesthetic parameters indicated that, Midazolam-Ketamine-Sevoflurane combination resulted in a better quality of general anaesthesia as compared to Midazolam –Ketamine-Isoflurane combination.
			5. Midazolam - Ketamine - Sevoflurane as well as Midazolam - Ketamine - Isoflurane as a protocol for general anaesthesia is safe and effective with smooth and rapid recovery and can be used for most routine surgical procedures comfortably.
18	**Title**	:	**Study on effect of therapeutic ultrasound in lameness in Goats.**
	Conclusions	:	1. Lameness in goats was mostly because of physical trauma. Incidences of lameness were more in female goats than male goats. Both the forelimbs and hind limbs were equally affected. 2. On day 1st serum cortisol and alkaline phosphatase level was higher in both groups & later on it decreased in group A significantly as compared to group B. 3. Use of therapeutic ultrasound with meloxicam therapy showed complete recovery within 7-11 days, post-treatment as compared to meloxicam alone in clinical cases of lameness. 4. Therapeutic ultrasound technique was effective and affordable for the management of lameness cases in Caprine species and can be used as a effective physiotherapy tool for lameness in goats and has a better future especially for its large scale application in organized goat farming.
8.E.16 Animal Reproduction, Gynaecology & Obstetrics			
1	**Title**	:	**Comparison of leukocyte esterase test and endometrial cytology for diagnosis of endometritis and its treatment using intra uterine hypertonic dextrose solution and antibiotic in post partum crossbred cows.**
	Conclusions	:	Intrauterine infusion of 50% dextrose at 35 ± 2 days post partum is economical than intrauterine infusion Ceftriaxone and metronidazole for treatment of postpartum endometritis an dimproving fertility.
2	**Title**	:	**Augmentation of fertility with the use of ovsynch and PRID plus Ovsynch protocol in anestrus buffalo.**
	Conclusions	:	PRID plus Ovsynch protocol was found to be better in terms of fertility improvement in anestrus buffaloes.

3	**Title**	**:**	**Therapeutic management of cystic ovarian degeneration using progesterone provided GnRh-PGF2α in gir and its crosses.**
	Conclusions	**:**	PGF2α was found to be best and most economical treatment for luteal cyst in Gir cows. However whenever there is doubt of type of cyst progesterone primed GnRh and PGF2α treatment give good result.
4	**Title**	:	**Fertility evaluation after clomiphene citrate and ovsynch protocol treatment in buffalo heifers.**
	Conclusions	:	Ovsynch treatment is more effective for estrus induction than Clomiphene citrate treatment in buffalo heifers during non-breeding season. First service conception rate is similar in Ovsynch and Clomiphene citrate treatment in buffalo heifers.
5	**Title**	:	**Therapeutic efficacy of *tinospora cordifolia* and *achyranthes aspera* on subclinical endometritis in cows**
	Conclusions	:	There was higher prevalence of subclinical endometritis in postpartum cows in surrounding farms of Akola city. The therapeutic efficacy and first service conception rate was higher in *Achyranthes aspera* treated cows as compared to *Tinospora cordifolia* and untreated control cows however it were observed similar with Cloprostenol treated cows.
6	**Title**	:	**Oestrous synchronization and fertility assessment using different protocols of intravaginal progestogen sponges in goats**
	Conclusions	:	The CIRG intravaginal sponges are highly effective in synchronization of estrus in does during low breeding season and CIRG intravaginal sponges along with $PGF_2\alpha$ and concurrent hormone GnRH treatment is dependable technique for estrus synchronization and pregnancy rate with fixed time A.I in low breeding season.
7	**Title**	:	**Treatment of repeat breeding with immuno-modulators**
	Conclusions		Use of lugol's iodine is efficacious in treatment of endometritis and is the most cheap, simple and easily adoptable treatment at field level. Use of immunostimulation with lugol's iodine therapy, have shown additive effect in buffaloes compared to lugol's iodine alone. E.coli LPS should be preferred on the basis of its course of action through improvement in body defense mechanism against mixed and chronic infection of endometritis giving highest recovery and conception rate in cows.
8	**Title**		**Fertility and fecundity improvement with USG in Goats**
	Conclusions	:	Select synch protocol has showed efficacy of 75.00 per cent for inducing estrus in a synchronized manner and the protocol leads to successful ovulation and fertilization as evidenced by 66.66 per cent conceptions. Ovsynch protocol has higher efficacy of inducing and synchronizing estrus in 91.66 per cent goats and the fertile induced estrus resulted in 75 per cent conceptions in Osmanabadi goats.
9	**Title**		**Reproductive parameters of estrus and parturition in Marathwadi Buffaloes**
	Conclusions		The physiological norms of estrus and parturition in Marathwadi heifers and buffaloes will be useful for breeders and veterinarians to improve reproductive managemental practices. It is necessary to continue similar studies for recording other details like biometry of ovaries, assessment of ovarian follicles, ovulation, time of ovulation, side of ovulation, corpus luteum with seasonal variations and environmental changes. It is also necessary to estimate hormonal levels during various phases of reproduction in Marathwadi buffaloes.
10	**Title**	**:**	**Biological Response Modifiers Against Endometritis in Marathwadi Buffaloes**
	Conclusions	:	Nature of oestrus discharge along with the white side test can be used for diagnosis of endometrtis in Marathawadi buffalo.*E. coli* is the major bacteria found in the cervical vaginal mucus which persists even after treatment.Changes in haematological indices from pre-treatment to post treatment status in endometritic buffaloes are related to improvement in the uterine environment of buffaloes.The results indicate that there is not any specific haemato-biochemical marker for endometritis in buffaloes though total leucocyte count declined and Hb and PCV increased significantly.Though in each group uterine infection was cleared but the conception rate was highest in *E. coli* treatment group and is best for the treatment of endometritis in Marathawdi buffalo as compare to autologous plasma, oyster glycogen and fresh colostrum.Intra uterine infusion of autologous plasma and fresh colostrum had at par results with oyster glycogen.Autologous plasma and colostrum are most cost effective and

			natural source for enhancing the uterine defence mechanism. More trails can be conducted to substantiate the current findings for their use under field conditions for treatment of endometritis in buffaloes.
11	**Title**	:	**Augmentation of Reproductive performance in Repeat Breeding Cross Bred Cows**
	Conclusions	:	Estrus synchronization response was better in repeat breeder cows treated with 500 µg of cloprostenol administered by i/m route (92 %) and 250 µg of the same drug through IVSM route ipsilateral to the CL in the ovary (84 %) than 250 µg dose administered through IVSM contralateral to the CL in the ovary (76 %). The estrus response can be achieved by reducing the dose of prostaglanding in cows in field condition. Repeat breeding syndrome (RBS) is one of the frustrating gynaecological maladies of the crossbred animals. Characterization of cervical mucus macroscopically and microscopically at insemination in esrus induced repeat breeder cows may indirectly help to improve conception rate. The non specific bacterial infection of reproductive tract is main cause of repeat breeding in cattle. White side test of cervical mucus before insemination is a simple and rapid test which can be used under field condition to determine the grades of non specific bacterial infection of genitalia and a prime modality for ascertaining non specific bacterial infection of repeat breeding cattle before subjecting them to any antibiotic therapy thereby reducing the cost of diagnosis and treatment. The electrical resistance of mucus associated with estrus using estrus detector in vaginal wall can be used as a tool for accurate detection of estrus in cows. Luteolytic effect of different doses through different routes of administration of PGF_2 alpha (cloprostenol) during matestrus/diestrus phase may regularize cyclicity in majority of the cows and subsequent conception. Although the synchronization rate was good following single dose administration of cloprostenol during matestrus/diestrus using different dose rates through different routes, the conception rate was 57.14 % in cows treated with 250 µg of cloprostenol through IVSM route ipsilateral to the CL followed by conception rate as 52.17 % in cows treated with 500 µg of cloprostenol administered by i/m route, whereas, conception rate was poor (42.10 %) in cows treated with 250 µg dose administered through IVSM contralateral to the CL in the ovary in repeat breeder cows.
12	**Title**	:	**Sero-prevalence and Diagnosis of Brucellosis in Cows**
	Conclusions	:	The prevalence of ROP is highest (28.57 %) followed by abortion (21.42 %), repeat breeding and anestrous (both 14.88%) in cows.The overall seroprevalance of brucellosis was 4.7%. The incidence of brucellosis according to the type of repeproductive didorder was 11.2% for abortion + ROP, 8.33 % for ROP and 5.5 % for abortion. The seroprevalance of brucellosis by RBPT was 4.7 %. The haematological ibdices in cows with reproductive disorders for Hb., PCV, TEC, TLC and DLC were significantly different except eosinophils. The confirmative diagnosis of brucellosis by PCR technique is recommended in the cases of abortion and retension of placenta. Using B4/B5 promers, PCR technique is useful to detect brucella organism in cow's partculary history of abortion and retension of placenta. The present study revealed that abortion and retension of placenta are important risk factors associated with prevalence of brucellosis in cattle.

8.E.17 College of Dairy Technology, Udgir

1	**Dairy Business Managment**		
	Title	:	**Development of low cost odourless soya based paneer**
	Conclusions	:	The present study was conducted to establish feasibility and acceptability of soya based paneer. Keeping in view the functionality and nutritional benefit of soya milk, soya milk based paneer was developed with the objective of improving quality and acceptability of soya Paneer. Three treatment viz. 15 (T1), 25 (T2) and 35 (T3) per cent addition of cow milk along with *Cinnamomum zeylanicum*&*Syzygium aromaticum* (@ 01 percent) and control without incorporation of cow milk were studied. The result showed significant difference among treatments with respect to acceptability and nutritional value. It was found that the addition of cow milk at 25 per cent level along with *Cinnamomum zeylanicum* (Dalchini) &*Syzygium aromaticum* (Clove) has improved the nutritional & medicinal benefit and increased the acceptability of soya paneer. Similarly the cost of production was less up to 65 percent that of milk paneer.

2	**Dairy Technology**		
	Title	:	**Development of whey based beverage to combat malnutrition**
	Conclusions	:	Whey, a high nutritious by-product of the dairy industry, is increasingly used as a main ingredient in functional beverages and foods worldwide. Similarly, fruit and Vegetable juices are valuable source of antioxidants because they contain a significant amount of bioactive compounds. The root plants like *Beta vulgaris* (beetroot) possesses wide range of compounds like flavonoids, phenolic acid, amino acid, ascorbic acid, tocopherol and pigments. The antioxidant rich extracts of beetroot and fresh whey can be utilized for the preparation of refreshing, & energizing beverage that not only improve the health but also fulfils the nutritional requirements, which will effectively combat the malnutrition. The beverage was prepared by combination of fresh whey and beetroot juice. The whey beverage prepared in the ratio of 80:20 by using the beetroot juice rated most acceptable by a panel of judges on a nine point hedonic scale. The prepared beverage was packed in autoclave able glass bottles and stored at refrigerated temperature satisfactorily for the period of more than 30 days.

8.F. STAFF RESEARCH

- **Bombay Vetrinary College, Mumbai**

1	**Department of Poultry Science**		
A	**Name of Project**	:	**Study on Organic Calcium in Layers**
	PI and Co-PI	:	PI- Dr. D. N. Desai Co- PI- Dr. A. S. Ranade Co- PI- Dr. P. E. Avari
	Funding Agency	:	M/s. Orffa Animal nutrition Pvt. Ltd
	Summary	:	Supplementation of organic calcium does not help layers in terms of production performance, egg shell qualiry and also does not prove to be economically profitable in the last phase of production cycle.
2	**Livestock Production Management**		
A	**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 set up 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.
3	**Veterinary Public Health**		
A	**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. Waghamare
	Funding Agency	:	ICAR
	Summary	:	• To monitor Egg, Meat and Fish Samples for pesticide residue, sold at different points in and around Mumbai city. • During year 2016-17 a total of 192 Egg, 192 Meat and 58 Raw fish Samples were extracted, detected and Quantified for organochlorine and organophosphate pesticides. • NABL desktop surveillance audit has been successfully completed in the month of May, 2016. NABL accreditation of laboratory is valid upto July, 2017. • Laboratory had participated in PT programme organised by FAPAS, UK, in the month of May 2016, for oily Fish. The Sample was analysed and the result was submitted to FAPAS. Z score of the test report was not calculated, as analytes spiked in the test sample were not under the scope of the laboratory. • The lab has successfully detected positive control in the given sample with prescribed concentration.

B	**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. Waghamare
	Funding Agency	:	ICAR 75% share and 25% Govt. of Maharashtra State share
	Summary	:	**Preservation and handling techniques for porcine skin for production of biological bandages.** • Standardization of shape and size of porcine skin grafts has been done using electric dermatome. The skin grafts were made up of 0.2-0.3 mm size. • Porcine skin grafts of size 0.4mm (3 x 3cm) could be preserved in PBS+ 15% glycerol at -18 ^{o}C for 24 days **Adoptive Trials and Popularization/Commercialization of Model Retail Outlet for Production of Hygienic Chicken Meat developed by Mumbai center** • A total of 08 training programs, 01 Science Exhibition and 03 Kisan Mela for total number of 484 farmers, butchers and entrepreneurs were conducted on 'Hygienic chicken meat production' at different places of Maharashtra. We have approached to state govt for formulation of schemes for providing financial assistance to the butcher communities for adoption of this unit. **Detection of Food-borne Pathogens by LAMP (Loop Mediated Isothermal Amplification) Technology** • Developed LAMP (Loop Mediated Isothermal Amplification) technology for detection of food-borne pathogens *S.aureus*, *Salmonella* spp. and Shiga toxin producing *E.coli*. • The Sensitivity (detection limit) was found to be 100-fold greater than that of conventional PCR as LAMP could detect4 ng/tube of *S. aureusandSalmonella* spp. of DNA concentration whereas, conventional PCR could able to detect 400 ng/tube of concentration of *S. aureus* DNA. However, LAMP could able to detect up to 1.11 X 10^{2}cfu/ml for both *stx*1 and *stx*2 genes. Thus, sensitivity (detection limit) of LAMP was found to be 10-fold greater than that of conventional PCR. • The specificity of LAMP and PCR assay was found to be 100% for *S. aureusandSalmonella* spp. and *E.coli.* The LAMP assay protocols will be made available at district and block resource limited Veterinary diagnostic laboratories. **Development and standardization of a process protocol for Extraction of Chondroitin sulphate from buffalo cartilage (Mumbai-Lead centre).** • Process protocol is developed and standardized for extraction of Chondroitin Sulphate from buffalo cartilage and is now ready for commercialization/adaptation by entrepreneurs/industries. • Applied for the patent Application No. 201721004162/MUM/2017 dated 06/02/2017) which will be published on Intellectual Property India (IPI) website **Development and standardization of a process protocol forExtraction of Collagen from animal and poultry (Mumbai- Sub center).** • Process protocol is developed and standardized for extraction ofcollagen from pig skin and is ready for commercialization/adaptation by small entrepreneur's and pig processing industries for economic utilization of pig skin. **Following New projects have been approved in 32nd Workshop of AICRP on PHET held at Ludhiana during 7-9 March, 2017** • Use of Electron Beam processing for shelf life extension of meat products • Development of low cost processing technology for the preparation of chicken liver powder and chicken liver chews • Development and Establishment of model retail outlet for hygienic Sheep/ Goat meat production.
C	**Name of Project**	:	**Outreach Programme On Zoonotic Diseases**
	PI and Co-PI	:	Dr. V.M. Vaidya and Dr. R. J. Zende
	Funding Agency	:	ICAR

	Summary	:	• Based on the research findings, it is observed that the overall prevalence of Hydatidosis and Cystecercosis in different animals in 3 states of India i.e. Maharashtra, Goa and Assam was observed to be 0.98% and 0.11% in buffalo, 0.46% and 0.23% in sheep, 0.18% and 0.00% in goat and 0.39% and 0.56% in pig, respectively. • The prevalence of Trichinellosis in pigs of Maharashtra, Goa and Assam was found to be 0.25% by Acid (HCl) pepsin digestion and microscopic observation by stereomicroscope. • Out of 226 serum samples analysed 6.64, 5.31 and 4.87 samples showed prevalence of Cystecercosis in pigs by ELISA, Flow through assay and Western Blotting, respectively. • Screening of 109 rodent's samples from the vicinity of pig farms and different abattoirs by acid pepsin digestion assay showed 5 samples found positive for Trichinellosis showing 4.59% prevalence. • In humans, 92 sera samples were tested for Hydatidosis, Cysticercosis and Trichinellosis by commercially available ELISA kit, none of the serum sample was found to be positive.
D	**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	:	Study is planned with the objective • To study the occurrence of *Salmonella* spp. in poultry farms and chicken meat production chain at different stages • Till date total of 432 samples from 48 organised and unorganised farms while 342 samples from different processing establishments were processed for Salmonella isolation. • Prevalance of salmonella was observed 16.66%, 7.4%, 1.8% and 0.92% amongst Non-integrated farmer owned farms, partially integrated farmsand complete integration with antibiotic feeding on arrival and complete integration with probiotic feeding on arrival, respectively. • Atotal of 204 samples from farms (Liver, Meat Kideny Water, Serum and feed) and 43 samples from proceesing establishment (Liver Meat Kidney, Processed products) were subjected for antibiotic screening by Premi test kit. Positive samples will be subjected for HPLC confirmation.
4	**Veterinary Pharmacology and Toxicology**		
A	**Name of Project**	:	**Studies on resistance pattern to betalactam antibiotics in *Staphylococcus aureus* and *Escherchia coli* isolated from milk of buffaloes with mastitis.**
	PI and Co-PI	:	Dr. V. V. Karande
	Funding Agency	:	Departmental Funds
	Summary	:	This study was undertaken as the part of PhD programme. Under this study milk samples from mastitis and subclinical mastitis were collected after screening with CMT from the Mumbai and surrounding regions. All the samples were subjected to microbiological analysis considering isolation and identification of *Staphylococcus aureus* and *Escherichia coli* by routine microbiological and biochemical procedures. All the isolated samples are being studied for their resistance pattern against beta lactam group of antibiotics. Further the organisms showing resistance to this particular group were subjected to PCR, in order to assess the resistance genes namely nuc, mecA, CTXm, SHV and TEM.

- **Nagpur Veterinary College, Nagpur**

1	**Department of Veterinary Physiology**		
A	**Name of Project**	:	**Expression, localization and modulatory effect of adipokines in ovary of cyclic buffaloes"**
	PI and Co-PI	:	PI: Dr. Mahesh B. Gupta, Assistant Professor, Department of Veterinary Physiology, Co PI: Dr. J. P. Korde, Associate Professor, Department of Veterinary Physiology, Dr. N. V. Kurkure, Associate Professor, Department of Veterinary Pathology

	Funding Agency	:	Science & Engineering Rersearch Board, Department of Science & Technology, New Delhi
	Summary	:	The project was sanctioned in September 2016 and grants were received in month of October 2016. The purchase procedure was initiated and chemicals and plasticwares purchased and also following equipments were purchasedThermal Cycler, Refrigerated High Speed Centrifuge, Deep Fridge, Homogeniser&Electrophoresis & blotting apperartus.
2	**Department of Veterinary Public Health**		
A	**Name of Project**		**ICAR Network project on "Outreach Programme On Zoonotic Diseases"**
	PI and Co-PI		PI: -Dr. S. P. Chaudhari, Co-PI :- Dr. W. A. Khan,Dr. D. S. Kale
	Funding Agency		ICAR, New Delhi
	Summary		• **1. Neurocysticercosis/Cysticercosis:** The antigens Cystic fluid antigen (CFA), Whole Cyst Antigen (WCA), 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 WCA CFA, SA, ESA and MBA antigen the positivity among pigs was found to the tune of 36.99%, 40.36%, 19.85%, 12.68% and 4.12% respecively. • A seropositivity of 12%, 24%, 38.46%, 30.76% and 15.38% was observed against WCA CFA, SA, ESA and MBA respectively in 80 human epileptic patients/suspected cases for neurocysticercosis.. • The immuno-dominating bands in EITB were found in lower and medium kDa range (16-68 kDa) against SA, ESA and MBA in seropositive cases in pigs. • A total of 26 human epileptic patients' sera samples along with 5 non-epileptic (control) samples were processed for EITB to detect the immunodominating proteins against WCA and CFA. • Of the 26 human epileptic patients 10 patients were positive in EITB for one or both the antigens. • The range of molecular weights of the bands recognized by human epileptic patient sera was between 28 to 125 kDa for WCA and 48 to 122 kDa for CFA. • Of all the seropositive pigs against antigens SA, ESA and MBA; 20, 30 and 12 were found PCR positive targeting LSU rRNA gene. • **2."Q fever":-** Conventional PCR (*trans* and *com*) was Standardized • A total of 311 samples (223 sheep, 88 goats (including 32 cases of abortions) were processed with *trans*-PCR, in which prevalence rate was reported as 0.89% in sheep, 9.09% in goats. • A total of 107 ticks were processed with *trans*-PCR out of which positivity was found among 24.29%. A total of 68 samples (60 abattoir workers, 2 livestock owners, 6 abortion cases,) from human were processed in which prevalence rate was reported as 10.94% in abattoir workers, 2.94% in livestock owners and 2.94% in abortion cases. 3. Employing WCA CFA, SA, ESA and MBA antigen the positivity among pigs was found to the tune of 36.99%, 40.36%, 19.85%, 12.68% and 4.12% respectively. • A seropositivity of 12%, 24%, 38.46%, 30.76% and 15.38% was observed against WCA CFA, SA, ESA and MBA respectively in 80 human epileptic patients/suspected cases for neurocysticercosis.. • The range of molecular weights of the bands recognized by human epileptic patient sera was between 28 to 125 kDa for WCA and 48 to 122 kDa for CFA. • A total of 311 samples (223 sheep, 88 goats (including 32 cases of abortions) were processed with *trans*-PCR, in which positivity for Q fever was reported as 0.89% in sheep, 9.09% in goats. • A total of 107 ticks were processed with *trans*-PCR out of which positivity was found among 24.29%. • A total of 68 samples from human risk group (60 abattoir workers, 2 livestock owners, 6 abortion cases,) were processed for Q fever in which positivity was reported as 10.94% in abattoir workers, 2.94% in livestock owners and 2.94% in abortion cases. **Technologies developed:** • Various antigens from the cysts were prepared and characterized for further use in

			diagnostics for cysticercosis and neurocysticercosis in pigs and humans respectively. • The report on positivity among tick population states the potential of these vector in transmission of *C.burnetii.*
B	**Name of Project**		**Niche Area of Excellence Project on "Centre for Zoonoses"**
	PI and Co-PI		**PI: Dr. Sandeep P.Chaudhari** **Co-PI:** Dr. N.V.Kurkure, Dr. S.W.Kolte ,Dr. V. C. Ingle, Dr. W.A.Khan, Dr. (Ms.) S.V.Shinde, Dr. P.A.Tembhurne, Dr.S.P.Awandkar, Dr.(Ms.) M.P.Kaore
	Funding Agency		ICAR, New Delhi
	Summary		**With the funding from the Indian Council of Agricultural Research, New Delhi a State of Art facility has been created for diagnosis of zoonotic diseases viz., Brucellosis, Listeriosis, Tuberculosis, Leptospirosis, Scrub typhus and Rota viral infection.** • A **duplex PCR** has been standardized for simultaneous detection of **Brucellosis and tuberculosis** in animals. The technique is under validation with collaborators. Has a potential of patenting. • 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 *Listeria monocytogenes* have been identified. • **In house listeriolysin -O (LLO) based ELISA** has been developed for serodiagnosis of listeriosis. • **Mite species "*Ornithonyssus bacotii* "** (tropical rat mite) has been detected with potentials to transmit *Orientia tsutsugamushi* ;an etiological agent for Scrub typhus in the region. • **Karp strain of *Orientia tsutsugamushi*** 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'**, a National training workshop on 'Surveillance and Outbreak Investigations for Veterinarians' was organised in collboration with National Institute of Epidemiology, Chennai. The training was attended by 33 academicians, scientists, field veterinarians, medicos from all over country. • The collaboration/Linkages with the **National and International Institutes** have been developed. • Three articles in esteemed journal 'Tropical Animal Health and Production' and 'Parasites and Vectors' are under submission. • A total of **8690 samples including 7730 of animal origin** and **960 of human origin** have been screened for detection of zoonotic diseases under study. In animals the overall prevalence of brucellosis and listeriosis was reported to be 13.21% and 6.77% respectively by serological assay. Employing the molecular techniques the prevalence was noted to be 26.66%, 5.74%, 6.33%, , 20.77%, 13.41% and 3.52% in for brucellosis, listeriosis, tuberculosis, leptospirosis, Scrub typhus and rota viral infection respectively, in animals. In isolation, positivity for *Brucella* pathogen was noted among 9.6% animals while 5.74% for *Listeria monocytogenes.* In human, seropositivity was noted among 0.52% for *Listeria* antibodies, 1.87% for Brucella , 92.30% for *Leptospira* antibodies while 43.33% were sero-positive for scrub typhus. Employing PCR 4.31% were positive for *Listeria monocytogenes*, 1.14 % for *Brucella*, 4.47% for TB, 16.55% for *Leptospira* and 8.64% for scrub typhus infection.

3	**Department of Animal Nutrition**		
A	**Name of Project**	**:**	**Effect of bio-methionine on growth performance and various parameters in broilers.**
	PI and Co-PI	:	Dr. S. V. Chopde, Dr. M.R. Jawale, Dr. S. B. Kawitkar, Dr. A. D. Deshmukh.
	Funding Agency	:	Vamso Biotec Pvt. Ltd., Gurgaon (Haryana), India
	Summary	:	The experiment was conducted on 240 broiler divided into eight identical groups to study the effect of supplementation of Biomethionine at various levels and in combination with synthetic methinonine at varying levels. The supplementation of Biomethionine at various levels and in combination with synthetic methinonine at varying levels to the broiler chicken yielded positive effects on growth, feed efficiency and protein efficiency and the best effect was observed for the supplementation of synthetic methinonine @ recommended dose 500 mg each of biomethionine and synthetic methionine.

- **Post Graduate Insitute of Veterinary & Animal Scinces, Akola**

I	**Veterinary Physiology**		
1	**Name of Project**	**:**	**Study of milk constituents of Purnathadi strain of Nagpuri Buffalo**
	PI and Co-PI	:	Prajakta Kuralkar
	Funding Agency	:	Departmental Project
	Summary	:	Ongoing
	Name of the Deptt.	**:**	**Department of Poultry Science**
	Name of Project	:	Establishment of Training and Demonstration Centre on Commercial Poultry Farming under MAFSU
	PI and Co-PI	:	PI: Dr. S.J.Manwar, Associate Professor & Head, Dept. of Poultry Science, PGIVAS, Akola Co PI: Dr. K.K.Khose, Dr. M.A. Gole
	Funding Agency	:	RKVY
	Summary	:	Date of sanction & Duration 30.09.2014 3 years (2014-15 – 2016-17) Total Budget sanctioned :Rs. 101.15 lakhs **Objective :** This project aims at popularizing the poultry farming and practical orientated training on commercial poultry farming for the farmers so that poultry rearing activity will take up to support the agriculture system which will generate employment, revenue in long term and development of entrepreneurship. The objectives are: 1. To Impart practical and technical knowledge of commercial poultry farming for interested farmers in Maharashtra state 2. To popularize commercial poultry farming and its recent trends to promote entrepreneurship spirit among farmers 3. To create infrastructural facility for hands on training and demonstration of commercial poultry farming on long term basis. Physical achievements (Infrastructure/ construction work) ✓ Farmer's Training Hall Cum Poultry Museum. ✓ Feed Mill Room ✓ Poultry Dressing Room ✓ Commercial layer shed ✓ Biosecurity compound wall ✓ Electrification of old poultry sheds, ✓ Renovation of Hatchery Unit. Physical achievements (Equipments purchased) : ✓ Installed feed mill ✓ Semi-automatic poultry processing unit

			✓ Automatic Drinking Systems ✓ Semi-Automatic Feeding Systems, Brooders ✓ Audio-visual aids, CCTV cameras, etc. ✓ Training Hall Furniture Trainings/ Visits/ Educational Material Provided : Organized 15 residential training programmes and two one day workshops on "COMMERCIAL POULTRY FARMING" for 694 farmers of Akola district including 150 women farmers. Eleven educational tours were also organized for trainee farmers to nearby modern commercial layer and contract broilers farms of 10000 -50000 capacity to get acquainted with the actual working of the farms and interaction with the progressive commercial poultry entrepreneurs. The beneficiary farmers were provided with a training kit consisting of educational materials like booklets in Marathi language on "Vyavasayeek Kukkut Palan" and "Parasatil Shastrokt Kukkutpalanat", and other training aids (leaflet, folder, writing pad and pen). After completion of the training program till date 18 farmers have started commercial poultry rearing activity. The department is maintaining touch with farmers to boost the farmers to start with the poultry rearing activity and providing technical support till they sustain their own.
II	**Animal Nutrition**		
1	**Name of Project**	**:**	**Estimation of Methane emission under different feeding systems and development of mitigation strategies**
	PI and Co-PI	:	**PI:** Dr. A. P. Dhok **Co PI:** Dr. S. M. Wankhede
	Funding Agency	:	ICAR, New Delhi
	Summary	:	The ICAR Research Project is under network/outreach mode having total outlay of Rs. 71.80 lacs and project duration is 2009-2012 (XI Plan), 2012-2017 (XII Plan). Since, global warming has become the matter of great concern for everyone and we are facing the vagaries of climate change attributed to the increase in emission level of green house gases from various sources. Although the concentration of methane is low in atmosphere, it is 23 times more potent than CO_2 for green house effects with 100 years half life. Methane is produced naturally by the ruminants due to enteric fermentation. Adult cow emits 80-120 Kg methane per year. Indian livestock contributes 14% (11Tg MT) of global emission. The objective of the project is to develop database for methane emission from Indian livestock and development suitable, practical, economic mitigation strategies. The centre was assigned the activities of undertaking mitigation strategies using locally available roughages its enrichment and supplements, in-vivo validation and effect on milk production. The mandate for MAFSU, Nagpur is Buffalo under study, hence the experiments were conducted to ameliorate methane production by feeding urea treated soybean straw based TMR and full fat soya and sorghum stover based TMR in buffaloes. The methane production was reduced significantly on urea treated soybean straw based total mixed ration (roughage to concentrate 60:40) and full fat based TMR against the control. The methane production was reduced by 23 percent and 27 percent respectively due to the feeding of total mixed ration and is suggestive of effective strategies of methane amelioration. Further addition of linseed oil in the ration of buffaloes tends to reduce methane production and enhance milk production in buffaloes.
2	**Name of Project**	**:**	**Balancing the ration of lactating buffaloes to increase the productivity and reduced methane emission and providing livelihood security through livestock keeping in tribal area of Melghat (Dist- Amravati) MS**
	PI and Co-PI	:	**PI:** Dr. A. P. Dhok **Co PI:** Dr. S. M. Wankhede
	Funding Agency	:	ICAR, New Delhi
	Summary	:	The aims and objectives of the project are to balance the ration of cattle and buffaloes to

			reduce the methane emission and increase productivity and to provide livelihood security through livestock keeping. The technical programme of the project for the year 2016-17 was to increase the livelihood of the tribal farmers from villages around Dharni area through adoption of animal husbandry practices. The tribal villages around Dharni were screened for adoption of goat husbandry by tribals. The possibilities of goat rearing by Korku Adiwasi of Melghat Region have been explored. Considering the response of Korku Adiwasi, workshop on Scientific Goat Farming was organized for the tribals and 108 tribals were trained in scientific goat farming. Total 21 beneficiaries from 7 tribal villages were selected and goat units were distributed to the beneficiaries for their sustainable livelihood. It is also aimed to enhance the productivity of goats in the region.

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

I.	**Department Of Animal Reproduction, Gynaecology And Obstetrics**		
1	**Name of Project**	**:**	**1. "Physio-biochemical aspects and efficacy of different therapeutic protocols for cervical dilatation in small ruminants."** **2. Comparative efficacy of transrectal and transabdominal approach of ultrasonography for early pregnancy diagnosis in goats.**
	PI and Co-PI	:	1. Drs. N. M. Markandeya, A.B. Mali and B. L. Kumawat 2. Drs. A. B. Mali, B. L. Kumawat and N.M. Markandeya
	Funding Agency	:	COVAS, Parbhani
	Summary	:	1. Observations on cervical structure indicates rigidity of the cervix in ewes and hence the time required for induced parturition or even for clinical cases of failure of cervical dilatation is more than that of the goats. 2. It is concluded that use of trans-rectal ultrasonography was found to be very effective than trans-abdominal approach in confirmation of pregnancy in goats at the earlier stage as well as useful in observation of ovarian and uterine for better reproductive health management.
II.	**Department of Veterinary Medicine**		
1.	**Name of Project**	**:**	**Clinico-therapeutic studies on soyabean residue intoxication in cattle**
	PI and Co-PI	:	Digraskar S. U., Borikar S. T., Tawheed A. S. and Syed A. M.
	Funding Agency	:	Departmental research
2.	**Name of Project**	**:**	**Studies on therapeutic management of *Anagalis arvensis* toxicity in cattle**
	PI and Co-PI	:	Digraskar S. U., Borikar S.T. and Tawheed A. S.
	Funding Agency	:	Departmental research
3.	**Name of Project**	**:**	**Medicinal management of visceral shistosomosis in cattle**
	PI and Co-PI	:	Dr. Digraskar U. U., Dr. Borikar S. T., Dr. Tawheed A. S. and Dr. N. W. Narladhkar
	Funding Agency	:	Departmental research
III.	**Department of Veterinary Parasitology**		
	Name of Project	**:**	**Multiple GI Parasitic infection aftermath heavy rains in osmanabadi goats in Marathwada region.**
	PI and Co-PI	:	B W Narladkar (PI), Y V Raote, G R Gangane & S U Digraskar (Co-PI)
	Funding Agency	:	Intra Mural

	Summary	**:**	Study conducted with a aim to record GI parasitic species infections in Osmanabadi goats in Marathwada region aftermath heavy rainfall by examination of more than 50 faecal samples received from different parts of Marathwada region as well as small sized organized goats farms in and around Parbhani region. Similarly study also incorporates the observations gathered from few postmortem examination of died goats/kids conducted in Pathology Department of COVAS, Parbhani. Samples were processed by flotation and Sedimentation technique. It was observed that the heavy infection of multiple GI parasitic species, irrespective of age and sex. The predominant infections recorded were Strongyle spp particularly of *Haemonchus*, *Oesophagostomum* and *Trichuris* sp.; different species of *Eimeria* and *Schistosoma indicum.* Carcasses of dead goats showed anaemia, with heavy worm load. The death in many goats can be ascertained to parasitic infections. From the study it was concluded that,aftermath heavy rainfall, goats acquired heavy parasitic infections, which needs to be properly addressed.
IV	**Department of Veterinary Pathology**		
	Name of Project	:	Study on Comparative Efficacy of certain Mycotoxin Binder Products in Experimentally Induced Combined Mycotoxicosis in Broiler
	PI and Co-PI	:	Dr.G.R.Gangane – PI & Dr. B.M.Kondre Co - PI
	Funding Agency	:	M/s. Ayurvet Ltd. Baddi (HP)
	Summary	:	1. Feeding Aflatoxin @ 100ppb and Ochratoxin @ 100ppb daily for 42 days induced toxicity as evidenced by lowered body weights, feed intake and higher F.C.R. values with altered haematobiochemical parameters. 2. All the experimental birds remained alive throughout the experimental period. 3. All the tested products showed comparable ameliorative effect against the combined mycotoxicosis in the birds as evidenced by hepato and nephroprotective role being played by the products as supported values obtained. 4. The birds of group T4 were comparatively healthier and showed results at par with the birds of control group when compared to birds of other treatment groups as well as birds of group T1.

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

1.	**Animal Genetics and Breeding**		
	Name of Project	**:**	**A survey on population dynamics of various strains of Deoni**
	PI and Co-PI	:	Dr.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 survery based study.
2.a.	**Veterinary Public Health**		
	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.
b.	**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 Kumdal Tq, Udgir, Dist. Latur and the results under field condition were studied. Thekeeping quality of milk was found to be increased by 4 hours at ambient temperature as compared to milk exposed to ambient environment during winter and rainy seasons. Now the study is being pursued during summer season.
c.	**Name of Project**	**:**	**Isolation, pathogenicity and verocytotoxicity studies of *E.coli* O157:H7 from fresh meats.**
	PI and Co-PI	:	Dr. V. S.Waskar and Dr. R. D. Suryawanshi
	Funding Agency	:	Intramural
	Summary	:	22*E.coli* isolates recovered from meat were characterized biochemically. A correlation study will be carried out with isolatesrecovered from clinical diarrhoeal samples (39) from organized farm at Udgir by using MALDI TOF MS & PFGE.
3.	**Clinical Medicine**		
	Name of Project	**:**	**Efficacy of Polyherbal spray against ticks and lice infestation in cattle &buffaloes**
	PI and Co-PI	:	Dr. A.U. Bhikane, Dr. B. S. Khillare, Dr. R.K. Jadhav and Dr. R.S. Ghadge
	Funding Agency	:	Rakesh Pharmaceuticals, Kalol, Dist. Gandhinagar, Gujarat
	Summary	:	1. Treatment of cattle and buffalo with Clear Ticks 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 is recommended during seasons of tick activity. 2. Being herbal spray and having pleasant smell, use of Clear Ticks spray by animal owner is easier and its application to cattle and buffalo revealed no any adverse reaction or toxicity signs, which are common in case of chemical acaricides.
4.	**Veterinary Parasitology**		
	Name of Project	**:**	**Prevalence of Helminth infections in dogs in Udgir of Latur district**
	PI and Co-PI	:	Dr.B.S.Khillare, Dr.G.N.Bhangale and Dr.A.U.Bhikane
	Funding Agency	:	Intramural
	Summary	:	A one year study (April-2016 to March 2017) was carried out to find out the prevalence of helminth infections in dogs. Out of total 218 fecal samples of dogs checked for presence eggs/ova of gastrointestinal parasites 69 samples were found positive *i.e.* with a prevalence rate of 31.65%. Sex wise prevalence was noted as 28.23% in males while 36.17 % in females. Breed wise prevalence of GIT parasites in dogs was 15.47% in dogs of descript breeds, 27.02% in non-descript domestic dogs and 52.36% in stray dogs. As regards age wise distribution of GIT parasites 17.98% prevalence was noted in age group 1 *i.e.* 0-4 months of age while that in age group 2 (4 months to 1 year of age) 27.03% dogs were found positive of GIT parasites. In age group 3 *i.e*. adult dogs of more than 1 years of age, a prevalence of 43.48% was noted. Season wise estimates showed higher prevalence in winter months (35.86%) followed by monsoon (26.23%) and summer months (8.33%). From the above study, it was found that as age advances prevalence also increases. Seasonal prevalence showed highest prevalence in winter followed by monsoon and summer. It was evident from this study, that the there is a consistent threat to the domesticated dogs of these parasitoses from stray dog population since they are harboring parasitic infections throughout the year. This indicates that faecal samples of dogs should be routinely examined for parasitological examination and treatment should be advocated in positive cases.

5.	**Department of Veterinary Pathology**		
	Name of Project	**:**	**Clinico-Pathological Studies on Prevalence of Bovine Immune-Mediated Hemolytic Anemia (IMHA)**
	PI and Co-PI	:	Dr.S.G.Chavhan and Dr.M.A.Khan
	Funding Agency	:	Intramural
	Summary	:	The bovine blood samples with the history of anemia were received from TVCC and surrounding farms. The blood smear examination revealed presence of spherocytosis, agglutination and majority of cases showed concurrent protozoan infection.
6.	**Veterinary Physiology**		
	Name of Project	**:**	**Determination of climatic profile of Udgir Area**
	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.
7.a.	**Instructional Livestock Farm Complex**		
	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	:	Different silages were prepared from green maize, yeshwant/Jaywant grass, Multicut Jowar, Azolla+Maize+Multicut Jowar, Yeahwant+Green Maize, Maize+Vegetable waste, Maize50%+Azolla50% 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.
b.	**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 and VDr.V.M.Salunke
	Funding Agency	:	Intramural
	Summary	:	Succesfully established 22 varieties on CBF as demostration plots. Chemical analysis is in progress. Once fodder variety propogated to the farmers land response study will be done.

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

1	**Department of Microbiology**		
	Name of Project	:	**Prevalence of antibiotic resistance in Escherichia coli of fecal origin and expression of Tetracycline resistant tet gene from stray dogs**
	PI and Co-PI	:	M. M. Pawade and P. P. Mhase
	Funding Agency	:	Intramural
	Summary	:	Total of 42 faecal samples of stray dogs having diarrhoea were collected from in and around Shirwal, Dist. Satara. Isolated and identified E.coli cultures were used for studying th eir antibiotic resistance pattern by the Kirby-Bauer disc diffusion method. Total 10 antibiotics were tested and the results showed highest sensitivity towards Enrofloxacin (72%) followed by Ceftriaxome (63 %), Ciprofloxacin (54%) Gentamycin (45%) and Chloramphenicol (36%).

			Multiple drug resistance was observed towards tetracycline (81%), Ampicillin (63%), Amoxicillin-clavulinic acid (36%), Penicillin (27%) and Streptomycin (27%). Almost all 18 of E. coli isolated from fecal samples of dogs were resistant to one or more antimicrobial agents respectively. The multidrug resistant strains of E. coli isolates were further examined for expression of tet(A) and tet(B) genes with published primer sequence. In majority of multidrug resistant strains expressed tet (A) gene in 11 of the dogs tested.
2	**Department of Animal Genetics and Breeding**		
	Name of Project	:	**Genotyping of khillar cattle for beta casein using PCR-RFLP**
	PI and Co-PI	:	T.C.Shende and A.Y.Doiphode
	Funding Agency	:	Intramural
	Summary	:	Genotyping of 40 Khillar animals was carried out by PCR- RFLP technique. It was revealed that all processed samples of khillar animals shown A2A2 genotype which was same as previous references for indigenous animals for beta casein locus (Mishra et., al 2009). Gene frequency of A1 allele is 0.00 and allele frequency of A2 allele is 1.00. Genotype frequency of A2A2 genotype for beta casein locus is 1.00.As Khillar cattle is draught purpose breed it is not kept for milk production. In HF crossbred cattle genotype frequency of A1A1 genotype was 0.28, A1A2 genotype was 0.72 and that of A2A2 genotype was 0.00. In contrast to HF crossbred cattle the Khillar cattle bears the genotyping frequency of A2A2 genotype is 1.00 and there is total absence of A1 allele in Khillar.
3	**Veterinary Biochemistry**		
	Name of Project	:	**Comparison of certain Biochemical, Stress parameters in Anemic and Non-anemic Deccani sheep.**
	PI and Co-PI	:	S.N. Jadhav, A.K. Barate, A.V. Khanvilkar, S.M. Bokare
	Funding Agency	:	Intramural
	Summary	:	Comparison of serum biochemical & stress profile between anemic & non-anemic apparently healthy Deccani sheep maintained under similar managmental conditions reveled significant difference in plasma cortisol level and certain biochemical parameters.
4	**Veterinary Physiology**		
	Name of Project	:	**Identification of Leptin and Lactoferrin gene from Pandharpuri buffalo**
	PI and Co-PI	:	V. R. Patodkar and P.V. Mehere
	Funding Agency	:	Intramural
	Summary	:	From PCR and Bioinformatics analysis it was revealed that Leptin and Lactoferrin genes are present in Pandharpuri Lactating buffaloes bur their functions are yet to be reveled in the climatic condition of Maharashtra.
5	**Animal Nutrition**		
a	**Title**	:	**Effect of partial replacement of concentrate mixture by wet distillers grain with solubles on the performance of cross bred lactating cows (*Bos taurus*)**
	Conclusions	:	The replacement of concentrate mixture by WDGS @ 10 and 20 % had significant effect on milk production and economy of the farm. Further, it was also seen that overall composition of milk did not had any adverse effect on milk fat, milk protein, total solids and solid not fat. Thus, in present study the inclusion of WDGS in the diet of lactating cows shows improvement in digestibility of nutrients, FCM and daily profit from sale of milk.
b	**Title**	:	**Effect of supplementation of turmeric (*Curcuma longa*) and ginger (*Zingiber officinale*) powder on performance of broiler birds.**
	Conclusions	:	The observation made in present study provides scope for further research on this topic, by taking more number of birds and making the supplementation of turmeric and ginger powderat more graded level may prove beneficial and provide more useful data for use of turmeric and ginger additionin broiler feeding. This may help to improve the understanding regarding the mechanism of action of additives in improving intestinal health and growth performance.
6	**Department of Poultry Science**		
	Name of Project	:	**Effect of "Emulso V" Emulsifier on the Production Performance of Broiler Chicken**
	PI and Co-PI	:	V.D Lonkar., C.S. Mote and P.P. Mhase

	Funding Agency	:	Ventkateshwara Hatcheries Pvt. Ltd., Pune
	Summary	:	The experiment was conducted for a period of six weeks on One hundred and forty four straight run day-old broiler chicks randomly allotted into four treatment groups viz., A, B, C and D with three replicates of twelve chicks each. The group A was the control fed basal diet, group B (Basal diet+ Emulso V @150 g per ton), Group C (Basal diet minus 50 Kcal ME+Emulso V @150 g per ton) and Group D (Basal diet minus 100 Kcal ME+Emulso V @150 g per ton). The performance parameters were recorded on weekly interval. It was concluded that the broilers fed on a low energy diet containing emulsifier results in performance comparable to energy rich diet formulations. This means nutritional emulsifiers can be used to improve fat digestibility and thus improve the energy efficiency by maintaining body weight gain, feed intake and carcass quality. As to the effect of emulsifier on low energy diet in the present study, 50 Kcal /kg low energy diet found to be better than 100 Kcal /Kg low energy diet in terms of overall body weight, feed intake and feed conversion ratio. There was no significant change in the percent abdominal fat and internal organs viz., percent liver, heart and spleen weight of broilers fed diet containing low energy with addition emulsifier. Also, the serum SGPT, SGOT, Total Proteins, Albumin and Globulin in broiler chicken at the end of 42nd day of age were not altered. The added dose level of emulsifier at 50 Kcal /Kg low energy level (group C) found to be economical than the 100 Kcal/Kg less energy diet group (Group D).
7	**Veterinary Pathology**		
	Name of Project		**A retrospective study into sheep & goat mortality in farms of Shirwal locality**
	PI and Co-PI	:	B. P. Kamdi and C.S. Mote
	Funding Agency	:	Intra-mural
	Summary		An investigation was conducted into the mortality of sheep and goat farms during January to March, 2016. Total 16 flocks of small ruminant studied (785 animals). Morbidity and mortality was estimated by clinical observations of sick animals and through interaction with the farmers. Dead animals subjected for systemic necropsy examination. Lesions were recorded as pneumonia, enteritis, mesenteric lymph node enlargement, hydropericardium, ascites, gastro-intestinal parasites, froth in trachea, abomasitis , necro-haemorrhagic myocarditis, pulpy kidney, haemorrhages at the base of pulmonary artery, tetanus and naval ill. The mortality rate ranged between 2 to 14% (average 7.16 %) in sheep and goat population. Clincially, anemia was reported in 31.25 % animals, diarrhoea in 56.25 % and respiratory stress in 75% animals. Necorpsy lesions prominently showed Eneteritis in 68.75 % animals while pneumonic lesions were reported in 81.25 % animals under study popualiton at various flocks. Endoparasitic infestation was reported in 25% animals, Pulpy kidney in 12.5 % animals and abomasitis in 31.50% animals.
8	**Veterinary Parasitology**		
	Name of Project		**In vitro and in-vivo studies with neem oil, eucalyptus oil, Kutaighanavati and Kutajarishta for controlling caecal coccidiosis in domestic chicken**
	PI and Co-PI		K. Kundu, M.W. Khasnis, V. D. Lonkar
	Funding Agency		Intramural
	Summary		In-vitro study eucalyptus oil on sporulation of oocysts that eucalyptus oil can delay and affect sporulation of oocysts. Kutarishta when given in water was found to be ineffective in reducing faecal oocyst output. Study with Kutajghanavati is ongoing.

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

INTRA MURAL RESEARCH PROJECTS :*

Sr. No.	Title of the Project, Duration and Proposed Budget	Principal Investigator	Sanctioned Amount
1.	Extraction of natural colour from Palas (Flame of forest, *Butea Monsperma*) flowers and testing its suitability as food colour. Duration: 12 months Proposed Budget: Rs 5000.	Dr. P.G. Wasnik	Rs 5000

2.	Neural Network Modeling of thermal conductivity changes in milk during khoa production Duration:- 12 months Proposed Budget: Rs 25000.	Er. M. Waseem	Rs 10000
3.	Heat Transfer Analysis of Bulk Milk Cooler during Load shedding Conditions Duration:- 7 months Proposed Budget: Rs 15000.	Er. A.V. Dhotre	Rs 5000
4.	Preparation of khoa based sweets with honey and studies on its Texture profile and shelf life Duration:- 9 months Proposed Budget: Rs 45000.	Mr. H. M. Gawande	Rs 15000

- **College of Fishery Science, Nagpur**

Fisheries Resources, Economics, Statistics & Extension Education		
Name of Project	:	"Sustainable livelihood of tribal population in Gadchirloi district through scientific fisheries technologies'
PI and Co-PI	:	PI: Shri. R. H. Rathod Co-PI: Dr. P. A. Telvekar, Shri. S. A. Joshi, Shri. S. T. Shelke
Funding Agency	:	Science and Technology Research Centre, Gondwanda University, Gadchiroli
Summary	:	The impoved fish farming technologies are disseminated in four village ponds in Gadchiroli district Simillary, the value added fish product technology is demonstated to the women self help groups in the district through this project.

8.G. RESEARCH PUBLICATIONS

8.G.1. Collegewise Research Publications

Sr. No.	Name of College	No of Research Papers		
		National	International	Total
1.	Bombay Veterinary College, Mumbai	45	13	58
2.	Nagpur Veterinary College, Nagpur	28	11	39
3.	College of Veterinary & Animal Sciences, Parbhani	11	10	21
4.	College of Veterinary and Animal Sciences, Udgir	08	06	14
5.	KNP College of Veterinary Science, Shirwal	10	07	17
6.	Post Graduate Institute of Vety & Animal Sci, Akola	18	06	24
7.	College of Dairy Technology, Warud	05	00	05
8.	College of Dairy Technology, Udgir	04	00	04
9.	College of Fishery Science, Udgir	01	00	01
	Total	**130**	**53**	**183**

8.G.2. Details of Research Publications

Sr. No.	Name of Author/s	Title of Research Artical	Name of the publication / Journal,Volume, Edition, page Nos. etc
1	S.S. Bodkhe, S.B.Banubakode, R.Y.Charjan, Jigyasa Rana, U.P.Mainde and P.K.Kawareti	"Immunohistochemical studies of thymus in chick embryo of RIR layers *(Gallus gallus* domesticus*)*	International journal of Science, Environment and Technology. 5(4) Page – 2286 – 2289.(2016)
2	Rajan Gajbe, S.B.Banubakode, R.Y.Charjan, N.V.Kurkure, Jigyasa Rana, U.P.Mainde and Amol Salankar	Differentiation of cattle and Buffalo by PCR-RFLP method.	Indian Journal of Veterinary Anatomy 28 (2) Page – 74 – 76..(2016)

3	Jyoti Saini, P. L. Dhande, S. A. Gaikwad, V. d. Shankhapal and E. V. L. Hmangaihzuali	Transmission electron microscope and sperm function study of spermatozoa in Murrah buffalo (*Bubalus bubalis*).	Indian J, of Vet. Anatomy, Vol. 28/2, 84-87 : NAAS Rating: 4.42:2016
4	Dr. Alka Sawarkar and Dr. Sonali D. Borkar	Phytochemical Analysis of Aqueous and Alcoholic extract of Some Medicinal Plants	International Journal of Scientific Research Management (2016)., Vol. 4, ISSUE 9
5	R.Parmar, A.Lateef, H.Das, N.Haque, M.J.Sanap andV.Solanki	Effect of age, sex and physiological stages on heamatological indices of Mehsana goat (Capra hircus)	Manuscript Number:IJLR-2017-02-153 was accepted for publication in the International Journal of Livestock Research.
6	A.M.Shende, S.K.Bhure, H.Pillai, M.Sarkar and S.S.Ramteke	Identification and evaluation of reference gene expression normalization of fresh and frozen –thawed spermatozoa of water buffalo (*Bubalus bubalis*)	*Theriogenology* 92:6-13, Jan. 2017
7	A.K. Wankar	Biochemical profile and methane emission during controlled thermal stress in buffaloes (*Bubalus Bubalis*)	Buffalo Bulletien,36 (1) : 15-22 :2017
8	Salve, R. R., Ingole, S. D., Nagvekar, A. S., Bharucha, S. V and Dagli, N. R	Pregnancy associated protein and progesterone concentrations during early pregnancy in Sirohi goats.	Small Ruminant Research. 141: 45 – 47 : NAAS Rating: 7.01:2016
9	Kasyap A., Ambade R.B.,Dalvi S.H.,& Kapale P.M.	Study of biochemical metabolites during late laying phase of layer chicken.	Indian Journal of Extention education Vol. 17, Jan 2017, PP. 5-9 : NAAS Rating: 5.32
10	P. V. Meshram , R. B. Ambade, S. S. Shirale and S.S.Chavan	Effect of *Saccharomyces Boulardi* on Afflation and Ochratoxin Toxicosis in Broilers: Haemato-Biochemical Observations.	*Indian ResearchJournal of Extension Education (IRJEE)* (Special issue on Veterinary Research & Extension), 42-45 : NAAS Rating: 4.81:2016
11	Sapana Paithane, Mohini Khodke	Effect of subclinical and clinical mastitis on AST & ALT alteration in sheep.	Chem. Sci. Rev.Lett., 6(21),88-93:2017
12	Nagre Shrikantand KuralkarPrajakta	Relation of leptin, insulin and glucose during late gestation and early lactation in Murrah buffalo	The Indain Journal of Vet. Sciences and Biotechnology 2017, 12(3): 35-38
13	V P Yadav, S S Dangi, V S Chouhan, Mahesh Gupta,S K. Dangi,G Singh, V P Maurya, Puneet Kumar,M. Sarkar	Expression analysis of NOS family and HSP genes during thermal stress in goat (Capra hircus)	International Journal of Biometeorology, 2016, 60 (3): 381–389
14	Sahu R. K., V. V. Deshmukh, C. D. Bhong, Yeotikar P.V. and Vaidya M.S..	Organoleptic, physicochemical and microbial qualities of fresh water fish (Katla katla) in various stages of supply chain vended in retail market.	Anim. Sci. Rep. 10(4): 123-131 :2017
15	Rajesh kumar Sahu, S. Raut, A. M. Chappalwar, C.D. Bhong and V. V. Deshmukh	Physicochemical and bacteriological analysis of Osmanabadi goat milk	Asian J. Microbial Biotech. Environ. Sci. 18(3):2016
16	V. R. Patodkar	Serum copper, iron, and zinc concentration during gestation and early lactation in Sangamneri Goats	ISSGPU, vol 22 (2) October 2016
17	V. R. Patodkar	Mineral Profile relationship of Animals, soil, roughages and concentrate from Pune District of Maharashtra	Progressive Research-An International Journal, Vol 11, 4784-4787:2016
18	Patodkar V.R.,Sardar V.M.,Meher P.V.,Bhokare S.M and Khanvilkar A.V.	Profile Relationship of Animals, Soil, Roughage and Concentrate from the Pune district of Maharashtra	*Progressive International Research Journal,* Meerut. 11(Special issue) 2016.

19	Nanotkar R. Y, Jangde C. R, Sar T. K., Mishra S. P. Limsay R.P., Jagtap, D. G and Mandal T. K.	Experimental evaluation of hepatoprotective activity of *Careya arborea* Roxb. bark methanol exctract in CCl_4 induced liver damage in rats.	Multilogic in science (2017), Vol. VII, Issue XX: 89-92
20	P.S.Ekambe, B.S.Surwase, A.P.Somkuwar and M.K.Patil	*In vivo* Anti-inflammatory and Antidiabetic Potential f Crude leaf extracts of *Canthium coromandelicum* (Burm.f.) Alston	*Journal of Biologically Active Products from Nature*. TBAP 6(3) 2016: 195-208.
21	D.P. Patil, M.I. Qureshi and S.V.Londhe	Hypoglycaemic activity of vegetable fruit coccinia indica and its interaction with glibenclamide in normal and alloxan induced diabetic rats.	Life Sciences International Research Journal Vol.4 (1)142-146:2017
22	Vinaykumar, Velingka, Anil Chindhe, M.M. Gatne, Mrunal Sanaye, Yatin Gadkari & Pravin Khatale	3D-QSAR, Synthesis and evaluation of novel piperidional amino methyl aryl sulphonamides with memory enhacing activity.	JSM Chemistry 4(1):1018:2016
23	P.V. Meshram, S.D, Moregaonkar, M.M. Gatne, R.V. Gaikwad, R.J. Zende, S.D. Ingole andG.R. Vanage	Physicochemical and Phytochemical Screening of Aqueous andEthanolic Extracts of *Costus Pictus* D. Don *and Enicostema Littorale*Blum.	*Chem Sci Rev Lett* 2017, 6(21),426-434 : NAAS Rating: 5.21
24	Amrutkar, Y. K., S.W. Hajare A. R. Sontakke, N. M. Bhojane, R. S. Ingole and M. V.Ingawale	Antidiarrhoeal Activity of Dalbergia Sissoo Leaves in Goats	The Indian J. of Vet. Science and Biotch Vol. 12 No. 2, 66-69:2016
25	Saroj, VK., UP Nakade, A Sharma, RS Yadav, SW Hajare and SK Garg	Functional involvement of L-type calcium channels and cyclic nucleotide-dependent pathways in cadmium-induced myometrial relaxation in rats	Human and Experimental Toxicology, May 10/1-11(NR-7.60):2016
26	Sunil W. Kolte, Stephen D. Larcombe, Suresh G. Jadhao, Swapnil P. Magar, Ganesh Warthi, Nitin V. Kurkure, Elizabeth J. Glass, Brian R. Shiels	PCR diagnosis of tick-borne pathogens inMaharashtra state, India indicates fitness costassociated with carrier infections is greater forcrossbreed than native cattle breeds)	PLOS ONE https://doi.org/10.1371/journal.pone .0174595March 30, 2017
27	Subi Migri, G.P. Bharkad and M.L. Gatne	Prevalence of clinical and subclinical forms of *Trypanosoma evansi* infection in buffaloes of Mumbai region (MS) of India	Buffalo Bulletin (October-December 2016) Vol.35 No.4 : NAAS Rating: 6.07
28	Dadas, S.A.,Mishra, S., Sawale, G.K.and Gatne, M.L	A Rare Abattoir Report on Heavy Infection of Pigs with *Opisthorchis tenuicollis*.	Israel Journal of Veterinary Medicine Vol. 71 (4) December 2016 : NAAS Rating: 6.29
29	Lavanya K.V., Gudewar,J.G. Pednekar, R.P. and Gatne, M.L	Epidemiological, clinical, haemato-biochemical and therapeutic evaluation of canine trypanosomosis in Mumbai	The Indian Journal of Anim Sci, 86 (4) :372-375 : NAAS Rating: 6.17:2016
30	Dadas, S.A, Gupta S., Jawalagatti, V., Gudewar,J.G. and Gatne, M.L	Comparative evaluation of different classes of insecticides in therapeutic management of caprine pediculosis.	International Journal of science, environment and technology. 5 (2) : 700-707 NAAS Rating: 3.98:2016
31	Mishra S., Pednekar, R.P. and Gatne, M.L	Comparative study of region specificity in bird louse in organized and unorganized sector in Mumbai.	International Journal of science, environment and technology. 5 (5) : 3506-3511 : NAAS Rating: 3.98:2016
32	Mishra S., Pednekar, R.P. and Gatne, M.L	Species wise and breed wise prevalence of lice infestation in poultry of Mumbai region, Inida.	Journal of Livestock Science(7): 293-295NAAS Rating: 2.88:2016

33	Hingole A.C., Gudewar,J.G. R.P. and Gatne, M.L	Prevalence and molecular charactorization of Cryptosporidium spp.in cattle and buffalo calves in Mumbai region of India.	Indian Journal of Parasitic Diseases. 16: 763-768:2016
34	Gavhane D. S. Moregaonkar S. D.and Mhase A. K.	Cytotoxicity and anticancer activity of Racemosa fruit extract in MCF7 Human Breast cancer cell lines by SRB method.	Indian Journal of Animal Research 6 (1) 1: 921-926 NAAS Rating: 6.09:2016
35	Krishnendu Kundu, Bhupesh Kamdi, Madhav Waman Khasnis, Chandrashekhar Mote, Sainath Manikrao Bhokre and Ajay V Khanvilkar	Comparative Effect of Doramectin andFenbendazole In Management of ClinicalToxocariosis in Pandharpuri BuffaloHerd.	*International Journal of Agricultural Sciences and Veterinary Medicine, ISSN 2320-3730,* 5(01):72-77.:2017
36	Ghorai S, Ghorai N, Dutta L, Bera A, Ghorui S, Kinhekar AS, Ingle VC, Sonkusale P, Awandkar SP, Tembhurne PA, Kumar V, Ravikumar RK and Kumar V	Protective and Immuno-Modulatory Effect of Low Cost LocallyAvailable Technology from West Bengal, India under Indigenous Knowledge Research System [IKRS]	*J. Immunol. Immunopathol*. 18(1): 19-23 ;2016
37	Trivenee Thakre, Shubhangi warke, Sumedha Bobade and Kalorey D.R	Characterization of E coli pathotypes of bovine and livestock farm environment origin	Indian Journal of Animal Research (Online ISSN; 0976-0555);2016
38	Uma Singh, Shubhangi Warke, Dewanand Kalorey, Sumedha Bobade	Characterization of *Listeria monocytogenes* from various sources by Random amplified polymorphic DNA(RAPD) and serotyping	Indian J. Comp. Microbiol. Immunol. Infect. Dis. Vol. 37 No. 1 (Jan-June), 2016: 37-42
39	Pannerselvam Manesh Kumar, Paramasivam Raja, Prabhakar Abhimanji Tembhurne, Sanjay Gohain and Vijay Chokharam Ingle	Differential Expression Profile of TGFβ2 in Immune and Visceral Organs of ggamiR-142-3p Knockdown Chicken Embryo	Journal of Animal Research: Vol.6 No.6 (2016) 977-982.
40	Pannerselvam M. Kumar, Prabhakar A. Tembhurne, Paramasivam Raja, Vijay C. Ingle, and Devanand R. Kalorey	Knockdown of gga-miR-142-3p in developing chicken embryo: expression profile of XPO1	Vet. arhiv 87(1) 67-76, 2017
41	S.R.Warke,V.C.Ingle, N.V.Kurkure, P.A.Tembhurne, S.P. Chaudhari and S.B. Barbuddhe	Biofilm Formation and Associated Genes in *Listeria monocytogenes*. The Indian Journal of Veterinary Science and Biotechnology	IJVSBT 12(3)(2017)7-12
42	Chellapa M.M., Dey S., Gaikwad S., Pathak D.C., Vakharia V.N.	Rescue of recombinant NDV strain R2B expressing green fluorescence protein	Virus genes: DOI 10.1007/s11262-017-1433-3:2017
43	S. P. Awandkar B. P. Kamdi S. D. Moregaonkar and S. J. Manwar	Comparative study of reovirus induced arthritis, tendosynovitis syndrome on vaccinated and non vaccinated commercial broilers and its effect on growth performance	India Journal of Poultry Science 2016 93(06) % 65-67 NAAS Rating: 5.01
44	V. S. Dhaygude, G. K. Sawale, M. M. Chawak, N. R. Bulbule, S. D. Moregaonkar and D. S. Gavhane	Molecular characterization of velogenic viscerotropic Ranikhet (Newcastle) disease virus from different outbreaks in desi chickens	Veterinary World, Available at www.veterinaryworld.org/Vol.10/March-2017/8.pdf : NAAS Rating: 5.71: 2017

45	S.P.Awandkar, S.D.Moregaonkar, S.J.Manwar, B.P. Kamdi and M.B.Kulkarni	Comparative investigations of infectious runting and stunting syndrome in vaccinated breeder chicks by inactivated reovirus and chicks from non-vaccinated breeders	Iranian Journal of Veterinary Research, 18(1), Ser. No. 58:6-12.:2017
46	Barbuddhe SB, Doijad SP, Goesmann A, Hilker R, Poharkar KV, Rawool DB, Kurkure NV, Kalorey D R, Malik SS, Shakuntala I, Chaudhari S, Waskar V, D'Costa D, Kolhe R, Arora R, Roy A, Raorane A, Kale S, Pathak A, Negi M, Kaur S, Waghmare R, Warke S, Shoukat S, Harish B, Poojary A, Madhavaprasad C, Nagappa K, Das S, Zende R, Garg S, Bhosle S, Radriguez S, Paturkar A, Fritzenwanker M, Ghosh H, Hain T, Chakraborty T	Presence of a widely disseminated Listeria monocytogenes serotype 4b clone in India.	Emerg Microbes Infect. 8 : 5 (2016)
47	Kumar M, Dhaka P, Vijay D, Vergis J, Mohan V, Kumar A, Kurkure NV, Barbuddhe SB, Malik SV, Rawool DB.	Antimicrobial effects of Lactobacillus plantarum and Lactobacillus acidophilus against multidrug-resistant enteroaggregative Escherichia coli.	Int J Antimicrob Agents. 48(3):265-70 ; 2016
48	Pathak AD, Dubal ZB, Karunakaran M, Doijad SP, Raorane AV, Dhuri RB, Bale MA, Chakurkar EB, Kalorey DR, Kurkure NV, Barbuddhe SB	Apparent seroprevalence, isolation and identification of risk factors for brucellosis among dairy cattle in Goa, India.	Comp Immunol Microbiol Infect Dis. 2016 Aug;47:1-6
49	Morla S, Shah M, Kaore M, Kurkure NV, and Kumar S	Molecular characterization of genotype XIIIb Newcastle disease virus from central India during 2006-2012: Evidence of its panzootic potential.	Microb Pathog. 99:83-86. 2016
50	Rawool DB, Doijad SP, Poharkar KV, Negi M, Kale SB, Malik SV, Kurkure NV, Chakraborty T, Barbuddhe SB	A multiplex PCR for detection of Listeria monocytogenes and its lineages.	J Microbiol Methods. 30:144-147.2016
51	Ganar K, Shah M, Kamdi BP, Kurkure NV, and Kumar S.	Molecular characterization of chicken anemia virus outbreaks in Nagpur province, India from 2012 to 2015.	Microb Pathog.102:113-119 2017
52	Kolte SW, Larcombe SD, Jadhao SG, Magar SP, Warthi G, Kurkure NV, Glass EJ and Shiels BR.	PCR diagnosis of tick-borne pathogens in Maharashtra state, India indicates fitness cost associated with carrier infections is greater for crossbreed than native cattle breeds.	PLoS One. 30;12(3):e0174595.2017
53	Wagh AC, Nivedita Mishra, Lande TB, Gangane GR, Kulkarni GB,Kondre BM, Rathod PR and Narladkar B W	Cysticercus tenuicollis in goat-necropsy	Pashudhan 8 (2016)

54	Dr. Pravin Rathod, Dr. Kulkarni Gangadhar, Govind Gangane and Dr. Nagnath Bhojane	Effect Effect of Aflatoxin on Haematological and Biochemical alteration in Broilers,	International Journal of Science, Environment and Technology, Vol. 6, No 1, 2017, 824- 831.
55	Sahu R. K., V. V. Deshmukh, C. D. Bhong, Vaidya M.S. and Patil S	Microbial hazard analysis of fish (Katla katla) in various stages of supply chain.	J. Anim. Res 6(4):711-715 :2017
56	Sawale, G.K, Yash Savla, Gavhane D.S.	Subcutaneous nodular lesions associated with *Dirofilaria repens* in Dog.	The Indian Vet Journal, 93 (2) :39-41NAAS Rating: 4.42:2016
57	G.K. Sawale, D. S. Gavhane A. K. Mhase, H. Y. Palampalle Purvi Naik & S.D. Moregaonkar	Observation on occurance of penetrating and nonpenetrating foreign bodies in murrah buffaloes	Indian Veterinary Journal 93 (6) : 19-21 NAAS Rating: 4.42:2016
58	D.N. Bahal, P.V.Meshram, S.D. Moregaonkar, D.U. Lokhande and P.R. Chaudhari	Unusual findings of cutaneous lymphomas in dogs	Indian Journal of Canine *Practice*.Vol. 8 (2)201-203, 2016 : NAAS Rating: 4.42
59	R.S. Ingole, M.V. Joshi, S. W. Hajare and M. V. Ingawale	Toxicological pathology of water salinity in bullocks slaughtered in saline area of Western Vidarbha region.	Indian Journalof Veterinary Pathology, 40(1):15-22:2016
60	R.M. Patil, R.S. Ingole, V.P.Pathak and M.V. Joshi	Effect of neemoil supplementation on growth performance and haematobiochemical profile in broilers	The Indian Journal of Veterinary Sciences and Biotechnology, 12(2):59-61.:2016
61	A. S. Chandewar, R. S. Ingole, M.V. Joshi, Madhuri Hedau, S. W. Hajare and M. V. Ingawale	Immunomodulatory effect of *Andographis paniculata* during lead induced toxicity in broilers.	The Indian Journal of Veterinary Sciences and Biotechnology, 12(2):70-74.:2016
62	R.J. Zende, D.P. Kshirsagar, V.M. Vaidya, R.N. Waghmare, A.H.Shirke and R.P.Todankar	Prevalence and Antibiogram Studies of *Salmonella* from Foods	International Journal of Current Microbiology and Applied Sciences(Accepted) NAAS Rating: 5.38
63	Sukhadeo B Barbuddhe, Swapnil P Doijad, Alexander Goesmann, Rolf Hilker, Krupali V Poharkar,Deepak B Rawool, Nitin V Kurkure, & others	Presence of a widely disseminated Listeria monocytogenes serotype 4b clone in India	Emerging Microbes & Infections, 5 e55, doi:10.1038/emi.2016.55 NAAS Rating: 10 (International Impact Factor - 4)
64	S.D. Lokhande, R.P. Kolhe, P.D. Deshpande, C.D. Bhong, A.G. Aradhye, D.M. Muglikar and B.N. Godse	Detection of *Escherichia coli* Pathotypes in Children with Diarrhea.	J.Vet. Public Health., 13(2):79-83:2016
65	S.R.Kolhe, R.P.Kolhe, Urmila Jagtap and Vasudha Sulakhe	Perception of knowledge level of zonootic diseases of women	Indian Res. J. Ext. Edu., January 2017 (Special issue on Veterinary Research & Extension) page no 116-118.
66	S. K. Jadhav, A.P. Dhok, A.D. Deshmukh, S. R. Lende and P. E. Taksande	Effect of replacement of maize with soybean hulls in the concentrate mixture of buffalo calves	Indian Journal of Animal Nutrition. 33(2): 242-244; 2016
67	G.B.Shinde, A.B.Kanduri, P.V.Patil and P.H.Pawar	Effect of supplementation of different levels of dried Tamrind pulp on meat cholesterol, carcass yield, dressing percentage and abdominal fat of broiler chicken	The Indian Journal of Veterinary Sciences and Biotechnology, 2016, 12(1):10-13.:2016
68	S.M.Gacche, A.B.Kanduri, P.V.Patil and N.Z.Gaikwad	Extent of replacement of soybean meal with distillers dried grains with solubles (ddgs) on carcass yield, dressing	*Animal Science Reporter*,July 2016, 3(10):109-114.

		percentage and feed cost in broiler chickens.	
69	S.M.Gacche, A.B.Kanduri, P.V.Patil and N.Z.Gaikwad	Effect of Distillers Dried Grains with Solubles on the Performance of Broilers	*Indian Vet. J.,* April 2016, 93 (04) : 54 – 57
70	A. R. Magre, G. M. Gadegaonkar, V.U. Dhande	Effect of feeding Azolla (*Azolla pinnata*) on performance of broilers.	J. Bombay Veterinary College (2015) 22 (1):1-6 : NAAS Rating: 2.18:2016
71	R. Arde, and G. M. Gadegaonkar	Effect of rumen protected choline on the yield and composition of milk in lactating buffaloes.	J. Bombay Veterinary College (2015) 22 (1):7-11: NAAS Rating: 2.18
72	B.N. Ramteke, S.V.Deshmulh, P.E. Taksande and S. Londe	Feeding practices for buffaloes in Eastern Zone of Vidarbha in Maharashtra Sate.	J. Bombay Veterinary College (2015) 22 (1):33-39: NAAS Rating: 2.18
73	M.M. Gujar, G.M. Gadegaonkar and B.G. Hol	Comparative performance of growing non-descript dogs on home made V/s dry pet food containing fish meal.	Indian J. Canine Practice Vol (8):2, Dec, 2016, pg 195-200 : NAAS Rating: 4.42
74	Gholap, P.N. ; Kale, D.S. Krishnamurthi, K. , Sirothia, A.R. and Kothekar, M.D.	Screening of partial coding region of metallothionein isoform-2 gene in Zebu cattle.	Iranian Journal of Veterinary Research, 17(3), Ser. No. 56, 155-159.2016
75	P.V.Jadhav,D.N.Das,and K.P.Ramesha	MolecularCharacterization of TLR2 gene exons and its association with SCS in HF crossbred cattle.	*International Journal of Scientific research*. 5(5): 27- 28:2016
76	P.V.Jadhav, S.B.Tarate, M. Bhuvana, D.N.Das and B.R.Shome.	Somatic cell count as a monitoring system for hygienic milk production in india	*Asian Journal of dairy and food research*. 35(4). 270-277:2016
77	P.V. Nandedkar, Bagale S.S., Shaikh G.M. and Abdul Aziz	MHC Allele Polymorphism in Cattle Mastitis	Volume 17, January Special Issue:2017
78	S.B. Khade, V.D. Pawar, M.M. Chopade, S.J. Komatwar and S.S. Pathade	Genotyping of the HF Crossbred Cattle for UMPS gene using PCR-RFLP	Int. J. Sci., Env. ISSN 2278-3687(O)and Technology, Vol. 5,(5) 2016, 3245 – 3248 2277-663X (P) : NAAS Rating: 3.98
79	S.B. Khade, M.P. Sawane, V.D. Pawar, M.M. Chopade and S.J. Komatwar	Identification of factor XI deficiency in HOLSTEIN crossbred cow with repeat breeding.	Int. J. Sci., Env. ISSN 2278-3687(O)and Technology,Vol. 5, No 6, 2016, 3860 – 3863 2277-663X (P): NAAS Rating: 3.98
80	S.B. Khade, V.D. Pawar, M.P. Sawane, U.D Umrikar and M.M. Chopade	Genotyping of Holstein Friesian Crossbred Cattle for Factor XI (FXI)Deficiency Locus	Indian Vet. J., January 2017, 94 (01) : 24 – 26 NAAS Rating: 4.42
81	T.C. Shende	Genotyping of HF Crossbred Cattle for ß-Casein Genes Using PCR-RFLP	Ind. Res. J. Ext. Edu., January 2017 (Special issue on Vety Res& Ext) page no 105-107.
82	Lakshmi Sharma, S.V. Kuralkar , S. Sajid Ali, P.S. Bankar and Prajakta Kuralkar	Polymorphism Study Of Bmpr-1b And Bmp-15 Genes In Berari Goats	Indian Journal of Small Ruminants, 22(2): 230-233:2016
83	B. R. Kadam, R.K. Ambadkar, K. S. Rathod and Yogesh Gadekar	High hydrostatic pressure: a novel non - thermal method for Processing of foods ofanimal Origin: A brief review.	J. Environmental Bio-Sci. 30 (2):397-403;2016
84	I.K. Madelwar, R. K. Ambadkar, R. Banerjee, K. S. Rathod and V. R. Pachpor	Shelf life of enrobed chicken bites treated with Guava extract	J. Meat Sci. 11(2): 15-21;2016
85	K. S. Rathod, R. K. Ambdkar ,	Analysis of Vacuum Packed Superchilled Chicken Breast at 24 h Storage.	International J. of Current Microbiology and Applied

	B. M. Naveena and S. K. Devatkal		Sciences. 6(2) :675-683;2017
86	S.V. Londhe, R. K. Ambadkar, D.P. Patil	Suitability of buffalo milk for preparation of chhana podo	Life Sciences International Res. Journal Vol.4 (1)139-141:2017
87	Dr. Vivek Shukla	Anthocynin based indicator sensor for intelligent packaging application	Agricultural research DOI 10. 1007/S40003-016-0211-0 : NAAS Rating: 5.9: 2016
88	Pavankumar Kadakadiyavar, Rajhans Krishnarao Ambadkar and Kishor Sheshrao Rathod	Assessment of Quality of Chicken Nuggets Treated with Mango Peel Extract	International Journal of Livestock Research. 7(2):71-77;2017
89	R.A. Garkal1, P.M. Kekan, S.D. Kharde, V.K. Munde, B.W. Narladkar and M.S. Vaidya	Effect of different housing systems on haematological parameters of buffaloes	Buffalo Bulletin (June 2016) Vol.35 No.2
90	Geetesh Mishra, M. F. Siddiqui, V.S. Ingle andM. S. Meel	International Journal of Livestock Research, Vol 7 (1), 54:62	International Journal of Livestock Research, Vol 7 (1), 54:62
91	G.J. Panchbhai, M.F.Siddiqui, M.N. Sawant, A.P. Verma and Parmeswaranaik	Correlation Analysis of Socio-Demographic Profile of Dairy Farmers with Knowledge and Adoption of Animal Husbandary Practices	International Cuurent Microbiolgy Applied Science Vol.6(3) : 1918-1925:2017
92	G.J. Panchbhai, M.F.Siddiqui, M.N. Sawant, A.P. Verma and Parmeswaranaik	Constraints Faced by Co-Operative Dairy Farmers in Adoption of Recommended Dairy Management Practices	International Cuurent Microbiolgy Applied Science Vol.6(3) : 1962-1966:2017
93	M. F. Siddiqui,H. S. Shelke,M. D. Kharwadkar,V. S. Ingle	Evaluation of Draughtability Traits of Red Kandhari Cattle	Life Sciences International Res. Journal Vol.4(1) : 119-121:2017
94	M. D. Kharwadkar, H. S. Shelke, M. F. Siddiqui and V. S. Ingle	Studies on Carting Performance of Red Kandhari Bullocks at Different Payloads	Life Sciences International ResJournal Vol.4(1) : 122-123:2017
95	Garkal, R. A, Kekan, P. M, Kharde, S. D, Munde, V. K, Naraladkar, B. W and Vaidya, M. S	Effect of different housing systems on haematological parameters of buffaloes.	Buffalo Bulletin. 35(2): 191 – 198 : NAAS Rating: 6.07: 2016
96	Kharde, S. D, Shinde, A. T, Munde, V. K, Kalbande, V. H and Kekan, P. M	Evaluation of urea treated sugarcane by-products and other crop residuesbased complete rations for Osmanabadi goat kids.	Multilogic in Science. 5(15): 148 – 150 : NAAS Rating: 5.20:2016
97	Kekan, P. M, Garkal, R. A, Kharde, S. D, Naraladkar, B. W, Munde, V. K,	Effect of season variations and different housing systems on physiological responses and haematological parameters.	Indian Journal of Animal Science. 86(7): 758 – 761 :NAAS Rating: 6.17:2016
98	A. U. Gawade., S.M. Bhokre and A.V. Khanvilkar	Occurrence of diseasesand Time Utilizationpattern of Different Housing Systems inCrossbred Cows.	*IndJournal of Animal Production and Management*, ISAPM, 32(1-2):22-25. :2016
99	Sagar Tagare[1]; S.M.Bhokre[2]; A.V.Khanvilkar[3]	Behavioural Indices In Khillar Cattle underLoose Housing System	*ProgressiveInter Res Journal,* Meerut. 11(Special issue) 2016
100	A.V. Khanvilkar., M.M. Islam., Y.G. Patel and K.N. Wadhwani.,	Impact of Water Restriction and Rehydration on Water Intake, and Feed Intake and Nutrient Intake on Sheep and Goats under Middle Gujarat Agro climatic Condition	*International journal of Environment Science and Technology,* 6(1):553-569.:2017

101	M.S.Bawaskar D.S.Raghuwanshi S.K.Sahatpure	Comparative Efficacy of Fertivet and Janova in the Treatment of Post Partum Anestrus in Cows	Indian Journal of Extension EducationVolume17, special issue, January 2017.
102	Prasanna Pati, S.K. Sahatpure, A. D. Patil, Umesh Kumar, Basanti Jena, A.K. Nahak and Laxman Prasad Sharma	Prediction of Gestational age in Osmanaba Goats by Ultrasonic Measurement of Crow Rump length	The Indian J. of Vet. Sci. & Biot. 12(2), 75-78;2016
103	M.Pande, G.K.Das, Rajendra Singh, S.S.Ramteke, F.A.Khan, H.Kumar, J.S.Rajoriya andN. Srivastava	Ovarian Teratoma in a water Buffalo (Bubalus bubalis)	*Buffalo Bulletin* 35 (4): 557-562.:2016
104	Pujar, C., Puro, N.A., Swami, S. G. Markandeya, N. M., Mali, A. B. and Kumawat, B. L.	Voluminous abdomen as a cause of post cervical torsion in a doe: A case report.	Raksha Technical Review, 6 (1): 35 ;2016
105	Pujar, C. Puro, N.A. , Markandeya, N. M. , Mali , A. B. & Kumawat , B. L.	Studies on efficacy of selectsynch and ovsynch protocols for induction and synchronization of estrus in osmanabadi goats.	Int. J. Sci., Environ. and Tecch. 5(6) : 4069-4073
106	P.M. Mane, S.M. Gaikwad, R.L. Dhoble, R J. Chaudhari, A. G. Sawale, P. R. Suryawanshi and S. C. Dawane	Effect of mineral supplementation on involution, post-partum ovarian activity and conception rate in marathwadi buffaloes.	Buffalo Bulletin 35 (2) : 247-257.:2016
107	Amle, M.B., Mundhe, S.M., and Birade, H.S.	*In vitro* Sperm Function Tests and Testicular Biometry for Fertility Prediction in Boar	Int. J Advanced Veterinary Sci and Tec. 2017, Volume 6, Issue 1, pp. 301-307
108	Raut M. R., Ingawale M. V., Deshmukh, S. G Hajare S.W. and Ingole R. S..	Impact of cloprostenol sodium treatment during early postpartum period on fertility in dairy cattle	The Indian Journal of Animal Reproduction Vol.37(1):39-40:2016
109	Watane T.M., Ingawale M.V.,Dalvi V.B.,Iyer K.B. and Hirole P.D.	Dystocia due to complete uterine inertia in german shepherd bitch	The Blue cross book Vol.34:98-99:2016
110	Deshnukh,S.G., Ingawale M.V,Birade H.S.,Thorat M.G.,Kuralkar S.V.Rekhate D.H.,Mode S.G. and Chepte S.D.	Effect of Dietary Supplementation of Crushed Flaxseed and Soybean Oil on Ovarian Functions in Postpartum Jersey Crossbred Cows	The Indian Journal of veterinary Science and Biotechnology Vol.12(3):118-123:2016
111	Manjusha Patil, M. V. Ingawale, H. S. Birade and A. Syed Anwar	Ultrasonographic studies of follicular activities in Clomiphene Citrate Treated Anoestrus cows.	The Indian Journal of Vety Sci & Biotec, Vol 12, No 2, Oct- Dec 2016
112	M.S. Dhakate, Mrunali Kamble and S.B. Akhare	Sugical management of urinary obstruction in a dog	Intas Polivet, Vol. 17 (2016) No. I
113	Mrunali Kamble, M.S. Dhakate, S.V. Upadhye and S.B. Akhare	Surgical management of mammary tumor in a dog	Intas Polivet, Vol. 17 (2016) No. I
114	S. S. Pitlawar, B. M. Gahlod,S.B. Akhare, S.V. Upadhye and P.T. Jadhao	Surgical management of horn affections : a repot of 2 bullocks	Intas Polivet, Vol. 17 (2016) No. II
115	Manisha Donekar, M.S. Dhakate, S.V. Upadhye, S. S. Mrunali kamble, and S.B. Akhare,	Comparative evaluation of surgical techniques fo management of aural haematoma in canines	Intas Polivet, Vol. 17 (2016) No. 1
116	V. A. Uike, P. T. Jadhao, S.V. Upadhye, S. P. Salvekar & S. S. Pitlawar	Clinical management of coneal opacity – a study of 11 dogs	Intas Polivet, Vol. 17 (2016) No. 1
117	Raulkar R. V., Thorat M.G., Kuralkar S.V., Chepte S.D.,	Morphometric Evaluation of Hooves In Different Affections Of Hoof In Cattle	Intl Journal of Agri Sci, ISSN: 0975-3710&E-ISSN: 0975-

	Waghmare S.P.and Kharwadkar M.D.		9107, Vol 8, Issue 54, 2016, pp.-2858-2861.
118	Sitaram Munda, Rajeev Pandey, Bhojne G. R., Dakshinkar N. P., Amol S. Kinhekar, Vivek Kumar, Ravikumar R. K. and Vipin Kumar	Indigenour Knowledge Research system (IKRS) for treatment of Bloat and its significance towards greenhouse gas emission: Jarkhand, India	Advances in Animal and Veterinary Sciences, 4 (5); pp- 241-244.;2016
119	Ravikumar R. K., Thakur Devesh, Chaudhary Hardev, Vivek Kumar, Amol S. Kinhekar, Tushar Garg, K. Pannuswamy, Bhojne G. R., Shetty Vasanth M. & Vipin Kumar	Social engineering of societal knowledge in Livestock Sciences: Can we be more empathetic?	Vety. World, pp- 86-91.;2017
120	G. R. Bhojne, N. P. Dakshinkar, M. D. Kothekar, N. V. Kurkure, V.M. Dhoot S. V. Upadhye and Kalyani Thakur	Prevalence of Renal Insufficiency in dogs of Nagpur city	Indian Journal of Canine Praactice. 8(2) pp- 107-111;2016
121	G. R. Bhojne, N. P. Dakshinkar, Kalyani Thakur and A. S. Karmankar	Successful therapeutic management of Hepatorenal syndrome in dogs. .	Indian Journal of Canine Praactice. 8(2) pp- 118-121.;2016
122	G. R. Bhojne, N. P. Dakshinkar, A. S. Karmankar and Kalyani Thakur	Epidemiological observations of canine ehrlichiosis in Nagpur city	Indian Journal of Canine Praactice. 8(2) pp- 124-126;2016
123	A. Karmankar, C.G. Panchbhai, N.P. Dakshinkar, S.V. Updhye, G.R. Bhojne, B.N. Ambore and M.P. Sakhare	Clinico-biochemical Evaluation in dehydrated adult cattle.	Compendium of 35th Annual Convention of ISVM-2017
124	C.G. Panchbhai, N.P.Dakshinkar, A.M. Rode, G.R. Bhojne, B.N. Ambore and V.M. Dhoot	GC-MS Analysis of ethanolic extract of Holarrhena antidysentrica stem bark (Pandhara kuda)	Compendium of 35th Annual Convention of ISVM-2017
125	A. Karmankar, C.G. Panchbhai, N.P. Dakshinkar, G.R. Bhojne, B.N. Ambore, M.P. Sakhare and V.M. Dhoot	Oral rehydration therapy in adult cattle	Compendium of 35th Annual Convention of ISVM-2017
126	A.M. Rode, B.N. Ambore, N.P. Dakshinkar and M. P. Sakhare	Theobromine Toxicity: An Uncommon Emergency In A Dog	Compendium of 35th Annual Convention of ISVM-2017
127	B. N. Ambore, A. M. Rode, N. P. Dakshinkar, M. P. Sakhare, D. S. Raghuwanshi and K. P. Kharkar	Successful Treatment Of Sulpha Allergy In A Calf	Compendium of 35th Annual Convention of ISVM-2017
128	M.P. Sakhare, N.P. Dakshinkar, B.N. Ambore and A.M. Rode	Successful Treatment Of Dermatophytosis In A Red Kandhari Calf	Compendium of 35th Annual Convention of ISVM-2017
129	M.P. Sakhare, N.P. Dakshinkar, B.N. Ambore and C.G. Panchbhai	Therapeutic Management Of Mange In A Deoni Calf	Compendium of 35th Annual Convention of ISVM-2017
130	R.K.Jadhav, .U.Bhikane, A.A.Bhosale, H.A.Shaikh and A.S.Jadhav	Acute Oxyclozanide-Levamisole poisoning in Red Kandhari bullocks.	*J. Adv. Vet. Res.* 7 (1): 16-17.2017
131	Harshal B. M., Digraskar S. U., Dhoot V. M. and Tawheed A. S.	Efficacy of calcium borogluconate and lime water therapy in *Anagallis arvensis* toxicity in cattle	Journal of Animal Research (Accepted on 26-03-2017)
132	Digraskar S.U., Borikar S. T, Tawheed A.S., Nithin B.S., Neelam S. and Kumbhar S	Thiamine Responsive Polioencephalomalacia in a Swan Goose-A Case Report	The Ind J Vety Sci & Biotech (Accepted on 02-03-2017; 543Acad/2017)
133	Digraskar S U, Borikar S T,	Scaly leg in backyard reared chicken and	The Ind J Vety Sci & Biotech

	Tawheed A S, Narladkar B W, Nithin B S, Ajabe J S and Shaik S R	its successful management	(Accepted on 04-03-2017; 544Acad/2017)
134	B.P. Kamdi, C.S. Mote, K. Kundu, Nissar Dar	Hemonchosis in a non-descript sheep - A case report	The Blue Cross Book, (34) 127:13 : 2016
135	S. P. Waghmare, D. B. Sarode & N.R. Dakshinkar	Study of soil-fodder-serum mineral interrelationship in saline tract area of Akola district of Maharashtra	Asian Journal of Soil Science, Vol 11 No. 2 December 2016
136	S. P. Waghmare, R. B. Meshram, N. P. Dakshinkar, K. S. Pajai and M.F.M.F. Siddiqui	Effect of supplementation of bypass fat on biochemical profile in dairy cows	The Asian Journal of Animal Sciences Vol 11 No. 2 December 2016
137	R. B. Meshram, S. P. Waghmare, N. P. Dakshinkar & K. S. Pajai	Effect of supplementation of rumen bypass fat with Chromium on milk yield and milk fat per cent in dairy cow	Veterinary Science Research Journal, Vol 7 No. 2 October 2016
138	V.S. Dhoke, P.R. Pande, Madhuri Hedau, R.S. Ingole and M.V. Joshi	Epitheliod hemangioma in a male Hound dog: A case report.	The Indian Journal of Veterinary Sciences and Biotechnology, 11(4):59-61.:2016
139	Madhuri Hedau and B. P. Kamdi	Tuberculosis in captive sloth bear (*Melursus urcinus*).	International J Sci Res& Management, 4(12):4941-4943.:2016
140	P. B. Hase, M.G.Patil and P.R.Rathod	Climate Change and It's Impact on Livestock – A Review	International J of Sci, Env & Tech, Vol 6,No 2, 2017
141	Madhuri Hedau, R. S. Ingole, Suvarna Sonwane and S. B. Tadavi	Vulvar squamous cell carcinoma in a horse: A case report	International J of Scientific Research and Management, 5(1):5086-5088.:2017
142	V.S. Dhoke, Madhuri Hedau and M.V. Joshi	Cervico-vaginal multiple leiomyoma in a Labrador dog: A case report.	The IndJ Vety Sci & Bio-tech(2017), 12(3):65-66
143	RashminB. Patel, Mrunali R. Patel, Kashyap K. Bhatt, Bharat G. Patel and Rajiv V. Gaikwad	Microemulsion-based drug delivery system for transnasal delivery of Carbamazepine: preliminary brain-targeting study.	Drug Delivery Volume 23, Issue 1, 2016 pages 207-213
144	Rashmin B. Patel, Mrunali R. Patel, Kashyap K. Bhatt, Bharat G. Patel and Rajiv V. Gaikwad	Evaluation of brain targeting efficiency of intranasal microemulsion containing olanzapine: pharmacodynamic and pharmacokinetic consideration	Drug Delivery, Volume 23, Issue 1, 2016 pages 307-315 DOI: 10.3109/ 10717544. 2014.912694 Received: 12 Mar 2014, Accepted: 3 Apr 2014, Published online: 20 May 2014
145	Mrunali R. Patel, Rashmin B. Patel, Kashyap K. Bhatt, Bharat G. Patel, and Rajiv V. Gaikwad	Paliperidone microemulsion for nose-to-brain targeted drug delivery system: pharmacodynamic and pharmacokinetic evaluation.	Drug Delivery Volume 23, Issue 1, 2016 pages 346-354 DOI: 10.3109/10717544.2014.914602 Received: 25 Mar 2014, Accepted: 9 Apr 2014, Published online: 28 May 2014
146	Vaibhav Hagone and V.K. Basunathe	Dairying Information Needs of Tribal Women	Journal of Communication Studies. Vol. XXXIV (1): 109-115 pp.2016
147	Nipane, S. F., Basunathe, V.K., Bankar, S.S., Seth, Pankaj, Singh, Navab and N.K. Singh	Socio-Economic Status of Goat Keepers in Bhandara District of Maharashtra State	International Journal of Science, Environment and Technology Vol.5 (5): 3615 – 3622 pp;2016
148	Yogesh Kankarne, Faheem Siddiqui& Sanjivkumar Kochewad	Effect of Socio-economic traits on the level of knowledge of Dairy Farmers	International Journal of Agricultural Science and Research, Vol,7 (1), 287-292:2017
149	S.S. Chavan	Measuring the perceived attributes of simple but worth chaff cutter technology adopted by dairy entrepreneurs	Indian R. Journal of Ext. Edu., Special Issue, Jan. 2017; Pg. 58 – 61.

150	Adhiti Bhanotra and Jancy Gupta	Mapping of ITK on animal health care and validation of ITKs used for treatment of pneumonia in dairy animals	Indian Journal of Traditional Knowledge Vol. 15 (2), April 2016, pp.297-303 : NAAS Rating: 6.37:2016
151	Adhiti Bhanotra, Jancy Gupta and Minu Singh	Socio-economic status and communication behaviour pattern of dairy farmers in kathua district of J&K.	International Journal of Farm Sciences 6 (1) : 1-6, 2016 ; NAAS Rating: 4.01
152	Dr. D.B. Bhaisare	Effect of Herbal Amino Acids in Improving Growth and Performance in Broiler Chicken	International Journal of Livestock Research, Volume 7, Issue 1, 43-53 January 2017
153	Dr. D.B. Bhaisare	Evaluation of aspirin (ASA) in broiler chicken during hot dry summer using zoo technical, molecular and physio-biochemical tools	Indian Journal of animal Research, DOI:10.18805/ijar.v0iOF.6836 2016
154	R.C.Kulkarni, A.B.Mandal, S.S.Sole, S.Dey and V.M.Salunke	*Rauwolfia serpentina:* A stress alleviator of coloured broilers using incentive to feed in extreme summer	*Indian Research Journal of Extension Education,* January 2017 (Special issue on Veterinary Research & Extension), p 85-88
155	Lonkar V.D., Kadam A.S., Choudhary A, Maini S. and Ravikanth K	Performance Improvement in Layer Birds Supplemented With Herbal Liver Tonic & Antistressor Product during Summer Stress	International Journal of Pharmacy and Pharmaceutical Sciences.8 (7) :129-132:2016
156	Lonkar V.D., Kadam A.S, Nimbalkar V.G., Daware A.G. and Yenge G.D.	Turkey Farming as an income generating activity for rural women	Ind Res J Ext Edn (Spissue on Vety Res& Ext):112-116:2017
157	S. J. Manwar, D. H. Rekhate, M.V. Joshi, S. P. Waghmare, S.V. Kuralkar, M. J. Saxena, K. Ravikanth, S. Maini, and A. Choudhary	Production Traits Optimization with Polyherbal Performance Enhancer in Layer Birds	Int. J. Livest. Res., 6(12): 27-33.
158	B. Nagargoje , M. V. Dhumal, M. G. Nikam and K. K. Khose	Effect of Crude Soy Lecithin with or without Lipase on Performance and Carcass Traits, Meat Keeping Quality and Economics of Broiler Chicken	Int. J. Livest. Res. 6(12): 46-54
159	Sitaram Munda, Rajeev Pandey, Bhojne G. R., Dakshinkar N. P., Amol S. Kinhekar, Vivek Kumar, Ravikumar R. K. & Vipin Kumar,	Indigenour Knowledge Research system (IKRS) for treatment of Bloat and its significance towards greenhouse gas emission: Jarkhand, India	Advances in Animal and Veterinary Sciences, 4 (5); pp- 241-244.
160	G. R. Bhojne, N. P. Dakshinkar, M. D. Kothekar, N. V. Kurkure, V. M. Dhoot, S. V. Upadhye and Kalyani Thakur	Prevalence of Renal Insufficiency in dogs of Nagpur city	Indian Journal of Canine Praactice. 8(2) pp- 107-111(2016)
161	G. R. Bhojne, N. P. Dakshinkar, Kalyani Thakur and A. S. Karmankar	Successful therapeutic management of Hepatorenal syndrome in dogs.	Indian Journal of Canine Praactice. 8(2) pp)- 118-121(2016)
162	G. R. Bhojne, N. P. Dakshinkar, A. S. Karmankar and Kalyani Thakur	Epidemiological observations of canine ehrlichiosis in Nagpur city	Indian Journal of Canine Praactice. 8(2) pp- 124-126. (2016)
163	S.S.Pitlawar, B.M.Gahlod, S.B.Akhare, S.V.Upadhye and P.T.Jadhao	Surgical management of horn affections-A Report of two bullock.	Intas Polivet (17) II, pp 239-240. (2016)

164	Manisha N. Donekar, M.S.Dhakate, S.V.Upadhye, Mrunali Kamble,& S.B.Akhare	Comparative evaluation of surgical techniques for management of Aural Haematoma in canines.	Intas Polivet (17) II, pp 259-259(2016)
165	V.A. Uike, P.T. Jadhao, S.V.Upadhye,S.P.Salvekar & S.S.Pitlawar	Clinical management of corneal opacity-A study of 11 dogs.	Intas Polivet (17) II,, pp 383-385(2016)
166	A.S.Lengare, A.U.Bhikane, S.S.Ghoke and A.M.Syed	Epidemiological, etiological and clinico-therapeutic investigations on pica in cattle	*Ruminant science* 5(1):73-80 2016
167	S.M.Gapat, A.U.Bhikane, P.B.Hase, and G.R.Gangane	Aetiological and therapeutic investigations on leukoderma in Indian Buffaloes (*Bubalus bubalis).*	*Buffalo Bulletin* 35(4):629- 638: 2016
168	Rameswar Panda, P.P. Ghorpade and H.Y. Palampalle	Effect of housing on (OPG)oocysts per gram count of Osmanabadi kids in Mumbai region	International journal of science, environment & technology, Vol.5, No.5, 2016, : NAAS Rating: 3.98
169	Rameswar Panda, P.P. Ghorpade, S.S.Chopade, A.H.Kodape, M.B.A, Siddiqui, H.Y.Palampalle and N.R.Dagli	Effect of Floor Space on Serum Cortisol Level of Osmanabadi Kids in Mumbai Region of India	Explor Anim Med Res, Vol.6, Issue - 2, 2016, p. 217-223 : NAAS Rating: 4.27
170	Rameswar Panda, P. P. Ghorpade, S. S. Chopade and M. B. A. Siddiqui	Effect of Floor Space Allowance Under Katcha Housing on Growth Performance of Post-Weaning Osmanabadi Kids in Mumbai	Journal of Animal Research: v.6 n.5, p. 1-5 : NAAS Rating: 5.68:2016
171	Rameshwar Panda, A.Sarat Chandra, P.P. Ghorpade, S.S. Chopade andA.H. Kodape	A study on rumination & resting behavior of Osmanabadi kids housed in katcha houing system under different floor space	Indian J.Anim. Prod.Magmt. Vol.32 (1-2) 63-66 (2016).NAAS Rating: 3.56
172	Rameshwar panda, P.P. Ghorpade, H.Y. Palampalle and N.R. Dagli	Effect of space allowance on social behavior of Osmanabadi kids	Indian journal of small Ruminanats 2017, 23(1):130-131. NAAS Rating: 5.25
173	P.V.Patil and M.K.Patil	Knowledge of scientific feeding practices among dairy farmers of Palus tehsil of Sangli district.	*Ruminant Science*. Vol.5 (1): 43-46. 2016
174	Dhotre AV and Bhadania AG	Acceptability of Thermized Shrikhand During Storage at Refrigeration Temperature (8 ± 2° C)	Indian J of Dairy Science, 69(4): 407-414.:2016
175	Lule VK, Singh R, Pophaly SD, Poonam and Tomar SK	Production and structural characterisation of dextran from an indigenous strain of Leuconostoc mesenteroides BA08 in Whey.	International Journal of Dairy TechnologyDOI: 0.1111/1471-0307.12271.:2016
176	Adil Shaikh, Sudhakar P Changade, Anant V Dhotre, Rupesh P Datir	A study on compositional characteristics of pumpkin based reconstituted Kheer	Indian J of Dairy Science, 70(1): 407-414.:2017
177	A.S. Vairagade, M.R. Patil, H.M. Gawande and A.V. Dhotre	Stability of saccharine in low calorie carrot halwa	Asian J. Dairy & Food Res, 35(1) 2016: 41-49:2016
178	AS Vairagade , MR Patil, HM Gawande and AV Dhotre	Preparation of carrot halwa with aspartame and storage	Indian J of Dairy Science, 70(1): 32-41.:2017
179	Kakan AK, Changade SP and Chopde SS	Effect of incorporation of Paneer whey on dough characteristics and organoleptic attributes of milk bread	Asian Journal of Dairy and Food Research, 35(2), 2016: 143-148
180	Santosh S Chopde, Madhav R Patil and Adil Shaikh	Solar technology: A way to the prosperity of Indian dairy industry	Indian J Dairy Sci. 69(4), 2016 : 375-381

181	D.N. Bajad, S.D. Kalyankar, M.A. Dehmukh, P.R. Bachanti and G.S. Bajad	Impact of Physico-Chemical Properties of Mix on the Final Quality of Ice-Cream	Asian J. Dairy & Food Res, 35 (4) 2016 : 293-297
182	Bhavesh Chavhan, C. Sahu, A.K. Agrawal and R.K. Sahu	Study on moisture desorption characteristics and isosteric heat of dairy whitener	Eco, Env & Cons., 22, 2016: S235-S241
183	S. R. Yadav, U. A. Suryawanshi, P. H. Sapkale, Amit K. Pandey, B.N. Sanap and M.H. Ramteke	Carp seed production using portable FRP carp hatchery in Udgir town of Latur district	*Eco. Env. & Cons. 22 (April Suppl.) : 2016; pp. (S393-S398)*

9

EXTENSION EDUCATION AND TRAINING

Extension as a third important component for the Universities plays a key role in 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 participation in regional and national exhibitions, trainings and animal health camps including demonstrations for the farmers. Special extension programmes through the activities involving 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 a 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 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 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 filed laboratories for on filed extension activities on regular basis. Beside this, 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 ORGANIZED

Name of College	For Officers	For Farmers
Bombay Veterinary College, Mumbai	19	15
Nagpur Veterinary College, Nagpur	04	22
College of Veterinary & Animal Sciences, Parbhani	--	01
KNP College of Veterinary Sciences, Shirwal	03	17
College of Veterinary & Animal Sciences, Udgir	05	12
Post Graduate Institute of Veterinary & Animal Sciences, Akola	03	18
College of Dairy Technology, Warud	--	05
Dairy Technology College, Udgir	01	01
College of Fishery Sciences, Nagpur	--	13
College of Fishery Sciences, Udgir	--	01
Total	**35**	**105**

9.A.1. Short Term Training Courses for Field Officers

- **Bombay Veterinary College, Mumbai**

Sr. No.	Title	Date	No. of Trainees
1	Reproductive Health Management of Livestock through Assisted Reproductive Technologies	25.07.2016 to 29.07.2016	22
		01.08.2016 to 05.08.2016	27
		08.08.2016 to 12.08.2016	26
		29.08.2016 to 02.09.2016	31
		17.10.2016 to 21.10.2016	26
		24.10.2016 to 28.10.2016	19
		07.11.2016 to 11.11.2016	29
		28.11.2016 to 02.12.2016	24
2	Preparation of meat products.	27.06.2016 to 30.06.2016	5
3	Training programme for field veterinarians on Small Animal Laparoscopy	06.02.2017 to 08.02.2017	10
4	Pharmacokinetic and Pharmacodynamic of pisces at CIFE, Mumbai.	17.02.2017	20
5	Research in Toxicology at Kundanani College of Pharmacy, Mumbai	03.09.2017	100
6	Goat Management	29.07.2016	45
7	Concepts in Small Animal Nephrology & Haemodialysis Techniques	03.10.2016 to 05.10.2016	17
8	Radiation safety training in nuclear medicine/ RIA and IRMA	06.07.2016 12.07.2016 26.11.2016 26.01.2017 09.02.2017	11
		Total	**412**

- **Nagpur Veterinary College, Nagpur**

Sr. No.	Title	Date	No. of Trainees
1.	Common toxicities in livestock	28.12.2016	25
2	ISO methods for detection of *Listeria monocytogenes* and introduction to PFGE	March 16 -18, 2017	21
3	Lecture on Listeriosis	06.08.2016	20
4	5 Days Technical Refresher Training Programme	26.12.2016 to 30.12.2016	18
		Total	**84**

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

Sr. No.	Title	Date	No. of Trainees
1	Technical refresher training programme	16.05.2016 to 20.05.2016	14
2.	Model Training Course on "Use of ICT Tools & Communication Skills for strengthening Livestock Extension Services"	19.09.2016 to 26.09.2016	19
3.	Diagnostic imaging	24.09.2016 to 28.09.2016	28
		Total	**61**

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

Sr. No.	Title	Date	No. of Trainees
1.	Technical Refresher training programme	16.05.2016 to 20.05.2016	06
2.	Training on Diagnosis & control of Animal Diseases	01.03.2017 to 06.03.2017	32
3.	Training under ASCAD	06.02.2017 to 10.02.2017	28
4.		13.02.2017 to 17.02.2017	26
5.		20.02.2017 to 24.02.2017	26
		Total	**118**

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

Sr. No.	Title	Date	No. of Trainees
1	Technical Refresher training programme	16.05.2016 to20.05.2016	24
2	One day workshop for students on "Effective Presentation"	31.05.2016	26
3	Clinical case conference	20.01.2017	160
		Total	**210**

- **Dairy Technology College, Udgir**

Sr. No.	Title	Date	No. of Trainees
1	Biodiversity, Sustainable people & their Livelihood	22.05.2016	26
		Total	**26**

9.A.2. Short Term Training Courses organized for Farmers

- **Bombay Veterinary College, Mumbai**

Sr.No.	Title	Date	No. of Trainees
1	Scientific Goat Farming	09.05.2016 to 11.05.2016	43
		27.07.2016 to 29.07.2016	49
		17.11.2016 to 19.11.2016	49
		17.12.2016 to 19.12.2016	36
		13.02.2017 to 15.02.2017	19
		18.02.2017 to 20.02.2017	51
2	Milk processing and value addition.	26.04.2016 to 28.04.2016	04
3	Clean Milk Production	03.12.2016	35
4	Scientific Goat Farming	15.04.2016	53
5	Scientific Goat Farming	30.07.2016	40
6	Scientific Goat Farming	17.12.2016	50
7	Scientific Goat Farming	15.02.2017	60
8	Dairy Farming	27.02.2017	22
9	One day training programme on Hygienic chicken meat production	03.12.2016	36
10	One day Technology and Machinery workshop for farmers, Entrepreneur and Butchers (KISAN MELA)	09.02.2017	118
		Total	**665**

- **Nagpur Veterinary College, Nagpur**

Sr. No.	Title	Date	No. of Trainees
1	Prevention and Control of Rabies	28.09.2016	60
2	Scientific Goat Farming Training	31.05.2016 to 04.06.2016	14
3	Scientific Goat Farming Training	03.10.2016 to 07.10.2016	40
4	Scientific Goat Farming Training	28.11.2016 to 02.12.2016	23
5	Commercial Dairy Farming Training	15.08.2016	18
6	Scientific Goat Farming	23.05.2016 to 27.05.2016	25
7	Scientific Goat Farming	31.05.2016 to 04.06.2016	32
8	Scientific Goat Farming	06.06.2016 to 10.06.2016	104
9	Scientific Dairy Farming	20.06.2016 to 24.06.2016	17
10	Scientific Goat Farming	23.08.2016 to 27.08.2016	59
11	Scientific Goat Farming	19.09.2016. to 23.09.2016	39
12	Scientific Goat Farming	05.12.2016 to 09.12.2016	57
13	Scientific Dairy Farming	09.01.2017 to 13.01.2017	24
14	Scientific Dairy Farming	20.03.2017 to 24.03.2017	26
15	Commercial Poultry Farming	26.04.2016 to 30.04.2016	59
16	Commercial Poultry Farming	14.06.2016 to 18.06.2016	101
17	Commercial Poultry Farming	04.07.2016 to 08.07.2016	57
18	Commercial Poultry Farming	17.10.2016 to 21.10.2016	51
19	Commercial Poultry Farming	15.11.2016 to 19.11.2016	69
20	Commercial Poultry Farming	13.12.2016 to 17.12.2016	87
21	Commercial Poultry Farming	02.01.2017 to 06.01.2017	67

22	Commercial Poultry Farming	23.01.2017 to 27.01.2017	72
		Total	**1101**

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

Sr.No.	Title	Date	No.of Trainees
1	Commercial Poultry Farming	29.11.2016 to 01.12.2016	31
		Total	**31**

- **KNP College of Veterinary Sciences, Shirwal**

Sr.No.	Title	Date	No.of Trainees
1	Commercial Poultry Farming	23.05.2016 to 30.05.2016	19
2	Modern Goat Farming	02.06.2016 to 04.06.2016	30
3	Modern Goat Farming	29.08.2016 to 31.08.2016	23
4	Modern Goat Farming	21.09.2016 to 23.09.2016	39
5	Scientific Dairy Farming	28.09.2016 to 30.09.2016	18
6	Milk & Milk products Processing	18.10.2016 to 20.10.2016	13
7	Modern Goat Farming	21.10.2016 to 23.10.2016	39
8	Modern Goat Farming	24.10.2016 to 26.10.2016	25
9	Commercial Poultry Farming	28.11.2016 to 30.11.2016	19
10	Modern Goat Farming	19.12.2016 to 21.12.2016	25
11	Modern Goat Farming	09.01.2017 to 11.01.2017	25
12	Modern Goat Farming	06.03.2017 to 08.03.2017	45
13	Modern Goat Farming	09.03.2017 to 11.03.2017	47
14	Modern Goat Farming	20.03.2017 to 22.03.2017	42
15	Modern Goat Farming	23.03.2017 to 25.03.2017	43
16	Modern Dairy Farming	02.03.2017 to 04.03.2017	32
17	Milk & Milk products Processing	16.03.2017 to 18.03.2017	35
		Total	**519**

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

Sr. No.	Title	Date	No. of Trainees
1.	Fodder production and management	07.08.2016	95
2.	Fodder production and management	08.08.2016	80
3.	Clean milk production and hygiene	03.12.2016	35
4.	Tuberculosis awareness programme	24.03.2017	12
5.	Profitable goat farming	19.07.2016 to 21.07.2016	23
6.	Profitable goat farming	30.08.2016 to 02.09.2016	22
7.	Profitable goat farming	22.11.2016 to 24.11.2016	23
8.	Integrated livestock farming	15.03.2017	60
9.	Integrated Livestock Management	26.05.2016	40
10.	Integrated Livestock Management	02.06.2016	51
11.	Integrated Livestock Management	06.06.2016	53
12.	Integrated Livestock Management	07.06.2016	35
		Total	**529**

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

Sr. No.	Title	Date	No. of Trainees
1	Broiler production	03.05.2016 to 07.05.2016	18
2	Commercial Poultry Farming	23.05.2016 to 27.05.2016	53
3	Commercial Goat Farming	01.06.2016 to 07.06.2016	19
4	Commercial Poultry Farming	06.06.2016 to 10.06.2016	46
5	Commercial Poultry Farming	13.06.2016 to 17.06.2016	48
6	Commercial Poultry Farming	18.07.2016 to 22.07.2016	49
7	Commercial Poultry Farming	23.08.2016 to 27.08.2016	41
8	Commercial Poultry Farming	30.08.2016 to 03.09.2016	42
9	Commercial Goat Farming	29.08.2016 to 03.09.2016	24
10	Commercial Poultry Farming	17.10.2016 to 21.10.2016	53
11	Animal Health Care	07.11.2016 to 11.11.2016	20
12	Commercial Poultry Farming	07.11.2016 to 11.11.2016	37
13	Commercial Poultry Farming	15.11.2016 to 19.11.2016	49
14	Commercial Poultry Farming	27.12.2016 to 31.12.2016	59
15	Commercial Goat Farming	13.12.2016 to 17.12.2016	36
16	Commercial Poultry Farming	09.01.2017 to 13.01.2017	57
17	Commercial Poultry Farming	31.01.2017 to 04.02.2017	54
18	Commercial Poultry Farming	14.02.2017 to 18.02.2017	48
		Total	**753**

- **Dairy Technology College, Warud**

Sr. No.	Title	Date	No. of Trainees
1.	Essentials of Starting New Dairy Business	28.04.2016 to 03.05.2016	09
2.	Quality Production of Khoa	21.06.2016 to 23.06.2016	22
3.	Preparation of Fermented Dairy Products	28.02.2017	40
4.	Preparation of Traditional Dairy Products	01.03.2017	34
5.	Preparation of Chocolate, Pizza & Ice-cream	02.03.2017	35
		Total	**140**

- **College of Dairy Technology, Udgir**

Sr. No	Title	Date	No. of Trainees
1	Upliftment of Dairy Farmers/ milk Producers	21.03.2017 to 23.03.2017	42
		Total	**42**

- **College of Fishery Science, Nagpur**

Sr. No.	Title	Date	No. of Trainees
1.	Fish Farming in Ponds and Tanks	25.04.2016 to 29.04.2016	30
2.	Value added fish products Development	16.05.2016 to 20.05.2016	20
3.	Value added fish products Development	30.05.2016 to 03.06.2016	20
4.	Value added fish products Development	13.06.2016 to 17.06.2016	20
5.	Value added fish products Development	27.06.2016 to 01.07.2016	20
6.	Value added fish products Development	25.07.2016 to 29.07.2016	20
7.	Value added fish products Development	08.08.2016 to 12.08.2016	20
8.	Freshwater fish culture in ponds and tanks	22.08.2016 to 26.08.2016	30

9.	Eco-friendly and sustainable shrimp/ prawn farming and diversification of aquaculture	23.01.2017 to 25.01.2017	25
10.	Culture based fisheries in small reservoirs	14.02.2017 to 18.02.2017	42
11.	Value Added Fish Products	15.03.2017 to 17.03.2017	22
12.	Freshwater Aquaculture	15.03.2017 to 17.03.2017	20
13.	Freshwater Aquaculture	27.03.2017 to 29.03.2017	25
		Total	**314**

- **College of Fishery Science, Udgir**

Sr. No.	Title	Date	No. of Trainees
1.	Value added fish products	18.10.2016	08
		Total	**08**

9.A.3. Workshops / Seminars organized for Field Officers

Name of College	Title	Date	No. of Participants	Sponsoring Agency
BVC, Mumbai	National Capacity Building workshop on Recent Diagnostic Tools for 'Hydatidosis, Cysticercosis and Trichinellosis'	05.01.2017 to 07.01. 2017	14	ICAR – OPZD
	World Zoonoses Day	11.07.2016	20	-
	32nd workshop of AICRP-PHET held at CIPHET	07.03.2017 to 09.03.2017	14	ICAR
NVC, Nagpur	XXX Annual Conference of IAVMI & National Symposium on Challenges in Animal Health for Higher Productivity and Income to Farmers	10.02.2017 to 12.02.2017	250	ICAR / ICMR / INSA / DST / Ventri
KNPCVS, Shirwal	Equine colic, fracture repair & radiology	24.10.2016 to 25.10.2016	39	Veterinary Orthopedic Foundation
	Fundamental in Veterinary Orthopaedics-Part II	12.11.2016 to 14.11.2016	58	
COVAS, Udgir	Seminar on 'Horizons of Hormones in Animal health'	27.07.2016	86	Pharmaceutical Companies
	Seminar on Rabies	28.09.2016	70	COVAS, Udgir
	Workshop on 'Avian Influenza: Preparedness and control'	23.03.2017	82	State AH Department, Maharashtra under ASCAD
PGIVAS, Akola	Seminar on 'One Health: Competing Perspectives in an Emerging Field with Reference to Zoonoses'	30.04.2016	106	Sponsored by various pharmaceuticals firms
	Clinical case conference on 'Domestic, Pet and Wild Animal Practice' for Students and Field Veterinarians	20.01.2017	192	Sponsored by various pharmaceuticals firms
		Total	**931**	

9.A.4. Workshop/Seminars organized for farmers

Name of College	Title	Date	No. of Participants	Sponsoring Agency
BVC, Mumbai	Shetkari Margadarshan and Melava	04.04.2016	22	Nil
	Shetkari Margadarshan and Melava	07.04.2016	35	Nil
	Shetkari Margadarshan & Melava	04.03.2017	30	Nil
NVC, Nagpur	One Day Workshop on "Livestock Insurance and Marketing Managment"	01.07.2016	500	NABARD, New India Assurance Co. Limited, Provincial Insurance Broking Pvt. Limited Nagpur and Dept. of Extension, NVC, Nagpur
	State Level Goat farmer's Convention and One Day Workshop on "Commercial Goat Farming" organized by Dept. of Veterinary and Animal Husbandry Extension, Nagpur Veterinary College, Nagpur, India.	23.09.2016	700	Maharashtra State Veterinary Council, Nagpur, The New India Assurance Company Limited, Nagpur, Virbac Animal Health Care, Mumbai, Reliance Foundation Information Service, Nagpur, A. K. Pharma Borgaon, Nagpur, New Mumbai Pharma, Nagpur, A.V. Agencies, Sitabuldi, Nagpur, P. N. Gawande Cotton Ginning, Pressing and Oil Mill, Bajargaon
KNPCVS, Shirwal	World Environment Day	04.06.2016	35	-
	Workshop on 'Dog Reproduction' for pet owners	25.06.2016	23	Virbac Animal Health Pvt. Ltd.Mumbai
	World Women's Day	08.03.2017	35	-
	Mahila Melawa	15.03.2017	126	-
COVAS, Udgir	Feeding of animals during draught and animal health	03.05.2016	70	ILFC, Udgir
PGIVAS, Akola	Workshop on Poultry farming	03.12.2016	50	RKVY
	Workshop for women on Poultry farming	17.03.2017	54	RKVY
DTC, Warud	Clean Milk Production & Processing.	13.01.2017	121	ATMA, Yavatmal
	Enterprenurship Development Workshop	17.01.2017	89	Smt. Vatsalabai Naik Mahavidyalay, Pusad
	Manufacture of Dairy Products	08/02/2017	87	Phulsing Naik Mahavidyalay, Pusad
CDT, Udgir	Soya Milk & Soya Paneer Manufacturing Technology	27.05.2016	10	CDT, Udgir
	Soya Milk & Soya Paneer Manufacturing Technology	23.09.2016	250	Jointly organized with Sharadchandra Mahavidyalay, Naygaon
	Clean Milk Production	03.12.2016	25	CDT, Udgir
	Manufacturing of milk and milk products at cottage level	03.12.2016	21	
	Clean Milk Production	09.03.2017	15	

	Clean Milk Production	15.03.2016	42	
COFS, Nagpur	Development of Fisheries in Vidarbha	14.05.2016	600	AGRO VISION, Nagpur
	Freshwater Fish culture at Yerkadi, Tal. Kurkheda, Dist. Gadchiroli	11.03.2017	20	STRC-GUG, Gadchiroli
	Value Added fish products at Permali, Tal. Aheri, Dist. Gadchiroli	18.03.2017	28	STRC-GUG, Gadchiroli
	Freshwater Fish culture at Aldandi, Tal. Aheri, Dist. Gadchiroli	18.03.2017	13	STRC-GUG, Gadchiroli
	Freshwater Fish culture at Aldandi, Dist. Gadchiroli	29.03.2017	19	STRC-GUG, Gadchiroli
COFS, Udgir	Farmer Scientist Forum	21.11.2016	25	COFS, Udgir
	Mission Fingerling	24.03.2017	165	State Fisheires Department
		Total	**3210**	

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

Sr.No.	Name of College	Name of Adopted Village (s)
1	Bombay Veterinary College, Mumbai	Arivali, Tq. Panvel, Dist. Sindhudurg
2	Nagpur Veterinary College, Nagpur	Borgaon, Tq. & Dist. Nagpur
3	College of Veterinary & Animal Sciences, Parbhani	Rumna, Tq. Gangakhed, Dist. Parbhani
4	KNP College of Veterinary Science, Shirwal	1) Jawale, Tq. Khandala, Dist. Satara 2) Bhongawali, Tq. Bhor, Dist. Pune
5	College of Veterinary & Animal Sciences, Udgir	Kodali and Dongershelki, Tq. Udgir, Dist. Latur
6	College of Dairy Technology, Warud	Moha, Tq. Pusad, Dist. Yavatmal
7	College of Dairy Technology, Udgir	Vadhwana (Khu), Tq. Udgir, Dist. Latur
8	College of Fishery Science, Nagpur	Pethkaldongari, Tq. & Dist. Nagpur
9	College of Fishery Science, Udgir	Nawandi, Tq. Udgir, Dist. Latur

9. C. HOSPITAL ACTIVITIES

Animal Health Camps, Cases Treated in Ambulatory Clinic & Hospital:

9.C. 1. Bombay Veterinary College, Mumbai

Sr. No.	Section	No of cases treated			
		Hospital	Animal Health Camps (08)	Ambulatory Clinic	Total
a	Medicine	58,166	49	--	58,215
b	Surgery	7244	19	--	7,263
c	Gynaecology	1000	24	500	1,524
d	Artificial Insemination				
e	Vaccination	50	3376	1470	4896
f	Deworming	1200	--	--	1,200
g	Spraying	100	10	--	110
	Total	**67760**	**3478**	**1970**	**73208**

9.C.2. Nagpur Veterinary College, Nagpur

Sr. No.	Section	No of cases treated			
		Hospital	Animal Health Camps (11)	Ambulatory Clinic	Total
a	Medicine	16576	1588	742	18906
b	Surgery	9670	109	120	9899
c	Gynaecology	1381	112	61	1554
d	Artificial Insemination	64	25	35	124
e	Vaccination	2827	--	--	2827
f	Deworming	1780	600	--	2380
g	Spraying	--	1378	--	1378
	Total	**32298**	**3812**	**958**	**37068**

9.C.3. College of Veterinary and Animal Science, Parbhani

Sr. No.	Section	No of cases treated			
		Hospital	Animal Health Camps (03)	Ambulatory Clinic	Total
a	Medicine	3,883	244	110	4237
b	Surgery	2,525	123	47	2695
c	Gynaecology	524	60	30	614
d	Artificial Insemination	76	--	--	76
e	Vaccination	84	350	--	434
f	Deworming	92	--	--	92
g	Spraying	--	--	--	--
	Total	**7184**	**777**	**187**	**8148**

9.C.4. KNP College of Veterinary and Animal Science, Shirwal

Sr. No.	Section	No of cases treated			
		Hospital	Animal Health Camps (09)	Ambulatory Clinic	Total
a	Medicine	1,132	135	158	1,425
b	Surgery	1190	55	118	1,363
c	Gynaecology	422	327	--	749
d	Artificial Insemination	177	--	--	177

e	Vaccination	321	410	434	1165
f	Deworming	295	512	536	1343
g	Spraying	61	94	94	249
	Total	**3598**	**1533**	**1340**	**6471**

9.C.5. College of Veterinary and Animal Science, Udgir

Sr. No.	Section	No of cases treated			
		Hospital	Animal Health Camps (14)	Ambulatory Clinic	Total
a	Medicine	5153	672	1169	6994
b	Surgery	1240	119	255	1614
c	Gynaecology	527	340	469	1336
d	Artificial Insemination	48	--	--	48
e	Vaccination	24	2620	3005	5649
f	Deworming	--	1446	2088	3534
g	Spraying	--	1270	2188	3458
	Total	**6992**	**6467**	**9174**	**22633**

9.C.6. Post Graduate Institute of Veterinary and Animal Science Akola

Sr. No.	Section	No of cases treated			
		Hospital	Animal Health Camps (04)	Ambulatory Clinic	Total
a	Medicine	3303	415	243	3961
b	Surgery	1751	43	89	1883
c	Gynaecology	400	129	62	591
d	Artificial Insemination	--	08	--	08
e	Vaccination	366	595	164	1125
f	Deworming	233	449	71	753
g	Spraying	56	186	--	242
	Total	**6109**	**1825**	**629**	**8563**

9.C.7. Dairy Technology College, Udgir

Sr. No.	Section	No of cases treated	
		Animal Health Camps (02) organized in coordinations with COVAS, Udgir	Total
a	Medicine	169	169
b	Surgery	05	05
c	Gynaecology	61	61
d	Artificial Insemination	--	--
e	Vaccination	219	219
f	Deworming	292	292
g	Spraying	282	282
	Total	**1028**	**1028**

ANIMAL HEALTH CAMPS

Spraying for ectoparasitic control in camps

Dog vaccination in camp

Examination of animal during camp

Expert treating animal in the camp

Animal treatment in camp

Vaccination camp

10

FARM ACTIVITIES

10.A. BOMBAY VETERINARY COLLEGE, MUMBAI

10.A.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 youths 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 2017

Sr. No.	Cattle	Buffalo	Sheep	Goat	Poultry	Horse	Fish	Pig
1.	26	31	56	94	350 layers	--	--	--

Receipt from farm in Rs.

Sale of milk	7,46,788
Goat & dairy training	7,25,000
Sale of animals (Sheep & Goat)	86,832
Any other item	5,700
Total	**15,64,332**

10.A.2. Name of farm: Cattle Breeding Farm & Dangi Cow Research Station, Igatpuri, Mumbai		
Year of establishment	:	1946.
Mandate	:	To study the Dangi cattle and define its characters.
Total land	:	88.60 ha.
Land under cultivation	:	10ha.
Grazing land	:	65.10 ha.

Livestock strength on 31st March 2017

Sr. No.	Cattle	Buffalo	Sheep	Goat	Poultry	Horse	Fish	Pig
1.	94	--	--	--	--	--	--	--

Receipt from farm in Rs.

Sale of milk	1,91,758
Sale of animal/s (Sheep & Goat)	1,89.518
Total	**3,81,276**

10.B. NAGPUR VETERINARY COLLEGE, NAGPUR

10.B.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 program.
Total land	:	20.26 hectors
Land under cultivation	:	8.55 hector
Grazing land	:	5.15 hector
Barrel Land	:	4.21 hector
Grazing land	:	5.15 hector

Livestock strength on 31st March 2017

Sr. No.	Cattle	Buffalo	Sheep	Goat	Poultry	Horse	Fish	Pig
1	38	62	--	46	--	--	--	--

Receipt from farm in Rs.

Sale of milk	12,52,000
Animal Sold	1,95,770
Any other item- bakri eid, feed donation, sale of coconut etc.	30,966
Total	**Rs. 14,78,736 /-**

10.B.2. Name of Farm: Poultry Research and Training Centre, Nagpur		
Year of establishment	:	1971
Mandate	:	Teaching, Research and Extension
Livestock strength on 31st March 2017	:	578 (Poultry Birds)
Receipt from farm in Rs.	:	**Rs. 8,05,066**

10.C. COLLEGE OF VETERINARY & ANIMAL SCIENCES, PARBHANI

Name of farm: Red Kandhari Research & Instructional Farm, Parbhani		
Year of establishment	:	1975
Mandate	:	1. To impart the basic training to the undergraduate students 2. Preservation and conducting the basic research work on the Red Kandhari animals. 3. Preservation of Osmanbadi goat. 4. Preservation of Deccani sheep. 5. Preservation of Marathwadi buffalo.
Total land	:	120 Acres
Land under cultivation	:	101 Acres
Grazing land	:	7 Acres
Land under any other purpose	:	7 Acres

Livestock strength on 31st March 2017

Sr. No.	Cattle	Buffalo	Sheep	Goat	Poultry	Horse	Fish	Pig
1.	92	40	34	68	--	1	--	--

Receipt from farm in Rs.		
	Sale of milk	2,29,350
	Sale of fodder stumps/seed	10,100
	Sale of animal/s (Sheep & Goat)	1,34,200
	Any other item- bakrieid, feed donation, sale of coconut etc.	3,000
	Total	**3,76,650**

10.D. COLLEGE OF VETERINARY & ANIMAL SCIENCES, UDGIR

10.D.1 Name of farm : Cattle Breeding Farm (ILFC), 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 2017

Sr. No.	Cattle	Buffalo	Sheep	Goat	Poultry	Horse	Fish	Pig
1.	39	26	55	18	--	--	--	--

Receipt from farm in Rs.		
	Sale of milk	5,00,956
	Goat & dairy training	34,000
	Sale of fodder stumps/seed/grass	3,65,600
	Sale of animal/s (Sheep & Goat)	60,268
	Any other item	4,100
	Total	**9,64,924**

10.D.2Name of farm : MAFSU Sub-Center, Udgir		
Year of establishment	:	31.03.2003
Mandate	:	**First phase Mandate** 1. Development of Deoni cattle & 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 Acre
Land under cultivation	:	18 Acre

Livestock strength on 31st March 2017

Sr. No.	Cattle	Buffalo	Sheep	Goat	Poultry	Horse	Fish	Pig
1.	47	72	--	53	--	--	--	--

Receipt from farm in Rs.

Sale of milk	8,06,440
Goat & dairy training	3,580
Sale of fodder stumps/seed	200
Sale of animal/s (Sheep & Goat)	30,895
Total	**8,41,115**

10.E. KNP COLLEGE OF VETERINARY SCIENCE, SHIRWAL

Name of farm : Khillar Cattle, Pandharpuri Buffalo and Sangamneri Goat, Livetsock Research Demonstration and Training Center, Shirwal

Year of establishment	:	1992
Mandate	:	Conservation of indigenous breeds of livestock.
Total land	:	19.35 hector
Land under cultivation	:	Throughout year 02 hectors land under irriation and 09 hectors (Seasonal irrigation June to Feb)
Land under any other purpose	:	Tree plantation (33 acre. in Pisalwadi village)

Livestock strength on 31st March 2017

Sr. No.	Cattle	Buffalo	Sheep	Goat	Poultry	Horse	Fish	Pig
1.	30	33	27	19	208	02	-	-

Receipt from farm in Rs.

Sale of milk	4,53,543
Goat & dairy training	1,13,000
Sale of fodder stumps/seeds/azolla culture / Jowar grain	1,46,300
Sale of animals	1,22,647
Total	**8,35,490**

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

10.F.1 Name of Farm : Insructional Livestock Farm Complex (Purnathadi Buffalo Unit & Poultry Research Centre), Akola

Year of establishment	:	2008
Mandate	:	Teaching, research, extension education and conservation of pure germ plasm of Purnathadi type buffalo.
Total land	:	17 Acres
Land under cultivation	:	07 Acres
Grazing land	:	08 acres
Land under any other purpose	:	02 acres

Livestock strength on 31st March 2017

Sr. No.	Cattle	Buffalo	Sheep	Goat	Poultry	Horse	Fish	Pig
1.	2	24	--	--	4200	--	--	--

Receipt from farm in Rs.

1	Sale of Milk	1,34,665
2.	Sale of fodder stumps/seed	13,900
3.	Sale of eggs/ Broiler birds	5,00,000
4.	Poultry trainings	27000
	Total	**6,75,565**

10.F.2	**Name of Farm : Berari Goat & Deccani Sheep Research, Demonstration & Training Centre, Borgaon Manju, Dist. Akola**	
Year of establishment	:	During British Regime
Mandate	:	Conservation of Berari Goats
Total land	:	153 Hector
Land under cultivation	:	1 Hector
Grazing land	:	100 Hectors

Livestock strength on 31st March 2017

Sr. No.	Cattle	Buffalo	Sheep	Goat	Poultry	Horse	Fish	Pig
1.	--	--	--	87	--	--	--	--

Receipt from farm in Rs.

Sale of fodder stumps/seed	20,500
Sale of animal/s (Sheep & Goat)	68,400
Total	**88,900**

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

Name of farm : College of Dairy Technology, Warud (Pusad), Students Training Dairy Plant		
Year of establishment	:	2009-10
Mandate	:	Teaching, Hands on Training & Extension
Expenditure on Manufacture of milk products	:	370740
Sale of Milk products	:	Rs. 465229
Profit from sale of milk products	:	Rs. 94489
Profit distributed to Hands on Training students as per ICAR norms	:	Rs. 47452

10.H. COLLEGE OF DAIRY TECHNOLOGY, UDGIR

Name of farm : College of Dairy Technology, Udgir		
Year of establishment	:	2012-13
Mandate	:	Teaching, Hands on Training & Extension
Expenditure on Manufacture of milk products	:	Rs. 96,097
Sale of Milk products	:	Rs. 1,10,326
Profit from sale of milk products	:	Rs. 14,229

10.I. COLLEGE OF FISHERY SCIENCE, NAGPUR

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 2017 (Fish)	:	480 kg (Fish)
Receipt from fish farm	:	Rs. 52,720

10.J. COLLEGE OF FISHERY SCIENCE, UDGIR

Name of farm : Fish Seed Production Centre, Udgir		
Year of establishment	:	2010-11
Mandate	:	Freshwater Fish seed production and rearing
Total land	:	0.5 ha and approx 25 ha. waterbody
Land under cultivation	:	0.15 ha
Livestock strength on 31st March 2017 (Fish)		Approx. 200 kg brood fishes and 10000 advanced fingerlings stocked in Nideban reservoir

11

DEMONSTRATIONS FOR FARMERS

Sr.No.	Name of College	No. of Demonstations	No. of Participants
1	Bombay Veterinary College, Mumbai	17	512
2	Nagpur Veterinary College, Nagpur	96	1207
3	College of Veterinary & Animal Sciences, Parbhani	09	655
4	College of Veterinary & Animal Sciences, Udgir	27	4061
5	KNP College of Veterinary Sciences, Shirwal	28	855
6	Post Graduate Institute of Veterinary & Animal Sciences, Akola	18	562
7	College of Dairy Technology, Warud	01	100
8	College of Fishery Sciences, Nagpur	04	35
9	College of Fishery Sciences, Udgir	02	15
	Total	**202**	**8002**

11.A. BOMBAY VETERINARY COLLEGE, MUMBAI

Sr.No.	Place	Date	Name of demonstration	No of Farmers
1	ILFC Goregaon	08.06.2016	Fodder planning and Azola production	10
2	Tarankhop village	16.07.2016	Urea treatment of poor quality roughages	10
3	ILFC Goregaon	27.07.2016	Azola feeding	49
4	ILFC Goregaon	27.07.2016	Silage preparation	49
5	ILFC Goregaon	27.07.2016	Urea treatment	49
6	ILFC Goregaon	27.07.2016	Concentrate making	49
7	ILFC Goregaon	09.08.2016	Azola feeding and silage making	04
8	ILFC Goregaon	28.12.2016	Azola and silage	17
9	ILFC Goregaon	03.12.2016	Clean milk production	21
10	ILFC Goregaon	16.12.2016	Farm activity	31
11	ILFC Goregaon	23.12.2016	Azola Production	02
12	ILFC Goregaon	10.03.2017	Clean milk production and feed mixing	01
13	At Sarni, Dist. Dahanu	04.03.2017	Clean Milk Production	50
14	Bandhaghar, Dist. Dahanu	09.11.2016	Milk Products	50
15	Lalthane, Dist. Palghar	04.04.2016	Clean milk production	50
16	Arivali, Dist. Raighad	07.04.2016	Clean Milk Production	50
17	ILFC, Unit 3, BVC	03.12.2016	Clean Milk Production	20
			Total	**512**

11.B. NAGPUR VETERINARY COLLEGE, NAGPUR

Sr.No.	Place	Date	Name of Demonstration	No of Farmers
1	NVC, Nagpur	24.06.2016	California Mastitis Test	25
2	Taluka - Kalamb, Dist. Yeotmal	04.11.2016 to 10.11.2016	Azolla Production (07) Urea Treatment of Straw (07) Silage Making (07)	210
3	NVC, Nagpur	April 2016 to March 2017	Clean Milk Production	80
4	NVC, Nagpur	27.12.2016	Zoonoses: prevention and control for LDOs	25
5	Veterinary &Animal Husbandry Extension Education	22.06.2016	Practical demonstration on "value added milk products" during Scientific dairy business training.	17
		12.01.2017	Practical demonstration on "value added milk products" during Scientific dairy business training.	24
		22.03.2017	Practical demonstration on "value added milk products" during Scientific dairy business training under ATMA Chandrapur	26
6	Adopted Village Borgaon, Tq & Dist. Nagpur	29.12.2016	Hydroponics (01)	50
7	Veterinary &Animal Husbandry Extension Education	April 2016 to March 2017	Silage Making (09) Urea Treatment on Fodder (09) Azola Production (09) Hydroponics (09) Vermicomposting (09) Milk Adulteration Tests (03) Khoa & Paneer Preparation (03)	400
8	Poultry Research & Training centre	April 2016 to March 2017	Brooding management (06) Incubation and Hatchery management (06) Vaccination and debeaking (05)	349
			Total	**1206**

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

Sr.No.	Place	Date	Name of demonstration	No of Farmers
1	Sarola (Tal. Pathri, Dist. Parbhani)	01.12.2016	CMT	111
2	Babhalgaon, (Tal. Pathri Dist.Parbhani)	20.12.2016	CMT	100
3	Sakud, Bhatangadi, Tambewadi (Tal., Dist. Parbahni)	13.05.2016	Tick control	40
4	Babhalgaon, (Tal. Pathri, Dist. Parbhani)	20.12.2016	Tick control	150
5	Lohgaon, Tal. Dist. Parbhani	03.12.2016	CMT	42
6	Sayala (Khating), Tal. Dist. Parbhani	15.03.2017	Urea treatment for enrichment of fodder	37
7	Sayala (Khating),	16.03.2017	Silage making	46

	Tal. Dist. Parbhani			
8	Sayala (Khating), Tal. Dist. Parbhani	17.03.2017	Azolla cultivation	34
9	Sayala (Khating), Tal., Dist. Parbahni	20.03.2017	CMT	105
			Total	**665**

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

Sr.No.	Place	Date	Name of demonstration	No of Farmers
1.	Ter, Dist: Osmanabad	02.05.2016	Urea-jaggery treatment on low quality roughages, Azolla cultivation and use in animal feed, hydroponics technique	124
2.	CBF, COVAS, Udgir	03.05.2016		70
3.	Palsap, Dist-Osmanabad	02.05.2016	Deworming, spraying and vaccination of animals	89
4.	Ghonsi, Tal-Udgir	02.06.2016		60
5.	Tuljipur, Tal- Udgir	09.07.2016		85
6.	CBF, COVAS, Udgir	19.07.2016 to 21.07.2016	Urea-jaggery treatment on low quality roughages, silage making, fodder cultivation, Hydroponics Azolla cultivation and use in animal feed	23
7.		31.08.2016 to 02.09.2016		22
8.	Kodali	07.09.2016	DHN6 Cultivation	95
9.	Dongarshelki	08.09.2016		80
10.	TVCC, COVAS, Udgir	28.09.2016	Vaccine/vaccination of animals, pet & poultry	07
11.	Sakol, Tal- Shirur	03.12.2016	Deworming, spraying and vaccination of animals	336
12.	ILFC, COVAS, Udgir	03.12.2016	Clean milk production and hygiene	35
13.	Jalkot	13.12.2016	DHN6 Cultivation & Azolla cultivation, hydroponics, silage making	127
14.	Malegaon, Dist: Nanded	28.12.2016		146
15.	Udgir	13.01.2017		155
16.	CBF, COVAS, Udgir	06.02.2017	Silage making & urea treatment on low quality roughages, Azolla cultivation and use in animal feed	28
17.		14.02.2017		26
18.		21.02.2017		26
19.		05.03.2017	Azolla cultivation & farm management	32
20.		06.03.2017	DHN6 Cultivation & azolla cultivation, silage making, urea treatment(04)	148
21.	Tondar, Tq. Udgir	09.03.2017	Paneer Process	30
22.	CBF, COVAS, Udgir	15.03.2017	Azolla cultivation (01) silage making & urea treatment (02)	42
23.	Tondar, Tal- Udgir	10.03.2017	Deworming, spraying and vaccination of animals	336
24.	Tiwatygyal, Tal- Udgir	11.03.2017		454
25.	Wadvana, Tq. Jalkot	18.03.2017		543
26.	Kodali, Tq-Udgir	21.03.2017		308
27.	Dongarshelki, Tq- Udgir	22.03.2017		634
			Total	**4061**

11.E. KNP COLLEGE OF VETERINARY SCIENCES, SHIRWAL

Sr.No.	Place	Date	Name of demonstration	No of Farmers
1	Poultry Farm, KNPVC, Shirwal	25.05.2016	Broiler farming	19
2	ILFC	28.09.2016 to 30.09.2016	Hydroponic, Silage, Azolla technology and Site specific Technology	20
3	Livestock Products Technology	11.07.2016	Practical Demo on Milk & Milk Products Processing, Quality Testing of Milk, Raw milk Processing, Preperation of different Indigenous Milk Products, Preperation of different Western Milk Products Processing.	23
		23.09.2016		12
		21.12.2016		10
		18.10.2016 to 20.10.2016		16
		16.03.2017 to 16.03.2017		34
4	Vety. & A. H. Extension and clinical departments	16.05.2016 to 20.05.2016	Hands on training on Recent molecular techniques, Routine Surgical Interventions & advancements in surgery and Assisted Reproductive Techniques	14
5	ILFC	02.06.2016 to 04.06.2016	Demonstration on managemental practices at goat farm to trainees under three days training on “Modern Goat Farming”	36
6	Vety. & A. H. Extension	30.08.2016	Farm Practices at Goat farm of KNPCVS Shirwal	23
7	Animal Genetics & Breeding	22.09.2016	Farm Practices at Goat farm of KNPCVS Shirwal	39
8	Livestock production and management	29.09.2016	Farm Practices at Dairy farm of KNPCVS Shirwal	18
9	Veterinary Surgery & Radiology	24.09.2016 to 28.09.2016	Diagnostic Imaging (06)	28
10	Livestock production and management	25.10. 2016	Farm Practices at Goat farm of KNPCVS Shirwal	23
11	Veterinary Surgery & Radiology	24.10.2016 to 25.10.2016	Equine Surgery (05)	39
12	At/p. Kesurdi, Tal. Khandala Satara	30.11.2016	Broiler farming	39
13	Goat Farm at Khandala village	21.10.2016 to 23.10.2016	Goat breeds, selection ,Breeding and management procedure etc.	58
14	Poultry Science	26.11.2016 to 30.11.2016	Farm Practices at Poultry farm of KNPCVS Shirwal	19
15	Veterinary Surgery & Radiology	12.11.2016 to 14.11.2016	Fundamentals in fracture repair (06)	17

16	ILFC	19.12.2016 to 21.12.2016	Farm Practices at Goat farm of KNPCVS Shirwal	25
17	Vety. & A. H. Extension	09.01.2017 to 11.01.2017	Farm Practices at Goat farm of KNPCVS Shirwal	23
18	ILFC	02.02.2017 to 04.02.2017	Hydroponic, Silage, Azolla technology and Site specific Technology	07
19	ILFC	05.02.2017 to 07.02.2017	Hydroponic, Silage, Azolla technology and Site specific Technology	104
20	ILFC	02.03.2017 to 04.03.2017	Farm Practices at dairy farm of KNPCVS Shirwal	32
21	Goat Farm at Kikawi village	06.03.2017 to 25.03.2017	Goat breeds, selection, Breeding and management procedure etc.	177
			Total	**855**

11.F. POST GRADUATE INSTITUTE OF VETERINARY AND ANIMAL SCIENCES, AKOLA

Sr. No.	Place	Date	Name of demonstration	No of Farmers
1	Borgaon Manju	16.05.2016	Goat Farming	04
2	Dairy farm, Dr. PDKV, Akola	06.06.2016	Goat Health Management, Scientific Goat Rearing	19
3	Dairy farm, Dr. PDKV, Akola	30.07.2016	Goat Health Management, Scientific Goat Rearing	24
4	ILFC, Dr. PDKV, Akola	01.09.2016	Janavaratil Gochid Nurmulan	24
5	Dairy farm, Dr. PDKV, Akola	09.11.2016	Acaricide spray to control ticks infestation	20
6	Dairy farm, Dr. PDKV, Akola	10.11.2016	Animal Health Management	20
7	Gurdi, Akola	10.11.2016	Swatch Bharat Pakhwada	10
8	Village- Gurdi, District-Akola	11.11.2017	Importance of Hygiene in Animal Health (*Swach pakhada Abhiyan*)	75
9	TVCC, PGIVAS, Akola	11.11.2016	Topical Applications in animals	20
10	Dairy farm, Dr. PDKV, Akola	16.12.2016	Goat Health Management, Scientific Goat Rearing	36
11	Madhapuri Tq. Murtizapur, Dist. Akola	29.03.2017	Dharmala Swachta Programme	30
12	Rambhapur Tq. Murtizapur, Dist. Akola	29.03.2017	Dharmala Swachta Programme	45
13	Bhamberi, Ta Telhara, Dist Akola	29.03.2017	Dharmala swachhata programme by Dr. R. S. Ingole	45
14	Gadegaon, Ta Telhara, Dist Akola	29.03.2017	Dharmala swachhata programme by Dr. R. S. Ingole	43

15	Shirso, Tq. Murtizapur, Dist. Akola	30.03.2017	Dharmala Swachta Programme	35
16	Jitapur Khedkar Tq. Murtizapur, Dist. Akola	30.03.2017	Dharmala Swachta Programme	30
17	Ural, Ta Balapur, Dist Akola	31.03.2017	Dharmala swachhata programme by Dr. M. S. Hedau	40
18	Nimba, Ta Balapur, Dist Akola	31.03.2017	Dharmala swachhata programme by Dr. M. S. Hedau	42
			Total	**562**

11.G. COLLEGE OF DAIRY TECHNOLOGY, WARUD

Sr. No.	Place	Date	Name of demonstration	No of Farmers
1.	Tehsil office, Digras	27.09.2016	Paneer making	100
			Total	**100**

11.H. COLLEGE OF FISHERY SCIENCE, NAGPUR

Sr.No.	Place	Date	Name of demonstration	No of Farmers
1.	Khedegaon, Tal. Kurkheda, Dist. Nagpur	15.11.2016	Fish growth assessment	15
2.	Aladandi, Tal. Aheri, Dist. Nagpur	16.11.2016	Fish feeding	04
3.	Khedegaon, Tal. Dhanora, Dist. Gadchiroli	17.03.2017	Water quality testing	06
4.	Tehetola, Tal. Dhanora, Dist. Gadchiroli	17.03.2017	Water quality testing	10
			Total	**35**

11.I. COLLEGE OF FISHERY SCIENCE, UDGIR

Sr.No.	Place	Date	Name of demonstration	No of Farmers
1	Koshtgaon, Tq. Renapur, Dist. Latur.	10.05.2016	Fish harvesting in farmers farm pond	10
2	Tiwatgyal Tq. Udgir, Dist. Latur	26.08.2016	Fish seed stocking in the farm pond	05
			Total	**15**

DEMONSTRATIONS FOR FARMERS

Demonstration of Azolla production

Demonstration of brooding

Demonstration of Khoa preparation

Demonstration of preparation of value added fish production

Demonstration on poultry vaccination

Field demonstration on Fish harvest at Farmers Farm Pond

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	1526	29
2.	Nagpur Veterinary College, Nagpur	4220	108
3.	College of Veterinary & Animal Sciences, Parbhani	480	12
4.	KNP College of Veterinary Science, Shirwal	3263	45
5.	College of Veterinary & Animal Sciences, Udgir	769	24
6.	Post Graduate Institute of Veterinary & Animal Sciences, Akola	1111	83
7.	Dairy Technology College, Warud (Pusad)	03	17
8.	College of Dairy Technology, Udgir	360	15
9.	College of Fishery Science, Nagpur	607	22
10.	College of Fishery Science, Udgir	245	12
	Total	**12584**	**367**

13

EXHIBITIONS

Abstract of College wise exhibitions organized / participated

Sr.No.	Name of College	Participation in Exhibitions
1	Bombay Veterinary College, Mumbai	03
2	Nagpur Veterinary College, Nagpur	08
3	KNP College of Veterinary Science, Shirwal	01
4	College of Veterinary & Animal Sciences, Udgir	08
5	Post Graduate Institute of Veterinary & Animal Sciences, Akola	02
6	College of Dairy Technology, Udgir	04
7	College of Fishery Science, Nagpur	02
8	College of Fishery Science, Udgir	05
	Total	**33**

13.A. BOMBAY VETERINARY COLLEGE, MUMBAI

Sr.No.	Title	Place	Date
1	Prevention of Infectious Diseases in Dogs	BVC, Mumbai	26.03.2016
2	Demonstration of a Model Chicken retail outlet developed for hygienic chicken meat production	Thane	16.12.2016 to 17.12.2016
3	International Agri. Festival' 2017	Nasik	25.01.2017 to 29.01.2017

13.B. NAGPUR VETERINARY COLLEGE, NAGPUR

Sr. No.	Title	Place	Date
1.	Animal Science Exhibition cum Livestock Show Judging	Sawargaon, Tal. Narkhed, Dist. Nagpur	12.04.2017
2.	Exhibition	CICR, Nagpur	16.04.2016
3.	Veterinary Science Exhibition on the occasion of "Dhammachakra Prawartan Din"	Dikshabhoomi, Nagpur	10.10.2016 to 11.10.2016
4.	3rd Vidarbha level Gaolao Cattle Show cum Animal Science Exhibition	Wardha	10.12.2016 to 11.12.2016
5.	8th AGROVISION - 2016	Reshimbag Ground, Nagpur	11.11.2016 to14.11.2016
6.	Veterinary Science Exhibition	TVCC, Nagpur	03.12.2016
7.	Exhibition for Dairy Farmers	Sakoli, Dist. Bhandara	23.03.2017

8.	Veterinary Science Exhibition & Technology Demonstration cum Livestock Farmers Meet and Kisan Goshti	Lakhani, Dist Bhandara	25.03.2017

13.C. KNP COLLEGE OF VETERINARY SCIENCE, SHIRWAL

Sr. No.	Title	Place	Date
1	KISAN Exhibition	Moshi, Pune	14.12.2016 to 18.12.2016

13.D. COLLEGE OF VETERINARY & ANIMAL SCIENCES, UDGIR

Sr. No.	Title	Place	Date
1.	Exhibition of gross pathological specimens, charts, clay, models etc. on the eve of World Veterinary Day	Dept. of Pathology, COVAS, Udgir	01.05.2016to04.05.2016
2.	Purebred Animal Judging	Wanjarwada Tq.Jalkot, Dist: Latur	04.05.2016
3.	Gaolao cattle show - Purebred Animal Judging	Wardha Dist: Wardha	10.12.2016
4.	Exhibition Stall and Purebred Animal Judging	Jalkot, Dist. Latur	13.12.2016
5.	Exhibition Stall and Purebred Animal Judging	Malegaon, Tq. Loha Dist:Nanded	28.12.2016
6.	Exhibition Stall and Purebred Animal Judging	Udgir, Dist. Latur	13.01.2017
7.	Purebred Animal Judging	Siddheshwar Yatra, Dist. Latur	28.02.2017
8.	Exhibition Stall	Wadhvana, Udgir	18.03.2017

13.E. POST GRADUATE INSTITUTE OF VETERINARY & ANIMAL SCIENCES, AKOLA

Sr. No.	Title	Place	Date
1	Goat Exhibition cum Sale	PGIVAS, Akola	03.09.2016 to 12.09.2016
2	AgroTech	Dr. P.D.K.V.Akola	27.12.2016 to 29.12.2016

13.F. DAIRY TECHNOLOGY COLLEGE, UDGIR

Sr.No.	Title	Place	Date
1	Animal Exhibition, (Malegaon Yatra,)	Malegaon, Dist-Nanded	28.12.2016
2	Animal & Bird Exhibition, Havgiswami Yatra, Udgir	Jilha Parishad Ground, Udgir	13.01.2017
3	Dairy Exhibition	Malhiparga, Tq-Jalkot, Dist-Latur	02.12.2016
4	Animal, Fisheries & Dairy Exhibition	Vadhavana (Khu.) Tq-Udgir, Dist-Latur	18.03.2017

13.G. COLLEGE OF FISHERY SCIENCE, NAGPUR

Sr. No.	Title	Place	Date
1.	Agro-Tech exhibition	Deekshabhoomi, Nagpur	10.10.2016 to 12.10.2016
2.	Agrovision - 2016	Reshimbag ground, Nagpur	11.11.2016 to 14.11.2016

13.H. COLLEGE OF FISHERY SCIENCE, UDGIR

Sr. No.	Title	Place	Date
1	Fisheries and Aquaculture	Kesapuri, Tq. Majalgaon, Dist. Beed	21.11.2016

2	Pashumela	Jalkot	13.12.2016
3	Animal & Bird Exhibition	Z. P. ground Udgir	13.01.2017
4	Dairy, Veterinary & Fishery Exhibition	Wadhwana, Tq. Udgir, Dist. Latur	18.03.2017
5	Agriculture Animal Husbandry & Fisheries	Rajarshee Shahu Mahavidyalaya, Latur	20.03.2017 To 21.03.2017

EXHIBITIONS

Animal Exhibition Udgir Jan 2017

Demonstration of CMT test at Exhibition stall

Dr.N.N.Zade, DET, MAFSU explaining the activities of MAFSU to Shri . Nitinji Gadkari, Hon'ble Minister, GOI and Dr. C.D.Mayee, Former Chairman, ASRB

Expert guiding farmers during exhibition

Experts from college acting as Judges in Livestock Show

Farmers visit to stall

14

PUBLICATIONS / RADIO & TV TALKS

Extension Publications Abstract:

Name of college	Leaflets/ Booklets	Books	Local Publication (News-paper)	Publications (Periodicals)	Radio	T.V. Talks
Bombay Veterinary College, Mumbai	03	02	17	01	13	05
Nagpur Veterinary College, Nagpur	03	03	11	09	13	08
College of Veterinary & Animal Sciences, Parbhani	-	-	15	03	06	01
KNP College of Veterinary Science, Shirwal	09	02	28	10	32	03
College of Veterinary & Animal Sciences, Udgir	-	-	14	03	01	00
Post Graduate Institute of Veterinary & Animal Sciences, Akola	05	03	07	20	14	01
Dairy Technology College, Warud (Pusad)	04	01	-	02	03	01
College of Dairy Technology, Udgir	04	01	08	02	-	01
College of Fishery Science, Nagpur	07	-	02	-	01	-
College of Fishery Science, Udgir	-	-	04	01	-	-
Total	**35**	**12**	**106**	**51**	**83**	**20**

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 2016, July-September 2016, October-December 2016 & January-March 2017. These publications are available on MAFSU website.

15

WEB SITE

The MAFSU website is restructured to suit the need of all the stake holders 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 has a website. The list is given below.

1. University : **www.mafsu.in**
2. Bombay Veterinary College, Mumbai : **www.bvc.org.in**
3. Nagpur Veterinary College, Nagpur : **www.nvcnagpur.net**
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

16.A. MAFSU HEAD QUARTER

Sr.No.	Name of the Awardee	Name of Award
1	Prof. A. K. Misra, Vice-Chancellor, MAFSU, Nagpur	**Nomination of Hon'ble Vice-Chancellor** Secretary, DARE and Director General, ICAR nominated Prof. A. K. Misra, Hon'ble Vice-Chancellor as a Member of the Judging Committee for the Annual Award titled Jawaharlal Nehru Award instituted by ICAR for P.G. Outstanding Doctoral Thesis Research in Agriculture and Allied for the year 2016.
		Nomination of Hon'ble Vice-Chancellor Ministry of Agriculture and Farmers Welfare, Govt. of India nominated Prof. A. K. Misra, Hon'ble Vice-Chancellor as a Member (from amongst the heads of Veterinary Institutions in the States to which this act extends) under clause (b) of subsection (3) of Section 3 for serial No.8 as per Indian Veterinary Council Act, 1984 (52 of 1984).

16.B. FACULTY AWARDS/ ACHIEVEMENTS

Sr.No.	Name of Teacher	Name of Award
1	Dr. M.M. Gatne, BVC, Mumbai	"Fellow of Indian Society of Veterinary Pharmacology and Toxicology" at Navsari, Gujrat on 23rd to 25th Nov. 2016
2	Dr. S. S.Modekar, BVC, Mumbai	Best writer for popular article writing at Nasik on March 2017
3	Dr. S. D. Ingole, BVC, Mumbai	J. N. Pandey Memorial Award for Best Poster Presentation at Azabu University, Japan on 22nd to 31st August, 2016
4	Dr. R. N. Waghamare, BVC, Mumbai	Participated in Diagnostic Methods for Veterinary and Zoonotic diseases under 'Sakura Science Plan Project (SSPP) as part of Japan Asia Youth Exchange programme at XXV Annual Conference of SAPI atCollege of Veterinary Science, Mhow,MP on 21st Dec 2016
5	Dr. R. J. Zende, Dr. V. M. Vaidya, BVC, Mumbai	Honoured in 3rd National Conference and Scientific Updates on Zoonotic Disease Control held on 31st March, 2017 in Mumbai for outstanding contribution to public health service at Seth G. S. Medical College and KEM Hospital, Parel, Mumbai on 31st March, 2017
6	Dr. C. N. Galdhar, BVC, Mumbai	Best Poster presentation Award for research abstract entitled-Therapeutic evaluation of mammi-guard in subclinical and clinical mastitis as a supportive therapy) at Veterinary College and Research Institute, Tirunelveli, Tamil Nadu –on 22ndto 24th Feb. 2017

7	Dr. S.D. Moregaonkar, BVC, Mumbai	Best Poultry Pathologist Award of Indian Association Veterinary Pathologists at Veterinary College Anjora, Durg on October 2016
8	Dr. S. V. Kuralkar, PGIVAS, Akola	Best Teacher Award by MAFSU on 14.04.2016
9	Dr. N. V. Kurkure, NVC, Nagpur	Best Teacher Award (Research) by MAFSU on 14.04.2016
10	Dr. A.U. Bhikane, COVAS, Udgir	MAFSU's Best Teacher Award (Extension) at Nagpur on 14.04.2016
11		Dr.Babasheb Ambedkar Smruti Manavata Puraskar at Udgir on 04.12.2016
12	Dr. Prachi E. Taksande, COVAS, Udgir	Best paper presentation award at TANUVAS, Chennai (TN) on 02-04 Dec. 2016
13	Dr. N. M. Markandeya COVAS Parbhani	Vasantrao Naik award by Maharashtra state board of literature and culture, Mumbai on 27.02.2017
14		Krishi mauli award by shri swami Samarth gurupeeth, Dindori, Nasik on 27.01.2017
15	Dr. Digraskar S.U., Borikar S.T., Tawheed A.S. COVAS Parbhani COVAS Parbhani	Best research paper presentation on eve of 35th Annual Convention of ISVM, at VCRI, Terunelvelli (T.N.) during 22-24th Feb. 2017.
16	Dr. A. D. Deshmukh, Dr. A. P. Dhok, Dr. S. V. Chopde and Dr. S. R. Lende, NVC, Nagpur	Best Poster Presentation Award - Second Prize at College of Veterinary and Animal Sciences, Tirupati during 9-11 November 2016
17	Dr. Gautam R. Bhojane NVC, Nagpur	Young Scientist Award in XIV Annual Convention of Indian Society for Advancement of Canine Practice and National Symposium on Concepts of One-Health in Canine Health Care and Management at College of Veterinary and Animal Sciences, G.B. Pant University, Pantnagar during 09-11th Feb, 2017
18	Dr. Sariput P. Landge NVC, Nagpur	Best Poster Presentation Award in National Seminar on Rainfed agriculture in India: Perspectives and Challenges organized by the Maharashtra Society of Extension Education Education and Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola during 7 to 9th Dec. 2016
19	Dr. V.K. Basunathe NVC, Nagpur	Young Scientist Award-2017 for Outstanding Contribution in Research of Extension education conffred by Sociaety of Extension Education, Agra at NAARM Hyderabad on 31st January 2017
20	Dr. B. W. Narladkar COVAS Parbhani	Dr. N. S. Ruprah Memorial Award at Veterinary College, Shimoga on 15th Feb. 2017
21	Dr. M. G. Nikam, COVAS, Parbhai	Chalimida Jankidevi Memorial Gold Medal for highest OGPA in Ph.D. (Poultry Science) sponsored by Shri. Venkateshwara Veterinary Science University, Tirupati (A.P)
22		Awarded by International Journal of Agriculture & Research for Best Research Article.
23	Dr. M. V. Dhumal & Dr. M. G. Nikam, COVAS, Parbhai	Award of Excellance by International Journal of Livestock Research for the year 2016-17

24	Dr. V. K. Lule (Dairy Microbiology) DTC, Warud	2nd Best Oral Presentation Award at Second National Conference on New Horizons in Human Health and Nutrition held during 2-3 March, 2017 organized by School of Bioengineering and Food Technology, Shoolini University, Solan (HP) on 2-3 March, 2017

16.C. STUDENTS AWARD/ACHIEVEMENTS

Sr.No.	Name of Student	Name of Award
1	B.V.Sc. & A.H. Under Graduate Team, BVC, Mumbai	Won bronze medal in prize in Mime during State Level cultural festival Indradhanushya -2016 at Dr. Babasaheb Ambedkar Marathwada University, Auranagabad on 08.11.2016
2	V. B. Thombre, COVAS, Parbhani	Received "Best Clinical Case Paper Award in Animal Reproduction, Gynaecology And Obstetrics Section in One Day Clinical Case Conference - 2017 on Domestic, Pet and Wild Animal Practice" at Post-Graduate Institute of Veterinary and Animal Sciences, Akola on Jan., 2017
3		Received "Late Dr. Shridhar Koli Memorial Emerging Veterinarian Award 2017" organized by Mahavet Technical Summit 2017 at Pachgani (Mahabaleshwar), Satara on 05 Feb., 2017
4	Anil Korade, KNPVC, Shirval	Received Bombay Gorakshak Mandali Scholarship at Betegaon/ Kandivali, Mumbai
5	Gujarmale Sonal, COVAS, Udgir	Received Best paper presentation Award in Medicine session of National Clinical Conference organized at PGIVAS, Akola on 20.01.2017.
6	Mr. Shubham Komarewar, COFS, Nagpur	Won First Prize in Spot Photography during State Level cultural festival Indradhanushya -2016 at Dr. Babasaheb Ambedkar Marathwada University, Auranagabad on 09.11.2016
7	Mr. Shubham Soni, COFS, Nagpur	Won First Prize in National Essay Competetion on New Horizons in Fisheries at Central Institute of Fisheries Education, Mumbai on 03.03.2017
8	Mr. Rohit Mandale Fulchand, COFS, Udgir	Best poster presentation in National Symposium on Practices in Sustainable Agriculture,Aquaculture and Animal Husbandry at Rajarshee Shahu Mahavidyalaya, Latur on 21.03.2017

AWARDS

Dr. A. U. Bhikane receiving MAFSU Best Teacher Award for Extension

Dr. Gautam R. Bhojne receiving Young Scientist Award

Dr. N. V. Kurkure receiving MAFSU Best Teacher Award for Research

Dr. S. V. Kuralkar receiving MAFSU Best Teacher Award

Dr. Vijay K. Basunathe receiving Young Scientist Award

The Indian Society for Advancement of Canine practice awarded fellowship to Dr. N. P. Dakshinkar, Associate Dean, NVC, Nagpur

17

VISITS OF DIGNITARIES

17.A. BOMBAY VETERINARY COLLEGE, MUMBAI

Sr. No.	Name of Dignitary	Date
1	Shri. Mahadeo Jankar, Hon'ble Minister, Animal Husbandry, Dairy and Fishery Development, Maharashtra	10.08.2016
2	Peer Review Committee, ICAR, New Delhi	11.08.2016
3	Dr. Sanjeev Nayyar, Hon'ble Mayor, Delhi, Shri. Praveenkumar Gupta, IAS, Commissioner, Shri. Deepak Hastir, Additional Commissioner (Vet.), Shri. Pankaj Singh, Additional Commissioner (Finance), Dr. Suresh Chand, Director (VS) and Dr. Dinesh Sharma, Dy. Director (VS) from North Delhi Municipal Corporation.	05.11.2016
4	Mr. Rathod, Chief Executive Officer, Aarey Goregaon Mumbai	19.11.2016
5	ICAR, New Delhi Team	29.11.2016
6	Dr. R. Shridhar, Professor & Head Dept, of Vet. Pathology, Madras Veterinary College, Chennai	28.12.2016
7	Prof. A. K. Misra, Hon'ble Vice Chancellor, MAFSU, Nagpur, Dr. Ashok Kumar, Hon'ble ADG (Animal Husbandry) ICAR, New Delhi & Dr. B. P. Mishra, Joint Director (Research) & Project Co-ordinator (OPZD), IVRI (U.P)	05.01.2017
8	John Robin Steel, Great Grand Son of Prof. John H. Steel, 1st Dean of Bombay Veterinary College.	02.02.2017
9	Dr. A. H. Bandivdekar, Ex- Senior Deputy Director, NIRRH, Parel	13.02.2017
10	Maruus Hausler, Bayer AG	03.03.2017
11	Mr. Tejesvi Sharma, Chief Editor, EPC World	26.03.2017
12	Hon'ble Shri. Arjunrao Khotkar, Minister of State, Animal Husbandry, Dairy Development and Fisheries, MS	30.03.2017
13	Dr. Mohinish Bhyatjiwale Director & Consultant of neurosurgery	10.03.2017
14	Dr. Dhumal, Deputy Commissioner, Animal Husbandry, Mumbai	15.02.2017
15	Dr. P. P. Sengupta, Principal Scientist	06.03.2017
16	Dr. Madhav Paranjape, Director, Bio-Reliance, Pathology Services	31.01.2017

17.B. NAGPUR VETERINARY COLLEGE, NAGPUR

Sr. No.	Name of Dignitary	Date
1.	Dr. Mohan Bhagwat RSS Chief	25.04.2016
2.	Shri. Sanjeev Kumar Balyan, Hon'ble State Minister for Agriculture, GoI, New Delhi	25.04.2016
3.	Dr. Umeshchandra Sharma, President, VCI, New Delhi	25.04.2016
4.	Dr. Nitish Bhardwaj, Ex. MP	25.04.2016
5.	Dr. Tarun Bhatnagar, Scientist D, NIE, Chennai	07.09.2016

6.	Dr. M. D. Gupte, Chair in Epidemiology, ICMR & Founder Director, NIE, Chennai	07.09.2016
7.	Dr. Himadri, NIVEDI, Bangalore	07.09.2016
8.	Dr. D. K. Sinha, Principal Scientist, Epidemiology, IVRI, Izatnagar	07.09.2016
9.	Dr. B. Suresh, NIVEDI, Bangalore	07.09.2016
10.	Dr. Sahdeb Dey, Principal Scientist, Medicine, IVRI, Izatnagar	27.06.2016
11.	Dr. S. S. Randhawa, Former Director of Research GADVASU Ludhiana	27.06.2016
12.	Dr. BijayKumar, Hon'ble Secretary, ADF, M.S.	01.07.2016
13.	Mr. Kallihali Umesh, Wolthom Agrovet India	28.07.2016
14	Shri. Mahadev Jankar, Minister of Animal Husbandry, M.S.	07.08.2016
15	Accreditation Committee from ICAR, New Delhi	08.08.2016
16	Shri. Anil Hathekar and Shri. M. Namjoshi, DGM, NDDB, Mumbai	24.01.2017
17	Dr. Ashok Kumar, ADG (AS), ICAR, New Delhi	12.02.2017
18	Dt. T. Mohapatra, Hon'ble DG, ICAR, New Delhi	09.03.2017
19	Dr. V. V. Kulkarni, Hon'ble Executive Council Member, MAFSU, Director, NRC on Meat, Hyderabad and Dr. Ravi Patil, Hon'ble Extension Council Member, MAFSU, Nagpur	27.01.2017

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

Sr. No	Name of Dignitary	Date
1	Prof. K. Padmakumar, Pro Vice-Chancellor, Kerala University of Fisheries and Ocean studies (KUFOS) & Dr. Prof. Jeet Singh, Dr. G. Venkateshwarlu Assistant Director General (EQA &R), ICAR, New Delhi	Aug. 2016
2.	Mrs. Kusum Bal Saraf, Chief Managing Director, Mahila Aarthik Vikas Mahamandal, (M.S)	09.11.2016
3.	Dr. Shahaji Phand, Assistant Director, MANAGE, Hyderabad	10.12.2016

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

Sr.No	Name of Dignitary	Date
1	Dr.S.N.Suryawanshi, RJC (AH), Latur Region, Latur	07.07.2016
2	Hon'ble. Shri. Mahadevji Jankar, Minister of Animal Husbandry, Dairy Development and Fisheries, M.S.	25.08.2016
3	Dr. Sunil Gaikwad, Member of Parliament, Latur	
4	Shri.Govind Kendre, Ex. MLA, Udgir	
5	Dr. A.S. Bannalikar, Director of Research, MAFSU, Nagpur	29.08.2016
6		23.02.2017

17.E. KNP COLLEGE OF VETERINARY SCIENCE, SHIRWAL

Sr. No	Name of Dignitary	Date
1	Prof. A. K. Misra, Hon,ble Vice Chancellor, MAFSU, Nagpur	21.04.2016
2	Dr A. S. Bannalikar, Director of Research, MAFSU, Nagpur	25.08.2016
3	Dr.V. K. Taneja, Former VC, GADVASU, Ludhiana, Punjab	
4	Dr. Jitendra Singh Bhatia, Former ADG (AS), ICAR, New Delhi	11.07.2016
5	Prof. P. K.Senapati, Dean, Dept. of Animal Genetics & Breeding, West Bengal	
6	Dr. R. N. Goswami, Dean (Vet), Veterinary College, Khanapara, Guwahati	
7	Dr. P. M. Puntambekar, Ex-Associate Dean, BVC, Parel, Mumbai	23.09.2016

8	Prof. A. K.Misra, Hon'ble Vice-Chancellor, MAFSU, Nagpur	23.11.2016
9	Mrs Neeraja Adiram, Joint Secretary, ICAR, New Delhi	17.01.2017

17.F. POST GRADUATE INSTITUTE OF VETERINARY AND ANIMAL SCIENCES, AKOLA

Sr. No	Name of Dignitary	Date
1		27.05.2016
2	Dr. V.M.Bhale, Director Instruction & Dean, Dr.P.D.K.V., Akola	18.07.2016
3		31.12.2016
4	Dr. N.N. Zade, Director Extension and Training, MAFSU, Nagpur	10.06.2016
5	Dr. D.M. Mankar, Director of Research, Dr. P.D.K.V., Akola	17.06.2016
6	ICAR Accreditation committee	10.08.2016
7	Smt. Ujjwalatai Deshmukh, Mayor, Akola	27.08.2016
8	Padma Shri. Vijay Bhatkar, Hon'ble Executive Council Member, MAFSU, Ngp	16.09.2016
9	Dr. Bhagwan Satale, Hon'ble Executive Council Member, MAFSU, Nagpur	27.10.2016
10	Dr. R.G. Dani, Hon'ble Vice-Chancellor, Dr. P.D.K.V., Akola	17.10.2017
11	Smt. Sandhyatai Waghode, President ZP, Akola	21.10.2016
12	Shri. Vijayji Agarwal, Chairman Staning Committee, ZP, Akola	15.11.2016
13		19.11.2016
14	Dr. N.P. Dakshinkar, DI & Dean (Vet.), MAFSU, Nagpur	20.01.2017
15		04.02.2017
16	Dr. A.B. Mandal, Principal, CARI, Izatnagar	07.12.2016
17	Mr. M. N. Dongre, Hon'ble Executive Council Member,MAFSU,Nagpur	22.12.2016
18		20.01.2017
19	Prof. A. K. Misra, Hon'ble Vice Chancellor, MAFSU, Nagpur	03.02.2017
20		04.02.2017
21	Dr. D. B. Sonkusale, Chief Executive Officer, Maharashtra Livestock Development Board, Akola	18.02.2017
22	Smt. Anjalitai Tapre, Poultry Entrepreneur, Buldhana	17.03.2017
23	Dr Pushpa Lokare, Assistant Prfessor, Community Medicine, Medical College	24.03.2017

17.G. COLLEGE OF DAIRY TECHNOLOGY, WARUD

Sr.No	Name of Dignitary	Date
1	Dr. Smt. Mandakini Amte, Hon'ble Executive Council Member, MAFSU, Ngp	31.12.2016
2	Prof. K. Padmakumar, Pro-Vice Chancellor, Kerala University of Fisheries and Ocean Studies, Dr. Jit Singh, Former Dean, MPUAT, Udaipur, Rajasthan and Dr. G. Venkateshwarlu, ADG, ICAR New Delhi	09.09.2016
3	Dr. N. N. Zade, Director of Extension & Training, MAFSU, Nagpur	23.04.2016
4	Dr. M. V. Joshi, Dean Vet. Science and Director Instructions, MAFSU, Nagpur	24.04.2016
5	Dr. N. P. Dakshinkar, Dean Vet. Science & Director Instructions, MAFSU, Ngp	27.12.2016

17.H. COLLEGE OF DAIRY TECHNOLOGY, UDGIR

Sr. No	Name of Dignitary	Date
1	Prof. K. Padmakumar, Pro-Vice Chancellor, Kerala University of Fisheries and Ocean Studies, Dr. Jit Singh, Former Dean, MPUAT, Udaipur, Rajasthan and Dr. G. Venkateshwarlu, ADG, ICAR New Delhi	10.08.2016
2	Hon'ble Shri. Mahadevji Jankar, Minister, Animal Husbandry, Dairy Development & Fisheries, M.S.	25.08.2016
3	Dr. A.S. Bannalikar, Director of Research, MAFSU, Nagpur	29.08.2016
4	Mr. M. N. Dongre, Hon'ble Executive Council Member,MAFSU,Nagpur	30.09.2016

17.I. COLLEGE OF FISHERY SCIENCE, NAGPUR

Sr.No	Name of Dignitary	Date
1	Peer Review Committee, ICAR, New Delhi	08.08.2016

17.J. COLLEGE OF FISHERY SCIENCE, UDGIR

Sr. No	Name of Dignitary	Date
1	Shri. Mahadev Jankar, Hon.ble Minister for Animal Husbandry, Dairy and Fisheries Development and Dr. Sunil Gaikwad, Hon'ble M.P., Latur	25.08.2016
2	Dr. Ajitsingh Patil, Ex- Exucutive & Research Council Member, MAFSU, Nagpur and Managing Director, Pancham Aquaculture Ltd, Saphale Dist Palghar	19.02.2017

VISIT OF DIGNITARIES

Hon'ble EC Member Dr. Smt. Mandakini Prakash Amte with girl students at DTC, Warud

Prof. A. K. Misra, Hon'ble Vice Chancellor, felicitating Hon'ble Mohanji Bhagwat, RSS Chief at University head quarter

Prof. A. K. Misra, Hon'ble Vice Chancellor, MAFSU, Nagpur welcoming Hon'ble Minister, ADF Shri Mahadevji Jankar at University head quarter

Visit of Hon'ble Minister Shri Giriraj Singh to Poultry Training and Research Centre of Nagpur Veterinary College, Nagpur

Visit of Hon'ble Minister Shri. Mahadevraoji Jankar to NVC, Nagpur

Visit of ICAR Accreditation Peer Review Team to COFS, Nagpur

18

BUILDING AND CONSTRUCTIONS

18.1 COMPLETED WORKS :

Sr.No.	Particulars of work	Total Cost (in Lakh)	Funding Agency
1	Construction of Diagnostic Lab & Information Centre on First Floor for Veterinary Clinical Complex for College of Veterinary & Animal Science, Udgir, Distt. Latur	46.00	R.K.V.Y. & M.V.K.
2	Replacement of Existing electrical equipment with Energy saving Electrical Equipment at MAFSU, Nagpur campus under the scheme of energy conservation	10.56	The scheme of energy conservation by MEDA
3	Renovation of Existing Poultry shed for Training & Demonstration Center at Poultry farm of Nagpur Veterinary College, Nagpur Under R.K.V.Y.	56.40	R.K.V.Y
4	Electrification to Diagnostic Lab & Information Centre on First Floor for Veterinary Clinical Complex for College of Veterinary & Animal Science, Udgir, Distt. Latur"	6.49	R.K.V.Y. & M.V.K.
5	Construction of cement concrete approach road to International Hostel Building at MAFSU, Nagpur.	9.78	University Revenue Receipt
6	Replacement of Existing electrical equipment with Energy saving Electrical Equipment at PGIVAS, Akola campus under the scheme of energy conservation	8.20	The scheme of energy conservation by MEDA.
7	Re-wiring of AP1 to AP6 qtrs & L1 to L6 Qters at NVC, Nagpur.	3.96	University Revenue Receipt
8	Renovation work for centre of Zoonoses at NVC, Nagpur.	15.42	ICAR Grant
9	Renovation & electrification to zoonoses lab at N.V.C. Nagpur.	7.44	ICAR Grant
10	Renovation of repair works of toilet blocks at boys hostel at KNPVC Shirwal.	9.92	ICAR Grant
11	Painting & modification work at administrative building at PGIVAS, Akola.	9.97	ICAR Grant
12	Construction of layer shed poultry farm at PGIVAS, Akola.	9.63	RKVY Project
13	Repair & renovation work for surgery poultry goat buffalo farm at PGIVAS, Akola.	9.75	ICAR Grant
14	Providing & Installation of Double face book stack main & add on section for University Library, at MAFSU, Nagpur.	13.25	State Govt.
15	Renovation & Alteration of Existing Auditorium at NVC Nagpur.	69.25	State Govt.
16	Construction of Laboratory at farm for COFS Nagpur.	14.06	State Govt.
17	Preparing Garden at Circular area for MAFSU Nagpur.	7.95	State Govt.

18	Painting work to new administrative building for MAFSU Nagpur.	9.76	University Receipt
19	Repair work to Administrative Building of MAFSU, Nagpur	3.55	University Receipt
20	Repirs to buildings at Bombay Veterinary college, Parel Mumbai.	23.66	State Govt.
21	Structural and other repairs to buildings at Goregaon Campus, Bombay Veterinary college, Mumbai.	286.69	State Govt.
22	Repairs & black topping to existing road in the premises of COVAS, Parbhani.	13.90	College Revenue Receipt
23	Replacement of damaged manglore tiles into AC Sheet roofing for residential quarters at NVC Nagpur.	21.85	State Govt. fund & University Revenue Receipt
	Total	**667.44**	

18.2. ON GOING WORKS :-

Sr.No.	Particulars of work	Total Cost (in Lakh)	Funding Agency
1	"Construction of S.C. Girl's Hostel under Babu Jagjivaram Chhatravas Yojna for Maharashtra Animal & Fishery Sciences University, Nagpur	279.37	Babu Jagjivanram Chatrawas Yojna
2	Repairs of boys Gokul Hostel at COVAS Parbhani.	70.06	ICAR Grant
3	Repairs of Electrical work in boys Gokul Hostel at COVAS Parbhani.	20.95	ICAR Grant
4	Renovation of existing Dr. Panjabrao Deshmukh statue & Entrance hall for NVC Nagpur.	9.39	ICAR Grant
5	Modification work at premises of administrative building at PGIVAS, Akola.	9.93	ICAR Grant
6	Electrification of new constructed layer shed at PGIVAS, Akola.	2.04	RKVY Project
7	Upgradation of road at PGIVAS Akola.	9.84	RKVY Project
8	Renovation of electrical installation & switchgears of TVCC building Dean office, pathology dept. at PGIVAS, Akola.	2.82	ICAR Grant
9	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
10	"Construction of Loose Housing for Marathawadi Buffalo Research Prjoect at College of Veterinary & Animal Science, Udgir,".	66.57	M.V.K.
11	Providing & Installation of Furniture for Girl's Hostel building Under BJCY at Nagpur.	28.42	University Receipt.
	Total	**502.15**	

19

ACCOUNTS AND FINANCE

19.1. STATE GOVERNMENT GRANTS FOR THE YEAR 2016-2017

Sr. No.	Particulars	Amount Received (in Rs.)	Expenditure (in Rs.)
A	**NON PLAN**		
1.	Salary & Allowance	65,37,01,000	65,13,68,198
2.	Pension	21,15,09,000	19,93,83,241
3.	Contingency	19,03,60,000	19,03,60,000
	TOTAL Rs. (A)	**105,55,70,000**	**104,11,11,439**
B	**PLAN**		
1.	Fishery Sciences College, Nagpur	3,99,60,000	3,99,60,000
2.	Fishery Sciences College, Udgir		
3.	Dairy Technology College, Udgir		
	TOTAL Rs. (B)	3,99,60,000	3,99,60,000
	TOTAL Rs. (A) + (B)	**109,55,30,000**	**109,55,30,000**

19.2. INDIAN COUNCIL OF AGRICULTURAL RESEARCH, NEW DELHI GRANTS 2016-2017

Sr. No.	Particulars	Received Amount (in Rs.)	Expenditure (in Rs.)
1	Extramural Fund Project	15,51,188	15,51,188
2	NAE project on Centre for Zoonoses	64,01,600	64,01,600
	Total Rs.	**79,52,788**	**79,52,788**

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

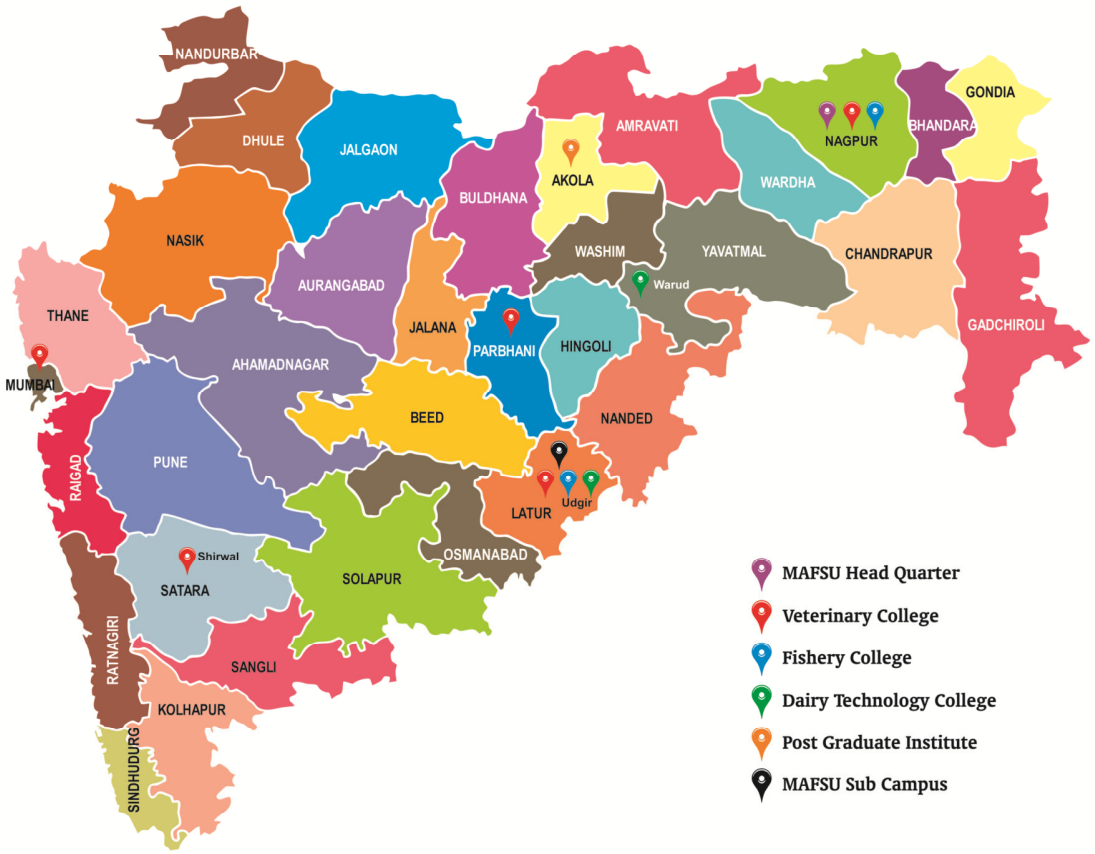
COLLEGE OF DAIRY TECHNOLOGY, WARUD

COLLEGE OF DAIRY TECHNOLOGY, UDGIR (Proposed Building)

COLLEGE OF FISHERY SCIENCE, NAGPUR

COLLEGE OF FISHERY SCIENCE, UDGIR

www.mafsu.in



MAHARASHTRA ANIMAL AND FISHERY SCIENCES UNIVERSITY, NAGPUR

Futala Lake Road, Nagpur - 440 001

Phone : 0712-2511784, **Fax:** 0712-2511282, **Email :** registrarmafsu@yahoo.com **Web :** www.mafsu.in

Toll Free No.: 1800-233-3268