



KVAFSU

2nd Annual Report

2006-07



**KARNATAKA VETERINARY, ANIMAL &
FISHERIES SCIENCES UNIVERSITY**

P.B.No.6, Nandinagar, Bidar - 585401, Karnataka, India

KVAFSU

2nd
ANNUAL REPORT
2006-07



RURAL FRIENDLY & FARMER FRIENDLY
TECHNOLOGY FOR RENEWABLES

**KARNATAKA VETERINARY, ANIMAL
AND FISHERIES SCIENCES UNIVERSITY**
Nandinagar, P.B. No.6, Bidar 585 401, Karnataka.



Preface

I am happy to place the Second Annual Report of Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar for the year 2006-07. The University has steadily progressing in the shortest period, in that the University has started one more Veterinary College at Shimoga with 30 students in take. The University, for Infrastructure Development procured 158 acres of land at Shimoga and 110 acres at Bidar main campus. Construction of the sports complex, library building and 'C' type quarters at the university main campus, Bidar; library building and hatchery shed at Hebbal campus are in progress.

The University is working hard with its mandates as per Indian Council of Agricultural Research/ Veterinary Council of India. It is a proud moment to release a fast growing variety of fish called 'Amur' and a dual purpose poultry breed named 'Swarnadhara' for both meat and egg production. I am happy to note that several research projects have been awarded by ICAR, DBT, DST, State Government and other agencies. Despite inadequacy of staff and resources, the students are excelling themselves in ICAR examination as well as in Postgraduate entrance tests at different Universities. I compliment all our students who have excelled themselves in their studies as well as in other competitive examinations. The University has turned out substantial research work and extension programmes during the year under report. The details of all the above programmes are adequately placed in the annual report. The university has planned and initiated establishment of Institute of Wild Life Medicine at Kudige, Coorg Dist. a Veterinary College at Hassan, a Dairy Science College at Gulbarga, Toxicological Center and Center for Vaccine Production at Shimoga and Belgaum. I am sure our teachers and scientists are going to perform exceedingly well in future and help the University to grow further.

I appreciate the efforts of Dr. Shivananda Murthy, Director of Extension, in bringing out of this report neatly.

Place: Bidar

Sd/-
Prof. R.N.Sreenivas Gowda
Vice-Chancellor





Editorial

*I*t gives me a great pleasure to bring out the 'Annual Report' for the period 2006-07. Due to change of officers at the Directorate of Extension and other unavoidable circumstances there was a delay in publishing of this Annual Report.

The Karnataka Veterinary, Animal and Fisheries Sciences University (KVAFSU) is a new University carved out of two Agricultural Universities (Bangalore and Dharwad) bifurcating Veterinary, Animal, Dairy and Fisheries Sciences Divisions. The 2nd Annual Report of the University includes the work carried out in education, research and extension at three Veterinary Colleges (Bidar, Bangalore and Shimoga), a Dairy Science College (Bangalore) and a College of Fisheries (Mangalore). The report on research and extension programmes conducted at Institute of Animal Health and Veterinary Biologicals (IAH&VB) Bangalore, Livestock Research and Information Centres and Fisheries Research and Information Centres spread across the State is also included.

The major share of funding comes from the Government of Karnataka under plan and non-plan grants. Sufficient grants under development were also received from the Indian Council of Agricultural Research (ICAR). Apart from these, good amount of grant for research and extension programmes was received from the different national and international organizations.

In addition to Meetings of Board of Management and Academic Council, Research Council and Extension Education Councils were met regularly during the period and planned programmes for the future. The first convocation of the University was held on January 17th 2007 and awarded degrees in Bachelors, Masters and Ph.D., to 524 students in Veterinary, Dairy and Fisheries Sciences. I am happy to note the outstanding achievements by the students which reflect the quality of education imparted. The progress achieved in research and extension by the teachers in the period has been exemplary. Although the University is a baby, established about 3 years back, the over all work and programmes carried out has been exceptionally good and most of the activities are included in this report.

I thank the Hon'ble Vice-Chancellor and all the officers of the University for their help and cooperation in preparation of this report. Finally, I thank Dr. K.C. Veeranna for his help in compiling the report and my secretarial staff for their computer assistance.

Sd/-

H. Shivananda Murthy
Chief Editor &
Director of Extension

Place: Bidar



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KVAFSU

Credit Line

Publisher

Vice-Chancellor,
KVAFSU, Bidar

Chief Editor

Dr. H. Shivananda Murthy
Director of Extension

Assisted by

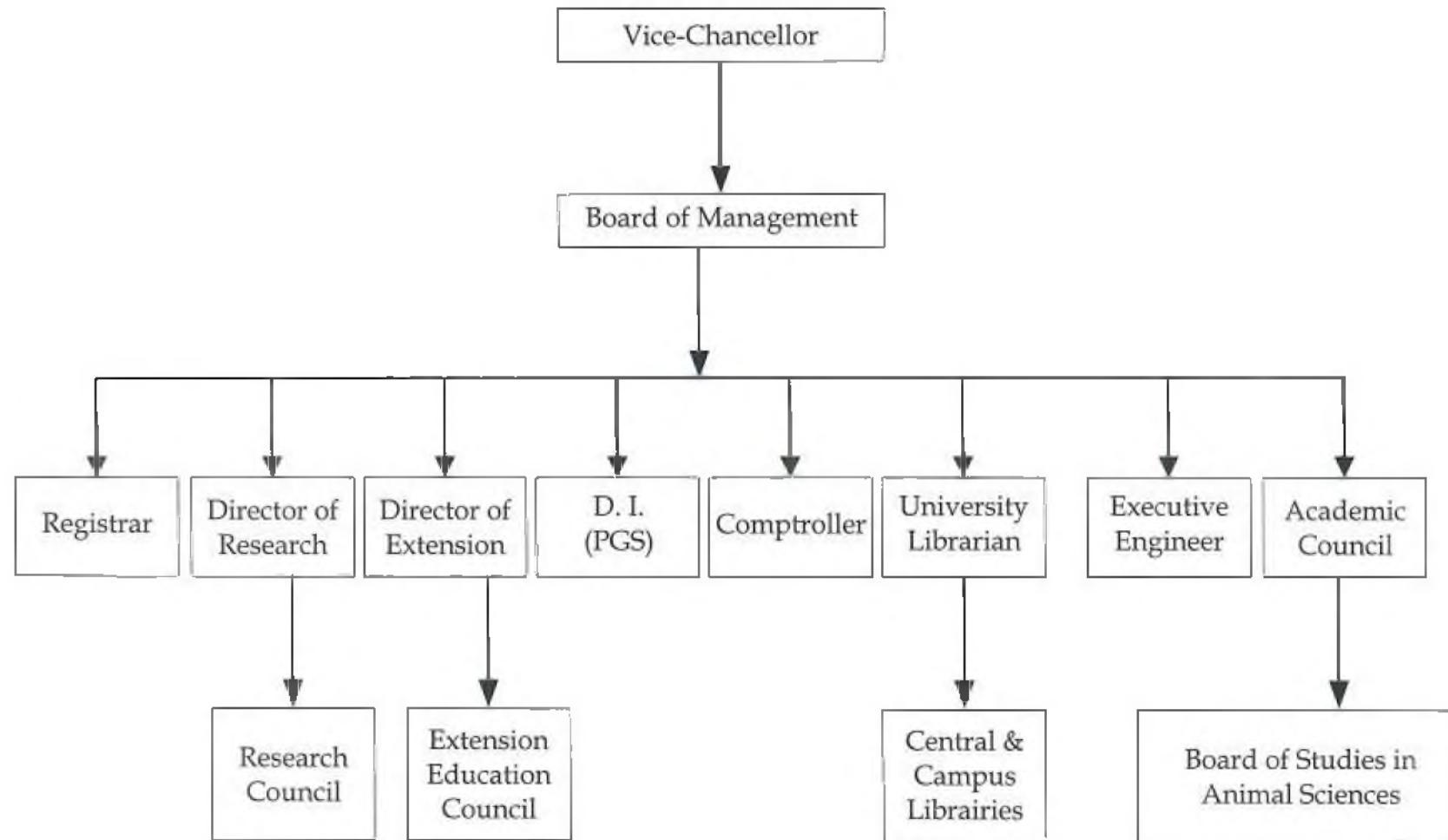
Dr. K.C. Veeranna
Sr. Technical Assistant to DE &
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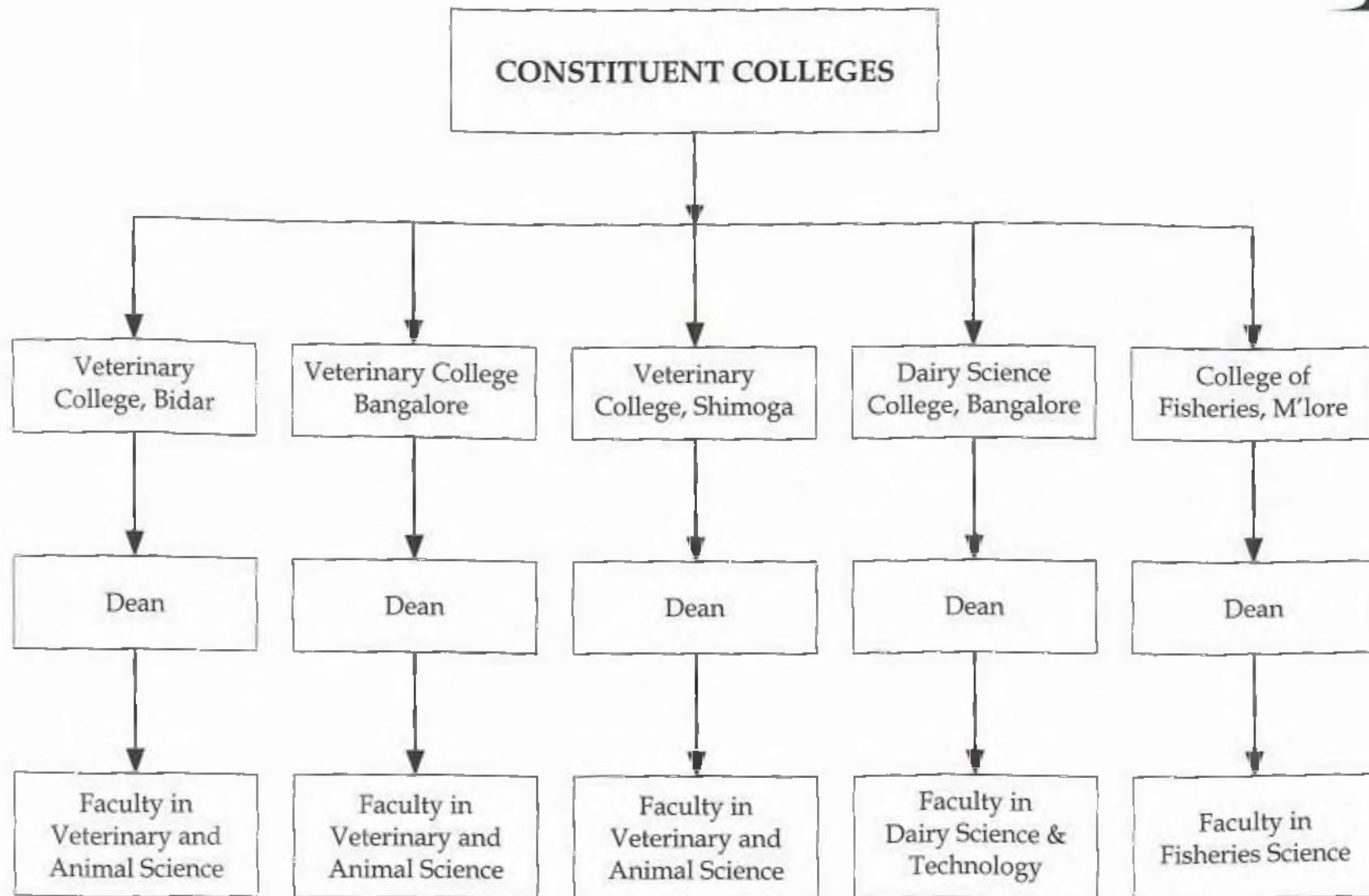
Artwings, Bidar

Organisational Structure





2



Mandate of the University

The prime objectives and mandate of the University are to uplift the rural livestock, poultry and fish farmers with a motto of "Rural Oriented and Farmer Friendly Activities". The University has a territorial jurisdiction of entire state of Karnataka covering the 29 districts. The major objectives of the University include,

- ▶ To impart higher quality education in different areas particularly veterinary, animal, dairy, fisheries and other allied sciences.
- ▶ Advancement of learning and research, particularly in veterinary science, dairy science, fisheries science and other allied sciences.
- ▶ To undertake the extension education service in veterinary, animal, dairy, fisheries and other allied sciences to the farmers & rural people of the state.
- ▶ Such other purposes as the State Government may specify by notification in the official gazette from time to time.

Mission of the University

The Mission of the Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar, is to strive hard and provide leadership in teaching, research and extension education services related to veterinary, animal, dairy and fisheries science to keep pace with new frontiers of science and contemporary developments with social and technical relevance. In this context, the Karnataka Veterinary, Animal and Fisheries Sciences University is strongly committed in absorbing newer paradigms and using them to develop excellent human resource, innovative technologies and their dissemination so as to serve the livestock and fish farming community of the state.



Governance

BOARD OF MANAGEMENT OF THE UNIVERSITY

Chairman : **Dr. R.N. Sreenivas Gowda**
Vice- Chancellor

Ex- Officio Members: The Principal Secretary to Govt. Department of AH & Fisheries or his nominee not below the rank of Joint Secretary.

The Principal Secretary to Finance department or his nominee not below the rank of Joint Secretary

The Secretary to Govt. Law Department or his nominee not below the rank of Joint Secretary

The Director of Animal Husbandry & Veterinary Services Govt. of Karnataka, Bangalore

The Director of Fisheries, Govt. of Karnataka, Bangalore

President, Karnataka Veterinary Council
From 10.03.2005 to 10.03.2008

The Registrar of the University - Member Secretary

Other Members : **Sri P.S. Nandkumar**
From 10.03.2005 to 10.03.2008

Sri Samad Siddiqui
From 10.03.2005 to 10.03.2008

Sr. M. Rajanna
From 10.03.2005 to 10.03.2008

Dr.R.V. Patil
From 10.03.2005 to 10.03.2008

Sri R. P. Kotekar
From 10.03.2005 to 10.03.2008

Smt. Sheela Tiwari
From 10.03.2005 to 10.03.2008

Our Institutions

1. Colleges

- 1) Veterinary College, Hebbal, Bangalore, established in 1958
- 2) Veterinary College, Bidar, established in 1984
- 3) Veterinary College, Shimoga, established in 2006
- 4) Dairy Science College, Hebbal, Bangalore, established in 1980
- 5) College of Fisheries, Mangalore, established in 1969

2. Research and Extension Institutes

- 1) Institute of Animal Health & Veterinary Biologicals, Bangalore, established in 1926
- 2) Livestock Research and Information Center (Amruth Mahal and Hallikar), Konnehally, Tiptur, Tumkur District
- 3) Livestock Research and Information Center (Deoni), Hallikhed, Bidar
- 4) Livestock Research and Information Center (Sheep), Nagamangala, Mandya district.
- 5) Fisheries Research and Information Center (Inland), Hessaraghatta, Bangalore Rural
- 6) Fisheries Research and Information Center (Inland), Hebbal, Bangalore
- 7) Fisheries Research and Information Center (Marine), Ankola, Uttara Kannada
- 8) Rural Veterinary Hospital, Yelahanka, Bangalore
- 9) Institute of Wildlife Veterinary Medicine, Kudige, Coorg District
- 10) Fish Seed Production Farm, Munirabad, Koppal
- 11) Fish Seed Production Farm, Shivapura, Koppal
- 12) Livestock Breeding Farm, Hessaraghatta
- 13) Livestock Breeding and Training Centre, Kurikuppe, Bellary
- 14) Institute for Toxicological Testing Centre, Shimoga*
- 15) Centre for Rabies Vaccine, Belgaum*

*Initiated for establishment.



Officers of the University during the period

1. Vice-Chancellor, Bidar	Dr. R.N.Srinivasa Gowda
2. Registrar, Bidar	Dr. S.S. Honnappagol
3. Comptroller, Bidar	Sri K. Pushparaj
4. Director of Extension	Dr. S. Nagaraj
5. Director of Research	Dr. I. Karunasagar
6. Director of Instruction (PGS), Bidar	Dr. S.M. Usturge
7. University Librarian	Dr. D.G.K. Rao
8. Dean, Veterinary College, Bidar	Dr. S. Mallikarjunappa
9. Dean, Veterinary College, Bangalore	Dr. B.S. Ventaranami Reddy
10. Dean, Dairy Science College, Bangalore	Dr. G.S.Bhat
11. Dean, College of Fisheries, Mangalore	Dr. P. Keshavanath
12. Head of Veterinary Science Division	Dr. S. Prasanna Kumar
13. Head of Poultry Science Division	Dr. Narasimha Murthy
14. Head of Animal Science Division	Dr. Krishna Murthy
15. Head of Fisheries Science Division	Dr. Joseph K. Maniserry
16. Head of Dairy Science Division	Dr. B.V. Venkateshaiah
17. Executive Engineer	Dr. Sri M.K.Satish

Executive Summary

It is a matter of pride that the university has completed two years of existence and attained to the status of full fledged University. The University has completed the recruitment of Assistant Professors in various faculties such as Veterinary, Animal, Poultry, Dairy and Fishery Sciences as per the Veterinary Council of India (VCI) and Indian Council of Agricultural Research (ICAR) norms. In the 1st convocation of the University 45 candidates got their Master's Degree and 6 got their Doctoral Degree in Veterinary and Animal Science. In Dairy Science, 12 obtained their Master's Degree and 2 candidates have been awarded Doctoral Degree. In Fisheries Science, 19 have taken their Master's Degree and 2 have taken their Doctoral Degree. It was a memorable occasion to open a three-in-one concept in restoration of Animal Health viz., Animal Hospital, Diagnostic Laboratory and Information Centre at APMC Yard, Bidar. For the production of vaccination, bio-fermentors as well as disease diagnosis & bio-safety laboratory was also added to the Institute of Animal Health and Veterinary Biologicals (IAH&VB) with a cost of 10 lakh rupees. The Computer networking laboratory established at the Department of Aquaculture, College of Fisheries, Mangalore under DST funded project. To fulfill the shortage of qualified veterinarians and to cater the needs of livestock farmers including poultry in Malnad region, the Government of Karnataka had sanctioned a Veterinary College at Shimoga and it was inaugurated by Hon'ble Chief Minister of Karnataka, Shri H.D. Kumara Swamy. The University procured 110 acres of land at Bidar main

campus and 158 acres land at Shimoga. Girls hostel was built and initiation was made for construction of sports complex, library building and 'C' type quarters at main campus, Bidar; construction of library building and hatchery shed at Hebbal campus, as part of creation of infrastructure in the University.

Education

The teaching activities were carried out in three major areas at four campuses through five colleges under the jurisdiction of this University. Undergraduate degree programmes in Veterinary and Animal Sciences are offered at Bidar, Bangalore and Shimoga; Dairy Science at Bangalore and Fisheries Science at Mangalore. The University offers Masters programme in 14 disciplines and Doctoral programme in 12 disciplines in Veterinary and Animal Sciences, 3 disciplines in Dairy Science and 5 disciplines in Fisheries Science for both Masters and Doctoral degree programmes.

Admission under various degree programmes to KVAFSU was undertaken during 2006-07 and the intake was 302 students, comprising 199 for graduate studies and 103 for postgraduate studies. Among 199 under graduate students admitted to various degree programmes, 160 were for BVSc & AH degree at Bangalore, Bidar and Shimoga campuses and 25 for B.Tech (Dairy) degree and 14 for Bachelor in Fisheries Science Degree. Out of 103 post graduate students, 62 for Master's Degree in Veterinary Science and 11 for MSc. Degree in Dairy Technology and 14 for Master's Degree in



Fisheries Science.

Out of total 86 post graduate students, who were awarded degrees in different disciplines of the University, 51 are from Veterinary Faculty, 14 from Dairy Science faculty and 21 are from Fisheries faculty. Many Veterinary Graduates of this University were qualified in ICAR Junior Research Fellowship and secured PG admissions in many prestigious institutes like IVRI, NDRD, CCS, HAU, etc., Fishery Science graduates of this University have bagged 11 ranks out of the first 15 in ICAR Research Fellowship examination and got admitted to CIFE.

The University successfully organised 1st Convocation of the University on 17th January, 2007 at Nandinagar Campus, Bidar. In this convocation, 524 students awarded degrees, of which 24 Ph.D., 135 Masters and 365 Graduates. Ninety Seven students received gold medals, of which 11 Ph.D., 31 Masters and 8 Graduating students

Research

KVAFSU is operating research projects with external funding support to the tune of Rs. 16.34 crores in various Colleges, Institutes and Farms. European Commission, Department of Biotechnology and ICAR are our major supporters. Technologies developed by KVAFSU are contributing to improvement of animal health and production of livestock, poultry and fish all over the country. Vaccines developed and marketed by the IAH&VB are in great demand through out the country, since those vaccines are manufactured according to GHP/OIE/WHO standards. In fact, we are considered leaders in the research area of

shrimp disease & health management. A recently introduced "Rapidot" kit based on monoclonal antibodies was found to be a farmer friendly kit. To overcome the usage of antibiotics in aquaculture, the scientists of this University have developed Bio-control Technology using bacteriophages, which has been released for commercialization. We are proud to release two improved varieties of Animals, 'swarnadara' poultry bird and 'amur' fish for the benefit of farmers.

After the formation of the new University, KVAFSU has been developing farms in different parts of Karnataka to undertake research on various aspects of livestock, poultry and fisheries. In Hallikhed, near Bidar, a Livestock Research and Information Centre with emphasis on conservation and maintenance of pure breed of Deoni cattle was undertaken. The farm has integrated livestock, poultry, fisheries, fodder and pasture development, vermicomposting and azolla culture with a concept of BIO-VILLAGE.

In Konehally, Tumkur District, a Livestock Research and Information Centre has been developed with emphasis on Amritmahal and Hallikar breeds of cattle. Inland Fisheries Research and Information Centres at Hessaraghatta and Hebbal, Bangalore have been actively working on fish seed production, genetic improvement of carps and ornamental fish breeding. The Marine Fisheries Research and Information Centre at Ankola, Uttar Kannada is being developed for demonstration of shrimp and brackish water aquaculture.

Extension Activities

The University is propagating its technologies to the farmers through training programmes, animal health camps, treatment of animals for medical, surgical and reproductive problems at Veterinary Colleges, Krishimelas, farmers meet, publication of folders, bulletins and books on package of practices in local language for the benefit of farming community.

Institute of IAH & VB, Bangalore has produced 102.76 lakh doses of bacterial vaccines and 106.82 lakh doses of viral vaccines. It has screened 73,695 samples for analysis of various diseases.

The Departments of Medicine, Surgery and Gynaecology of Veterinary College, Bidar and Bangalore provided diagnosis and treatment for more than 20000 livestock and advise to farmers. The Pathology Department of Bangalore conducted 5000 post mortems of livestock to diagnose the diseases and also helped in solving the Vetro legal cases. Department of Veterinary and Animal Husbandry Extension, Bidar and Bangalore organized 35 on farm demonstrations on scientific livestock production for practices to the practicing farmers, farm women and unemployed youth, prepared project and feasibility reports for establishing various livestock enterprises for 80 farmers.

Different Colleges of the University organized 80 animal health camps / livestock shows and

exhibitions, 163 training programmes to farmers and officers of the Central and State Governments. The faculty members participated in 134 training programmes organized by various agencies. The University officials served as judges in various committees formed at All India Livestock shows. The faculty also delivered 52 Radio talks and 22 TV programmes for the benefit of the farmers. Several popular articles have been published in leading news papers and magazine by the teachers for the benefit of farmers. The farms of the University supplied 400 piglets, 100 sheep and goat, 1,698 lakh Giriraja chicks, 1.04 lakh fertile eggs and 10.44 lakh fish fingerlings to the farmers within the State.

Sports/NSS/Cultural Activities

The students have been given adequate platform to exhibit their talents in sports and cultural activities. The students won the prizes in national integration march, mono acting, group songs, folk dance and extempore at the 7th All India Inter-Agriculture University Youth Festival held at Orissa. The students also participated in Agricultural Universities Festival and won a gold, a silver and a bronze medal. The six NSS units of constituent colleges of the University organized 10 days special annual camps in the adopted villages with an objective of over all personality development of students through community service.

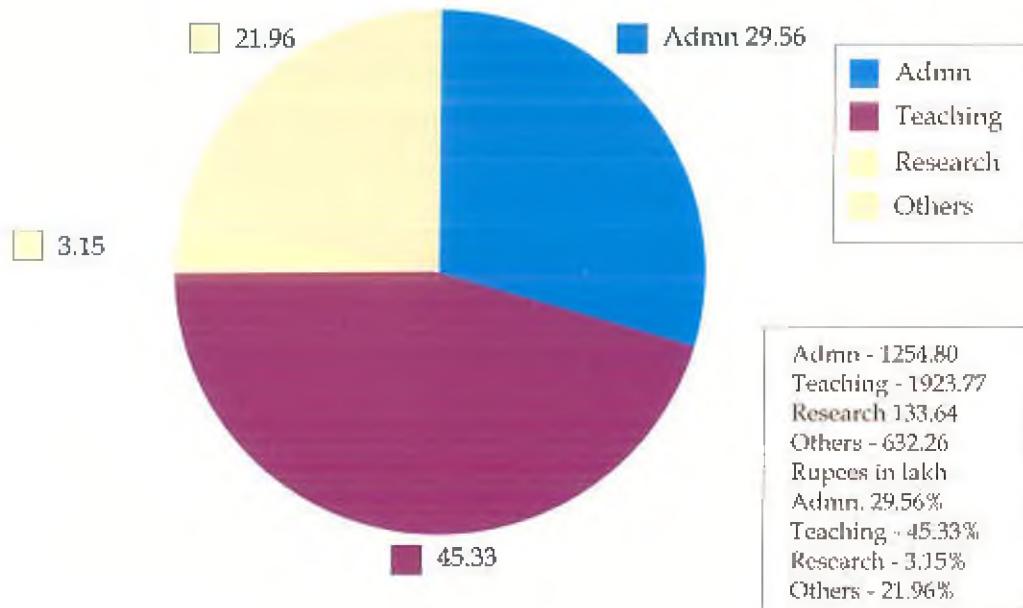


Board of Management of Meetings

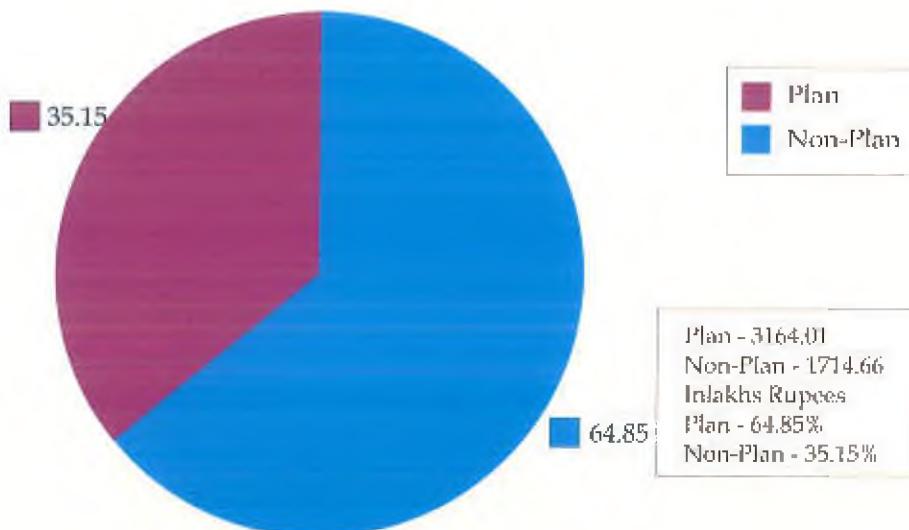
The Followings of the Board of Management were held during the period

- 1) 10th Board of Management was held on 1st July, 2006 at Bidar
- 2) 11th Board of Management was held on 5th August, 2006 at Bangalore
- 3) 12th Board of Management was held on 27th October, 2006 at Bidar
- 4) 13th Board of Management was held on 16th January, 2007 at Bidar
- 5) 14th Board of Management was held on 18th February, 2007 at Bangalore

Revenue Generation and Expenditure during 2006-07



University Receipts for the year 2006-07



Revenue Generation and Expenditure During 2006-07

RECEIPTS AND EXPENDITURE

ABSTRACT ESTIMATES OF RECEIPTS

SL. No.	Particulars	Accounts for 2005-06		Budget for 2006-07		Revised Budget for 2006-07		Budget for 2007-08	
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan
I GENERAL FUNDS									
	Add Opening Balance	152.00	-	197.76	47.59	197.76	185.71	827.82	-193.62
1	Statutory Grants from State Govt.	-	1327.98	-	1278.95	-	1378.95	-	1330.10
A	Block Grants	-	-	-	-	-	-	-	-
B	Developmental Grants	349.86	-	700.00	-	700.00	-	500.00	-
C.	Establishment of Shimoga Veterinary College	-	-	844.00	-	844.00	-	480.00	-
D	Pharmacological & therapeutic evaluation of Cattle Urine	-	-	-	-	314.50	-	-	-
E	Establishment of Dairy Science College, Gulbarga	-	-	-	-	-	-	550.00	-
F	Establishment of Veterinary College, Hassan	-	-	-	-	-	-	600.00	-
G	Centre for wild life Veterinary Research	-	-	-	-	-	-	200.00	-
H	Refund of Gratuity & Commutation from Pension Fund	-	-	100.00	-	112.53	-	120.00	-
I	State Share of AICRP Poultry	-	-	-	-	-	-	11.90	-
	Total (I)	501.86	1327.98	1841.76	1326.54	2168.79	1564.66	3289.72	1136.48

II A) GRANTS FROM OTHER SOURCES, ICAR ETC.

1	AD-HOC Schemes Sponsored by GOK	11.33	-	-	-	51.98	-	-	-
2	Govt. of India	98.28	-	-	-	88.76	-	-	-
3	ICAR AD-HOC Projects (100%)	41.02	-	-	-	107.68	-	-	-
4	AICRP Projects (75:25)	47.74	-	48.08	-	46.08	-	-	-
5	Foreign Funded Projects	10.65	-	-	-	8.40	-	-	-
6	Schemes Sponsored by Other Agencies	60.44	-	-	-	53.17	-	-	-
7	DBT/DST Projects	83.63	-	-	-	118.15	-	-	-

B) ICAR DEVELOPMENTAL GRANTS

1	ICAR Developmental Grants	144.12	-	-	-	351.00	-	-	-
2	Senior Research Fellows	2.30	-	-	-	2.65	-	-	-
3	Junior Research Fellows	7.72	-	-	-	7.84	-	-	-
4	Internship	2.99	-	-	-	3.30	-	-	-
5	RAWI:	-	-	-	-	2.00	-	-	-
6	Construction of Farmer's Hostel	-	-	-	-	49.00	-	-	-
7	Undergraduate Instructional Dairy Plant	-	-	-	-	105.00	-	-	-
8	Merit Cum Means Scholarship	-	-	-	-	0.21	-	-	-
	Total Of (II (A) & (B))	510.22	-	48.08	-	995.22	-	-	-



III	INTERNAL RESOURCES								
1	Income from Fees	-	69.23	-	56.70	-	87.27	-	941.00
2	Income from University Property	-	57.93	-	23.96	-	23.98	-	30.00
3	Other Miscellaneous Income	-	58.55	-	38.75	-	38.75	-	30.00
	Total (II)	-	185.71	-	121.43	-	150.00	-	150.00
	Total (I + II + III)	1012.08	1513.89	1889.84	1447.97	3164.01	1714.66	3289.72	1286.48
	Debt & Suspense Account		191.64		134.18		1073.80		697.61
	Grand Total	1012.08	1705.33	1889.84	1582.15	3164.01	2788.46	3289.72	1984.12

ABSTRACT ESTIMATES OF EXPENDITURE

SL. No.	Particulars	Accounts for 2005-06		Budget for 2006-07		Revised Budget for 2006-07		Budget for 2007-08	
		Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan
1	GENERAL ADMINISTRATION								
1.	Salary of Officers	34.8		55.50		483.68		29.35	
2.	HTC/LTC Concessions	0.10	0.50			0.20		0.50	
3.	Contingencies	22.12	27.05			26.95		46.30	
4.	Construction of Compound Wall at Bidar	-				60.00		-	
5.	Provision for Payment of Gratuity & Commutation	54.40		100.00		112.53		120.00	
6.	Civil Works	171.79		479.74		243.77		616.28	
7.	Computerization of Accounts /Administration	19.31		12.37		12.37		13.00	
8.	Purchase of Office Furniture & Vehicles	28.27		43.00		36.85		20.00	
9.	Human Resources Development	0.18		-		-		-	
10.	Grants for sports Activities	4.75		5.00		11.75		12.35	
11.	Audit Fees	-		2.00		-		2.00	
12.	Developmental Works @ Deoni Cattle Breeding Station, Karanja	-		2.00		-		2.00	
13.	Salary of Service Personnel	8.13		25.00		28.50		50.00	
14.	Security Charges	-		-		-		-	
15.	Other Contingencies	-		-		-		-	
16.	TA to Seminars & Conferences	-		-		-		-	
17.	Regional Office @ Hobbal Campus	34.93		85.60		97.40		110.00	
18.	Maintenance of Vehicle/ Guest House/Water & Lighting/Security Charges etc.	9.69		34.75		59.80		57.55	
19.	Legal Charges/TA for Experts & TA to Seminars to Conferences	2.08		9.00		11.00		11.00	
20.	Pension Contribution		-		80.00		70.00		90.00
	Total (I)	349.86	57.02	824.01	135.50	613.97	640.83	1012.18	166.15

RESIDENTS								
	TEACHING							
1	Veterinary College Bidar	-	269.22	55.05	248.06	43.05	242.52	- 299.75
2	Veterinary College Hebbal	-	481.23	58.65	489.07	61.06	436.15	- 536.20
3	Fisheries College Mangalore	-	278.24	28.50	292.95	29.50	285.37	- 317.35
4	Dairy Science College Hebbal	-	174.86	14.05	205.41	22.65	192.82	- 198.95
5	Veterinary College Shimoga	-	-	844.00	-	610.65	-	713.35 -
6	Veterinary College Hassan	-	-	-	-	-	-	600.00 -
7	Dairy Science College Gulbarga	-	-	-	-	-	-	550.00 -
Total (II)		0.00	1203.55	1000.25	1235.49	766.91	1156.86	1863.35
III RESEARCH								
1	Deoni Cattle Breeding Station	-	8.75	5.00	12.87	5.00	20.02	- 27.45
2	MFR & IC Ankola	-	5.45	5.00	13.52	5.00	20.32	- 21.75
3	FRS Hessaraghatta	-	23.78	3.00	28.62	3.00	27.45	- 18.75
4	ARS Nagamangala	-	12.93	2.00	16.85	7.05	14.59	- 27.40
5	RRS, B.G. Kaval, Tiptur	-	16.50	3.00	20.45	3.00	23.40	- 22.60
6	IFR & IC Hebbal, Bangalore	-	-	-	-	-	4.81	- 26.30
7	Centre for Wild Life Veterinary Research	-	-	-	-	-	-	200.00 -
Total (III)		-	67.41	18.00	92.31	23.05	110.59	200.00
IV (A) GRANTS FROM OTHER SOURCES, ICAR ETC.								
1	AD-HOC Schemes Sponsored by GOK	11.33	-	-	-	51.98	-	-
2	Govt. of India	98.28	-	-	-	88.76	-	-
3	ICAR AD-HOC Projects (100%)	41.02	-	-	-	107.68	-	2.23
4	AICRP Projects (75:25)	47.74	-	47.58	-	46.08	-	35.68
5	Foreign Funded Projects	10.65	-	-	-	8.40	-	-
6	Schemes Sponsored by Other Agencies	60.44	-	-	-	53.17	-	-
7	DBT/DST Projects	83.63	-	-	-	104.19	-	13.96
8	Pharmacological & therapeutic evaluation of Cattle Urine	-	-	-	-	-	-	314.50-
IV (B) ICAR DEVELOPMENTAL GRANTS								
1	ICAR Developmental Grants	144.12	-	-	-	351.00	-	-
2	Senior Research Fellowships	2.30	-	-	-	2.65	-	-
3	Junior Research Fellows	7.72	-	-	-	7.84	-	-
4	Internship	2.99	-	-	-	3.30	-	-
5	RAWE	-	-	-	-	2.00	-	-
6	Construction of Farmer's Hostel	-	-	-	-	-	-	49.00
7	Undergraduate Instructional Dairy Plant	-	-	-	-	105.00	-	-
8	Merit Cum Means Scholarship	-	0.21	-	-	-	-	-
Total of (IV(A)+(B))		510.22	0.00	47.58	0.00	932.26	0.00	415.37
0.00								

Total (I + II + III + IV)	860.08	1327.98	1889.84	1463.30	2336.19	1908.28	3490.90	1662.65
Debt & Suspense Account		191.64		134.18		1073.80		697.64
Grand Total	860.08	1519.62	1889.84	1597.48	2336.19	2982.08	3490.90	2360.29
Closing Balance	152.00	185.71		-15.33	827.82	-193.62	-201.18	-376.17
Grand Total	1012.08	1705.33	1889.84	1582.15	3164.01	2788.46	3289.72	1984.12



Education

The Academic Council

As per the provisions made under Chapter - 4, Section - 29 of the KVAFSU Act-2004, the Academic Council of this University was constituted with the following members,

01.	The Vice-Chancellor	Ex-officio Chairperson
02.	The DI (PGS)	Member
03.	The Director of Research	Member
04.	The Director of Extension	Member
05.	Librarian, KVAFSU, Bidar	Member
06.	The Director, Dept. of AH&VS	Member
07.	The Director, Dept. of Fisheries	Member
08.	The Director, IAH&VB	Member
09.	The Dean, Veterinary, College, Bidar	Member
10.	The Dean, Veterinary College, Bangalore	Member
11.	The Dean, Veterinary College, Shimoga	Member
12.	The Dean, Dairy Sci. College Bangalore	Member
13.	The Dean, College of Fisheries, Mangalore	Member
14.	Head, Division of Veterinary Science	Member
15.	Head, Division of Poultry Science	Member
16.	Head, Division of Animal Science	Member
17.	Head, Division of Fisheries Science	Member
18.	Head, Division of Dairy Science	Member
19.	Prof. & Head, Dept. of Clinical Medicine, VCH	Member
20.	Prof. & Head, Dept. of Fish. Envir. & Ecol	Member
21.	Prof. & Head, Fish Processing Technology	Member
22.	Professor, Dept. of Aquaculture	Member
23.	Prof. & Head, Dept. of Dairy Econ. & Business	Member
24.	Prof. & Head, Dept. of Dairy Engineering	Member
25.	Assoc. Prof, Dept. of AGB, Veterinary College, B'llore	Member
26.	Professor, Dept. of Dairy Chemistry	Member
27.	Dr.Md.Hafeez, Dean (PGS) & Officer on Special Duty Sri Vekateshwara Veterinary University Rajendranagar, Hyderabad	Member
28.	The Registrar	Member Secretary

The Academic Council shall be in charge of the Academic affairs of the University. It shall subject to the provisions of the Act and Statutes; superintend, direct and control, and be responsible for the maintenance of standards of Instruction, Education, Examinations and the Conferment of Degrees or Award of Diplomas. It shall excise such other powers and discharge other duties as may be conferred or imposed on it by the statutes.

Academic Council Meetings

Academic Council met on 15th January 2007 and discussed the items

1. Ratified the evaluation schemes of BVSc & AH degree programme as recommended by the academic information and regulation committee meeting dated 21 & 22nd Nov. 2006 proposal for revision of remuneration to External Examiners, miscellaneous and other fees and recommended the same for Board of Management.
2. Ratified the evaluation scheme for Masters and Doctoral degree programmes as per the recommendations of the committee constituted for the purpose.
3. The Academic Council discussed the academic information and regulations governing BVSc & AH degree programme of the University for students admitted during 2005-06 onwards and recommended the same to the Board of Management.
4. The Academic Council approved the
5. The Academic Council approved the list of Doctoral / Masters and Undergraduates who have applied for receiving degree certificates in the first convocation (17-1-2007) and recommended the same for Board of Management.
6. The Academic Council reviewed the list of Gold Medalists as notified by the University and recommended the same to Board of Management for consideration.

I. Students admitted and College wise strength

A. Admission to various Under-Graduate programmes (2006-07)

Sl. No.	Degree Programme	College	No. of Students admitted
1	B.V.Sc&AH	Veterinary College Bangalore	75
2	B.V.Sc&AH	Veterinary College, Bidar	58
3	B.V.Sc&AH	Veterinary College, Shimoga	27
4	B.Sc (Dairy Science)	Dairy Sciences College Bangalore	25
5	B.F.Sc	College of Fisheries Mangalore	14



College wise Strength

Sl. No.	College Name	I Year	II Year	III Year	IV Year	V Year	Total
1	Veterinary College, Bidar	72	61	52	61	52	298
2	Veterinary College, Hebbal Bangalore	89	60	67	68	76	36
3	Veterinary College, Shimoga	30	New College started in the year 2006-07				30
4	Dairy Science College, Hebbal Bangalore	25	25	24	28	--	102
5	College of Fisheries, Mangalore	14	39	29	44	--	126

B. Post Graduate Programme

- ◆ Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar is having three major disciplines of post graduate programme leading to Masters and Doctoral programme, namely,
 1. Veterinary and Animal Sciences Faculty
 2. Dairy Sciences Faculty and
 3. Fisheries Sciences Faculty.
 The Faculties were located at various campuses namely, Bidar, Bangalore and Mangalore.
- ◆ There are 14 disciplines for Masters and 12 for Ph.D., programmes in Veterinary Sciences faculty at Bangalore Campus, where as 7 for Masters and 4 for Doctoral programme at Bidar Campus.
- ◆ There are 3 disciplines in Dairy Science faculty for Masters and Doctoral programme at Bangalore campus.
- ◆ There are 5 disciplines in Fisheries Sciences for Masters and Doctoral programme at Mangalore campus.
- ◆ PG students admitted through ICAR nomination are 16 and Foreign National student-1.
- ◆ No. of PG students admitted for PG programme during the year 2006-07 are 103 (85 Masters & 18 Doctoral).
- ◆ No. of students completed PG programme in Veterinary and Animal Sciences faculty during the year 2006-07 are 51 (45 Masters & 06 Doctoral).
- ◆ No. of students completed PG programme in Dairy Sciences faculty during the year 2006-07 are 14 (12Masters & 2 Doctoral).
- ◆ No. of students completed PG programme in Fisheries Sciences faculty during the year 2006-07 are 21 (19 Masters & 2 Doctoral).

Number of Students Completed the PG programme during the year 2006-07

Faculty of Veterinary and Animal Science, Bidar and Bangalore

Sl. No.	Subject	Bidar		Bangalore	
		M.V.Sc.	Ph.D.	M.V.Sc.	Ph.D.
1.	Animal Nutrition	--	--	07	--
2.	Veterinary Epidemiology and Preventive Medicine	02	--	--	--
3.	Veterinary Pathology	01	--	03	--
4.	Veterinary Microbiology	--	--	03	--
5.	Veterinary Surgery and Radiology	01	--	02	01
6.	Animal Genetics and Breeding	--	--	02	01
7.	Livestock Production and Management	--	--	03	--
8.	Poultry Science	--	--	05	01
9.	Veterinary Anatomy	--	--	01	--
10.	Animal Reproduction & Gynaecology Obstetrics	02	--	04	--
11.	Veterinary Medicine	--	--	03	--
12.	Veterinary Pharmacology	--	--	02	01
13.	Veterinary Physiology	--	--	02	01
14.	Veterinary Parasitology	--	--	02	01
	Total	06	--	39	06

Faculty of Dairy Science, Bangalore

Sl.No.	Subject	M.Tech	Ph.D.
1.	Dairy Technology	06	01
2.	Dairy Chemistry	06	-
3.	Dairy Microbiology	--	01
	Total	12	02

Faculty of Fishery Science, Mangalore

Sl.No.	Subject	M.F.Sc.	Ph.D.
1.	Aquaculture	02	01
2.	Fisheries Environmental and Ecology	04	-
3.	Fisheries Resources and Management	04	-
4.	Fishery Microbiology	08	01
5.	Industrial Fishery Technology	01	-
	Total	19	02



Number of Post-Graduate students admitted during the year 2006-07

Sl.No.	College Name	Masters	Doctoral
1.	Veterinary College, Bangalore	50	11
2.	Veterinary College, Bidar	11	-
3.	Dairy Science College, Bangalore	11	-
4.	College of Fisheries, Mangalore	13	07
	Total	85	18

List of Thesis accepted during 2006-07

List of Students who have completed the PG programme (2006-07) at Veterinary College, Bangalore

S. No.	Student Name	I.D. No.	Master / Ph.D.	Thesis Title	Dept.	Guide Name	Date
1.	George Chandy	PVK 303	Ph.D.	Studies on spinal fixation technique with and without decompression for traumatic posterior paralysis in dogs	Veterinary Surgery & Radiology (VSR)	Dr. M.S.Vasanth	13-11-2006
2.	Sumanta Nandi	PVK-248	Ph.D.	Studies on bioactivities of peptide (S) isolated from ovarian follicular fluid of sheep	Veterinary Physiology	Dr.V.GirishKumar	05-07-2006
3.	Mamtha G.S.	PVK-304	Ph.D.	Immunodiagnosis and Molecular characterization of sarcocystis species in cattle	Veterinary Parasitology	Dr.Placid E.D'Souza	13-11-2006
4.	Nataraju O.R.	PVK-305	Ph.D.	Economic impact of variation in dietary profile and duration of early feed restriction in broilers	Poultry Science	Dr.K.S.PratapKumar	13-11-2006
5.	Bindya Liz Abraham	PVK-301	Ph.D.	Prediction of egg production up to forty weeks of age from part records in colored broiler dam line (PB2)	ABGB	Dr. M.G. Govidaiah	18-11-2006
6.	C.R. Santhosh	PVK-306	Ph.D.	Pharmacokinetics of 17 A-hydroxyprogesterone caproate in cattle, buffalo, sheep and goat	Veterinary Pharm. & Toxi.	Dr. K. Jayakumar	16-12-2006
7.	Bhajantri Shankrappa	PVK-307	Master	Molecular genetic studies of MHC gene in Bandur and Hassan breeds of sheep	ABGB*	Dr. C.S. Nagaraja	2006
8.	Prayag H.S.	PVK-309	Master	Genetic differentiation of Bannur and Hassan sheep breeds by rapid	ABGB	Dr. M.R Jayashankar	24-04-2006
9.	Jaishanakar N.	PVK-312	Master	Influence of lysine producing probiotics (LPP) vis-A vis type of protein source on performance of broilers	Nutrition Animal	Dr. B.S. Venkatarami Dr. B.S. Venkatarami x	10-4-2006

* Animal Breeding, Genetics & Biostatics



S. No.	Student Name	I.D. No.	Master / Ph.D.	Thesis Title	Dept.	Guide Name	Date
10.	Manju G.U.	PVK - 313	Master	Effect of supplementation of lysine producing microbes vis-à-vis type and level of dietary protein on performance of post peak layers	Animal Nutrition	Dr. B.S.Venkatarami Reddy	05-07-2006
11.	Giridhar K.S.	PVK - 311	Master	Nutritional evaluation of detoxified honge (<i>Pongamia glabra</i> vent) seed meal in broiler rabbits	Animal Nutrition	Dr. R.G. Glori Doss	10-04-2006
12.	Temjennug Sang	PVK 314	Master	Long term effect of feeding honge (<i>Pongamia glabra</i> vent) seed meal based concentrate mixtures on the performance of stall fed male goat kids	Animal Nutrition	Dr. T.M. Prabhu	13-11-2006
13.	Nagaraju R.	PVK 420	Master	Prospects of humic acid based product in broiler rations	Animal Nutrition	Dr. B.S.Venkatarami Reddy	13-11-2006
14.	Syed Afsar Pash A.H.	PVK-422	Master	Nutritional evaluation of detoxified castor (<i>Ricinus communis</i>) bear meal in broiler rabbits	Animal Nutrition	Dr. T.M. Prabhu	14-02-2007
15.	Ramesh C.	PVK-421	Master	Preliminary study on the effect of humic acid based product through water in broilers	Animal Nutrition	Dr. R.G. Glori Doss	24-02-2007
16.	Manjunath G.L.	PVK-317	Master	Evaluation of protein sources for partitioning factor and their associative effects on fibre digestion in vitro	Livestock Products Management (LPM)	Dr U.Krishnamurthy	05-07-2006
17.	Siddeswara N.C.	PVK 458	Master	Effect of feeding <i>Moringa oleifera</i> at different levels on growth & performance of broiler rabbits	LPM	Dr. Y.B. Rajeshwari	12-03-2007
18.	AnupKumar P.K.	PVK 457	Master	Influence of supplementary diets with varying efficiency of microbial biomass synthesis on feed intake & nitrogen metabolism in cross bred dairy Heifers.	LPM	Dr. R. Bhaskaran	05-02-2007

S. No.	Student Name	I.D. No.	Master / Ph.D.	Thesis Title	Dept.	Guide Name	Date
19.	Indresh H.C.	PVK 444	Master	Evaluation of ameliorating effects of high grade bentonite (Ashafeed) on aflatoxicosis and combined toxicities of ochratoxin and T-2 toxin in broilers	Poultry Science	Dr. B. Umakantha	13-11-2006
20.	Ramesh A.	PVK 447	Master	Study of lipid profile & production performance in layers as influenced by herbal preparations abana™ and garlic paste	Poultry Science	Dr. T. Mune Gouda	13-11-2006
21.	Jomon Joseph	PVK - 346	Master	Genetic evaluation of two synthetic lines	Poultry Science	Dr. Prathap Kumar K.S.	03-05-2006
22.	Milad Manafi	PVK 445	Master	Efficacy of graded levels of high grade bentonite (Ashafeed) to lessen individual & combined toxicities of T-2 toxin and aflatoxin	Poultry Science	Dr. B. Umakantha	02-12-2006
23.	Ankur Shrivastava	PVK 443	Master	Evaluation of mitigating effects of high grade bentonite (Ashafeed) on performance and immune status of broilers, fed ochratoxin and aflatoxin	Poultry Science	Dr. B. Umakantha	19-12-2006
24.	Lakshmi Kantah T.R.	PVK-321	Master	Effect of ovarian follicular fluid of different species on in vitro maturation of caprine oocytes	ARGO*	Dr. M. Devaraj	10-04-2006
25.	Narasimha Murthy	PVK 454	Master	Studies on comparative efficacy of natural and a synthetic PGF _{2α} analogue for estrus induction in crossbred dairy cows	ARGO	Dr. M. Devaraj	13-11-2006
26.	Suchitra B.R.	PVK 456	Master	Influence of heavy metal,cadmium on buffalo oocyte & embryo Development in vitro	ARGO	Dr. T.G. Honnappa	15-12-2006
27.	Padmini Pradhan	PVK - 322	Master	Studies on termination of pregnancy in bitch with anti-progestins	ARGO	Dr.A.Krishna Swamy	05-02-2007
28.	Maheesh V.	PVK 452	Master	Studies on lensectomy with and without limbal sutures for cataract in dogs	VSR	Dr. M.S. Vasanth	13-11-2006

S. No.	Student Name	I.D. No.	Master / Ph.D.	Thesis Title	Dept.	Guide Name	Date
29.	Maruthi P.M.	PVK-354	Master	Comparision of ulnar osteotomy and radial stapling techniques for correction of carpus valgus in dogs	VSR	Dr. L. Ranganatha	18-04-2006
30.	Jouher Sulthana C.M.	PVK 432	Master	Studies on the prevalence of diseases of captive birds at Bannerghatta Biological Park	Veterinary Medicine	Dr. M. Narayan Bhat	13-11-2006
31.	Nelson M. Mathew	PVK 433	Master	Studies on recombinant DNA vaccine against rabies in dogs	Veterinary Medicine	Dr. Muralidhara A.	07-12-2006
32.	Ms. Seema C.G.	PVK 435	Master	Studies on peritoneal dialysis in renal failure in dogs	Veterinary Medicine	C. Ansar Kamran	26-03-2007
33.	Nirmala G.C.	PVK 450	Master	Toxicity studies of fungal isolates from sorghum straw in rats, mice and calves	Veterinary Pharmacol & Toxicol	Dr. N.B. Shridhar	26-03-2007
34.	Veena K.	PVK -451	Master	Toxicity study of fungal isolates from paddy straw in rats, mice and Calves	Veterinary Pharm. & Toxi.	Dr. N.B. Shridhar	18-12-2006
35.	Shivaraj Aralikatti	PVK- 431	Master	Amplification, cloning and expression of enolase gene in E. Coli.	Veterinary Microbiology	Dr. B.M.Veeregowda	04-01-2007
36.	Shivakumar R.	PVK -430	Master	Standardization of immuno capture elisa for bluetongue virus using Vp7 recombination protein	Veterinary Microbiology	Dr. S.M. Byregowda	2006
37.	A.K. Santosh	PVK 429	Master	Comparative evaluation of immune response of sheep and goats to sungr (IVRI) and Arasur strain (Tanuvas) of PPR vaccine viruses	Veterinary Microbiology	Dr. Shrikrishna Isloor	03-02-2007
38.	Prathiush P.R.	PVK 436	Master	Studies on Echinococcus granulosus in dogs with special reference to coproantigen detection	Veterinary Parasitology	Dr. Placid E.D'Souza	03-01-2006
39.	Prakash	PVK 427	Master	Evaluation of Escherichia coli biofilm vaccine in poultry broiler parents	Veterinary Parasitology	Dr.B.M.Veeregowda	05-03-2006

S. No.	Student Name	I.D. No.	Master / Ph.D.	Thesis Title	Dept.	Guide Name	Date
40.	Jayachandra K.C	PVK 438	Master	Studies on determination of prognostic value of AgNOR & proliferation antigen (Ki67) in mammary gland tumours of dogs	Veterinary Pathology	Dr. Suguna Rao	05-02-2007
41.	Dayananda T.S.	PVK 437	Master	Studies on proliferation and AgNOR indices in cutaneous & Subcutaneous neoplasms of dogs	Veterinary Pathology	Dr. Suguna Rao	18-04-2007
42.	Mallikarjuna A.R.	PVK 440	Master	Pathology of lymphoid organs in toxicity of aflatoxin B ₁ and T-2 toxin in chick embryos and its effects on progeny Performance	Veterinary Pathology	Dr. H.D.Narayan Swamy	09-12-2006
43.	S.V. Krishna Rao	PVK - 441	Master	Seed germination technique (Punyakoti test) to detect early pregnancy in cows	Veterinary Physiology	Dr. T. Veena	01-02-2007
44.	Sunitha Awate	PVK 442	Master	Isolation and identification of sperm maturation proteins in epididymis of bull	Veterinary Physiology	Dr. V.Girish Kumar	01-02-2007
45.	Nataraju G.N.	MVHK519	Master	Studies on morphology and cytoarchitecture of reticular formation of medulla oblongata in buffalo (<i>Bubalus bubalis</i>)	Veterinary Anatomy & Histology	Dr. R.V. Prasad	25-11-2006

*Animal Reproduction, Gynecology & obstetrics



**List of Students who have completed the PG programme (2006-07)
at Veterinary College, Bidar**

S. No.	Student Name	I.D. No.	Master / Ph.D.	Thesis Title	Dept.	Guide Name	Date
1.	Rajashekhar	PGS 03 VET-3267	Master	Epidemiological aspects of haemorrhagic septicaemia in Karnataka state	EPM*	Dr. S.Prasanna Kumar	02-08-2006
2.	Shatheesha S.P.	PGS 03 VET-3587	Master	Studies on certain aspects of vector capacity of colicoides species in relation to Bluetongue	EPM	Dr.K.Ganesh Udupa	10-05-2006
3.	Prakash S. Jattennavar	MVNK -509	Master	Urolithiasis in cattle with special reference to incidence & haematobiochemical changes in dionic tract	VSR	Dr. S.M. Usturge	14-06-2006
4.	Arunsingh H. Paradeshi	MVNK 502	Master	Therapeutic efficacy of herbal uterine cleanser and restorative tonic for the management of repeat breeder cow	ARGO	Dr. Suresh Honnappagol	09-08-2006
5.	Padmavati F. Doddamani	MVNK - 507	Master	Hormonal approaches for therapeutic management of repeat breeder crossbred cows	ARGO	Dr. Suresh Honnappagol	09-08-2006
6	Shankar B.P.	PGS O4 VET-3615	Master	Pathology of avian influenza in chickens	Veterinary Pathology	Dr. D.G.K. Rao	14-10-2006

*EPM- Epidemiology and Preventive Medicine

**List of Students who have completed the PG programme (2006-07)
at College of Fisheries, Mangalore**

S. No.	Student Name	I.D. No.	Master / Ph.D.	Thesis Title	Dept.	Guide Name	Date
1.	Vasanthakumar A.	PFK310	Master	Mascutoinization and progeny testing in the common carp, <i>Cyprinus carpio</i> (Linnaeus)	Aquaculture	N. Basawaraja	23-06-2006
2	Shreenivas	PFK309	Master	Effect of substrate on and survival of <i>Macrobrachium rosenbergii</i> (de Man) and <i>Labeo rohita</i> (Ham.)	Aquaculture	Dr. Joseph K. Maniserry	10-04-2006
3	Ganeshraj D.	PFK432	Master	Distribution of phytoplankton in relation to selected Hydrographic parameters in the haladi chakra estuary Coondapur udupi	FEE	Dr. R.J. Katti	18-11-2006
4	Abhishekkumar Mishra	PFK431	Master	Benthic Biodiversity of haladi chakra estuarine system Coondapur Karnataka	FEE	Dr. H.R.V. Reddy	18-11-2006
5.	Ramamoorthy C.	PFK-216	Master	Studies on the distribution of macro and meiobenthic fauna in relation to environmental factor in the sandy beaches along Mangalore coast	FEE	Dr. Ganadhara Gowda	10-04-2006
6.	Manjunatha R. Nayaka	PFK433	Master	Nutrient Profile of sediment and water in selected shrimp ponds	FEE	Dr. Ganadhara Gowda	10-04-2006
7	Deepali S.V.	PFK319	Master	Food and feeding of <i>sardinella longiceps</i> off Mangalore & histology of gill rakers	FRM		23-06-2006
8	Mahesh S.	PFK427	Master	Morphology, histology and functions of gill rakers and their relation to food and feeding in some demersal fishes off Mangalore coast	FRM	Dr. K.V. Radha Krishnan	18-11-2006
9	Nagarathna R.	PFK428	Master	Studies on some aspects of the biology of <i>saurid gracilis</i> (Quoy & Gaimard off Mangalore Coast	FRM	Dr. S. Benakappa	18-11-2006

*FEE - Fisheries Environment & Ecology

FRM - Fishery Resources & Management

S. No.	Student Name	I.D. No.	Master / Ph.D.	Thesis Title	Dept.	Guide Name	Date
10	Vivekananda Pandey	PFK-430	Master	Diversity, Abundance and food and feeding habits of fish from notified (potential Fishing zone, PFZ) and non notified areas off Mangalore coast	FRM	Dr. K.V. Radha Krishnan	04-12-2006
11	Divu D.	PFK421	Master	Development of micro satellite DNA Markers in macro brachium Rosenbergii	Fishery Microbiology	Dr. I. Karunasagar	18-11-2006
12	Raghu Patil J.	PFK314	Master	Vibriophages from aquatic environments	Fishery Microbiology	Dr. I. Karunasagar	18-11-2006
13	Siddarama A.P.	PFK424	Master	Evaluation of polymerase chain reaction (PCR) for rapid detection of V. Harveyi	Fishery Microbiology	Dr. I. Karunasagar	18-11-2006
14	Prashanth Vernekar	PFK423	Master	Detection of antibiotic residues in wild caught and cultured finfish and shellfish	Fishery Microbiology	Dr. I. Karunasagar	18-11-2006
15	Anilkumar H.A.	PFK311	Master	Factors affecting biofilm formation by V.harveyi	Fishery Microbiology	Dr. M.N. Venugopal	19-09-2006
16	Surendranath S.V.	PFK 425	Master	Isolation of Vibrio phages from aquaculture environments and study of their host range	Fishery Microbiology	Dr. I. Karunasagar	18-11-2006
17	Kirankumar B.S.	PFK 422	Master	Prevalence of Non Tuberculous mycobacteria in aquatic Environ	Fishery Microbiology	Dr. M.N. Venugopal	18-11-2006
18	Shamsundar K.R.	PFK 315	Master	Antibiotic resistant Vibrios in aquatic Environment	Fishery Microbiology	Dr. M.N. Venugopal	21-08-2006
19	Kiran N.G.	PFK 321	Master	Biotechnological approaches for the utilization of shrimp processing Waste and Bycatch	IFT	Prof. N.S. Sudhakara	21-08-2006
20	Ramesh K.S.	PFK - 404	Ph.D.	Evaluation of disease resistance mechanisms in stunted cirrhinus Mrigala	Aquaculture	Dr. Joseph K. Maniserry	28-10-2006
21	Shabarinath S.	PFK 304	Ph.D.	Molecular Characterization of Salmonella isolated from seafood	Fishery Microbiology	Dr. I.Karunasagar	02-12-2006

*IFT - Industrial Fishery Technology

S. No.	Student Name	I.D. No.	Master / Ph. D.	Thesis Title	Dept.	Guide Name	Date
22.	Miss.Kavitha.R.k.	PFK-313	M.F.Sc.	Salmonella in aquatic environment and its Significance	Fishery Microbiology	Dr.Indrani Karunasagar	2007
23.	Miss.Kumari Jyoti	PFK-435	M.P.Sc.	Utilization of low proceed fish for the Preparation of Noodles	Fish Processing Technology	Prof. N.S. Sudhakar	2006
24.	Mr.Kangku Oliver.N. Sangma	PFK-419	M.F.Sc.	Induced breeding fry rearing & early growth of Deccan Mahseer, Tor Kudree (Skyes)	Aquaculture	Dr. N. Basavaraj	2006
25.	Mr.Sharanappa Biradar	PFK-420	M.F.Sc.	Effect of dietary microbial phytase supplementation on growth, survival & body composition of <i>Macrobrachium rosenbergii</i> . (De Man)	Aquaculture	Dr. H. Shivananda Murty	2006
26.	Miss Pancy Sowmini, J	PFK-429	M.F.Sc.	Some aspects of the biology of the oil sardine <i>Sardinella longiceps</i> (Valenciennes) from the Mangalore coast.	Fisheries Resource and Management	Dr. S.M.Shivaprakash	2006
27.	Mr. Mahesh, G	PFK-426	M.F.Sc.	Morphology, histology and functions of the gill rakers and their relation to food and feeding in some pelagic fishes off Mangalore coast.	Fisheries Resource and Management	Dr. K.V. Radhakrishnan	2006
28.	Mr.Umesh K.R.	PFK-206	Ph.D.	Human enteric viruses associated with molluscan shellfish in coastal waters	Fishery Microbiology	Dr. M.N. Venugopal	2007

**List of Students who have completed the PG programme
(2006-07) at Dairy Science College, Bangalore**

S. No.	Student Name	I.D. No.	Master / Ph. D.	Thesis Title	Dept.	Guide Name	Date
1.	Veena R.	PDK309	Master	Enzymatic modification of Soy proteins & its application in frozen dairy products	Dairy Chemistry	Mr. C. Kempanna	26-04-2006
2.	Sunitha C.	PDK307	Master	Studies on nutritional evaluation of Caseinophosphopeptides (CPPs) isolated from	Dairy Chemistry	Dr. Narasimha Murthy	26-04-2006



S. No.	Student Name	I.D. No.	Master / Ph. D.	Thesis Title	Dept.	Guide Name	Date
3.	Pankaj Chettri	PDK-306	Master	Studies on the functional properties of Caseinophosphopeptides (CPPs) isolated from different sources	Dairy Chemistry	Dr. G.S. Bhat	26-04-2006
4.	Seenappa V.	PDK-308	Master	Enzymatic modification of whey components in the formulation of weaning food for milk allergic children	Dairy Chemistry	Mrs. Jayashree P. Hiremath	26-04-2006
5.	Amaravathamma	PDK 401	Master	Studies on mineral binding ability of Caseinophosphopeptides for enhancement of bio-availability	Dairy Chemistry	Dr. Narasimha Murthy	21-12-2006
6.	K. Suneetha Dev	PDK 403	Master	Studies on physico-Chemical sensory and textural characteristics of the confections Enriched with caseinophopeptides (CPPS)	Dairy Chemistry	Dr. Mrs. Jayashri P. Hiremath	12-01-2007
7.	Devaraja H.C.	PDK-312	Master	Enhancement of shelf life to enriched gulabjamun by microwave processing	Dairy Technology	Dr.B.V.Venkateshiah	26-04-2006
8.	Ashraf Unnisa	PDK-311	Master	Development of enriched & long shelf life Chhana Podo	Dairy Technology	Dr.B.V.Venkateshiah	30-06-2006
9.	Vijayendrakumar P.N.	PDK- 410	Master	Development of low calorie enriched diabetic Sandesh	Dairy Technology	Dr. B.V.Venkateshiah	15-11-2006
10.	Kusuma Rani	PDK406	Master	Formulation of functional weaning food utilizing whey protein concentrate and probiotics	Dairy Technology	Dr. H.M. Jayaprakash	10-01-2007
11.	Lokesh T.K.	PDK-407	Master	Development of enriched probiotic Yoghurt drink	Dairy Tech. Technology	Dr. B.V.Venkateshiah	21-01-2007
12.	Prabhushankara B.R.	PDK408	Master	Effect of concentration of milk on physico chemical & sensory characteristics of Burfi	Dairy Technology	Dr. H. G. Ramachandra Rao	29-03-2007
13.	H. Arun Kumar	PDK501	Ph.D.	Development of various paneer based spreads	Dairy Technology	Dr. H.G. Ramachandra Rao	05-07-2006
14	Manjunatha H.	PDK303	Ph.D.	Bacterial profile of microwave treated milks and indigenous Dairy products	Dairy Microbiology	Dr. P.A. Shankar	Dec. 2006

Awards and Recognitions

- ❖ Dr. M.G. Govindaiah was awarded the certificate of honour at the First Convocation of the KVAFSU, Bidar on 17.01.2007 for obtaining outside funded projects; was awarded "Bharathi Jyothi award" by India International Friendship Society on 06.05.2006 and awarded the certificate of honour for the second best poster presenting in SOCDAB conference on February 8-9 held at Ranchi, Jharkand.
- ❖ Devaraj, H.C., Venkateshaiah, B.V. and Tulasidas, T.N., 2005, Conferred 2nd prize for the presentation "Studies on the enhancement of shelf life of gulabjamun by microwave processing", ICFOST.
- ❖ Karthikeyan, S and Venkateshaiah, B.V., 2005, Conferred 3rd prize for presentation on "Application of continuous microwave processing and modified atmosphere packaging for enhancement of shelf life of paneer".
- ❖ Dr. I. Karunasagar has been selected as National Professor by the Indian Council of Agricultural Research (ICAR) during 2006 and selected as Fellow, National Academy of Agricultural Sciences (NAAS), New Delhi during 2006.
- ❖ Mr. Anuj Tyagi, Research scholar, received the University Gold Medal for 1st Rank in MFSc, Prof. H.P.C. Shetty Gold Medal and Prof. P. Tauro Gold Medal in Microbiology and Prof. H.P.C. Shetty Gold Medal for the best outgoing Fisheries Student in Masters programme in 2006.
- ❖ Mr. Divu, D., Research scholar received the University Gold medal for 1st Rank in MFSc, Prof. H.P.C. Shetty Gold Medal and Prof. P. Tauro Gold Medal in Microbiology during 2006.
- ❖ Dr. Shabarinath, S. Research Associate received the University Gold Medal during 2006-07.
- ❖ Dr. N.A. Patil received D.C. Blood Gold Medal instituted by Indian Society for Veterinary Medicine for the contribution made in the field of Veterinary Medicince during the National Symposium held at Pantnagar, Uttaranchal State during February, 2007.
- ❖ Dr. Vivek R. Kasaralikar received Hyderabad Race Club Gold medal for securing the Highest OGPA in Ph.D. in Veterinary Science at Acharya N.G. Ranga Agril. Univeristy, Rajendranagar, Hyderabad during March 2007.
- ❖ Dr. S.M. Usturge, D.I. (PGS), KVAFSU, Bidar has been awarded as Fellow of "National Academy of Veterinary Sciences (India)" for the year 2007.
- ❖ B.V. Shivaprakash was conferred K.N. Nage Gowda state level Samaj Seva Prashasti 2007; Karnataka Govt. Independence Day Award 2007 for Clinical Services rendered and Gold Medal for 2006 ,Poster session award by Indian Society for Veterinary Surgery (ISVS).
- ❖ S M Usturge: Gold Medal for 2006, Poster session award by ISVS (Indian Society for Veterinary surgery) and Gold Medal for 2006, "Large animal surgery session award by ISVS.
- ❖ D. Dilip Kumar: Gold Medal for 2006, "Poster session award by ISVS and Gold medal for 2006, "Large animal surgery session award" by ISVS.



- ❖ Dr. Shilpa, V.T. bagged the Dr.R.R.K. Shukla Award for Best M.V.Sc thesis in the National Symposium of IAVP, 2006.
- ❖ Dr. T. M. Prabhu - Selected for Dr. N.D. Kehar Award for the year 2002-03 by IVRI (Deemed University), Izatnagar.
- ❖ Best poster presentation award to K.V.Jamuna, O.K. Remadevi, T.M.Prabhu and K. Chandrapal Singh at the International Conference in Zoology, Bangalore University, Bangalore (November 19-22, 2006). Topic: Chemical composition and nutritive value of tree leaves for goats.
- ❖ Dr.Nirmala G.C MVSc student, Department of Pharmacolgy & Toxicology got the Young Scientist award in the V Annual Conference of ISVPT held at Patna during October 2006 for the paper entitled " Toxicity studies of fungal isolates obtained from sorghum straw in calves"
- ❖ Dr V.C.Murthy secured best paper presentation award in Animal Reproduction during IV International symposium on Canine Practice held at Nagpur during Feb. 7-9, 2007.
- ❖ Dr. K. V. Jamuna - Best Paper presentation Award for the article entitled "Nutritional evaluation of selected forest tree leaves by chemical, in vitro and in situ studies" at the International Conference in Zoology (INCOZ-2006) organized by Department of Zoology, Bangalore University during 19th - 22nd November, 2006.
- ❖ Best research paper award for the paper presented by Dr.H.A.Upendra and Dr.S.Yathiraj at National symposium of ISVM held at GBPUAT, Pantnagar 26th 28th February 2007.
- ❖ Dr. M.S.Vasanth, Professor and Head, Dept of Surgery & Radiology: Received an "Award of honour" for his contribution by the Indian Society for Advancement of Canine Practice during the Asian Congress on Canine Practice held during 7th to 9th February, 2007 at Nagpur, Maharastra.
- ❖ Dr. George Chandy, Asst Professor, Department of Surgery, and Dr. M.S.Vasanth Professor & Head, Department of Surgery & Radiology were awarded "Best Paper award" during the 30th Annual Congress of Indian Society for Veterinary Surgery and National Symposium on "Surgical Techniques for the benefit of livestock farmers and companion animals" during 2nd to 4th November, 2006 held at Bidar, Karnataka. Dr. George Chandy also received "Young Surgeon Award" during 30th Annual Congress Society.
- ❖ Dr. George Chandy, Asst Professor, and Dr. M.S.Vasanth Professor & Head, Dept of Surgery & Radiology were awarded "Best Clinical Paper" by Intas Polivet Vol 7 (1): 2006. Dr. George Chandy, also received "University Gold Medal for Ph D programme" during the First Convocation of the KVAFS University held on 17th January, 2007.

Veterinary College, Hebbal, Bangalore

1. STAFF PARTICIPATION IN SEMINARS / TRAININGS

Department of Animal Reproduction, Gynaecology and Obstetrics

- i. Dr.T.G.Honnappa, Associate Professor attended a training programme on "Learning Management Systems" conducted at the Indian Institute of Science, Bangalore from 18-04-06 to 24-04-06.
- ii. Dr.V.Chandrashekhar Murthy, Assistant Professor participated in winter school on "Reproductive Techniques to Augment Fertility in Dairy Animals" held in the Department of ARGO, Veterinary College, Hebbal, Bangalore from 01-12-2006 to 21-12-2006.

Department of Animal Breeding, Genetics and Biostatistics

Sl.No.	Date & place	Topic	Organizer of training programme
1.	Bangalore 07-06-2006	Talk on "Breeding policy for small ruminants" at the State level Workshop on "Strengthening Livestock Component in Watershed Programs: Concerns and Options" Dr. M.R. Jayashankar	LAN-K, Dept. of Watershed Development, Dept. of AH&VS, Veterinary College, Bangalore and KVC
2.	Kodagu, 21.12.2006	Talk on Conservation of indigenous cattle breeds and Crossbreeding Dr. C. S. Nagaraja	Dept. of AH&VS Kodagu District
3	Chitradurga 25-01-07	Talk on conservation of indigenous breeds Dr.M.R.Jayashankar	Dept. of AH&VS Chitradurga District

Department of Veterinary & A.H. Extension

Dr. K.Satyanarayan participated as a resource person in the following programme

Trainings

Sl. No.	Date	Training Programme
1	29/5/06 2/6/06	ASCAD training
2	12/6/06-16/6/06	ASCAD training
3	22/1/07-25/1/07	ASCAD training
4	5/2/07-9/2	ASCAD training

Sl. No.	Date	Topic
1	8/4/2006	Livestock farming & Development
2	29/4/2006	World Veterinarian's day & seminar
3	22/5/06	Karnataka Government Veterinary Doctor's Technical Seminar and Delivered a lecture
4	24/6 / 2006	Farmers meet arranged in People Trust



Guest lectures delivered

1. Under Watershed Programme, "On Importance of Livestock farming"
 - 17/6/05 at Gandagooligapura 50 farmers
 - 24/6/05 at Godludoddanahalli-55 farmers
 - 27/6/05 at Arebommanahalli 52 farmers
 - 29/6/05 at Boodhigere 60 farmers
 - 14/7/06 at Huluguriki 62 farmers
2. For trainees of the training programme conducted by Centre for Advanced studies Dept. of Veterinary Parasitology
 - 3/1/06 Extension services in KVAPSU
 - 20/1/06 Extension services in KVAFSU
3. For KAS candidates, on 21/11/2006, at Hebbal "Employment Opportunities to educated youth"
4. For NSS students, on 15/4/06 at Yelahanka "Role of Animal Husbandry in rural development"
5. For ASCAD trainees, on
 - 13/6/06, at Hebbal "Importance of Extension education in Animal Husbandry"
- * 26/7/06, "Piggery & Goat farming for Assam trainees"
- 23/8/06, "Piggery & Goat farming for Assam trainees"
6. 14/9/06, "Economic aspect of Piggery, Sheep, Goat & Rabbit rearing" for trainees of Agri-business.
7. For trainees during training programme in FTI,
- 22/6/06, "Importance of Sheep & Goat farming in Agriculture"
- 2/8/06, "Importance of Sheep & Goat farming in Agriculture"
- 24/11/06, "Importance of Sheep & Goat farming in Agriculture"
8. For Assam Trainees on 28/12/2007, "Pig and Goat Farming"
9. Bagalkot District Farmers on 21/1/2007, "Conservation of Indigenous Breeds of Livestock".
10. In ASCAD Training on 25/1/2007 & 7/2/2007, "Talk on Role of Extension in Animal Husbandry"
11. For FTI trainees, on 12/2/2007 "Improved Animal Husbandry Practices"

Department of Animal Nutrition

Sl. No.	Title	Organizer	Resource person/ participant
1	One Day Work Shop on "Livestock Environment and Development Issues pertaining to Karnataka" on 8 th April 2006	Media for Sustainable Development, Center for Environment Education Veterinary College, KVAFSU	Dr.R.G.Glori Doss Dr.T.M.Prabhu
2.	Technical seminar on "Conservation of local cattle breeds and cross breeding for dairy development"	Jersey Breeding Station, Kudige Coorg, 21 st December, 2006	
3.	Investment in Livestock Industry	KVAFSU, Bangalore and Haniyur Village (16.10.2006) World Food Day	Dr. K. Chandrapal Singh
4.	Importance of balanced feeding for indigenous breeds of cattle	Koppala District Agricultural Training Centre, Gangavathi and Dept. of AAH and VS, COK (19.12.2006)	Dr. K. Chandrapal Singh
5.	Feeding broiler rabbits	KVAFSU, Bangalore and DBT Project (Pouplarising broiler rabbit farming), New Delhi	Dr. K. Chandrapal Singh
6.	Specialized training programme on " Vermicompost production and dairying"	FTI, UAS, Bangalore 27 th Feb to 3 rd March 2007	Dr.T.M.Prabhu
7.	Five days specialized training programme under WYTEP on Vermicompost and Animal Husbandry	FTI, UAS, Bangalore March 2007	Dr.T.M.Prabhu
8.	Training programme on " Agri-clinics and Agri-business centres" for Agricultural graduates	UAS, Bangalore 16.08.2006 to 14.10.2006	Dr.T.M.Prabhu
9.	Five days specialized institutional training programme on Animal Husbandry under WYTEP for field functionaries, Dept. Of Agri., Bangalore	FTI, UAS, Bangalore 19-23 rd June, 2006	Dr.T.M.Prabhu
10.	Technical Seminar on "Amino Acid Nutrition in Poultry"	Degussa Pte.Ltd GERMANY at Hotel Park view	Dr.R.G.Glori Doss
11.	Workshop on Livestock, Environment and Development Issues pertaining to Karnataka	Center for environment Education at Veterinary College, Hebbal 8 th April 2006	Dr.T.M.Prabhu
12.	State level workshop on "Strengthening livestock component in watershed programmes: concerns and options"	SAMUHA at KVC, Bangalore 7-8 th June 2006	Dr.T.M.Prabhu
13.	Animal Health and Fertility camp at Narasipura, Nelamangala, Bangalore	KVAFSU 12 th November 2006	Dr.T.M.Prabhu
14.	National level training programme on "Advanced Nutritional Techniques for Optimizing Poultry Production"	CAS in Poultry Science, Veterinary College and Research Institute, Namakkal, Tamil Nadu 29.11.2006 to 19.12.2006	Dr.T.M.Prabhu



Department of Pathology

- i. ASCAD Training Programme for Veterinary Officers at Veterinary College, Bangalore, 29/5/2006 to 2/6/2006 and 12/6/2006 to 6/6/06 in 17x2 batches.
- ii. ASCAD Training Programme for Para-Veterinary Staff at Veterinary College, Bangalore, 22/1/07 to 25/1/07 and 4/2/07 to 9/2/07.
- iii. Scientists Training programme at Veterinary College, Bangalore.

Department of Veterinary Microbiology

(a) Trainings organized

- i. ASCAD training programmes were conducted for field Veterinarians as well as Livestock Inspectors of Dept of AH&VS in four batches as mentioned below (20 in each batch)
 - From 29.05.2006 to 02.06.2006
 - From 12.06.2006 to 16.06.2006
 - From 22.01.2007 to 25.01.2007
 - From 05.02.2007 to 09.02.2007
- ii. Training on "Techniques in Virology" was imparted to seven students of M.Sc. (Microbiology) & MSc. (Biotechnology) of CMRIT and Kristu Jayanti College, Bangalore from 01.07.2006 to 30.09.2006

(b) Trainings participated

- i. Dr. D. Rathnamma, Assistant Professor (SS) and I/c Head of the Department attended the ICAR Winter School on "Global Challenges in Vaccinology and Control of Animal Diseases-Strategies, Approach and Blue print" organized by the Dept. Of Veterinary Microbiology, Madras Veterinary College at Chennai from 01.12.2006 to 21.12.2006.
- ii. Dr. Shrikrishna Isloor, Assistant Professor

attended the DBT sponsored training program on "Biotechnological methods in Disease Diagnosis" organized by the Dept. of Biotechnology, Madras Veterinary College at Chennai from 24.01.2007 to 30.02.2007.

(c) Seminars / Lectures delivered in Training programmes

- i. Dr. D. Rathnamma, Assistant Professor (SS) and Head, delivered lectures on "Diagnosis and control of Anthrax in Livestock" for Veterinarians on 31.05.2006 and 14.06.2006 and on " Infectious Diseases of Livestock" in Kannada for Livestock Inspectors on 23.01.2007 and 07.02.2007 under ASCAD training programmes.
- ii. Dr. S. Isloor, Assistant professor, delivered lecture on "Trends in development of vaccines against Bovine Mastitis" for veterinarians on 02.06.2006 and 16.06.2006 under ASCAD training programmes.
- iii. Dr. B. M. Veeregowda and S. Isloor delivered a lecture on "Role of uterine defensive mechanisms in maintenance of normal reproductive process in dairy cattle" on 06.12.2006 at Winter School on 'Reproductive techniques to augment fertility in Dairy Animals' organized by Dept. of ARGO, Veterinary College, Bangalore

(d) Seminars/Lectures attended

- i. Seminar on "Gene chip Technology" delivered by Dr. M. M. Vijayan, Associate Professor & Research Head, Canada., was organized by the Forum of Fisheries Technologists, Hebbal at Veterinary College, Bangalore on 13.06.2006 was attended by staff and students of the department.
- ii. Seminar on "Pathogenesis of Brucellosis - An update" delivered by Prof Siba K. Samal, Assoc. Dean, USA., was organized by the Faculty Club, Veterinary College, Bangalore on 03.08.2006 was attended by staff and students of the department.

- iii. Seminar on "Prions; Strains and Interspecies transmission and detection" delivered by Dr. S. Srinand, Associate Professor, USA, was organized by the Faculty Club, Veterinary College, Bangalore on 11.08.2006 was attended by staff and students of the department.
- iv. Seminar on "Job opportunities in the Livestock sector in the Gulf region" delivered by Dr. K. B. Suresh, Animal Health Lab Manager, Saudi Arabia., was organized by the Faculty Club, Veterinary College, Bangalore on 10.01.2007 was attended by staff and students of the department.
- v. Seminar on "Graduate Studies in USA" delivered by Dr. Prema Arasu, Director, North Carolina State University., was organized by the Faculty Club, Veterinary College, Bangalore on 11.01.2007 was attended by staff and students of the department.
- vi. Seminar on "Animals and the nature of feeling good, animal behavior research" delivered by Dr. Jonathan Balcombe, Animal Behavior Research Scientist, Washington, USA., was organized by the Faculty Club, Veterinary College, Bangalore on 12.01.2007 was attended by staff and students of the department.
- vii. Seminar on "A regional policy dialogue on Agri-Biotechnology" organized by the International Food Policy Research Institute, USA and the South Asia Biosafety Program, India at the Park Hotel, MG Road, Bangalore on 16.03.2007 was attended by Dr. Shrikrishna Isloor, Assistant Professor of the Department.

Department of Pharmacology and Toxicology

- i. Dr.N.B. Shridhar, Assistant Professor participated in the 21 day winter school on "Reproductive Techniques to Augment

Fertility in Dairy Animals" held in the Department of ARGO, Veterinary College, Hebbal, Bangalore from 01.12.2006 to 21.12.2006.

Seminars/Lectures delivered in Training programmes

- i. Dr.N.B.Shridhar delivered a lecture on "Pharmacological induction of lactation in repeat breeder cows" on 12.12.2006 at Winter school on 'Reproductive techniques to augment fertility in Dairy Animals' organised by Dept. of ARGO, Veterinary College, Bangalore

Department of Livestock Production & Management

Dr. U. Krishnamoorthy, Professor and Head attended following programme,

- 1. IAEA Technical Cooperation Expert Mission on "Improving productivity of N'dama Cattle" Establishment of Nutrition Laboratory in University of Sierra Leone, Free Town, Sierra Leone 19-20 June 2006.
- 2. Role of sheep and goat in rural economy under the programme "Assistance to states for the control of Animal diseases" on 12.1.2007, FTI, Hebbal, Bangalore.
- 3. Winter School on "Reproduction Techniques to augment fertility in dairy animals" on 16.12.2006. Lecture on "Nutritional Approaches to augment fertility in dairy animals".
- 4. State level workshop on "Strengthening Livestock component in Watershed programme: concerns and options" Analysis of livestock production models for poor livestock rearing households.
- 5. 2nd Scientific Advisory Committee meeting of Kemin Nutritional Technology India Pvt. Ltd., Chennai chaired by Dr. Bhargava, Knowledge Commission, Govt. of India.



**Dr. R. Bhaskaran, Professor
Guest lecture delivered**

Sl. No.	Place & date	Officers / Farmers training	Title of the training programme	No. of participants	Organizer
1.	2.5.06	Farmers training, Bangalore rural district	WYTERP	40	UAS, Bangalore
2.	4.5.06	-do-	-do-	40	-do-
3.	12.5.06	Officers training	Establishment of dairy unit	30	UAS, B'lore Extension, AC&ABC cell
4.	29.5.06	Officers training	ASCAD training	25	Veterinary College
5.	4.6.06	Officers training	Strengthening of live-Stock components in watershed programme	60	-do-
6.	8.6.06	Officers training	-do-	60	-do-
7.	11.6.06	Officers training	ASCAD	25	-do-
8.	25.8.06	Officers training	Establishment of dairy unit	25	UAS extension AC&ABC Cell
9.	9.12.06	Officers training	Reproductive technique to augment Fertility	25	Dept. of ARGO, Veterinary College
10.	22.1.07 5.2.07	ASCAD training for VLIs 2 batches	ASCAD training	22 12	Veterinary College, Bangalore
11.	2.3.07	Farmers training	Dairying	12	FTI,UAS,Bangalore

Seminars Attended

Sl. No.	Place & date	Topic discussed	No. of Participants	Organizer
1.	8.4.06	Workshop on livestock and Development	50	Veterinary College
2.	26.4.06	Sujala Watershed Development	50	Veterinary College & Sujala Watershed Development Board
3	27.4.06	Sujala Watershed Development	50	-do-
4	21.5.06	Brain storming session	40	Veterinary College
5	2.6.06	Foundation stone laying function	60	Inland fisheries
6	6.6.06	World Environment Day	120	Alumni Association & Directorate of Extension
7	16.6.06	ASCAD training concluding function	30	Veterinary College
8	21.6.06	Challenges in food processing	35	Alumni Association
9	26.2.07	Advices to augment sheep production (MVSC students)	8 12	Dept. of LPM Dept. of Gynaecology and
10	5.3.07	Pregnancy diagnosis in bitches (Ph.D. seminar)		Obstetrics
11	9.2.07	Feeding of goats	6	Dept. of Nutrition

Dr. Y.B. Rajeshwari, Assoc. Professor attended the following activities,

1. Xth National Training programme on veterinary parasitology in focus with special reference to emerging diseases. Dept. of Veterinary Parasitology, UAS, Bangalore on 10-30th March, 2006 as a Resource Person.
2. WYTEP-programme FTI, "Mola sakanike bagge"
3. Kunapajala Traditional method of treating the animal waste. National Symposium on Emerging trends, some reflection and new dimensions in veterinary science and animal husbandry practices
4. VII Animal convention and national symposium. Indian Association of Lady

Veterinarians, College of veterinary Sci. & Animal Husbandry Anjora, during 20-22 Jan. 2007

S.B. Prasanna, Asst. Professor attended the following programme,

1. Delivered lecture on Mastitis and its control on 1.3.2007 at L. Muthakadahalli, conducted by Dairy Science College
2. Lecture given to VLI on Rural Veterinary Services on 5th Feb. 07, under ASCAD Training Programme.

Department of Livestock Products and Technology

Dr. Nadeem Fairoze - Delivered Lectures and demonstrations to participants of Agriclinic and Agribusiness programs on different aspect of LPT.

Department of Clinical Veterinary Medicine

Sl. No	Name	Date	Teacher	Remarks
1.	Officers training	18 th to 20 th April 06	Dr.H.A.Upendra participated in the program	Learning management system
2.	Women Farmers training	5.5.06 Bangalore	Dr.H.A.Upendra presented a talk.	Mastitis and clean milk production
3.	Officers training	1.6.06 Bangalore	Dr.H.A.Upendra presented two talks.	ASCAD training program
4.	Officers training	2.6.06 Bangalore	Dr.S.Yathiraj presented a talk on Diagnosis Therapy & Control of Bovine Mastitis	ASCAD training program
5.	Officers training	14.6.06 Bangalore	Dr.H.A.Upendra presented two talks	ASCAD training program
6.	Officers training	15.6.06	Dr.S.Yathiraj presented a talk on Diagnosis Therapy & Control of Bovine Mastitis	ASCAD training program
7.	Farmers training	25.11.06 Sorab	Dr.H.A.Upendra presented a talk on poultry management and nutrition	Rural development seminar presented a talk on poultry management and nutrition
8.	Farmers training	23.1.07 Bangalore	KVAFSU	Dr.H.A.Upendra presented a talk on metabolic diseases of animals
9.	Farmers training	22.1.07 Bangalore	KVAFSU	Dr.S.Yathiraj presented a talk on Pashuvaidhya parikshakara Tharabetti
10.	Farmers training	7.2.07 Bangalore	KVAFSU	Dr.H.A.Upendra presented a talk on metabolic diseases of animals



Sl. No	Name	Date	Teacher	Remarks
11.	Farmers training	25.1.07 Bangalore	KVAFSU	Dr.S.Yathiraj presented a talk on Rogagrastha PramigalaSushrushe
12.	Farmers training	5.2.07 Bangalore	KVAFSU	Dr.S.Yathiraj presented a talk on Pashu Aspathreyalli Shubrathe Mattu Nirvahane
13.	Farmers training	9.2.07 Bangalore	KVAFSU	Dr.S.Yathiraj presented a talk on Pranigala shushrushe
14.	National Training Programme	10 th to 30 th March 07	Veterinary Parasitology	Dr.C.Anzar Kamran
15.	Farmers training	29.3.07	Dept of Animal Health and Veterinary Services	Dr.H.K.Raghavendra Rao

Department of Veterinary Clinical Service Complex

1. Dr. R.Nagaraja, Assistant Professor & Head has attended the Xth National Training Programme on 'Veterinary Parasitology in Focus with special reference to Emerging Disease' sponsored by the ICAR and conducted by the Centre of Advanced Studies, Dept. of Parasitology, Veterinary College, Hebbal, Bangalore 24 from 10th to 30th March 2007.
2. Winter School on Reproductive techniques to augment fertility in dairy animals, Dept. of ARGO, Veterinary College, Hebbal, Bangalore, December 1-21st, 2006.

Department of Epidemiology and Preventive Medicine

Sl. No	Scientist	Date	Nature of activity	Title of the Topic	Venue
1.	M N Bhat	3-05-06	Talk to farm women	Infectious diseases of cattle & their prevention	FTI, Bangalore
2.	M N Bhat	29-05-06	Talk to Vets (ASCAD)	Diseases of wild animals in Karnataka	Veterinary College, Hebbal (VCH)
3.	M N Bhat	12-06-06	Talk to Para Veterinarians	Diseases of wild animals in Karnataka	VCH
4.	M N Bhat	22-06-06	Talk to Agricultural Officers of the field	Infectious diseases of & their control	FTI Bangalore
5.	M N Bhat	10-09-06	Talk to Field Vets	Infectious diseases of & their control in companion animals	FTI Bangalore
6.	M N Bhat	9-01-07	Talk at Conference of Vets of Bangalore Rural Dist.	Wildlife diseases	Devanahalli
7.	A.Muralidhar	24-01-07	Talk to Paravets (ASCAD)	Prevention & control of infectious diseases	VCH
8.	M N Bhat	25-01-07	Talk to Paravets (ASCAD)	Transmission of infectious diseases	VCH

Sl. No	Scientist	Date	Nature of activity	Title of the Topic	Venue
9.	A Muralidhar	8-02-07	Talk to Paravets (ASCAD)	Prevention & control of infectious diseases	VCH
10.	M N Bhat	9-02-07	Talk to Paravets (ASCAD)	Transmission of infectious diseases	VCH
11.	M N Bhat	2-03-07	Talk to farm Women (Self Help Group)	Infectious diseases of cattle & their prevention	FTI, Bangalore

Department of Surgery and Radiology

Sl. No	Place & Date	Officers Training/ Farming Training	Title of the Training Programme	Number of Participants	Organisers	Remarks
1.	IISc, Bangalore 19 to 20.4.06	Officers training	Learning management System	20	Indian Institute of Science, Bangalore	Attended by Dr. B N Nagaraja
2	18.1.07 to 7.2.07 TANUVAS,Chennai	National training programme	An update on diagnostic & therapeutic procedures in Veterinary practice	12	Madras veterinary college	Attended by Dr. B N Nagaraja

Department of Anatomy and Histology

Sl. No	Place & Date	Topic Discussed	Organizers	Remarks
1.	Bangalore 19/11/2006	Nutritional evaluation of selected forest tree leaves by chemical, <i>in vitro</i> and <i>in situ</i> studies	International conference in Zoology, Bangalore University	Best paper award
2.	Bangalore 22/02/2007	Reproductive Anatomy Basics For Successful Implementation of Reproductive Techniques	Department of AGRO, KVAFSU, Bangalore	



2. Deputation For Higher Studies

Dr. D. Rathnamma, Assistant Professor (SS) and Head, Department of Veterinary Microbiology is pursuing her Ph.D. studies on deputation from 28.02.2005 to 06.05.2006 and on part time from 22.05.2006.

Dr. B.N.Nagaraja has been pursuing Ph D studies on part time basis at Dept. of Surgery, Veterinary College, Bangalore.

3. NSS/Activites

National Service Scheme (NSS) is a programme sponsored by Government of Karnataka and Government of India based on Gandhian principle i.e. to utilize youth force for the country and for nation building activities.

There were two types of activities conducted by the NSS wing,

- i) Regular activities
- ii) Annual camp activities

Regular Activities

- 1. Two students namely, Devaraj and Vishwanath were deputed to attend interstate NSS camp held at Shimoga on 2/6/2006 to 12/6/2006 (10 days)
- 2. For the first year students an orientation lecture was delivered on the objective and methods of NSS.
- 3. Blood donation camp was organized by three NSS volunteer groups in Ghosia memorial hall on 5/3/07.

Annual special camp activities

Special camp was conducted at Veterinary College Hebbal for the final year students between 8-4-06 and 16-4-06 and about 77 students had participated in the programme.

Sports Activities conducted by Department of Physical Education, Veterinary College, Hebbal, Bangalore.

- 1. Conducted inter-class sports meet for hostel day celebration.
- 2. Conducted inter-class selection of candidates for inter-campus sports meet held at Mangalore.
- 3. Selected cricket team, trained them to participate in inter-campus cricket tournament and the students bagged runnership in both athletic meet and cricket tournament.

4. Hostel Activities

1. Veterinary College Hostel provides on-campus accommodation for boys of Veterinary College, Hebbal Campus, Bangalore. Both Undergraduate and Post-graduate students are provided accommodation in the same hostel at present. Efforts are on to establish a separate PG hostel for all post graduate students in the campus. The Hostel is managed by the Hostel Supervisory Committee with Dean (Veterinary) as the Chairman. The day to day activities of the Hostel are looked after by the Chief Warden and Warden with the help of General Secretary of the Hostel, who is elected by the student representatives. The two messes in the Hostel are run by the students, on no-loss no-profit basis. From among the residents of the Hostel, Prefects are selected each month to run the Vegetarian and Non-Vegetarian messes. The hostel provides a congenial atmosphere for study as well as co-curricular activities like indoor games, a reading room with ample number of news papers and magazines, a gym, two TV rooms with cable connections. To sum up, it is a home away from home for students coming from various parts of the state as well as students from other parts of the country and the globe.

5. Students Activities

1. Dr.Suguna Rao, Dr.L.Ranganath, Dr. M. Narayana Swamy and Dr. Sri Krishna Islloor served as Student Staff Advisors. All the staff members of this College have actively participated in all the students' activities.
2. Dr. K. Chandrapal Singh served as Editor for the Students Magazine (*Cloud-9*) of Veterinary students of batch 2001-06.
3. Dr. R.G. Glori Doss, Associate Professor, was in charge of registration of 1st year B.V.Sc. & A.H students of 2005-06 on 12th September, 2005 as a part of the student counseling
4. Dr.M.L.Satyanarayana served as the Chairman of the organizing Committee for Silver Jubilee Celebrations of B.V.Sc. Batch of 1981. The teachers who taught the undergraduate programme for 1981 batch were honored during the celebrations.
5. Dr A.H. Shuaib, Associate Professor worked as a Counsellor of the B.V.Sc. students
6. Dr. Placid E. D'Souza was the Editor for the students magazine 2006 'Manvanthara'.
7. Dr.M.Devaraj, Dr.A.Krishnaswamy and Dr.T.G.Honnappa served as counselors for BVSc and AH students of the College.

6. Special Guest Lectures Arranged

1. 03.08.2006: Prof.Siba Sanal, Associate Dean, Faculty of Veterinary Medicine, University of Maryland, USA.
2. 03.08.2006: Dr.Gireesh, R., Associate Professor, OHIO State University on "Brucellosis"
3. 11.08.2006: Dr.Srinand, University of Minnesota on "Prions"
4. 10.01.2007: Dr.Kambiranda Suresh on "Opportunities for Vets in Gulf"
5. 11.01.2007: Dr.Prema Arasan, Director,

International Programme, North Carolina University.

6. 12.01.2007: Dr. Jonathan Balcome, UK, on "Animal Behaviour"

7. Library & Information Centre, Hebbal

Keeping in view of providing more facilities and good atmosphere to the library clientele, the efforts were made to provide good service with the available resources of the library to the users.

The University with the help of the State Government and ICAR get library funds. The library has fulfilled general needs of the Teaching, Research and Extension staff and students of the University in general and Veterinary and Dairy Sciences Colleges in particular.

Acquisition

Two hundred thirty nine titles were added to the library and these books were procured through the funds made available by ICAR funds.

The Post Graduate and Ph.D students have submitted 65 (Sixty five) thesis to the library and these were added to the collection.

Technical

The newly added books and thesis have been classified and catalogued. The catalogue cards for the new books and thesis were prepared and merged in the main holdings, the books and theses were processed and added to the collection.

Circulation

Student membership

1. BV.Sc. & A.H.	:	242
2. B.Tech (Dairy Technology)	:	98
3. MV.Sc & M.Tech (Dairy Technology):	:	82
4. Ph.D.	:	29
Total	:	451



Use of Library

1. No. of Books issued	:	4132
2. No. of Books/Periodicals consulted	:	1,15,000
3. No. of Theses/Reports consulted	:	12,250
4. No. of visits by staff and students	:	44,776
5. No. of Introductory letters issued	:	118
6. No. of consultation	:	16

Details of amount collected from staff and students

1. Over due charges	Rs :	12,322.00
2. Book lost cost recovered	Rs :	387.00
3. Loss of readers tickets	Rs :	520.00
4. Text book bank	Rs :	750.00
5. CD-ROM service charges	Rs :	1,260.00
6. Outsiders consultation charges	Rs :	400.00
Total	Rs :	15,639.00

Text Book Bank

1. Total no. of books	:	391
2. Total no. of members	:	85
3. Total no. of books issued	:	150
4. Total amount collected	:	750.00

SC/ST and Text book bank

1. Total no. of books (SC/ST Text book bank)	:	599
2. Total no. of books (ST text book bank)	:	75
3. Total no. of members	:	68
4. Total no. of books issued	:	136

Periodicals

1. Total no. of Periodicals (Foreign & Indian) subscribed for 2007	:	19
2. VET-CD and FSTA Database subscribed for 2007	:	2

CD-ROM services

The staff and post graduate students have used VET-CD for their research purpose and the information required was downloaded.

1. Total no. of request received	:	126
2. Total amount collected	Rs. :	1260.00

Photocopy Service

The Xerox service has been provided in the library through private agency for the benefit of staff and students.

8. Research Activities

Department of Animal Reproduction Gynaecology and Obstetrics

1. A study involving invitromaturation of caprine oocytes with ovarian follicular fluid of buffalo, sheep and goat indicated that the follicular fluid of all these species could be successfully used as a replacement for synthetic media (TCM 199) for invitro maturation of caprine oocytes with all other conditions remaining same. Further, caprine follicular fluid was found to be superior to that of sheep and buffalo follicular fluid.
2. A study was conducted to ascertain the effective dose of natural (Dinoprost Tromethamine) and synthetic (Cloprostolen sodium) PGF2 alpha to induce estrus in crossbred dairy cows by two routes of administration namely IM and IVSM route (Intravulvulo submucosal). The results indicated that Dinoprost Tromethamine at the dose of 12.5 mg by IM and 6.25 mg by IVSM route could effectively induce estrus comparable to that of normally recommended dose of 25mg. Similarly, CLP (Cloprostolen sodium) at 250 µg by IM and 125 µg by IVSM route was effective comparable to normally recommended dose of 500 µg.

3. A study conducted has indicated the suppressing effect of cadmium on oocyte maturation, fertilization and early embryonic development in buffaloes. Cadmium could be one of the major environmental pollutants causing infertility in farm animals grazed on contaminated areas.
4. A study was conducted to ascertain the efficacy of oral antiprogestins along with intravaginal administration of PGE to induce abortion in bitches. A single oral dose of Mifepristone (antiprogestins) at 20mg/kg body weight along with 400 µg Misopristol (PGE) intravaginally was effective in inducing abortion during mid and late pregnancy in bitch. However, the same treatment was not effective to induce abortion during early pregnancy.
5. Various aspects of invitro embryo production (IVEP) with oocytes obtained by OPU technique (Ultra sound guided vaginal oocytes aspiration) and cryopreservation of

invitro produced buffalo embryos was studied. The OPU at twice a week was more successful than OPU once a week in terms of available follicles for aspiration, oocytes harvested and transferable embryos obtained. Further, twice a week OPU was more successful during peak breeding season compared to low breeding season. Administration of PMSG nullified the seasonal effect. Vitrification with EG+DMSO was found to be suitable for cryopreservation of embryos. Further, addition of cytochalazin B improved vitrification. The oocytes which were BCD positive showed better results in terms of Cleavage and blastocyst production than BCD negative oocytes. The Presence of a dominant follicle and CL yielded low cleavage rate compared to ovaries with no dominant follicle. Addition of antioxidants like cystamine, melatonin and taurine tested at all doses yielded significantly higher transferable embryos.

Department of Animal Breeding, Genetics and Biostatistics

1. Completed Research Project

1	Title of the project	Survey, Characterization and Evaluation of Mandya breed of Sheep
2	PI (Name & Address)	Dr. M.G.Govindaiah, Dean, Veterinary College, Bangalore
3	Funding Agency	Network Project on Animal Genetic Resources, From ICAR, New Delhi through National Bureau of Animal Genetic Resources, Karnal
4	Duration	Two year : 2004 -05 to 2005 - 06

2. Ongoing Research Project

1.	Title of the project	Survey, Characterization, Evaluation and Conservation of Hallikar cattle breed.
2.	PI (Name & Address)	Dr. M.G.Govindaiah, Dean, Veterinary College, Shimoga
3.	Funding Agency	Indian Council of Agriculture Research, New Delhi
4.	Duration	Three years : 2006-07 to 2008-09



3. New Project

1.	Title of the project	Herd Registration and Field Performance Recording in Indigenous Cattle Breeds of Karnataka
2.	PI (Name & Address)	Dr. M. R. Jayashankar, Professor and Head, Dept. of ABGB, Veterinary College, Hebbal, Bangalore -24
3.	Funding Agency	Karnataka Livestock Development Agency, Department of Animal Husbandry and Fisheries, Government of Karnataka, Bangalore
4.	Duration	Three years

Department of Pathology : Ongoing PG Students in the Department

Sl. No.	Name of the student	Year of Admission	Master/ PhD	Name & Designation Of Major Advisor
1.	Anitha N	2005-06	Masters	Dr.H.D.Narayanaswamy
2.	Jyothilakshmi	2005-06	Masters	Dr.M.L.Satyanarayana
3.	Pradeep Kumar P G	2005-06	Masters	Dr.Suguna Rao
4.	Senthil Kumar D	2005-06	Masters	Dr.Suguna Rao
5.	Ravikumar Hukkeri	2005-06	Masters	Dr.H.D.Narayanaswamy
6.	S R Krupesha Sharma	2004-05	PhD	Dr.M.L.Satyanarayana
7.	B Umakanth	2005-06	PhD	Dr.R.N.Sreenivas Gowda
8.	G M Jayaramu	2005-06	PhD	Dr.M.L.Satyanarayana
9.	Shankar B P	2005-06	PhD	Dr. H.D.Narayanaswamy
10.	Ravikumar P	2005-06	PhD	Dr.Suguna Rao
11.	Manjunatha K P	2006-07	Masters	Dr.Suguna Rao
12.	Kishore T K	2006-07	Masters	Dr.H.D.Narayanaswamy
13.	Dharanesh N K	2006-07	Masters	Dr.H.D.Narayanaswamy
14.	Saravesha K	2006-07	Masters	Dr.M.L.Satyanarayana

Department of Veterinary Microbiology

1. Development of Biofilm based vaccines against important bacterial diseases of Livestock and Poultry
2. Standardization of Indirect ELISA for serodiagnosis of Canine Leptospirosis
3. Application of Enolase FMD viral antigen fusion protein as mucosal vaccine.
4. Molecular characterization of E.coli isolated from Bovine Mastitis cases.
5. Isolation and Characterization of Bacterial Pathogens from chicken meat
6. Evaluation of immune response in calves against recombinant BCG vaccine.

7. Development of recombinant antigen based diagnostic tools for the detection of Avian Mycoplasma Infections.

Department of Veterinary Pharmacology and Toxicology

The department is involved in regular screening of the plant samples for the presence of cyanide, nitrate and other toxic principle content and giving information to the field veterinarians and farmers. Screening of various samples sent by the veterinarians for the detection of the OPC, OCC, synthetic pyrithroids, zinc phosphide, aluminium phosphide etc.

Department of Livestock Production and Management

Dr. U. Krishnamoorthy, Professor and Head

1. Rumen microbial biomass synthesis and fibre digestion: 1. Feed factors affecting partitioning of fermentable organic matter between microbial biomass and fermentation water products. Sponsored by the Dept. of Biotechnology, Govt. of India. Duration: Dec. 2003 to June 30, 2007. Budget: Rs.42.89 lakh

Dr. R. Bhaskaran, Professor

1. DBT Project on Ruminal Microbial biomass synthesis project Associate
2. DBT Project on Rabbits to improve the economic status of rural women project associate
3. Influence of supplementary diets with varying efficiency of microbial biomass synthesis on feed intake and nitrogen metabolism in Crossbred dairy heifers PG research

Department of Livestock Products & Technology

"Contract Farming of Poultry in India: Partnership to promote the environmentally friendly and equitable intensification of small holders market-oriented livestock production".

Funding agency : International Food Policy Research Institute (IFPRI), Washington, D.C

Total funds sanctioned : US\$ 9775.

Staff projects

Department of Pathology Diagnostic Work

This department has been regularly providing post mortem and laboratory diagnostic facilities of livestock and poultry to farmers, clinicians, Insurance companies, Turf club, University of Agricultural Sciences etc.

Department of Veterinary and Animal Husbandry Extension

posed a research project on "Evaluation of the Training Programme for Women Livestock

Farmers of Sujala Watershed Programme"

9. ICAR Funded Projects

Department of Animal Breeding, Genetics and Biostatistics -2 Projects

10. Projects Funded By Different Sources Other than ICAR

Department of Animal Breeding, Genetics and Biostatistics -1 Project

Department of Pathology

Three new research projects have been proposed to DST, NABARD and private agencies from this department.

Department of Animal Nutrition

Title : Studies on Efficacy of 'Provet', a humic acid based feed supplement in broiler chicken

Principal Investigator : Dr.R.G.Gloridoss

Funding agency : M/s Wigreen Agricare Pvt. Ltd., Kolkatta.

Budget: Rs.36,000/- + Chicks and feed ingredients

Department of Veterinary Microbiology

DBT funded projects

(a) Development of Biofilm based vaccine against mastitis causing *Staphylococcus aureus* and *Escherichia coli* organisms in Bovines.

Total Budget: Rs.30.17 lakh

(b) Development of recombinant antigen based diagnostic tools for the detection of Avian Mycoplasma Infections

Total Budget: Rs.38.90 lakh

Department of Veterinary Pharmacology and Toxicology

1. Obscure disease of cattle and buffaloes of Karnataka: Studies on cause and cure- 80 lakh

2. Toxicity studies of *Asteracantha longifolium* and its preparations - 2.4 lakh

3. Cattle disease and death in Malnad areas: Studies on cause and cure - 51 lakh

4. Pharmacological evaluation of cow urine - 3.2



Crores

Department of Livestock Production & Management

By Dr. U. Krishnamoorthy, Professor and Head

Rumen microbial biomass synthesis and fibre digestion: 1. Feed factors affecting partitioning of fermentable organic matter between microbial biomass and fermentation water products. Sponsored by the Dept. of Biotechnology, Govt. of India. Duration: Dec. 2003 to June 30, 2007. Budget: Rs.42.89 lakh

By Y.B. Rajeshwari, Assoc. Professor

Improving the economic and health status of rural people through backyard rabbit rearing. Sponsored by the Dept. of Biotechnology, Govt. of India.

Department of Surgery and Radiology

Title : Reconstruction of Temporo-Mandibular (TM) Joint Using Distraction Osteogenesis in Dogs.

Funding Agency : Centre for Cranio-Facial Research, Deccan Institute of Advanced Studies, Bangalore.

Name of the Scientists : M.S. Vasanth, B.N.

11. International Agency Funded Projects

Department of Livestock Products & Technology

A project was funded by the International Food Policy Research Institute (IFPRI)

Crops grown in farms

Sl. No.	Crop	Area		Yield in Tons
		Rainfed	Irrigated	
1.	South African tall	13.5	-	364 tons
2.	Yellow maize	-	3.0	183 tons

12. Livestock Activities

Department of Veterinary and A.H Extension

On March 22nd 2007 the Department organized the inauguration of Haniyuru integrated Animal Husbandry Development Project activities and also organized an Animal Health Camp.

Department of Clinical Veterinary Medicine

Participated in Animal Health Camps, Disease investigation, Diagnosis and Treatment.

Department of Veterinary Clinical Service Complex

Treatments performed

Sl. No	Particulars	Bovine	Canine	Others	Total
1.	Medicine	2383	1902	633	4918
2.	Surgery	428	453	158	1039
3.	Gynaecology	1232	-	-	1232
4.	Vaccinations	340	908	310	1558
	Total	4383	3263	1101	8747

Department of Surgery and Radiology

The Department of Surgery and Radiology being part of the Veterinary college hospital, Hebbal, is managing the Surgical wing of the hospital in the service of animals, their owners and the farmers and the figures for 2006-07 are as follows,

Number of out patient cases treated	:	8926
Number of surgical inpatients	:	289
Number minor surgical procedures	:	1137
Number of Major surgery conducted	:	873
Number of X-rays taken	:	2552

13. Fisheries Activities: Carriedout at Hebbal Campus

Research Activities

- * The genetic evaluation study of *Labeo fimbriatus* stocks for aquaculture indicated that Cauvery stock was found to be superior to Tungabhadra and Vedavathi stocks of *fimbriatus* under both mono and polyculture systems.
- * Studies on development of molecular markers and their application in breeding programme for common carp, *cyprinus carpio* resulted in introduction of genetically superior strain of Common carp 'Amur' for commercial production.
- * Fisheries research study in selected tanks of Northern Karnataka districts indicated better growth performance of Common carp followed by Silver carp and Catla with an average production of about 1315 kg / ha / year at a stocking density of 1500 stunted fingerlings / ha.

Extension activities

- * Fingerlings of different cultivable fish namely, catla, rohu, mrigal, silver carp, grass carp, common carp and *fimbriatus* (3.83 lakh, nos.) and ornamental fishes (7736 no) were supplied to the farming community / aquaria's under revolving fund for "Commercialization of aquaculture production technologies" earning a receipt of Rs.4.25 lakh during the year.

- * Delivered six guest lectures on "Integrated Fish Farming" to the trainees of Agri. Entrepreneurs from Assam organized by FTI, UAS(B).
- * Participated in Krishimela held at GKVK from 17th to 29th November 2006.
- * Extended technical services fish culture and managemental activities to the farmers, students and other visitors of the station.

14. Linkage and Collaboration in India and Abroad

Funded Projects

Department of Livestock Production and Management

By Dr. U. Krishnamoorthy, Professor and Head

1. Collaboration with Dept. of Animal Nutrition, Veterinary College, Bidar.
2. Nimbkar Agriculture Research Institute.
3. International Atomic Energy Agency
4. Dept. of Biotechnology, Govt. of India

15. Krishimelas and other Extension Activities

Department of Animal Reproduction Gynaecology and Obstetrics

A. Visits to Semen banks and farms

1. All staff members of the department participated in Krishi Mela - 2006 organized jointly by UAS (B) and KVAFSU at GKVK, Bangalore from 17.11.2006 to 20.11.2006
2. Dr. A.Krishnaswamy participated in the dog show organized by Kennel Club of Raichur on 10.12.2006.
3. Dr.T.G.Honnappa, Associate Professor participated in a discussion on Invention in Agriculture for food Security organized at Hanniyur village on the eve of World Food Day on 16.10.2006.
4. Staff and PG students of the Department participated in a pet care health camp and awareness programme organized by the NGO



Rashtra Bandhu at JP Nagar, Bangalore on 24.09.2006

5. Dr.M.Devaraj, Professor and Head attended culling committee meeting and examined bulls listed for culling at Nandini Sperm Station, KMF, Kakolu on 06.04.2006.
6. Dr.T.G.Honnappa, Associate Professor visited Nandini Sperm Station to examine the bulls on 20.07.2006.
7. Dr.M.Devaraj, Professor and Head attended culling and auction committee meeting at CFSP and TI, Govt. of India, Hessarghatta on 05.09.2006.
8. Dr.M.Devaraj, Professor and Head attended culling and auction committee meeting at CCBF, Govt. of India, Hessaraghatta on 30.10.2006
9. Dr.M.Devaraj, Professor and Head participated in culling and auction committee meeting at CFSP and TI on 10.01.07.
10. Dr.M. Devaraj Professor and Head participated in auctioning of uneconomic cattle at KVAFSU Dairy Farm, Hebbal, Bangalore on 28.03.2007.

B. Guest lectures to trainee Veterinarians

1. Dr.A.Krishnaswamy, Professor delivered a lecture on Ultrasound Technique in Veterinary Practice at the Technical Meeting organized by Karnataka Veterinary Association at Mysore on 28.04.2006
2. Dr.M.Devaraj, delivered a lecture on Diseases Transmitted through Artificial Insemination and Embryo Transfer and their control at the ASCAD training programme on "Diagnosis and Control of Animal Diseases" held at Veterinary College, Bangalore during 29.05.2006 to 02.06.06 (First batch).
3. Dr.M.Devaraj, delivered a lecture on Diseases Transmitted through Artificial Insemination and Embryo Transfer at the ASCAD training programme to the field Veterinarians on
4. Dr.A.Krishnaswamy, Professor delivered a lecture on Ultrasound Technique in Veterinary Practice at Technical Meeting organized by KVA, Belgaum on 05.06.2006.
5. Dr.A.Krishnaswamy, Professor delivered a lecture on Ultrasound Technique in Veterinary Practice at Technical Meeting organized by KVA at Hubli on 21.06.2006
6. Dr.M.Devaraj delivered a lecture on "Nutritional Requirements for better Reproduction" at the training programme on Management of field AI activities and infertility organized at CFSP and TI , Hessarghatta, Bangalore on 28.08.2006
7. Dr.A.Krishnaswamy delivered a lecture on "Management of Gestational and Puerperal Disorders" at the training programme on Management of field AI activities and infertility organized at CFSP and TI , Hessarghatta, Bangalore on 28.08.2006
8. Dr.M.Devaraj delivered a lecture on "Nutritional Requirements for better Reproduction" at the training programme on Management of field AI activities and infertility organized at CFSP and TI, Hessarghatta, Bangalore on 20.09.2006
9. Dr.A.Krishnaswamy delivered a lecture on "Management of Gestational and Puerperal Disorders" at the training programme on Management of field AI activities and infertility organized at CFSP and TI, Hessarghatta, Bangalore on 20.09.2006
10. Dr.M.Devaraj presented a paper on "Advances in Treatment of Endometritis in Cattle" at KVA meeting held at Mandya on 16.09.2006
11. Dr.A.Krishnaswamy delivered a lecture on "Advances in Obstetrics" at the technical seminar organized by KVA, Davanagere on 06.01.2007.

C. Fertility Camps Attended

Different teachers of the Department attended fertility camps along with post graduate students

Sl. No.	Date	Teacher (s)	Place	No. of cases
1.	23.04.2006	Dr.M.Devaraj & Dr.T.G.Honnappa	Devanahalli	150
2.	27.04.2006	Dr.M.Devaraj & Dr.T.G.Honnappa	Yelahanka	120
3.	02.05.2006	Dr.M.Devaraj & Dr.A.Krishnaswamy	Mylanalli, B'lore north	185
4.	13.06.2006	Dr.A.Krishnaswamy	Santhekallahalli, Chintamani Tq	80
5.	22.08.2006	Dr.T.G.Honnappa	Talguppa, Sagar tq	54
6.	23.08.2006	Dr.T.G.Honnappa	Sirasi	68
7.	12.11.2006	Dr.V.Chandrashekaramurthy	Narasipura, Nelamangala	75
8.	08.12.2006	Dr.T.G.Honnappa	D.Hossalli, Mandya	78
9.	30.12.2006	Dr.M.Devaraj and Dr.T.G.Honnappa	Nandhini, Kakolu, B'lore north	10
10.	20.01.2007	Dr.T.G.Honnappa and Dr.V.Chandrashekaramurthy	Arakere, Mandya	143
11.	21.01.2007	Dr.M.Devaraj and Dr.A.Krishnaswamy	Lepakshi	47
12.	10.02.2007	Dr.A.Krishnaswamy	Chandagalu, Mandya	120
13.	16.02.2007 to 19.02.2007	Dr.T.G.Honnappa	Sagar and Sirsi areas	120
14.	02.03.2007	Dr.T.G.Honnappa	Muthuakada Halli, Siddalaghatta	145
				Total 1395

Department of Animal Breeding, Genetics and Biostatistics

Participated in the Krishimela held at GKVK on 17, 18 and 19th November, 2006. Dr. M. R. Jayashankar organized the cattle show at the Krishimela.

Department of Veterinary & Animal Husbandry Extension:

All the staff of AHE department attended the Krishimela during 17.11.06-20.11.06.

Health Camps

S.No.	Date	Place	Organized/participated
1.	16/10/2006	Narasipura	Organised by AHE
2.	3/12/2006	Addhiganahalli	Organised by AHE
3.	22/3/2007	Hanniyuru	Orgnaised by AHE

Radio Talks / TV Programme

S.No.	Name of the Scientists	Place	Date of Broadcast/Telecast & Station
1.	Dr.K.Satyanarayan	Prospects in Veterinary & Dairy Science for Outgoing students of XII/PUC	Telecast under Yuvabharath Programme in ETV channel
2.	Dr.K.Satyanarayan	On Pig farming	Telecasted in ETV



Department of Animal Nutrition

All the Staff of the Department of Animal Nutrition participated in the "Krishimela-2006" jointly organized by the UAS, Bangalore and KVAFSU, from 17th to 20th November, 2006 at GKVK as Resource Person/Subject Matter Specialist.

Department of Pathology

Staff and post graduate students of the department participated actively in the Krishimela conducted by UAS & KVAFSU during Nov. 2006 at GKVK, Bangalore.

Consultancy: field visits/by phone/by mail/in person

S.No.	Date	Place / Number of farmers	Problems tackled
1.	26-04-06	Konanur, Hassan Dist.	1. 6 tiger skins 2. 50 bladders (Skin bags) Musk Deer 3. 25 Canine teeth (wild boar) (suspected)
2.	27-04-06	Newtharagupet police station, Bangalore	1 tiger skin (Suspected)
3.	09-05-06	Kollegal Police Station, Mysore Dist	Bones (Skull, Mandible, Vertebral column & Limbs) of Tiger (Suspected)
4.	19-06-06	Dabaspet Police Station, Nelamangala, Bangalore	3 Tiger skins (Suspected)

Department of Clinical Veterinary Medicine

Staff members of the department participated in the Krishi Mela organized by KVAFSU & UAS, Bangalore on 17-20th November, 2006.

Department of Epidemiology and Preventive Medicine

Health Camps

1. Dr. M. N.Bhat attended health camp at Narasipur, Nelamangala Taluk, Tumkur Districts.
2. Dr. M. C. Anil Kumar attended health camp at Muthukadahalli, Shidlaghatta Taluk, Kolar Districts.

Department of Livestock Production & Management:

17.11.06 to 20.11.06 and animals stalls were kept during the Krishimela

Department of Anatomy & Histology

Staff and post graduate students of the department participated actively in the krishimela conducted by UAS & KVAFSU during Nov. 2006 at GKVK,

16. Scientific Papers Published/presented /contributed in the Symposium/Seminar

Department of Animal Reproduction Gynaecology and Obstetrics

1. B.P. Ravi Kumar; M.Devaraj; T.G. Honnappa and A.Krishna Swamy (2007). Certain haematological parameters in healthy and endometritis affected cows. Indian J. Anim. Sci. 77(3): 239-240.
2. Manjunatha, B.M.; Anil Kumar; Honnappa.T.G; Mir Aamir Ali and Venkata Chalapathi, J.N (2006). A Case of Uterine serosal inclusion cyst in bitch. The Journal of

- Remount Veterinary Corps. 45(3): 185-188.
3. B.P. Ravi Kumar; M.Devaraj; T.G. Honnappa and A.Krishna Swamy (2006). Therapeutic Efficacy of certain treatment protocols for endometritis in cross breed cows. Indian J. Anim. Reprod. 27:73-75.
 4. Mir Aamir Ali; A.Krishna Swamy; M.Devaraj; T.G. Honnappa; and V.C. Murthy (2006). Efficacy of Cortico- Steroids as Abortifacients during mid to late pregnancy in bitches. The Journal of Remount Veterinary Corps. 45: 111-118.
 5. B.M.Manjunath, J.P.Ravindra, P.S.P.Gupta and M.Devaraj (2006). Effect of aspiration frequency on ultrasound guided transvaginal oocyte recovery and in vitro embryo production in non descriptive Indian River buffaloes. XXII Annual Convention of ISSAR and National Symposium on Innovative Technologies for Fertility Enhancement in Livestock held on Nov 10-12, 2006 at the College of Veterinary Science and Animal Husbandry, Mhow (MP).
 6. B.M.Manjunath, P.S.P.Gupta, J.P.Ravindra and M.Devaraj (2006). Selection of developmentally competent buffalo oocytes before IVM by brilliant cresyl blue staining test (BCB). XXII Annual Convention of ISSAR and National Symposium on Innovative Technologies for Fertility Enhancement in Livestock held on Nov 10-12, 2006 at the College of Veterinary Science and Animal Husbandry, Mhow (MP).
 7. B.R.Suchitra, S.Nandi, P.S.P.Gupta, T.G.Honnappa, M.Devaraj and J.P.Ravindra (2006). Effect of cadmium on invitro buffalo oocyte viability and Maturatio. XXII Annual Convention of ISSAR and National Symposium on Innovative Technologies for Fertility Enhancement in Livestock held on Nov 10-12, 2006 at the College of Veterinary Science and Animal Husbandry, Mhow (MP).
 8. B.R.Suchitra, S.Nandi, P.S.P.Gupta, T.G.Honnappa, J.P.Ravindra, M.Devaraj, G.C.Nirmala (2006). Effect of cadmium on in vitro fertilization and embryo development in buffalo. XXII Annual Convention of ISSAR and National Symposium on Innovative Technologies for Fertility Enhancement in Livestock held on Nov 10-12, 2006 at the College of Veterinary Science and Animal Husbandry, Mhow (MP).
 9. M.Devaraj, Sahadev,A. T.G.Honnappa and A.Krishnaswamy (2006). Efficacy of certain immunomodulators in the treatment of endometritis in crossbred cows XXII. Annual Convention of ISSAR and National Symposium on Innovative Technologies for Fertility Enhancement in Livestock held on Nov 10-12, 2006 at the College of Veterinary Science and Animal Husbandry, Mhow (MP).
 10. M. Devaraj, Narasimha Murthy, T.G.Honnappa Effective doe of synthetic PGF2 alpha to induce luteolysis and estrus by IM and IVSM route in crossbred cows. XXII. Annual Convention of ISSAR and National Symposium on Innovative Technologies for Fertility Enhancement in Livestock held on Nov 10-12, 2006 at the College of Veterinary Science and Animal Husbandry, Mhow (MP).
 11. M. Devaraj, Narasimha Murthy, T.G.Honnappa Effective doe of natural PGF2 alpha to induce luteolysis and estrus by IM and IVSM route in crossbred cows. XXII. Annual Convention of ISSAR and National Symposium on Innovative Technologies for Fertility Enhancement in Livestock held on Nov 10-12, 2006 at the College of Veterinary Science and Animal Husbandry, Mhow (MP).

Department of Animal Breeding, Genetics and Biostatistics

Tadele Mirkena Keba, Nagaraja, C. S., Byregowda, S. M. and Jayashankar, M. R., 2006, PCR RFLP of Bovine Lymphocyte Antigen gene of crossbred cows. Mysore J. Ag. Sc. 40(1): 83-87.

Department of Animal Nutrition

A) Full length Articles



- * Prabhu, T.M., V.R.B. Sastry and A. Kannan. 2006. Performance of lambs fed karanj seed cake as protein supplement. Indian Journal of Animal Nutrition, Vol. 23 (1):19-223
- * Suresh, B.N., B.S.V. Reddy, T.M. Prabhu, R.G. Gloridoss and B. Jagadeesh. 2006. Nutritional evaluation of sugarcane pressmud in lambs. Indian Journal of Animal Nutrition, Vol. 23 (1):47-49.

B) Abstracts Presented in National Symposia and Conferences

1. Temjenningsang, Sonal Thakur, T.M.Prabhu and B.S.V.Reddy,2006. Long term effect of feeding honge seed meal based concentrate mixtures on the performance of male goat kids. Vi Biennial Conference,ANA,Sher-e-Kashmir,University of Agricultural Sciences & Technology,Jammu (Sept.15-17).
2. K.V.Jamuna, O.K. Remadevi, T.M.Prabhu and K. Chandrapal Singh.2006. Chemical composition and nutritive value of tree leaves for goats. at the International Conference in Zoology, Bangalore University, Bangalore (November 19-22, 2006) Abstract No. 054; p60.

Department of Pathology

1. Bhanuprakash, M L Satynarayana, S K Vijayasarithi and H.A.Upendra (2006). Serum Biochemistry, organ weights and performance of broiler chickens fed aflatoxin, ochratoxin and toxin binder. Indian Veterinary J. 83 : 159 161.
2. A.M.Manjunatha, M L Satynarayana, S K Vijayasarithi S.Yathiraj and Suguna Rao (2006) Pathomorphological study of lungs in chicken. Indian Veterinary J. 83 : 262 263.

Research articles accepted for publication : 3 numbers

Research Papers presented in National Seminars

1. V.T. Shilpa, Suguna Rao, S.M. Byregowda, M.L.Satyanarayana and C.Anzar kamran (2006). Role of apoptosis in spontaneous

regression of canine transmissible venereal tumour. Paper presented at National seminar on Newer concepts in diagnostic veterinary pathology and toxicopathology with special emphasis on Indian systems of medicine and XXIII Annual conference of Indian association of Veterinary Pathologists held between 27th to 29th December 2006, at Madras Veterinary College, Chennai. Compendium PP 97.

2. C. Shivappa, M.L.Satyanarayana, Suguna Rao and H.D.Narayana Swamy (2006). Pathomorphological, biochemical changes and assessment of efficacy of different toxin binders in combined toxicity of aflatoxin and ochratoxin. Paper presented at national seminar on Newer concepts in diagnostic veterinary pathology and toxicopathology with special emphasis on Indian systems of medicine and XXIII Annual conference of Indian association of Veterinary Pathologists held between 27th to 29th December 2006, at Madras Veterinary College, Chennai. Compendium PP38.
3. K.J. Ananda and Suguna rao (2006) Pathomorphological study of skin in Lantana camara toxicity in Holstein Friesen crossbred cattle Paper presented at National seminar on Newer concepts in diagnostic veterinary pathology and toxicopathology with special emphasis on Indian systems of medicine and XXIII Annual conference of Indian association of Veterinary Pathologists held between 27th to 29th December 2006, at Madras Veterinary College, Chennai. Compendium PP 35.
4. A.R.Mallikarjuna, H.D.Narayana Swamy, M.L.Satyanarayana, B.Umakanth, M. Narayana Swamy and K.C.Madhusudhana (2006). Pathomorphology of lymphoid organs in combined aflatoxin B1 and T-2 toxin inoculated chick embryos. Paper presented at National seminar on Newer concepts in diagnostic veterinary pathology and toxicopathology with special emphasis on Indian systems of medicine and XXIII Annual

conference of Indian association of Veterinary Pathologists held between 27th to 29th December 2006, at Madras Veterinary College, Chennai. Compendium PP37

5. A.R.Mallikarjuna, H.D.Narayana Swamy, M.L.Satyanarayana, B.Umakanth, L.Ranganath, M.Narayana Swamy and K.C.Madhusudhana (2006). *Salmonella gallinarum* interactive study in chicks hatched from the embryos inoculated with T2 toxin. Paper presented at National seminar on Newer concepts in diagnostic veterinary pathology and toxicopathology with special emphasis on Indian systems of medicine and XXIII Annual conference of Indian association of Veterinary Pathologists held between 27th to 29th December 2006, at Madras Veterinary College, Chennai. Compendium, PP37.
6. Pradeep Kumar Ray, H.D.Narayana Swamy, M.L.Satyanarayana and M.Narayana Swamy (2006). Pathomorphological changes in chick embryos and chicks hatched out aflatoxin B1 inoculated eggs. Paper presented at National seminar on Newer concepts in diagnostic veterinary pathology and toxicopathology with special emphasis on Indian systems of medicine and XXIII Annual conference of Indian association of Veterinary Pathologists held between 27th to 29th December 2006, at Madras Veterinary College, Chennai. Compendium PP22.
7. Suguna Rao, Ramesh, Byregowda,S.M., Puttalakshamma G.C and Shilpa V.T. (2007). Pathology & Immunohistochemical studies of Blue Tongue virus in Chicken embryos. Paper presented at the National Symposium on Emerging trends: Some reflections & New Dimensions in Veterinary Science & Animal Husbandry Practices & VIII Annual convention of Indian Association of Lady Veterinarians held between January 20th - 22nd, 2007 at College of Veterinary Science & Animal Husbandry, Durg, Pp 134-135.
8. Suguna Rao, Girish B.C., Byregowda,S.M.,

Satyanarayana M.L., Puttalakshamma, G.C and Shilpa V.T. Studies on Cytology, Histopathology and Immunohistochemistry of Squamous Cell Carcinoma in canines. Paper presented at the National Symposium on Emerging trends: Some reflections & New Dimensions in Veterinary Science & Animal Husbandry Practices & VIII Annual convention of Indian Association of Lady Veterinarians held between January 20th - 22nd, 2007 at College of Veterinary Science & Animal Husbandry, Durg, Pp 138-139.

9. Shilpa V.T, Suguna Rao, Byregowda,S.M., Satyanarayana M.L. Immunohistochemistry of transmissible venereal tumour in dogs. Paper presented at the National Symposium on Emerging trends: Some reflections & New Dimensions in Veterinary Science & Animal Husbandry Practices & VIII Annual convention of Indian Association of Lady Veterinarians held between January 20th - 22nd, 2007 at College of Veterinary Science & Animal Husbandry, Durg, Pp 138-139.

Department of Veterinary Microbiology

1. Shambulingappa, D. Rathnamma & M. Sathyaranayana Rao, "Studies on antibiogram profiles of the bacterial isolates in reproductive disorders of bitches". Accepted for publication in Mysore Journal of Agricultural Sciences in Aug 2006.
2. A. S. Agasthya, S. Isloor, K. Prabhudas (2007), "Brucellosis in High risk group Individuals", Ind. J. Med. Mic., 25(1); 28-31
3. Shivaraj Aralikatti, S. Isloor, D. Rathnamma & B. M. Veeregowda (2007), "Amplification & Cloning of Eno1ase gene" Publication at XIII Annual Convention at ISVIB and National Symposium on Veterinary Biotechnology & Immunology for Sustainable rural livelihood Security at College of Veterinary Science, Pookot, Kerala, 15th ,to 17th February 2007
4. Rajeev, N. Kuler, S. Isloor, B.M. Veeregowda & D. Rathnamma (2007) "Genotyping by ica A



PCR of *Staphylococcus aureus* strains isolated from cases of Bovine Mastitis". Oral presentation and publication at XIII Annual Convention at ISVIB and National Symposium on Veterinary Biotechnology & Immunology for Sustainable rural livelihood Security at College of Veterinary Science, Pookot, Kerala, 15th to 17th February 2007.

Department of Veterinary Pharmacology and Toxicology

A) Articles published in International Journals

1. Santhosh C.R., Narayana, K., Shridhar, N.B. and Ramachandra, S.G.(2006) Oestrous inducing nature of the plant *Rapidopora pertusa* in rats, cattle and buffalo; Ethnopharmacology 67:124-130
2. Sreekanth P, Narayana, K. and Shridhar, N.B. and Bhat Avinash.(2006). Toxicity studies of *Calycopteris floribonda* in rats, mice and calves Ethnopharmacology 68:111-115.

B) Articles published in National Journals

1. Shridhar, N.B. and Narayana, K (2006).Toxicity studies of Bamboo shoot extract in calves: Ind.VeterinaryJ. 25: 252-257

Department of Livestock Production and Management

1. Kiran, D. and Krishnamoorthy, U., 2006, Rumen fermentation and microbial biomass synthesis indices of tropical feedstuffs determined by the in vitro gas production techniques. Animal Feed Sci. Tech. (In press)
2. Darshan, K.A., Krishnamoorthy, U., Kiran, D., Bhaskaran, R. and Manjunath, V., 2006. Effect of supplementing finger millet straw with two concentrates differing in their partitioning factor on dry matter intake, organic matter digestibility and nitrogen metabolism in Karan Friesian crossbred heifers. Animal Feed Sci. Tech. (In press)
3. Anup Kumar, P.K., Bhaskaran, R., Krishnamoorthy, U., Venkatarami Reddy, B.S., Manjunath, V., Thirumalesh, T. and

Siddeswara, N.C., 2007, Effect of supplementary diets varying in partitioning factor on nutrient digestibility, nitrogen metabolism and microbial biomass synthesis in crossbred dairy heifers. (Sent for publication)

4. Rajeshwari, Y.B., and Sudha, S.K., Parasitic diseases of laboratory animals. X National Training programme.

Department of Clinical Veterinary Medicine

Papers presented at ISVM Convention sent for publication to IVJ

1. Evaluation of ND antibody response in broiler breeders under different vaccinations schedule Dr.H.A.Upendra & Dr.S.Yathiraj.
2. Studies on harmful effects of ammonia exposia in commercial broiler chicken Harsha K.S, Dr.H.A.Upendra & Dr.S.Yathiraj.
3. Comparative study of ammonia binding efficiency of herbal ammonia binders Dr. H.A. Upendra & Dr.S.Yathiraj & Dr.M.L.Satyanarayana.

Department of Epidemiology & Preventive Medicine

1. Muralidhar A, Yathiraj S, Nelson Mathew and Sudha G (2007). Helminth parasites in canines in and around Bangalore. Abstract of the paper presented at Silver Jubilee convention of ISVM at Pant Nagar 26-28 Feb 2007.
2. Muralidhar A, Yathiraj S, Upendra H A, Nelson Mathew and Deepti B R (2007). Cryptosporidiosis in calves. Abstract of the paper presented at Silver Jubilee convention of ISVM at Pant Nagar 26-28 Feb 2007.
3. Muralidhar A, Yathiraj S, Mahendran K (2007). Utility of ayurvedic preparation in management of otitis in canines. Abstract of the paper presented at Silver Jubilee convention of ISVM at Pant Nagar 26-28 Feb 2007.
4. Nelson Mathew, Muralidhar A, S. Yathiraj and Ramesh, P.T. (2007). Epidemiological



10. Mahendra A M, Ranganth L and Vasanth M S (2006) Radiographic studies on influence of Poly methyl methacrylate on femoral fracture healing in dogs. Indian J.VeterinarySurg. 27(2):84-86
11. Ranganth L and Subin Kolady (2006) Hip scoring in dogs, Indian J.VeterinarySurg. 27(2):116-118.
12. Ranganath L, Ranganath B N, and Pawan kumar (2006) Myelographic evaluation of intervertebral disc disease in dogs. Indian J.VeterinarySurg. 27(2):125-126.
13. Riyaz D B, Vasanth M S, Ranganath L, and Ranganath B N (2006) Myelography for evaluation of spinal lesion in dogs. Indian J.VeterinarySurg. 27(2):127
14. Ranganth L, santhosh M V, Vani S, and Ranganath B N (2006) Bilateral ovarian cyst in a dog- A case report. Indian J.VeterinarySurg. 27(2):141-142.
15. George chandy and Vasanth M S, (2006) Epidural use of methyl prednisolone acetate in paraplegic dogs : report of 5 cases. Indian J.VeterinarySurg. 27(2):122-124.
16. Nair S S and Vasanth M S (2007) Gross changes at surgical site following cataract surgery in dogs. Indian Veterinary J. 84:368-369
- Papers presented at the 24th convention of ISVM held at Veterinary College, Bangalore.**
17. George chandy , Nagaraj B N , Vasanth M S and Yathiraj S, (2006) Epidural use of methyl prednisolone acetate for treatment of traumatic paraplegia in dogs a report of 14 cases.
18. George chandy , Nagaraj B N , Vasanth M S and Yathiraj S, (2006) Medical management of tetraparesis due to cervical vertebral malformation in a non-descript dog- a Case report.
19. George chandy , Subin Kolady and , Vasanth M S (2006) Survey on awareness of about pain perception in animals among veterinarians.
- Papers presented at the International conference on "Advanced veterinary Practice in medicine and surgery augmenting health and production" held at TANUVAS, Chennai, during 21st to 25th June, 2006.**
20. George chandy and Vasanth M S, (2006) Treatment of traumatic paraplegia in a non-descript dog by modified dorsal spinal stapling and tension band wiring
21. George chandy Mahesh V, Nagaraja B N and Vasanth M S, (2006), Intraperitoneal macerated fetus in a german Shepard dog.
22. George chandy , Nagaraja B N and Vasanth M S, (2006), Transmissible venereal tumour involving the nasal cavity and nasal bone in a non-descript dog.
23. George chandy , Senthil selva kumar S, Mahesh V and Vasanth M S, (2006) Double contrast cystography for diagnosis of urocystolithiasis in a female dog.
24. Chandrashekappa M, Ranganath L, Ananda K J, and Ranganath B N (2006) Evaluation of anesthetic combination of propofol with and pentazocine lactate and chloramphenical in dogs on different parameters.
25. Chandrashekappa M, Ranganath L, Ananda K J, and Ranganath B N (2006), Haematological and biochemical changes during induction of propofol anesthesia in dogs.
26. Chandrashekappa M, Ranganath L, Ananda K J, and Ranganath B N (2006), Combined effect of propofol, pentazocine lactate and chloramphenical on parameters in dogs.
27. Ranganath and senthil selva kumar (2006) Influence of ovario-hysterectomy on C reactive proteins in bitches.
- Papers presented in the National symposium on "Surgical techniques for the benefit of livestock farmers and companion animals." and 30th Congress of ISVS, held during November 2 to 4, 2006 at Bidar, Karnataka.**
28. Patil A S, B N Ranganath, S M Jayadevappa, C L Srinivas and M S Vasanth

- (2006) Radiographic and angiographic studies of radio ulnar fracture repair by intramedullary indwelling of a modified stainless steel pin in dogs.
29. Vasanth M S, B N Nagaraja and George Chandy (2006) Adenocarcinoma of larynx in a dog, its diagnosis and management.
30. Vasanth M S, B N Nagaraja and George Chandy (2006) Magnetic resonance imaging for diagnosis of ethmoid tumour in a dog.
31. George Chandy and Vasanth M S (2006) Radiological changes associated with traumatic posterior paralysis and spinal fixation in dogs.
32. George Chandy and Vasanth M S (2006) Imaging techniques for the diagnosis of spinal lesions in dogs.
33. Mahesh V and Vasanth M S (2006) Incidence of cataract in dogs.
34. Mahesh V and Vasanth M S. (2006) haematological and biochemical parameters in dogs subjected to cataract surgery.
35. Mahesh V and Vasanth M S (2006) Comparative evaluation of lensectomy with and without limbal sutures for cataract in dogs.
36. Nagaraja R, Ranganath L, K Subin, and Vasanth M S, (2006) Paralytic ilius and fecolith due to enlarged prostate in a dog.
37. George Chandy and Vasanth M S (2006) Clinical and neurological evaluation of dogs with posterior paralysis.
38. George Chandy and Vasanth M S (2006) Modified spinal stapling with tension band wiring for traumatic posterior paralysis in dogs.
39. George Chandy and Vasanth M S (2006) Efficacy of sinal fixation versus medical management in dogs with traumatic posterior paralysis in dogs.
40. George Chandy and Vasanth M S (2006) Hemilaminectomy as an adjunct to spinal fixation in dogs with traumatic posterior paralysis.
41. George Chandy and Vasanth M S (2006) Concurrent injuries and complications associated with traumatic paraplegia and spinal fixation in dogs.
42. Basavana Gowda M T, C L Srinivas, S M Jayadevappa, B N Ranganath, M S Vasanth and T G Honnappa. (2006) Stainless steel staple for the repair of diaphyseal femur fracture in dogs.
43. Nagaraja B N, Vasanth M S, A M Mahendra, and M Nagaraj. (2006) Trochleoplasty and patellectomy for bilateral medially displaced patella in a goat.
44. Vasanth M S, (2006) Wild life surgery - a new arena for veterinary practice. Lead paper presented in the Wildlife session
45. Gaurav Pardeshi, B N Nagaraja, C Yeshwanth kumar, and Vasanth M S (2006) Adenocarcinoma in a swan goose - A case report.
46. Nagaraja B N, Vasanth M S, A M Mahendra, and M Nagaraj. (2006) Dermatofibroma of velvet in a spotted deer - a case report.
47. George Chandy and Vasanth M S (2006) Unusual rapid recovery following epidural administration of methyl-prednisolone acetate in a dog with chronic paraparesis - a case report.
48. George Chandy and Vasanth M S (2006) A pictorial survey of different types of urinary calculi in dogs.
49. George Chandy and Vasanth M S (2006) Post-operative pain, its awareness and management by veterinary practitioners - a survey report.
50. George Chandy and Vasanth M S (2006) Evaluation of cerebrospinal fluid in dogs with traumatic posterior paralysis.
51. Gaurav Pardeshi, B N Nagaraja and Vasanth M S (2006) Rectal leiomyoma in a dog and its



- successful surgical treatment.
52. Yeshwanth kumar C, Nagaraja B N, Vasanth M S, (2006) Surgical management of gangrenous mastitis in a pregnant goat - a case report.
 53. George Chandy and Vasanth M S (2006) incidence, etiology and types of spinal lesions associated with traumatic posterior paralysis in dogs.
 54. Nagaraja R, Ranganath L, K.Subin, and Vasanth M S, (2006) Paralytic ileus and fecolith due to enlarged prostate in a dog.
 55. Senthil selvakumar , Ranganath L and Vasanth MS, (2006) Perineal hernia in a dog.
 56. Senthil selvakumar, and Ranganath L (2006) Comparison of laparoscopic and conventional surgical method of ovariohysterectomy in bitches.
 57. Senthil selvakumar , and Ranganath L (2006) laparoscopic ovariohysterectomy in six bitches.
 58. Nagaraja R, Ranganath L, K.Mahendran, and M. Manjunath (2006), A typical chronic abscess in a cow.
 59. Nagaraja R, Ranganath L, K.Mahendran, J N Venkatachalapathy and m. Manjunath(2006), a Day old calf with severe dog bite injuries.
Paper presented in 25th ISVM congress held at Veterinary college Panthnagar from 22nd to 24th February 2007,
 60. Dilip kumar das, G K Vishwanath, Roopa satish, shashidhar Bellari, L Ranganath, M S Vasanth, Narayan Bhat and S K Vijayasarathi (2007) Adenocarcinome in a tigress.

17. Popular Articles Published

Department of Veterinary and Animal Husbandry Extension

S. No	Authors	Title	Date & Name of the News paper/Magazine
1.	Dr.M.Narayan Bhat & Dr.K.Satyanarayan	Communicable diseases in Livestock & their preventive measures	Compendium of FTI (2006 June)
2.	Dr.K.Satyanarayan	Role of Veterinary & AH Extension in control of Livestock diseases	Compendium of ASCAD Training Programme June 2006,
3.	Dr.K.Satyanarayan	Sheep & Goat Farming A boon to farmers	Compendium of FTI (2006) June ASCAD Training Programme for
4.	Dr.K.Satyanarayan	Importance of Extension Education in Livestock Production and Disease Prevention	Vets of the Department of Animal Husbandry and Veterinary Services Government of Karnataka on Diagnosis & of Animal Diseases, June 2006.
5.	Dr.K.Satyanarayan	Pig Production	Training Manual of Training Programme on Integrated farming for Agri entrepreneurs from SIRD Assam, July 2006

Dr.V.Jagadeeswary & Dr K. Satyanarayan, 2007, "Ethnoveterinary Knowledge An Emerging Animal Health Aid, Abstract.

Department of Pathology

Dr.M.L.Satyanarayana . Prevention of Gout in poultry. Varsha Vahini, Vol I, Issue 2, Dec 2006

Department of Veterinary Pharmacology and Toxicology

11 articles published in various dailies

Department of Livestock Production & Management

1. Feeding management of high yielding dairy cows (Kannada). Krishi Loka:39(10):15.
2. Feeding management of high yielding dairy cows (Kannada). Krishi Loka: 27: 4-5.

Abstract Sent for publication

1. Prasanna, S.B., Raghavendra, A.G., Kailas, M.M., Bhaskaran, R and Rajeshwari, Y.B., 2007. Fenvalerate- its use in controlling footrot in cattle.

Brochures

1. Mola Saakanike (Kannada) WYTEP programme

Department of Clinical Veterinary Medicine

Dr.S.Yathiraj, Prof. & Head, Diagnosis, Therapy and Control of Bovine Mastitis, for KVA, Annual state level technical symposium on 16th sept 06 at Mandya.

Department of Surgery & Radiology

1. B N Nagaraja Gundu shoole nivarantege gundina chikitseye May 2006, Ksheera sagara, Kannada Monthly
2. B N Nagaraja Januvarugalige Mole marananthika May 31, Prajavani kannada daily
3. B N Nagaraja and M S Vasanth Hasuvina Kechaliniali raktha eke suriuthe June 28,

- 2006, Vijaya Karnataka, Kannada daily
4. B N Nagaraja and M S Vasanth Januvaru rogagalu, lasikegalu July 2006, Adike patrike Kannada monthly
5. B N Nagaraja and M S Vasanth, Januvarugala ola paropajeevigalu mathu avugala nivarano payagalu, July 2006, Annadhatu Kannada monthly
6. B N Nagaraja and M S Vasanth Dudiyuva danagalannu kaduva kodina cancer July 2006, Ksheera sagara, Kannada monthly

Department of Epidemiology & Preventive Medicine

1. Dr. M. Narayana Bhat (2006) " samkramika roga haraduva vidhanagalu" compendium of training programme for paraveterinarians under ASCAD training programme.
2. Dr. A. Muralidhara (2006). "Roga thadegathuvikege sukta salahegalu" Compendium of training programme for paraveterinarians under ASCAD training programme.
3. Dr. M. Narayana Bhat (2006). "Januvarugala sankramika rogagalu mathu avugalannu tadegattuva vidhanagalu" compendium of training programme for farm women by FTI.

18. Distinguished Visitors

- * Dr. Manu Sebastian, Assistant Professor, University of Georgia, USA.
- * Dr. M.V.Jagannath, Assistant Professor, University of Georgia, USA.
- * Dr. Poonacha, Professor, University of Kentucky, USA.
- * Prof. J.L.Vegad, Professor Emeritus, Jabalpur.
- * Prof. V.K.Gupta, Secretary General-IAVP.
- * Dr.T.V.Anilkumar, Scientist, Sree Chitra Tirunal Institute of Medical Sciences, Trivandrum, Kerala.
- * Dr. Ayona Silva Fletcher, Director, Distance Learning, The Royal Veterinary College



- * Prof. Neville Gregory, Professor in Animal Welfare Physiology, The Royal Veterinary College.
- * Dr. Prema Arasu, Director, International Programs and Government Relations/ Strategic Initiatives, North Carolina State University-10th and 11th of January 2007.
- * Dr. Peter Robinson, Professor, Dept. of Animal Science, University of California, Davis, California, USA.
- * Mr. Nyandebo from University of Sierra Leone, West Africa.
- * Dr. Ilbyung Chung (South Korea), visiting Scientist at the International Livestock Research Institute laboratory, located in International Crops Research Institute for the semi-arid tropics, Patancheru, Hyderabad.
- * Dr. R. Bhatta, Sr. Scientist, National Institute of Animal Nutrition and Physiology, Adugodi, Bangalore.
- * Dr. Wendi Jackson, University of California, Davis.
- * Dr. Ramachand, Director of Research, M/s. Kemin Nutritional Technologies Pvt. Ltd. India, Chennai.
- * 5 Members of Karnataka State human rights council on 6.3.07

Department of Surgery and Radiology

1.	Bangalore 30.5.06 to 1.6.06	Student training	Externship programme	One	Dept Surgery, KVAFSU	Specific for MS.Emily grossman, Veterinary student from Washington State University
2.	Bangalore 4.12.06 to 6.12.06	Officers training	Surgical techniques and procedures	3	Dept of Surgery, KVAFSU	For the vets of Karuna welfare society

20. Participation of Scientists in Conference, Workshops, Symposia

Department of Animal Reproduction Gynaecology and Obstetrics

- ★ Dr. M. Devaraj, Dr A.Krishna Swamy, Dr.T.G. Honnappa & Dr. V.Chandrashekhar Murthy

19. Workshops/Seminars/Summer/Winter Institutes/Farmers Meet etc organised

Department of Animal Reproduction Gynaecology and Obstetrics

Conducted ICAR Sponsored winter school on "Reproductive Techniques to Augment Fertility in Dairy Animals" under the directorship of Dr. M. Devaraj, Professor and Head, from 01.12.2006 to 21.12.2006.

Department of Pathology

1. Annual gathering of IAVP Karnataka Chapter was organized on 2/12/2006 at Century Club, Bangalore.
2. ASCAD Training Programme for Veterinary Officers. Veterinary College, Bangalore. 29/5/2006 to 2/6/2006 and 12/6/2006 to 6/6/06 in 17 x 2 batches.
3. ASCAD Training Programme for Para-Veterinary Staff, Veterinary College, Bangalore. 22/1/07 to 25/1/07 and 4/2/07 to 9/2/07.
4. Scientists Training programme, Dept of Veterinary Parasitology, Veterinary College, Bangalore. Veterinary College, Bangalore

contributed papers to the 22nd Annual Conference of ISSAR and National Symposium held in November 10-12, 2006 at Veterinary College, Mhow (MP)

Department of Pathology

- * Dr.M.L.Satyanarayana served as Member for

Expert Committee on Stray Dog menace at Bangalore Mahanagara Palike.

- * Two staff members of this department participated as resource scientists in two training programmes for field veterinarians organized by Centre of Excellence in Parasitology, Veterinary college, Bangalore.
- * National Symposium on Newer Concepts in Diagnostic Veterinary Pathology & Toxicopathology with special emphasis on Indian System of Medicine, Pathology of Emerging zoonosis & transboundary diseases of animals organized by the IAVP, Madras Veterinary College, TANUVAS, Chennai 26th-29th Dec, 2006.
- * Mycotoxin Summit - Mycotoxins in Global Scenario organized by Vetcare, Bangalore Hotel Atria, February 15, 2007.
- * Annual Conference on Toxicologic Pathology & Continuous Development Programme in Toxicopathology organized by STPI, India., at Hotel Atria, Bangalore. 25th 27th August, 2006.
- * National Symposium on Emerging trends: Some reflections & New Dimensions in Veterinary Science & Animal Husbandry Practices & VIII Annual Convention of IALV. Organized by Durg Veterinary College and IALV, India., at the College of Veterinary Science & Animal Husbandry, Durg. 20th-22nd Jan, 2007.
- * First International Conference on Rabies (RIACON), organized by NIMHANS and KIMS, Bangalore during 3rd - 4th March, 2007 held at NIMHANS, Bangalore.
- * Dr. H.D.Narayanaswamy delivered a talk on "Pathology & Pathogenesis of Infectious Bovine Rhinotracheitis & Brucellosis", at IVRI, Bangalore , 21st March, 2007 organized by ADMAS & IVRI, Bangalore.

Department of Veterinary Microbiology

- * Dr Shrikrishna Islor, Dr B. M. Veeregowda, Dr A. K. Santhosh, Dr Rajeev N. Kuler, & Dr

Viveka Prabhu attended in the XIII Annual Convention of ISVIB and National Symposium on" Veterinary Biotechnology and Immunology for Sustainable rural livelihood Security at The College of Veterinary Science, Pookot, Kerala from 15th to 17th February 2007

- * Rajeev. N. Kuler, S. Islor, B.M. Veeregowda & D. Rathnamma (2007) "Genotyping by ica A PCR of *Staphylococcus aureus* strains isolated from cases of Bovine Mastitis", presentation at XIII Annual Convention at ISVIB and National Symposium on Veterinary Biotechnology & Immunology for Sustainable rural livelihood Security at College of Veterinary Science,Pookot,Kerala, 15th . to 17 th February 2007.
- * K. Santhosh, S. Islor, D. Rathnamma & B. M. Veeregowda (2007) "Comparative Evaluation of Immune response of Sheep & Goats to PPR vaccine strains, poster presentation at National Symposium on Veterinary Biotechnology & Immunology for Sustainable rural livelihood Security at College of Veterinary Science, Pookot, Kerala, 15th to 17 th February 2007 (Bagged Best Poster presentation award).
- * Shivaraj Aralikatti, S. Islor, D. Rathnamma & B. M. Veeregowda (2007), "Amplification & Cloning of Enolase gene" Publication at XIII Annual Convention at ISVIB and National Symposium on Veterinary Biotechnology & Immunology for Sustainable rural livelihood Security at College of Veterinary Science, Pookot, Kerala, 15th to 17th February 2007.

Department of Veterinary Pharmacology and Toxicology

Pharma - V Annual Conference of ISVPT held in Patna during October 2006

Department of Epidemiology & Preventive Medicine

Dr.A.Muralidhar participated in Silver Jubilee convention of ISVM at Pant Nagar from 26-28 Feb



Department of Clinical Veterinary Medicine

Sl. No	Place & Date	Topic discussed	Organizers	Remarks
1.	6.4.06 Bangalore	Immunonutrition	Provimi-Vetcare, Bangalore	Participated by Dr. H.A. Upendra
2.	8.4.06 Bangalore	Livestock environment and development issues pertaining to Karnataka	Media for sustainable development, Center for Environment Education	Participated by Dr.H.A.Upendra
3.	11.5.06 - Bangalore	Clinical Nutrition for parental care management and appropriate dietary therapy	Hill's and Scientific Remedies	Participated by Dr.H.A.Upendra
4.	21.05.06	Resource person at the regional seminar conducted by pet practitioners association of Karnataka held at Dharwad.	PPAK	Dr.C.Anzar Kamran Delivered a talk on Collection of material and their presentation for biochemical parameters and Dr.S.Yathiraj delivered a talk on Recent Advances in Clinical Veterinary Medicine
5.	25.5.06	Technical seminar on Bird Flu in coming days	Caretech organics India Ltd, Bangalore	Participated by Dr.H.A.Upendra
6.	7-9 th Sep 06, Lusaka, Zambia	National seminar on Avian Influenza	Zambia Poultry farmers association	Dr.H.A.Upendra presented a lead paper on Avian influenza today& tomorrow
7.	16.9.06 Mandya	Technical seminar of KVA	Karnataka Veterinary Association (KVA)	Dr.S.Yathiraj and Dr.H.A.Upendra participated
8.	15.11.06	Asia Pacific Lecture tour Bangalore on Feeding the gene for performance and profitability in the seminar.	Alltech, USA	Dr.H.A.Upendra participated in the seminar
9.	03-12-06	Participated in advances in canine dermatology	PPAK	Dr.S.Yathiraj & Dr.H.A.Upendra delivered the lecture
10.	23.12.06 Bangalore	Technical seminar on Current poultry diseases and Their control	Tinna Agro and Tinna Oils, Bangalore	Dr.H.A.Upendra participated in the seminar.
11.	10.2.07 Bangalore	Technical seminar on Bridging the gap between Academia and Industry	IVPI, Bangalore	Dr.H.A.Upendra participated in the seminar
12.	15.2.07 Bangalore	Technical seminar on Mycotoxin summit	Vetcare and Provimi, Bangalore	Dr.H.A.Upendra participated in the seminar
13.	26-28 Feb, 2007 CV & AS, GBPUAT,	National Seminar on animal welfare and sustainable health through recent therapeutic and disease management research Pantnagar strategies	Indian Society for Veterinary Medicine and College of Veterinary Sciences, Pantnagar	Dr.S.Yathiraj and Dr.H.A.Upendra presented one lead paper each and presented a total of 15 papers in the seminar.

Department of Veterinary and A.H Extension

Dr.K.Sathyaranayanan Associate Professor & Head participated on

- 22,23,24/4/2006 - workshop on Watershed Programme
- 7/8/2006 - Workshop cum brainstorming Session on Discussion on 11th five year plan
- 16/10/2006 - Organised World Food Day at Haniyuru
- 4/12/2006 - Conducted Programme with a Theme Women in Agriculture at Addhiganahalli, Bangalore North Taluk

Dr.Jagadeeswary, Assistant Professor participated in workshop at Pune "Improving

Quality of Veterinary & Animal Husbandry Extension in India".

Department of Veterinary Clinical Service Complex

Dr. Nagaraja

- * XXX Annual Congress of Indian Society for Veterinary Surgery and National Symposium on "Surgical Techniques for the benefit of Livestock farmers and Companion animals", Veterinary College, KVAFSU, Bidar. Nov 2-4th, 2006.
- * 6th Annual Convention of Society of Post graduate in Veterinary Surgery, Veterinary College, Hebbal, Bangalore, 9th September, 2006.

Department of Surgery and Radiology

Sl. No	Place & Date	Topic discussed	No. of Participants	Organizers	Remarks
1.	Bangalore 8.4.09	Livestock, environment and development issues pertaining to Karnataka	50	KVAFSU & Center of environment Education	Attended by Dr.M.S.Vasanth, Dr.B.N. Nagaraja & PG students.
2.	Bangalore 29.4.06	World Veterinary Day	70	Karnataka Veterinary Association, B'lore	Guest lecture by Dr. M.S.Vasanth
3.	Bangalore 16. 6.06	Recent advances in surgery	25	ASCAD training programme	Guest lecture by Dr. M.S.Vasanth
4.	Mandya 16.9.06	Horn cancer in cattle	50	Karnataka Veterinary Association, Mandya	Guest lecture by Dr.L.Ranganath
5.	Haniyur 16.10.06	"Invest in Agriculture for food security"	50	KVAFSU	Dr.Mahendra
6.	Bidar 2.11.2006 to 4.11.2006	National symposium on surgical techniques for the benefit of livestock farmers and companion Animals	300	Indian society for veterinary surgery & KVAFSU	Dr. M.S.Vasanth, Dr.L.Ranganath and P G Students
7.	Shimoga 3.12.06 Shimoga	Recent advances in Canine orthopaedics	30	Karnataka Veterinary Association,	Guest lecture by Dr.L.Ranganath
8.	Bangalore 1 st to 21 st dec 2006	Imaging techniques in Veterinary practice	25	Dept of ARGO Winter School	Guest lecture by Dr.L.Ranganath

9.	Bangalore 23.1.07	Upakaranagala Shuddeekarana	20	ASCAD training programme	Guest lecture by Dr. M.S.Vasanth
10.	Bangalore 5.2.07	Upakaranagala Shuddeekarana	20	ASCAD training programme	Guest lecture by Dr. M.S.Vasanth
11.	Nagpur 7.2.07 to 9.2.07	Asian congress on Canine practice and symposium	250	Indian Soc. Adv. Canine Practice and MAFSU	Dr. M.S.Vasanth

21. Technologies Asserted And Transferred

Department of Animal Reproduction Gynaecology and Obstetrics

1. Ascertained the efficacy of immunomodulators in treatment of endometritis in dairy cows which can be utilized profitably by the Field Veterinarians.
2. A single day oral treatment with antiprogestins along with PGE intravaginally to induce abortion during mid and late pregnancy in bitch was ascertained.
3. Particle utility of OPU to harvest oocytes per embryo production and their cryopreservation was ascertained in buffaloes.

Department of Animal Breeding, Genetics and Biostatistics

1. Development of DNA finger printing

technology to differentiate the tissue/organs of wild cats for resolving the vertigo legal cases.

2. Physical and molecular genetic characterization of Bandur sheep breed

Department of Pharmacology and Toxicology

Visited various villages in various parts of Karnataka for the disease investigation process and found solutions of more than 8 obscure diseases

Department of Livestock Production and Management

1. Broiler rabbits are distributed to rural women below poverty line in Bangalore rural district, Nelamangala
2. Training and Demonstration on rabbit rearing. Training is imparted to Kolar District farmers
3. Rabbits are distributed to farmers at Haniyuru (University adopted village)

Veterinary College, Bidar

A. Training Programmes Organised

Sl. No	Place & Date	Officers/Farmers	Title	No. of Participants	Organizers	Remarks
1.	Bidar 17.07.06 to 21.07.06	Veterinary Officers	ASCAD	21	Veterinary College Bidar	Dr. N.A. Patil and Dr. Vivek Kasaralikar
2.	Bidar 07.08.06 To 11.08.06	Veterinary Officers	ASCAD	16	Veterinary College Bidar	Dr. N.A. Patil and Dr. Vivek Kasaralikar
3.	Bidar 05.02.07 to 09.08.07	Veterinary Livestock Inspectors	ASCAD	16	Veterinary College Bidar	Dr. N.A. Patil
4.	Bidar 19.02.07 to 23.02.07	Veterinary Livestock Inspectors	ASCAD	16	Veterinary College Bidar	Dr. N.A. Patil
5.	Bidar 22.03.07	Farmers meet	Dairy farming	75	Veterinary College Bidar	Dr. N.A. Patil

2. A. Seminar/ Workshop organized

Sl. No	Place & Date	Topic discussed	No. of Participants	Organizers	Remarks
1.	Chennai 21 to 25 June, 2006	International Conference on Advances in Veterinary Practice	300	Dept. of clinical Medicine, Veterinary College, Chennai	Dr. N.A. Patil
2.	Belgaum 07-09-06	Animal welfare acts	100	Karnataka veterinary Association, Belgaum	Dr. V.R.Kasaralikar
3.	Panjnagar 26 to 28 th Feb. 2007	Advances in Veterinary Medicine	300	Dept. of Preventive Medicine, Veterinary College, Panjnagar	Dr. N.A. Patil
4.	Bijapur 20.01.07	Diseases of livestock and its prevention	150	Karnataka Veterinary Association, Bijapur	Dr. N.A. Patil

B. Summer Institute/Refresher Course Attended

Sl. No	Name of Scientist	Name of the Theme	Name of the Institute	Duration with dates
1.	Dr. Vivek R Kasaralikar	ICAR workshop on Biotechnology	Dept. of Animal Biotechnology, Madras Veterinary Colleges, Chennai	18.4.2006
2.	Dr. Vivek R Kasaralikar	Faculty Development Programme on Education Technology	National Academy of agri Research Management, Rajendranagar, Hyderabad	21.2.2007 to 13.3.2007 (21 days)



Radio - Talks / T.V. Programme Delivered

Sl. No	Name of the Scientist	Topic	Date of Broadcast and station	Remarks
1.	Dr. N.A. Patil	Zoonotic diseases and its prevention	27.09.06 A.I.R Gulbarga	
2.	D. N.A. Patil	Management of calves	29.09.06 Doordarshan, Gulbarga	

Popular Articles Published

S. No	Authors	Title	Date & Name of the News paper/Magazine
1.	Dr. N.A. Patil	Advances in diagnosis and treatment of bovine mastitis	Compendium of KVA
2.	Dr. Vivek Kasaralikar	Current strategies on prevention and control of production diseases in dairy animals	Compendium of KVA
3.	Dr. N.A. Patil	Effects of Black Quarter disease on productivity of animals	Prajawani
4.	Dr. Vivek Karsaralikar	Care and Management of dogs	Dainik Saamna, 10.10.06
5.	Dr. Vivek Karsaralikar	Diseases of sheep	Dainika Saamna 7.11.06
6.	Dr. Vivek Karsaralikar	Mastitis Bane to the Dairy Industry	Dainik Saamna 7.12.06
7.	Dr. Vivek Kasaralikar	Buffalo calf mortality due to ascariasis	Dainik Saamna, 6.2.06

Research Publications

- Patil N.A., Kasaralikar V.R. Udupa K.G., 2006 Clinico-hematological studies in traumatic pericarditis of cattle. Indian Journal for field veterinarian. 1(5):57
- Patil N.A. 2006. Advances in diagnosis and treatment of bovine mastitis. Compendium f KVA Technical Symposium held at Mandya on 16.09.2007. pp.34.36.
- Kasaralikar V.R. 2006. Current strategies for the prevention and control of production diseases of dairy animals.
- Compendium of KVA Technical Symposium held at Mandya on 16.09.2007. pp.32.33.
- S. Prasanna Kumar and Vivek R. Kasaralikar 2006. Collection and analysis of data for epidemiological pattern of diseases of livestock. ASCAD training manual. Veterinary College, Bidar. Pp. -100.
- Anil Kumar, M.C., Kasaralikar V.R., Thimmareddy, P.M. and Prasanna Kumar S., 2006. Comparative study of haematological and biochemical parameters in healthy and acariosis affected buffalo- calves. Indian Journal of Animal Research. 4(2): 113.

Animal Health Camps/Livestock Shows organised

Sl.No.	Date	Place	Organized	Total participants
1.	03.06.07	Jampad	Participated	250
2.	28.05.06	Hippalgaon	Participated	
3.	13.11.06	Udamannahalli	Organized	300
4.	24.03.07	Kaplapur	organized	300

Other Activities

- * Treated cases presented to the Teaching Veterinary service complex, Veterinary College, Bidar and APMC hospital, Gandhigunj Bidar.
- * Clinical samples were examined for the confirmatory diagnosis of disease sent by field veterinarians as well as samples collected at college hospital.
- * Staff participated in the Intercollegiate Youth Festival of KVAPSU, Bidar From 28th October 2006 to 30th Athlete Meet held at Bidar during September 2006.
- * Dr. N.A. Patil acted as chairman for Academic Procession Committee for First Annual Convocation of KVAFSU held on 17th January 2007.
- ★ Dr. Vivek R. Kasaralikar anchored the first Annual Convocation of KVAFSU held on 17th January 2007 at Nandinagar Campus Bidar.

Department of AGBG Veterinary College, Bidar.

Staff participation seminars / Trainings etc

Sl. No	Place & Date	Officers/ Farmers	Title	No. of Participants	Organisers	Remarks
01.	Bidar 05.06.06 29.01.07 05.02.07 12.02.07 19.02.07 01.03.07 13.03.07 23.03.07 26.03.07	Veterinary Officers	Refresher Training Programme on AI and infertility on Dairy animals	16-20 in each batch	Veterinary College, Bidar	Dr. M.M. Appannavar participated and delivered talk on breeding strategies in cattle and Buffaloes
02.	Bidar 12.03.07	Veterinary Officers	Refresher training Programme on AI and infertility on Dairy animals	16-20 in each batch	Veterinary College, Bidar	Dr. G.K. Sivaraman participated and delivered talk on breeding strategies in cattle and buffaloes
03.	Bidar 05.03.07	Veterinary Officers	Refresher training Programme on AI and infertility on Dairy animal	16-20 in each batch	Veterinary College Bidar	Dr. G.S. Naveen Kumar participated and delivered talk on Breeding strategies in cattle and Buffaloes
04.	Bidar 07.02.07 20.02.07	Veterinary Livestock Inspectors	ASCAD training Programme	20 in each batch	Veterinary College Bidar	Dr. M.M. Appannavar participated and delivered talk on role of sheep, goat and piggery farming in economy of farmers,



1. Title	Estimation of reliability in non-accumulating damage shock model
2. Principal Investigator	Dr. M.D. Surangi, Asst. Professor(ABGB), Veterinary College, Bidar
3. Funding Agency	
4. Significant achievements	A component is subjected to a sequence of shocks occurring randomly in time as events of a Poisson process. The shocks damage the component and the amount of damage due to a shock is an exponential random variable. The component fails whenever the damage due to a shock exceeds the threshold of the component, otherwise the component works as good as new one (non-accumulating damage shock model). The reliability function of the model is derived. The maximum likelihood estimator (MLE) and Bayes estimator of the reliability function are obtained.

ICAR Funded Projects

1. 1. Title	Integrated study to evaluate Kenguri breed of sheep for mutton production for sustainable animal enterprise in Hyderabad Karnataka region
2. Principal Investigator	Dr. M.M. Appannavar, Asst. Professor (ABGB) Veterinary College Bidar
3. Funding Agency	ICAR New Delhi
4. Significant achievements	The initial findings of the survey are as follows. Average Flock size was 112 ± 13 with ewes, ± Breeding Rams, Ram Lambs and Ewe Lambs accounting for 90.90, 2.08, 1.04 and 6.28 percentage respectively. Housing was provided during night time only by 7 percent of the farmers while 93 per cent of the farmers provided no housing at all. Provision of confinement after lambing was 3.08 ± 0.09 months. Breeding is during rainy season, it starts in the month of May and picks up in the month of June. Similarly lambing is during winter and starts from the month of October. Average age at first mating, average age at first lambing, lambing interval was 17.28 ± 0.33 , 23.90 ± 0.23 and 10.79 ± 0.15 months respectively, while lambing percentage was 76. Male lambs were sold usually by 3-4 months. Adult sheep were sold at an average age of 11 years with slaughter weight of 13.43 ± 7.62 Kg and selling price of Rs. 811 ± 27 per adult sheep. All the shepherd practice abundant feeding and continuous feeding during day time. No feeding was done during night time. All the flock were of grazing type and traveled average distance of 5.15 ± 0.20 kms per day. Concentrate feed was given by 48 per cent of the shepherds during scarcity while remaining shepherd did not feed concentrate at all. Among the rams, 91 percent of rams were born in the flock while remaining was brought from outside. Percentage of horned rams was 80.36 while remaining was polled. White spot on fore head white belly were found in 78.7 and 91.95 percent of rams respectively.

Publications

S.B. Munoli and M.D. Suranagi (2006) Estimation of reliability in non-accumulating damage shock

model. "Far East Journal of Theoretical Statistics" 19(2),273-279.

Participation of scientists in conference, workshops and symposia

Sl. No.	Place & Date	Topic Discussed	No. of Participants	Organisers	Remarks
01.	Bijapur 27.11.06	Workshop on conservation of Indigenous breeds of livestock	200	Dept. Of AH & VS, Bijapur	Dr. M.M. Appannavar participated and spoke on need for conservation of Indigenous breeds of cattle
02.	Laxmeshwar Gadag 23.12.06	Workshop on conservation of Indigenous breeds of livestock	80	Dept. of AH & VS, Gadag	Dr. M.M. Appannavar participated and spoke on need for conservation of Indigenous breeds of cattle
03.	Belgaum 26.02.07	Workshop on conservation of Indigenous breeds of livestock	80	Dept. of AH & VS, Belgaum	Dr. M.M. Appannavar participated and spoke on need for conservation of Indigenous breeds of cattle
04.	Bidar 27.02.07	Workshop on conservation of Indigenous breeds of livestock	80	Dept. Of AH & VS, Bidar	Dr. M.M. Appannavar participated and spoke on need for conservation of Indigenous breeds of cattle

Participation in International Conference

Sri M.D.Suranagi, Assistant Professor of Statistics, Dept. of ABGB, Veterinary College, Bidar participated in the "First International Conference on Mathematical Sciences" held at Al-Azhar

University, GAZA, Palestine during 15-17 May, 2006 and presented a research paper entitled "Estimation of Reliability in Non-accumulating Damage shock Model"

Department of Veterinary Physiology

Participation in Trainings

Sl. No	Place & Date	Officers/ Farmers	Title	No. of Participants	Organisers	Remarks
1.	21.02.2007 13.03.2007 at Veterinary College and Research Institute, Namakkal	Short term training course for teachers/ scientists of ICAR /SAUs	Maximizing poultry production by advanced housing and management	20	Centre of Advanced Studies in Poultry Science, TANVASU	M.G.Manjunath participated in the training programme



Department of Surgery and Radiology

Sl. No	Place & Date	Topic discussed	No. of Participants	Organizers
1.	Veterinary College, Bidar 22.03.07	Endocrinology of estrus cycle and recent advances in heat detection aids Dr. Shrikant Kulkarni	18	Karnataka Livestock Development Agency (K.L.D.A), Dept of A.H. & VS, GOK and Dept. of ARG &O, Bidar
2.	Veterinary College Bidar 27.03.07	Endocrinology of estrus cycle and recent advances in heat detection aids Dr. Shrikant Kulkarni	20	Karnataka Livestock Development Agency (K.L.D.A), Dept of A.H. & VS, GOK and Dept. of ARG &O, Bidar

Department of Animal Nutrition

Seminars Participate

Sl. No	Place & Date	Topic discussed	No. of Participants	Organizers
1.	Veterinary College Bidar, at one week interval for four months	Balanced feed formulations for milking animals using locally available feed and fodders Dr. V. Nagabhushana	18-20	Karnataka Livestock Development Agency (K.L.D.A), Dept of A.H. & VS, GOK and Dept. of ARG &O, Bidar

Department of Surgery & Radiology

1. Training organized/participated

Sl. No	Place & Date	Officers/ Farmers	Title	No. of Participants	Organisers
1.	Bidar 18-22 July 2007	Officers	ASCAD	15	Veterinary College, Bidar

2. Seminar/ workshop/ Organized /Participated

Sl. No	Place & Date	Topic discussed	No. of Participants	Organizers
1.	15 June 2007 (Belgum)	Dr. D. Dilip Kumar presented a lecture on "Large animal surgery"	20	12KVA chapter Belgaum
2	10 July 2007 (Bangalore)	Dr. B.V. Shivaprakash attended as chief guest for inauguration of akhil Karnataka Go- shala Sangha		Adi Chunchanagiri Math, Bangalore
3	0-06 July 2007 (Chennai)	Dr. Ravi Raidurg attended fifth National Training Programme on "Ultrasonography for the Veterinary Practitioner"		Veterinary College TNVASU, Chennai
4.	28 April 2007 (SCC Bank, Bidar	Dr.B V Shivaprasad gave a talk on "Rabies" and "Leptospirosis" in animals	300	Veterinary College Bidar
5	02.04.2006	Organised	240	Dept.of Surgery & Radiology, Veterinary College, Bidar

Radio - Talks / T.V. Programme Delivered

Name of the Scientist	Topic	Date of Broadcast and station	Organisers
1. Dr.B.V. Shivaprakash	Large animal surgery	01 Feb 2007 ETV Bangalore TV-9, Bangalore	2
2. Dr.B.V. Shivaprakash	Ruminal effects due to plastics in cattle and their surgical management	Go-Shala, Hubli	

Folders/ Leaflets/ Booklets/ Books / training manuals prepared

Sl. No	Name of the Scientist	Title	Year of Publication	Publisher / Remarks
1.	Dr. B.V. Shivaprakash	Horn fracture and horn cancer in cattle	2007	Directorate of Extension, KVAFSU, Bidar
2.	Dr. Dilip Kumar	Eye affections in animals	2007	Directorate of Extension KVAFSU, Bidar
3.	Dr. B.V. Shivaprakash	Book on " Januvargalalli Shastrachikitseyinda 'Gunapadisahahudada rogalu hagu labhadayaka pashusanghopane'	2006	New Tech Publishers Bangalore
4.	Dr. B.V. Shivaprakash	Chapter : " Surgical procedure to treat dystocia" IN Management of pre and post partum reproductive disorders of livestock ed . S S. Honnapagol, M K Tandle, S D Sonwane and R G Bijurkar	2006	

Animal health camps / Livestock shows organised

Sl. No	Date	Place	Organised	Total Participants
1.	17-24 May 2007	Kapalapur	Special health camp	150
2.	15-17 April 2006	Gadagi	Participated in a Animal health camp & cattle show	150
3.	28 May 2006	Andur	Animal health camp & cattle show	120
4.	03.June 2006	Jampad	Animal health camp & cattle show	200
5.	13 November 2006	Udumanahalli	Organized Health camp	300

Research Activities

Conducted clinical investigation and worked on surgical techniques for the treatment of balanoposthitis, horn injuries, eye disorders and

fractures in livestock and presented the findings in the National I Symposium.



NSS Special Camp

NSS Unit I and Unit II of Veterinary College Bidar had conducted a NSS special camp at Kaplapur(A) village of Bidar taluk. The camp was conducted between 17-02-2007 and 26-03-2007 (10 days). It was inaugurated by Professor B.R. Konda and Dr. S. Mallikarjunappa, Dean, Veterinary College, Bidar presided over the function. On 18.03.2007, Forest Development and Environmental Day was celebrated. Five hundred plantations were done in Kaplapur (A) village. On 19.03.07 youth day was celebrated. The youths were advised to leave bad habits like eating of gutkha, alcoholism etc. On 20.03.07 human health and dental check up camp was arranged. The camp was arranged in collaboration with Dental Village , Bidar and Primary Health Centre, Anadur. On 21.03.07, conservation day water celebrated and water conservation awareness was created among the villagers. On 22.03.07 'Womens' Day' was celebrated and role of women in rural economy up liftment was discussed. On 23.03.07 was celebrated as Agriculture training day and farmers discussed & problems faced by them in agriculture and Agriculture Scientists imparted the technical advise. On 24.03.07, Animal Health Camp was conducted in collaboration with AH and VS Department. The animals were vaccinated against FMD diseases. Various infectious disease surgical and gynecological problems of animals were treated by the experts. On 25.03.07 Bankers Day was celebrated the role of banks in rural development awareness was created among farmers. On 26.03.07, the NSS Special Camp ended with distribution of 200 plants to villagers of Kaplpur(A). The NSS Programme Officers for the camp were Dr. D. Dilipkumar and Sri. S.M. Kartikesh.

Department of Anatomy & Histology

Cultural activities

The staff of the department is actively participated and guided the UG and PG students during Hostel day, College day and University first convocation of KVAFSU celebrations.

Sports Activities

The staff of the department have officiated as chairmen and members during intercollege sports conducted during the year.

NSS

The staff of the department actively participated during NSS camps entertainment activities.

Hostel activities

The staff of the department have guided the students for cultural activity during hostel day celebration.

Student activities

The staff of the department served as counselors for UG students and also guided the students in the various co-curricular activities.

Library activities

Professor and Head, was member in the library committee for the purchase of various books and scientific journals.

Member usage

The staff of the department is the member of Indian Association of Veterinary Anatomists andmember for Indian Veterinary journals. The journal copies were placed in the library.

Acquisition of books

A Technical bulletings, Periodicals and bound volumes. The staff of the department helped students to keep update the knowledge by using various technical bulletins.

Student welfare activities

The staff of the department actively involved in the cultural and sports activity of the students. The staff of the department officiated as chairman and member for different sports activities.

Department of Parasitology

Staff Participation in Seminar

- * Invited as resource person to give a talk on "Toxoplasmosis" on 28/03/07 at Centre of Advanced Studies, Department of Parasitology, Veterinary College, Bangalore and in the National Training Programme on "Emerging parasitic diseases". The Participants Consisted of Assistant professors, Research Assistant State Agricultural and veterinary Universities. It was organized by Director, Centre of advanced study, dept of Parasitology Veterinary College Bangalore from 10.3.2007 to 30.03.2007.
- * ASCAD Training programme for Veterinary Officers : Acted as resource scientist to give talk on "Diagnosis of Parasitic diseases" On 2007.06 and 10.08.06 (including practical) at Veterinary College, Bidar. The participates were Veterinary officers and Assistant Directors of Dept of AHAVS, Govt. of Karnataka.

Cultural Activities

Participated in the Various Cultural activities of the students during youth festival, College and Hostel day functions. Acted as member for various committees.

Reprography

Prepared slides and charts from books and journals for demonstration to students

Scientific Publication

Published one article in the Indian journal of poultry sciences. The title of the article "Efficacy of herbal occidental in poultry coccidiosis

Department of Epidemiology and Preventive Medicine

Research Accomplishments

A research project entitled ' Study on culicoides midges as vector of Bluetongue disease' was sanctioned by the Karnataka Sheep and Wool Development Cooperation Limited, Hebbal, Bangalore with a budgetary provision of Rs.5.00 lakh where in the Principle Investigator is Dr. K.Ganesh Udupa and the Co-Investigators were Drs. S. Prasanna Kumar, N.A.Patil ,M.M.Appanavar and P.M.Thimmareddy. The Project was initially sanctioned for one year from 25.01.2005 to 24 01.2006 and the it was extended up to 24.01.2007 and further permission was granted to extend the project up to 30.06.2007

List of Scientific papers published

- i. Patil, N.A. Kasaralikar, V.R. and Udupa, K.G. (2006). Clinico-haematological studies in traumatic pericarditis of cattle. Indian Journal of Field Veterinarians 1(5):57.
- ii. Anil kumar M.C., Kasaralikar V.R., Thimma Reddy P.M., Prasanna Kumar S, (2007). Comparative study of haematological and biochemical parameters in healthy and ascariasis affected buffaloe calves. Indian Journal of Animal Research, 40 (2), 113-117.
- iii. Halmandge S.C., Prasanna Kumar S., Sheltar V.B., Muregappa A. and Sudhindra (2006). Influence of meteorological factors on the prevalence of ascariasis of buffaloe calves.



Name of Participant and designation	Organiser/Course Director and Institute	Name of the event	Date and Venue	Borne on T/R/E/
Dr. K. Ganesh Udupa, Assistant Professor	Dept. of Veterinary Microbiology, College of Veterinary Sciences, Tirupati, AP	"Strategies for control of Blue tongue"	24 th and 25 th May 2006	R

II Extension activities

Trainings Organized /Participated: Following teachers were saved as resource persons in different programmes organised.

Sl. No	Place & Date	Officers/ Farmers	Title	No. of Participants	Organisers	Remarks (Resource Persons)
1.	Bidar 17-07-06 to 21-07-06	Veterinary officers	ASCAD	21	Veterinary College, Bidar	Dr.S.Prassanna Kumar Dr. K.Ganesh Udupa.
2.	Bidar 07-08-06 to 11-08-06	Veterinary officers	ASCAD	16	Veterinary College, Bidar	Dr.S.Prassanna Kumar Dr. K.Ganesh Udupa
3.	Bidar 05-02-07 to 09-02-07	Veterinary Livestock Inspectors	ASCAD	16	Veterinary College, Bidar	Dr.K.Ganesh Udupa Dr.Raveendra Bhoyar & Dr.Sandeep Halmandge
4	Bidar 19-02-07 to 23-02-07	Veterinary Livestock Inspectors	ASCAD	16	Veterinary College, Bidar	Dr.K.Ganesh Udupa Dr.Raveendra Bhoyar & Dr.Sandeep Halmandge
5	Bidar 22-03-07	Farmers meet	Dairy Farming	75	Veterinary College, Bidar	Dr.K.Ganesh Udupa Dr.Raveendra Bhoyar & Dr.Sandeep Halmandge

Any other activities

- i. Treated good number of animals presented to Teaching Veterinary Clinical Service complex, Veterinary College, Bidar and Veterinary Hospital, APMC, Gandhi Gunj, Bidar
- ii. Examined good number of clinical samples for the confirmatory diagnosis of disease sent by field veterinarians as well as samples collected at the College hospital.
- iii. Staff of the department served as track and event referees in the first Intercollegiate Athletic Meet of KVAFSU, Bidar held during September 2006.
- iv. Dr. K. Ganesh Udupa, served as member of result declaration committee of cultural events conducted during the Intercollegiate Youth Festival of KVAFSU, Bidar held at Veterinary College, Bidar, during 28-10-06 to 30-10-06.
- v. Dr. K Ganesh Udupa acted as Chairman of Intersession tea Committee in XXX annual conference held at Veterinary College, Bidar during the period from 2nd to 4th November 2006.
- vi. Dr. K Ganesh Udupa acted as Literary Committee member of the essay writing competition, debate and elocution on 14-11-06

conducted on the occasion of 22nd Foundation day Celebration of Veterinary College, Bidar.

Bhoyar acted as member of Academic Procession Committee in the first Convocation of KVAFSU, Bidar held on 17.01.07 at Bidar.

vii. Dr. K. Ganesh Udupa and Dr. Ravindra

Department of Pharmacology and Toxicology : Report of Extension Activities

Trainings Participated

	Place & Date	Topic delivered by	Topic discussed	No. of Participants	Sponsored by
1.	Veterinary college, Bidar, 17.7.06	Veterinary Officers, Department of A.H. & VS	Diagnosis & Control of Animal Diseases	21	Dept. of AH.&VS, GOK Dairying & Ministry of Agriculture, GOI
2.	Veterinary College, Bidar 7.8.2006 to 11/8/2006	Veterinary Officers, Dept of AH. & VS	Diagnosis & Control of Animal diseases	21	Dept of AH & VS, GOK Dariying & Ministry of Agriculture, GOI

Sl. No	Place & Date	Topic Discussed	No.of Participants	Sponsored by
1.	Veterinary College Bidar 19.7.2006	Toxicology of important poisonings and antidote therapy in farm Animals -N. Prakash	21	Dept. of AH & VS, GOK and Ministry of Agriculture, GOI
2.	Veterinary College Bidar 09.08.2006	Toxicology of important poisoning and antidote therapy in farm Animals - N.Prakash	21	Dept. of AH & VS, GOK Dariying Ministry of Agriculture, GOI and Veterinary College Bidar
3.	Veterinary College Bidar 2.2.2006	Pharmacological basis of use of drugs and hormones in the treatment of uterine infections in bovines - N. Prakash	20	Karnataka Livestock Development Agency (KLDA) & Dept of AH.& V, GOK
4.	Veterinary College Bidar 16.2.2007	Pharmacological basis of use of Drugs and hormones in the treatment of Uterine infections in bovines - N. Prakash	21	Karnataka Livestock Development Agency (KLDA) Dept of AH.& VS, GOK.
5.	Veterinary College Bidar 23.2.2007	Pharmacological basis of use of Drugs and hormones in the treatment of Uterine infections in bovines - N. Prakash	20	Karnataka Llivestock Development Agency (KLDA), Dept of AH.& VS, GOK



6.	Veterinary College, Bidar 2.3.2007	Principles of judicious use of antimicrobials in uterine infections of bovines - U.Sunilchandra	20	Karnataka Livestock Development Agency (KLDA) & Dept. of AH.& VS, GOK
7.	Veterinary College,Bidar 9.3.2007	Pharmacological basis of use of Drugs & hormones in the treatment of Uterine infections in bovines - N.Prakash	20	Karnataka Livestock Development Agency (KLDA) & Dept. of AH.& VS, GOK
8.	Veterinary College, Bidar 16.3.2007	Pharmacological basis of use of Drugs & hormones in the treatment of Uterine infections in bovines - N.Prakash	20	Karnataka Livestock Development Agenc (KLDA) & Dept. of AH.& V, GOK
9.	Veterinary College, Bidar 23.3.2007	Pharmacological basis of use of Drugs & hormones in the treatment of Uterine infections in bovines - N.Prakash	20	Karnataka livestock Development Agency (KLDA) & Dept. of AH.& VS, GOK

Department of Reproduction, Gynecology and Obstetrics

Trainings organized

Sl. No	Place & Date	Officers / Farmers Training	Title of the Training Programme	No. of Participants	Sponsored by
	Dept. of Animal Reproduction, Gynecology & Obstetrics, Veterinary College, Bidar	Officers of Dept of AH & VS Govt. Of Karnataka	Artificial Insemination and treatment of infertility in dairy cattle and buffaloes		Karnataka Livestock Development Agency, Bangalore
1.	29.01.2007 to 02.02.2007	Do	Do	20	Do
2.	05.02.2007 to 09.02.2007	Do	Do	19	Do
3.	12.02.2007 to 09.02.2007	Do	Do	16	Do
4.	19.02.2007 to 23.02.2007	Do	Do	16	Do
5.	26.02.2007 to 02.03.2007	Do	Do	16	Do
6.	05.03.2007 to 09.03.2007	Do	Do	22	Do
7.	12.03.2007 to 16.03.2007	Do	Do	13	Do
8.	20.03.2007 to 24.03.2007	Do	Do	17	Do
9.	26.03.2007 to 30.03.2007	Do	Do	14	Do
10.	02.04.2007 to 06.04.2007	Do	Do	15	Do
11.	09.04.2007 to 13.04.2007	Do	Do	18	Do
12.	16.04.2007 to 20.04.2007	Do	Do	20	Do
13.	23.04.2007 to 27.04.2007	Do	Do	13	Do
14.	30.04.2007 to 11.05.2007	Do	Do	15	Do
15.	07.05.2007 to 11.05.2007	Do	Do	10	Do
16.	14.05.2007 to 18.05.2007	Do	Do	12	Do
17.	21.05.2007 to 25.05.2007	Do	Do	09	Do
18.	28.05.2007 to 01.06.2007	Do	Do	15	Do
19.	04.06.2007 to 8.06.2007	Do	Do	09	Do
20.	11.06.2007 to 15.06.2007	Do	Do	04	Do
21.	18.06.2007 to 22.06.2007	Do	Do	07	Do

Animal Health Camps /Livestock Shows
Exhibition Krishimela: Infertility treatment camp conducted to treat the animals with reproductive disorders as mentioned below.
Date : 24.3.2007
Name of the Village : Kapalapur
Clinician : Dr. Mahesh Dodamani

List of theses accepted during 2006-07

1. Hormonal approach for therapeutic management of RB crossbred cows, MVSc Thesis Submitted by Padmavati F Dodamani. Major Advisor-Dr.Suresh S.Honnappagol
2. Therapeutic efficacy of oral herbal uterine cleanser and restorative tonic for the management of RB cows, MVSc Thesis submitted by Arunsing Paraseshi. Major adviser Dr. Shursh S. Honnappagol
3. Therapeutic efficacy of poly-herbal uterine tonic and ecbolic in post partum cows by Shirajahmand Awati. Major Advisor-Dr. Suresh S. Honnappagol

Deputation for Higher Studies

Dr. R.G.Bijurkar, Assistant Professor was on study leave for his Ph.D. studies at Dept. of Animal Reproduction , Gynaecology & Obstetrics , Veterinary College, Hebbal , Bangalore. He has reported for duty as Assistant Professor w.e.f. 21.10.2006. He has completed course work and now he is completing his Ph.D research as part time student.

Sport activities

Dr. M.K.Tandle, Associate Professor, worked as a Team Manager and accompanied the team of Veterinary College, Bidar for KVAFSU Inter-Collegiate Sports and Games Meet - 2006 held at Mangalore.

Hostel Activities

Dr. M.K.Tandle has worked as Chief Warden, Hostel, Veterinary College, Bidar w.e.f. 30.5.2006 to

4.7.2007.

Students Activities

Dr. S.D.Sonwane, Assistant Professor, accompanied as Co-Tour Leader for the All India Educational Tour from 15.3.2007 to 5.4.2007.

Library Activities

Maintained a library by the faculties in the Department where different journals and books are available.

Research activities

Two research projects have been submitted for financial approval to out side agencies as detailed below. 1. "Studies on growth and reproductive performance of Dorper X Deccani Crossbred sheep" to NABARD. 2. Sustainable embryo transfer technology under field conditions submitted to Dept of AH and VS, Govt. Of Karnataka.

Staff activities

1. Studies on retention of placenta in non-descript buffaloes of Bidar district, research project by Dr. S.D. Sonwane completed during 2005-06.
2. Studies on the efficacy of Exanar-Janova and Mintrus in the treatment of post parturient anoestrus submitted by Dr. Mahesh Dodamani for financial approval to M/s Ayurved Ltd., New Delhi.

University Project

'Comparative efficacy of HCG and GnRH on fertility in Deccani Cross Ewes' research project by Dr. M.K Tandle was completed in the year 2005-06.

Projects funded by different sources other than ICAR

M/s Ayurved India Ltd., New Delhi sponsored research project of Rs. 57,200.00 on 'Comparative efficacy of intrauterine herbal and other antimicrobial agents in buffaloes with retained



fetal membranes ongoing project. PI Dr. S.S. Honnappagol.

Livestock Activities

Two Deoni breeding bulls are being maintained for practical demonstration along with fodder plot. Dr. Mahesh S. Dodamani, Assistant Professor is looking after the bull centre.

Scientific publications

M.K. Tandle, S.S. Honnappagol, N.V. Jadhav and M.M. Appannavar(2006), Effect of route of administration of HCG after mating on fertility in Deccani cross ewes. Indian J of Anim. Sci.76(8):614-615.

Participation of Scientist in Conference, Workshops, Symposia

Dr. M.K. Tandle, Dr. S.D. Sonwane and Dr. R.G. Bijirkar have participated in XXX Annual Congress of Indian Society for Veterinary Surgery and National Symposium on Surgical techniques for the benefit of livestock farmers and companion animals during 2-4 Nov. 2006 at Bidar.

Technologies asserted and transferred

It was found that wining can be induced by injecting GnRH on the day of estrus in Deccani ewes.

Any other items

- i. Several animals suffering with reproductive disorders were treated in OPD of Veterinary College, Bidar, and Veterinary Hospital of APMC, Gandhi Gunj, Bidar.
- ii. Several cows and buffaloes in estrus period were inseminated with frozen thawed semen.
- iii. Initiated garden development around the OPD, ARGO.
- iv. Initiated cesarean operation and genital operations facility in small and large animals at OPD, ARGO.

- v. Initiated AI facility in bitches.

Dept. of Animal Breeding, Genetics and Biostatistics

Extension Activities

Dr. M.M. Appannavar, Associate Professor and Head, participated in workshops on conservation of Indigenous breeds of Livestock organized by Dept. of AH & VS, Belgaum and Bidar on 26th and 27th February 2007 and spoke on need for conservation of indigenous breeds of cattle.

Department of Bio-Chemistry

Training Programme

1. Dr. Kartikesh S.M. Asst. Professor (SC) has participated in training Programme on "An update on diagnosis therapeutic procedures in Veterinary Practice", Sponsored by ICAR and Organized by the Tamil Nadu Veterinary & Animal Science University, Chennai, held at Madras Veterinary College, Chennai from 18th January to 7th Feb 2007.
2. Mr. Kartikesh S.M. Asst. Prof.(SC) has participated in the the winter School on Information Communication Technology Sponsored by ICAR organized by the Dept of Agricultural Extension Education, University of Agricultural Sciences, Dharwad, during September 3-23, 2007.

Department of Veterinary Microbiology Veterinary College, Bidar

Staff participation in Seminars/ Trainings

1. ASCAD training for Veterinary Officers of Department AH and VS, Govt. of Karnataka, "On Diagnosis and Control of Animal Diseases" from 17-07-2006 to 21-07-2006 and 7-08-2006 to 11-08-2006. Following scientist served as resource scientists.

Dr. Basavaraj Awati, Associate Prof. & Head given lecture on "Veterinary Biologicals," Transportation, Preservation of Clinical Samples"

2. ASCAD Training for Veterinary Livestock Inspectors of Department AH and VS, Govt. of Karnataka, on Diagnosis and Control of Animal Diseases from 5-02-2006 to 09-02-2006.

Dr. Basavaraj Awati, Assoc. Prof. served as resource scientist and gave lecture on "Infectious Diseases transmitted through Artificial Insemination and their Control Measures."

Cultural Activities

Participated in the cultural activities of the students during youth festival, College foundation day, Hostel day functions as member for various committees made for organization of these activities.

Sports Activities

Involved in Cricket match between Staff V/S Students played in the campus.

Hostel Activities

Title	Name	Year	Chairman
Milk borne survey of bovine Brucellosis in North Karnataka	Dr. Shivananda M.S	2007	Dr. Y. HariBabu
Immunological evaluation of immunomodulatory effect of in chicken vaccinated with Newcastle disease virus.	Dr. Basavaraj S.B.	2007	Dr. Y. HariBabu
Evaluation of immune status of the cattle vaccinated against brucellosis with RB 51 strain.	Dr. Khalid Ali Nadaf	2007	Dr. Y. HariBabu
Isolation and characterization of heat shock proteins form tumor cell line.	Dr. Harsha.G.V.	2007	Dr. Y. HariBabu

Library Activities

- Submitted the list of Text Books and Journals which are required by the Department.
- Reprography is work carried out and repaired slides, charts for the students demonstration.

Research Activities

Regular isolation and identification of pathogenic bacteria from the clinical samples for various Bacterial and Viral diseases.

Staff Research Project

1. Seroprevalance of Brucellosis in sheep and goats in and Around Bidar. Project is lead by Dr. Basavaraj. Awati, Assoc. Prof. in association of Dept. of ARGO.

2. Isolation and Identifaction of Mycoplasma from sheep and goats from respiratory tracts. Project. Dr. Y. Hari Babu is the P.I. And Dr. Basavaraj Awati is the Co-PI.
3. Isolation and Identification of Mycoplasma from CRD cases of poultry. Dr. Y. Hari Babu is the PI and Dr. Basavaraj, Awati is the Co-PI.

Scientific Publications

1. Mohd Amanullah and Y. Hari Babu (2006). Biochemical parameters as a measure of toxicity of carbamate insecticides on animal cells cultured in vitro, Tamilandu Journal of Veterinary and Animal Sciences, 2 (2):34-37.
2. Chandra Naik, B.M. and Y Hari Babu (2006) Effect of calf thymus extract on phagocyte cells in chicken vaccinated against Newcastle



disease virus (NDV), Indian Journal of Animal Sciences, 76(3): 228-229.

Dr. Y. Hari Babu and Dr. Basavarj Awati participated in National Surgery Conference held in the Department of Veterinary Surgery and Radiology, Veterinary college, Bidar from 2-11-2006 to 4-11-2006.

Participation of scientists in conference / workshop/seminar/symposia etc

Department of Veterinary and Animal Husbandry Extension

1) Trainings organized/ Participated

Sl. No	Place & Date	Officers / Farmers Training	Title of the Training Programme	No. of Participants	Organisers/ Sponsors
1.	Veterinary College, Bidar 17/07/2006 to 21/07/2006	Veterinary Officers	Diagnosis and control of animal diseases.	21	Veterinary College, Bidar (VCB) and Dept. of A.H. & V.S., Govt. of Karnataka
2.	Veterinary College, Bidar 07.08.2006 to 11.08.2006	Veterinary Officers	Diagnosis and control of diseases in Animals	20	VCB and Dept. of A.H. & V.S., Govt. of Karnataka
3.	Veterinary College, Bidar 05.20.2007 to 09.02.2007	Veterinary Livestock Inspectors (VLI's)	ASCAD training for Veterinary Livestock Inspectors	16	VCB and Dept. of A.H. & V.S., Govt. of Karnataka
4.	Veterinary College, Bidar	VLI's	ASCAD training for Veterinary Livestock Inspectors	19	VCB and Dept. of A.H. & V.S., Govt. of Karnataka
5.	Village Khanapur Dec. 2006	Farmers	DBT- Project Orientation and training of Beneficiaries of Bhalki Taluk	20	Dept. of AH & Veterinary Extension, VCB
6.	Village Hokhrana Tq. Aurad 29/1/2007	Farmers	DBT Project Orientation and training of Beneficiaries of Aurad Taluk	18	Dept. of A.H. & Veterinary Extension, VCB
7.	Veterinary College, Bidar 31/1/2007	Farmers	DBT- Project Orientation and training of beneficiaries of Bidar Taluk	14	Dept. of AH & Veterinary Extension VCB

8.	Village- Rajola, Kalyan 2/2/2007	Farmers	DBT- Project Orientation and training of beneficiaries of Rajola	8	Dept. of AH. & Veterinary Extension, VCB
9.	Village- Dastapur, Tq.- Basava Kalyan 12/2/2007	Farmers	DBT-project training of beneficiaries of Basava Kalyan taluka about goat farming	20	Dept. of AH & Veterinary Extension, VCB
10.	Veterinary College Bidar	Farmers	DBT-Project Selection process of Kamthana village	4	Dept. of AH & Veterinary Extension, VCB
11.	Veterinary College, Bidar	Farmers	Training of beneficiaries of Bhalki Taluk in complete feed making	20.	Dept. of AH. & Veterinary Extension, VCB
12.	Veterinary College Bidar 20/2/2007	Farmers	Training of beneficiaries of Basava Kalyan Taluk in complete feed making	14	Dept. of AH. & Veterinary Extension, VCB
13.	NKRDS, Humanabad, Dist. Bidar. 28/2/2007	Farmers	DBT-Project Orientation and training of beneficiaries of Humanabad Taluk	20	Dept. of AH. & Veterinary Extension, VCB
14.	Veterinary college Bidar 2/3/2007	Farmers	Training of beneficiaries of Kamtana village about complete Feed making	10	Dept. of AH. & Veterinary Extension, VCB
15.	Veterinary college Bidar	Farmers	Training of beneficiaries about complete Feed making	10	Dept. of AH. & Veterinary Extension, VCB
16.	Veterinary college Bidar 6/3/2007	Farmers	DBT-Project Orientation and training of beneficiaries of Humanabad Taluk	10	Veterinary Extension, VCB

Sl. No	Place & Date	Topic Discussed	No. of Participants	Organisers	Remarks
1.	Veterinary College, Bidar 12/09/2007	Improved livestock production practices	120	VCB & Dooradarshan Gulbarga.	Technical seminar and farmers interaction programme Later on 6 episodes of the same were broadcasted by DD-Gulbarga.
2.	Kaplapur	Investment in Agriculture for food Security	200	VCB & Prawardha, Bidar	Organized
3.	Veterinary College Bidar	Improved Dairy farming practices	115	VCB and American Soyabean Association New Delhi	Dairy Farmers

Seminars Participated

Sl. No	Place & Date	Topic Discussed	No. of Participants	Organisers	Remarks
1.	Veterinary College Bidar 23/9/2006	Fodder development and socio- economic	150	Dept. of A.H. & V.S., Bidar	Delivered a talk
2.	Veterinary College Bangalore 8/4/2007	Extension Education strategies for livestock environment interface	70	KVAFSU, Bidar and CALPI, Bangalore	Delivered a talk
3.	Veterinary College Bidar 27/02/2007	Workshop on Indigenous livestock conservation and Management	150	Dept. of AH & VS	Participated

Animal health camps / Livestock shows exhibition

Sl. No	Date	Place	Organised/ Participated	Total Participants	Remarks
1.	02.10.06	Kamtana,	Participated	Mass	
2.	16.10.06	Kaplapur, Dist. Bidar	Organized	300	World food day
3.	29.2.07	Sedam, Dist. Gulbarga	Participated	Mass	

Department of Livestock Production and Management, Veterinary College, Bidar

Staff participation in Seminars/trainings

ASCAD Training for Veterinary Livestock Inspectors of Department AH and VS Govt. of Karnataka, on "Diagnosis and control of Animal Diseases" from 5.02.2007 to 09.02.2007 and 19.02.2007, to 24.02.2007. Dr. P.G. Waghmare, Asst. Prof & Head has given a lecture on "Role of Dairying in Economic Upliftment of Farmers"

Cultural Activities

Participated in the cultural activities of the students during Youth festival, College Foundation day, Hostel day function served as member for various committees made for organization of these activities.

Other Activities

- * Visits to the hostels as a member of flying squad to prevent any incidence of ragging.
- * Reprography: Prepared slides, charts for the students' demonstration.

Staff Research Project

Comparative efficacy of intrauterine herbal and other antimicrobial agents in buffaloes with retained fetal membranes" in collaboration with Dept. of ARGO.

Scientific Publications

N.V. Jadhav, P.G. Waghmare and P.T. Chopde (2006), " Comparative efficacy of herbal and antibiotic growth promoters in broilers under field conditions" RVJI, VOL@, No.-II,: 99-101., July 2006.

Popular Articles

1. P.G. Waghmare and S.A. Kochewad Management of pregnant cattle. Pashudhan Vol. 33 (1), January 2007.
2. B.R.Motipawale and P.G. Waghmare. Feeding of sheep (Marathi). Yashwant, 17th Feb, 2007.
3. B.R. Motipawale and P.G. Waghmare. Management of Lambs (Marathi) Yashwant, 17th Feb, 2007.
4. P.G.Waghmare, B.R.Motipawale and S.A. Kochewad, Turkey Farming. Pashudhan, Vol 33 (2), February 2007.
5. S.A. Kochewad, P.G. Waghmare, B.R. Motipawale and S.M. Bhalerao. Rabbit Production and Management.. Pashudhan, Vol. 33 (3), March 2007.
6. P.G. Waghmare, Vivek Patil and S.A. Kochewad, "Role of Dairying" for Inspectors of Department AH and VS, Govt. of Karnataka and on Diagnosis and Control of Animal Diseases from 5-02-2007 to 09-02-2007 and 19-02-2007 to 24-02-2007

Participation of scientists in conference /workshop/seminar/symposia etc

- * Dr. P.G. Waghmare participated in National Surgery Conference held in the Department of Veterinary Surgery and Radiology, Veterinary College, Bidar from 2.11.2006 to 4.11.2006.
- * Awards and Distinctions- Received GOLD MEDAL for best paper presentation in National Surgery Conference held in the Department of Veterinary Surgery and Radiology, Veterinary College, Bidar from 2-11-2006 to 4.11.2006.



Sl. No	Funding Agency	Title	Objectives	Duration of the Work	Name of the Scientists
1.	University Fund	Detection of the pathogenic micro organisms in foods of animal origin in and around Bidar city	To collect the samples of foods of animal origin from different locations in and around Bidar city to assess their microbiological quality. To ensure the supply of clean wholesome and pathogen free foods to the consumers. To educate the butchers and farmers regarding the production and supply of quality foods	Two years	1.Dr.Pradeep Kumar Assistant Professor & Head, VPH 2. Dr. Vilas M. Vaidya Assistant Professor, VPH 3. Dr. Y. Haribabu Professor & Head, Veterinary Microbiology

Seminars participated

Sl. No	Place and Date	Topic delivered by	Topic discussed	No.of Participants	Organisers
1.	Veterinary College Bidar 20.07.06	Dr. Madhavprasad	Prevention and control of emerging zoonoses in India	21	ASCAD training for Veterinary Officers sponsored by Department of Animal Husbandry and Dairying, Ministry of Agriculture, GOI
2.	Veterinary College Bidar 10.08.07	Dr. Madhavprasad	Prevention and control of emerging zoonoses in India	20	ASCAD training for Veterinary Officers sponsored by Department of Animal Husbandry and Dairying, Ministry of Agriculture, GOI & GOK
3.	Veterinary College, Bidar 09/02/07	Dr. Pradeep Kumar	Zoonotic diseases transmitted from animals to man and precautions to be taken	16	ASCAD training for Veterinary Livestock Inspectors, sponsored by Dept. of AH & Dairying, Ministry of Agriculture GOI
4.	Veterinary College Bidar 09.02.07	Dr. Pradeep	Zoonotic diseases transmitted from animals to man and precautions to be taken	19	ASCAD training for Veterinary Livestock Inspectors sponsored by Dept. of AH & Dairying, Ministry of Agriculture GOI

Popular Articles published

Sl. No	Authors	Title	Date / Name of the Booklet
1.	Dr. Madhav Prasad	Prvention and control of emerging Zoonoses in India	ASCAD Training for veterinary Officers sponsored by Department of Animal husbandry and Dairying Ministry of AGriculture, GOI
2.	Dr. Pradeep Kumar	Zoonotic diseases transmitted from animals to man and precautions to be taken	ASCAD Training for Veterinary Livestock Inspectors sponsored by Department of Animal Husbandry and Dairying, Ministy of Agriculture, GOI

Faculty in the Department

Sl. No	Name of the Staff	Designation	Remarks
1.	Dr. Madhavprasad	Assistant Professor	Presently persuing his Ph.D. studies on deputation
2.	Dr. Pradeep Kumar	Assistant Professor	Presently working in the department
3.	Dr. Vilas M. Vaidya	Assistant Professor	Presently working in the department



Library and Information Centre, Bidar

Library and Information Centre, Bidar Campus

Library of KVAFSU has a very good collection of books and journals pertaining to Animal and Veterinary Sciences. The infrastructure development of the library has been continued and Rs. 11 lakh was spent on deferent items during the financial year 2006-07 for development of library and information resources. The volume of library books has been enhanced by 375 reference/textbooks worth of Rs. 2,36,396/- . The library has Subscribed CD ROM i.e VET-CD database (1972-2007) for Rs. 2,51 199/-, and presently library has subscribed to 38 Indian and 08 foreign journals for RS. 3,11,162/- to keep the students and faculty abreast of the latest scientific & technical developments both in India and abroad. Besides the library has subscribed to 16 general magazines

and 08 news papers and receive 16 titles of News letters, Annual reports and Popular magazines gratis publications from SAUs, ICAR Institutes and other Indian organizations.

The library has 1687 back volumes since 1965 connected to Master and Doctoral theses. During current financial year library has got printed 100 copies of "Library Rules and Regulation of University Library" for the academic benefit of the students and faculty members of KVAFSU, Bidar and allied institutes.

In the new clipping services the library is providing information to Veterinary/ Animal, Dairy and Fisheries. Among these, most of clippings are related to veterinary and dairy disciplines.

Sl. No.	Particulars	Amount
1	Over Due Charge	16,321.00
2.	B.L.C.R.	Nil
3.	L.R.T.	Nil
4.	Reprographic Services	3262.00
5.	Text Book Bank	875.00

Sl. No.	Library Collection (As on 31-03-2007)	Numbers
1.	Books	4815
2.	Thesis	865
3.	Reports	44
4.	Pamphlets	Nil
5.	Back Volumes	1687
6.	Journals	38(Indian) 08 (Foreign)
7.	Others (Specific Gift Journals)	16

Details of amount collected from staff and students

Sl. No.	Particulars	Amount
1.	Over Dues Charges	12,322.00
2.	Book Lost Cost Recovered	387.00
3.	Loss of Readers Tickets	520.00
4.	Text Book Bank	750.00
5.	CD-ROM Service Charges	1260.00
6.	Outsiders Consultation Charges	400.00
Total		15639.00

Text Book Bank

Sl. No.	Particulars
1.	Total No of Books : 39
2.	Total No of Members : 85
3.	Total No of Books Issued : 150
4.	Total Amount Collected : Rs. 750=00

Sc/St and Text Book Bank

Sl. No.	Particulars
1.	Total No Books (SC/ST Book Bank) : 599
2.	Total No Books ST text Book Bank) : 75
3.	Total No Members : 68
4.	Total No Books Issued : 136

Periodicals

1. Total No of Periodicals (Foreign and Indian) Subscribed for 2007 : 19
2. VET-CD and FSTA Database Subscribed for : 2

Cd-rom Services

The staff and post- graduate students have used VET-CDs for their research purpose and the information required was downloaded.

1. Total No of Request received : 126
2. Total Amount Collected : Rs 1260.00

Photo Copy Service

The Xerox Service is provided in the library through private agency for the benefit of staff and students.



Veterinary College, Shimoga

Progress of initiation of New Veterinary College, Shimoga

1. Major object of establishing the New Veterinary College under the administrative control of KVAFSU, Bidar by the Government of Karnataka is to fulfill the long standing demands of people of Malnad region in development of human resource in the field of Veterinary and Animal Husbandry, and to enhance the livestock productivity, in order to increase the social security and food security of the people in the region.
2. A draft proposal was submitted to Government of Karnataka by the Hon'ble Vice-Chancellor for a total grant of Rs. 78 Crores to start new Veterinary College at Shimoga.
3. On 28.04.2006 and 02.05.2006 the team led by Hon'ble Deputy Chief Minister Shri. B.S. Yediyurappa along with Vice-Chancellor Prof. R.N. Srinivasagowda and other officers visited various places and finally decided to start college on 160 acres land at Sominakoppa.
4. Dr. M.G. Govindaiah was appointed as Officer on Special Duty on 30.06.2006 and he assumed office on 06.07.2006.
5. On 03.08.2006 the Government Order ಸಂಖ್ಯೆ 81 ಪತ್ರಸೀರ್ಕೆ 2006 (ಫಾಗ್-I), was issued to start the College during 2006-07 itself.
6. As per Government order ಸಂಖ್ಯೆ ಕಂಜ 13 ಭೂತ್ವಾ ನಿಯಮ 2006, ಚೆಂಗಡಿಯ ರಿಳಾಂಕ. 22.08.2006 the District Commissioner, Shimoga accorded permission to acquire 39 acre 29 gunta land.
7. As per Government order ಸಂಖ್ಯೆ ಪತ್ರಸೀರ್ಕೆ 199 ಪತ್ರಸೀರ್ಕೆ 2006 ರಿಳಾಂಕ 23.08.2006 Government released Rs. 100 lakh for the College.
8. Totally 30 students (27 boys and 3 girls) were given admission through counselling on 29.08.2006.
9. On 07.09.2006 Prof. R.N. Srinivasagowda, Vice-Chancellor in presence of other officers formally inaugurated the College.
10. As per Government order ಸಂಖ್ಯೆ ಪತ್ರಸೀರ್ಕೆ 81 ಪತ್ರಸೀರ್ಕೆ 2006(ಫಾಗ್) ರಿಳಾಂಕ 11.09.2006 permitted creation and appointment of 42 teaching and 49 non-teaching staff.
11. Orientation to newly admitted students was conducted on 11.09.2006.
12. An additional grant of Rs. 744 lakh was approved by Government in its special assembly session at Belgaum.
13. On 10.08.2006 the cabinet approved the land and grant for the college.
14. As per Government order ಸಂಖ್ಯೆ ನಾಲ್ಕು 22 ಚೆಂಗಡಿಯ 2006 ಚೆಂಗಡಿಯ ರಿಳಾಂಕ 19.10.2006, a grant for Rs. 3.24 crores was allotted for acquisition of land at Sominakoppa.
15. As per District Commissioner letter ಸಂಖ್ಯೆ ಎಲ್.ಎ.ಕ್ರಿ. ನಿ.ಆರ್.35:2006-07 ರಿಳಾಂಕ 25.7.2006 and 06.09.2006 a total of 39 acre and 26 gunta land was acquired at a cost of Rs. 1.40 crores.
16. Proposal for construction of compound wall at cost of Rs. 1.4 crore was submitted to the University.
17. On 10.11.2006 the University submitted a proposal to the Principal Secretary, AH&VS for transfer of land at a cost of Rs. 6.04 crores.
18. As per Veterinary Council of India regulations the creation of 119 teaching and 226 non-teaching posts was accorded permission by the Cabinet.
19. As per Government order ಸಂಖ್ಯೆ ಪತ್ರಸೀರ್ಕೆ 81 ಪತ್ರಸೀರ್ಕೆ 2006 ರಿಳಾಂಕ 15.11.2006 the Government released grant of Rs. 744 lakh for land acquisition and creation of infra structural facilities under the head of account 2403-00-800-0-27-101.
20. An amount of Rs. 3.24 crores was given to

- SUDA for 118 acre 01 gunte and Rs 1.40 crore for 39 acre 05 gunte.
21. The acquired land was transferred to Registrar, KVAFSU(B) on 29.01.2007 vide letter ಸಂಪ್ರೇಶನಾತ್ಮಕ ವಿ.ಎ/2006-07 ದಿನಾಂಕ 29.01.2007.
 22. The land acquired was published in Karnataka gazette on ಕೃಷ್ಣಾಂಕ ಅಂಗ 3 ಎಂ.ಎ.ಕ್ರ.ವಿ.ಅಂಗ/2006-07 ದಿನಾಂಕ 14.2.2007.
 23. During 2006-07 a total of Rs. 5 crores 13 lakh was spent for various activities.
 24. Only Rs. 4.80 crores grant is available for construction of building, whereas a total of Rs. 45 crores is required. Hence, additional Rs. 40 crores release will be requested during supplementary budget.
 25. Inauguration of new campus was scheduled on 18.05.2007.
 26. Prof. M.G. Govindaiah discussed with Deputy Chief Minister and District In charge Minister, Water Resources Minister, District Authorities, SUDA Authorities and also various department officials for overall development. Important achievements made are
 - a. Widening and tarring of 1 ½ km. road from Vinobhangar to campus was proposed to SUDA completed.
 - b. Rejuvenation of Sominakoppa land and connecting it through Jackwell to campus by minor irrigation department is under progress. Govt. has approved the drinking water supply scheme to campus by the ministry of water resources.
 - c. Taking over of 118 acres of land from the SUDA and issuance of 4(1) notification of 39 acres and 36 gunta by the district Commissioner.

27. Hostel facilities

The newly admitted Veterinary College students are provided lodging and boarding facilities in a hired three storey building owned by Mrs. Geetha Chandrashekhar at 2nd

cross, Basaveshwaranagar, Savalanga Road, Shimoga 577204 for a monthly rent of Rs. 24,000/-.

- a. **Lodging facilities:** The hostel possesses 12 spacious suitable to accommodate three students in each and are furnished with cots, tables, attached toilet-cum-bathrooms and 24 hours water availability. Hot water facility is also available to every room. This is ensured through a large solar heater fitted on the roof top and in during cloudy and rainy days there is an additional electrical cum fire wood operated water heater to supply hot water. Other facilities like aqua guard water filter cooler, refrigerator, wall fans and telephone bearing No. 08182-325011 are provided.
At present there are 23 students residing in the hostel. Few teaching and non-teaching staff members also share the hostel facilities and with the additional responsibility of hostel care taking. Guest visiting the Veterinary College, Shimoga is also provided with boarding and lodging facilities in the hostel in the hostel at a fixed nominal cost.
- b. **Boarding facility:** The ground floor of the building has a big hall, suitable for providing dining facility to about 30 members at a time. There is a large kitchen attached to this dining hall. The kitchen is well equipped with all the kitchen wares and utensils.
- c. **Recreation:** The students are provided with two daily news papers (English and Kannada), two weekly magazines and television facility with cable connection.
- d. **Transportation:** A 35 seated deluxe bus is provided for the transport of the students from the hostel to the college and back which is about 5 kms away.
- e. **Guardian:** Dr. Mohd. Amanullah, Assistant Professor (SG), Biochemistry, Veterinary College, Vidyanagar, Shimoga is the Chief Warden of the Hostel.



Point wise details

1. Staff Participation in Seminars/Training etc.

- * Dr. M.G.Govindaiah, Dean, participated in the seminar organized by Karnataka Bio-diversity Board, Bangalore, Rastrakavi Kuvempu Pratistan®, Kuppalli and Dept. of Forest, Shimoga, on 30.12.2006 and presented a detailed note on "Animal Bio-diversity of the country with special reference to biosphere of western ghats" and its role in the development of Agriculture and Animal Husbandry for the benefit of the society.
- * Dr. M.G. Govindaiah, Dean participated in a Farmers Meet on 10.01.2007 at Pattanayakanahalli, Sira Taluk, Tumkur Dist. as Chief guest and also delivered talk on "Dairying in drought prone areas" with special reference to Tumkur and Chikkamagalore Districts.
- * Dr. M.G.Govindaiah, Dean, participated National Social Service camp on 02.02.2007 at in Kachinakatte organized by DVS Evening College of Kuvempu University, Shimoga.
- * Dr.V.B.Shettar, Assistant Professor (SS) delivered a talk on conservation of indigenous breeds at Davanagere on 13.12.2006, at Gangavathi (Koppal Dist.) on 19.12.2006, at Bagalkot on 21.01.2007 and at Dharwad on 28.02.2007.
- * Dr.Rudresh, B.H, Assistant Professor delivered talk on conservation of indigenous breeds at Birur on 17.01.2007.

Cultural activities

- * The Suvarna Karnataka Kannada Rajyothsava was celebrated on 30.11.06 at the College in a grand manner. Prof. Srikanta Kudi inaugurated, Sri S.N. Channabasappa, Chairman, SUDA, Prof. T.S. Hoovaiah Gowda, Principal, Sahyadri Science College and Dr. R.R.Ravindra, Deputy Director, Dept. of AH & VS, Shimoga were Chief Guests. Prof. M.G.Govindaiah, Dean, presided over the

function. All the activities were carried out by the students with the guidance of staff members.

- * Staff and students organized and celebrated 57th Republic Day of India on 26.01.2007 and Dr. M.G. Govindaiah, Dean addressed the gathering.

Sports activities

- * 13 students participated in the inter campus sports meet held at Fisheries College, Mangalore held from 24-27, November 2006. Dr. Md. Amanullah, Assistant Prof. (SG) accompanied the students.
- * 14 students cricket team took part in the inter campus cricket tournament held at Dairy Science College, Bangalore from 1-4, December 2006. Dr. V.B.Shettar, Assistant Prof. (SS) was the team manager.

Hostel activities

The students are accommodated in the well equipped hired Hostel building which is located on the Savalanga Road, IInd cross, Basaveshwara Nagar, Shimoga 577 201. One cook, one Care taker and one Security guard are engaged for the hostel.

Student activities

The various curricular and extra curricular activities are shown in various columns.

Curricular activities

Students were taken to various Goushalas, Livestock farms and Indigenous cattle conservation centre ("Kamadhuga Yojane" of Ramachandrapura Mutti) as part of hands on training cum practical classes of LPM, AHE and AGB courses.

Library activities

Membership usage	-
Acquisition of books	
A. Technical	572 books
B. Periodicals	One
C. Binding	Nil

Student welfare activities

During the period one hospital was recognized in the city to cater to the emergency health service to the students and a proposal for a part-time consultant doctor was submitted to the University.

Sports conducted

Department of Physical Education conducted Carrom match on 02.04.2007. All the 27 students took part in that competition.

The winner and Runner as follows

1. Winner Rohith S Hegde 1st B.V.Sc & AH
2. Runner Prasanth S. Talawar 1st B.V.Sc & AH

Department of Physical Education conducted Chess match on 17.04.2007. All the 27 students took part in that competition.

The winner and Runner as follows

1. Winner Rohith S. Hegde 1st B.V.Sc
2. Runner Sunil 1st B.V.Sc

Youth festival

In the very first year of its start 6 students represented in the Youth Festival held at Veterinary College, Bidar from 27-29 October, 2006 by the KVAFSU, Bidar. Dr. Ashok Pawar, Associate Prof. accompanied the students.

Staff project

Dr. Chidanandiah submitted a project on "Studies on the effect of curing and combination of flour on quality of enrobed chicken" to the University.

ICAR funded projects:

- * Dr. M.G. Govindaiah, Dean and Principal Investigator submitted the Final Report of Network project on "Mandy sheep breed".
- * Dr. M.G. Govindaiah, Dean and the Principal Investigator of Network Project on "Characterization of Hallikar breed of cattle" which is an on going project in the Department of ABGB, Veterinary College, Hebbal, Bangalore.

Projects Funded by different by different sources other than ICAR

Four projects have been proposed

- * National Agriculture Innovative Programme (NAIP) Serial No. 169 Integrated livestock, poultry and fisheries in three disadvantaged districts of Karnataka for sustainable livelihood security. Project leader Prof. M.G. Govindaiah, Dean, Veterinary College, Shimoga. A mega project of Rs. 2000 lakh for the period of five years.
- * Characterization of Malnad Gidda cattle submitted to NBAGR by Dr. M.G. Govindaiah, Dr. V.B. Shettar and Rudresh, B.H. Rs. 60 lakh
- * Characterization of South Kanara buffaloes submitted to NBAGR by Dr. M.G. Govindaiah, Dr. Nagaraj, C.S and Dr. V.B. Shettar. Rs. 30 lakh.
- * Animal Husbandry practices in Malnad region to Dept. of Planning, Govt. of Karnataka by Dr. M.G. Govindaiah and Dr. M.L. Manjunath Rs. 10 lakh.

Krishimelas conducted

Dr. M.G. Govindaiah, Dean, Staff and Students participated in the Krishimela held at Agricultural College, Navule.

Scientific publications

- * Dr. M.G. Govindaiah has published the following research abstracts in the National symposium on "Role of Animal Genetic Resources in Rural Livelihood" held at Ranchi during February 8-9, 2007.
- * Molecular characterization of casein gene and the effects of its polymorphism on selected traits in Buffaloes, P. 330
- * Contribution of Malnad Gidda cattle in Rural livelihood of Western Ghats of Karnataka, P. 236
- * Estrus and its distribution under different climatic seasons and sequence of calving in HF



upgraded cows, P. 247

- * Evaluation of breeding efficiency in upgraded HF cows P. 247
- * Impact of season and parity on service period in HF upgraded cows, P. 255
- * Incidence of abortion in relation to its parity seasons and stage of gestation in HF upgraded cows, P. 257
- * Influence of different climatic seasons order of lactation, sex of calf and sex ratio on gestation period in HF upgraded cows.

Popular Articles

- * Dr. M.G. Govindaiah, Dean, has published

following popular articles,

b. ಹಂಡಿ, ಮೊಲ ಮತ್ತು ಅಡು ಸಾಕಣೆಗೆ ಲಾಭದಾಯಕ ಉಪಕರಣ in Annadata, August 2006. P 46-47

b. Karnataka Sheep and Wool Development Corporation Limited Activities and programmes in proceedings of State level workshop on sheep breeding policy for Andhra Pradesh.

* Dr. Sanjeev Kumar has published following popular articles.

- a. Management of pregnant cattle, Pashudhan, January 2007
- b. Turkey farming, Pashudhan, February 2007
- c. Rabbit production and management,

Resources and Financial estimates for the year 2006-07

	Expenditure	BALANCE
TOTAL AMOUNT (in Rs.)	8,44,00,000.00	3,31,12,035.00

Staff position in different faculties of the College

SI. No	Name of the Staff	Designation
1.	Dr. M.G. Govindaiah	Dean
2.	Dr. Mohd Amanullah	Assistant Professor (SG), Dept. of Bio-Chemistry
3.	Dr. Vijayakumar B. Shettar	Assistant Professor (SS), Dept. of ABGB
4.	Dr. Ganganaik S.	Assistant Professor, Dept. of Anatomy
5.	Dr. Chidanandaiah	Assistant Professor, Dept. of LPT
6.	Dr. Rudresh B.H.	Assistant Professor, Dept. of ABGB
7.	Dr. Manjunatha L.	Assistant Professor, Dept. of AH & V Ext.
8.	Dr. T.C. Balamurugan	Assistant Professor, Dept. of Physiology
9.	Dr. Jagadish Hiremath	Assistant Professor, Dept. of Bio-Chemistry
10.	Dr. Sanjeev Kumar, A.K	Assistant Professor, Dept. of LPM

Non-Teaching

1.	Maruthi, Z	Lab Assistant
Total by 19 members (non-teaching workers) are working in contractual basis.		

Distinguished Visitors

- * The Hon'ble Minister for Animal Husbandry, Govt. of Karnataka and Pro-chancellor of the University Shri. Revu Nayak Belamagi visited the proposed college campus site and also the college on 09.10.2006 and interacted with the students and staff members and appreciated the development activities being initiated at this campus.
- * The Hon'ble Member, Board of Management of the University Shri. P.S. Nandakumar visited the proposed site and also the college and hostel. He was very much impressed upon on a going works and arrangement made in the hostel. Later on interacted with the students and staff. Besides he also applauded the bus conveyance arranged for the mobility of the students and staff members through out sourcing.
- * The Hon'ble Members, Board of Management of the University Shri. Rajanna, Shri. Samad Siddiqui and Smt. Sheela Tiwari visited the proposed site and also the college and hostel. They were very much impressed upon by the on going works and arrangement made in the hostel. Later on interacted with the students and staff.

Workshops, Seminars, Summer institute, farmer's day etc. convened:

- * The Pet Practitioners' Association, Shimoga chapter in association with the Veterinary Association, Shimoga chapter and Veterinary College, Shimoga organized one day

Workshop on "Pet Animals" on 3/12/06. It was inaugurated by Dr.R. Ravindra, District Dy. Director, Dr. B.C. Ramakrishna, President over the function. Dr.M.G. Govindaiah was the Chief Guest. Dr.S.Yathiraj, Prof. and Head, Clinical Medicine was present. The State AH & VS and V.C, Shimoga in Association of Pet India Organized "Pet Dog Shows" and a seminar. It was inaugurated by Sri. K.S. Eshwarappa, Water Resource Minister, Govt. of Karnataka, and M.G.Govinaiah, Special Office & Dean, Veterinary College, Shimoga. Sri. Marthanda Chairman SHIMUL, Dr.R.R.Ravindra were the Chief Guests.

* The staff and students of the college actively participated in the organization and conduction of the dog show on 19.12.2006 in association with the State Dept. of AH & VS, Rotary Club (North), Shimoga and Mysore Kennel Club, Bangalore. The show was inaugurated by Shri. K.S.Eshwarappa, Water Resource Minister, Shri.P.Boregowda, Chief Executive Officer, Shimoga, Sri S.N. Channabasappa, Chairman, SUDA, Sri H.B.Marthanda, Chairman, SHIMUL and Dr. M.G.Govindaiah, Dean, participated as Chief Guests and addressed the gathering. More than 250 Dogs of all categories belonging to different breeds participated in the show which was appreciated by one and all.

- * A seminar on "Malnad Gidda Cattle and its conservation" was organized collectively by the Dept. of AH & VS, Shimoga, Veterinary College, Shimoga and Kamadugha Yojane of Ramachandrapuram Mutt on 26/12/06 at



Ramachandrapuram Mutt, Hosanagar, which was sponsored by Karnataka Livestock Development Agency, Bangalore. It was inaugurated by his Holiness Sri Sri Sri Rahaveshwara Bharathi Swamiji of Ramachandrapuram Mutt. Hon'ble Deputy Chief Minister Sri B.S.Yadiyurappa presided over the function and spoke at length on various schemes initiated by the state govt. to preserve and propagate the indigenous livestock. Dr. M.G. Govindaiah presented a detailed note on Conservation and Genetic improvement of Malnad Gidda.

Participation of Scientists in conference, workshops, symposia

- * Dr. M.G. Govindaiah and President of Indian Dairy Association (South zone), participated in seminar on "Food security" at Pandichery from 8-9 February 2007 and spoke on quality milk products production and safety.
- * Dr. Sanjeev Kumar attended ISVS National Symposium at Bidar, Karnataka

- * Dr. Sanjeev Kumar attended one day refresher course on animal health and reproduction at Veterinary College, Bidar
- * Dr. Amanullah attended 21 days training programme at IVRI, Izatnagar.

Other activities

- * Prof. M.G. Govindaiah, Dean has been nominated as "External Member of the Education-TANAVASU, Academic council, Chennai for a period of three years from 2006-07 to 2008-09.
- * Prof. R.N. Shrinivasagowda, Vice-Chancellor and M.G. Govindaiah, Dean were actively involved in developing and establishment of new Veterinary College, Institute on Toxicology, Wildlife Veterinary Medicine Institute and other University developmental activities.
- * Dr. M.G. Govindaiah is governing council member of National Institute of Animal Nutrition and Physiology, Bangalore.

studies on rabies- In and around Bangalore. Abstract of the paper presented at Silver Jubilee convention of ISVM at Pant Nagar 26-28 Feb 2007.

5. Nelson Mathew, Muralidhar A, Yathiraj S and P T Ramesh (2007). Evaluation of rabies recombinant DNA vaccine. Abstract of the paper presented at Silver Jubilee convention of ISVM at Pant Nagar 26-28 Feb 2007.
6. Mahendran K, Muralidhar A, Yathiraj S and Ansar Kamran (2007). Epidemiological study of otitis in dogs. Abstract of the paper presented at Silver Jubilee convention of ISVM at Pant Nagar 26-28 Feb 2007.
7. Mahendran K, Muralidhar A, Yathiraj S and Ansar Kamran (2007). Etiology and therapeutic management of otitis in dogs. Abstract of the paper presented at Silver Jubilee convention of ISVM at Pant Nagar 26-28 Feb 2007.
8. Ramesh P T, Muralidhar A, Yathiraj S and Narayana Bhat M (2007). Epidemiological study of fowl cholera in parts of Karnataka. Abstract of the paper presented at Silver Jubilee convention of ISVM at Pant Nagar 26-28 Feb 2007.
9. Ramesh P T, Muralidhar A, Yathiraj S and Narayana Bhat M (2007). Evaluation of biofilm fowl cholera vaccine against commercial vaccines. Abstract of the paper presented at Silver Jubilee convention of ISVM at Pant Nagar 26-28 Feb 2007.
10. Nelson Mathew, Muralidhar A, Yathiraj S and Ramesh P T (2007). Evaluation of rabies recombinant DNA vaccine against commercial vaccine. Abstract of the paper presented at Silver Jubilee convention of ISVM at Pant Nagar 26-28 Feb 2007.
11. S.Yathiraj, M.Narayana Bhat, Deepthi B R, H A Upendra and A Muralidhar (2007). Pattern of bacterial isolates from mastitis in cows. Abstract of the paper presented at Silver Jubilee convention of ISVM at Pant Nagar 26-28 Feb 2007.
12. Nelson Mathew, Muralidhar A, Yathiraj S, Ramesh P T (2007). Comparison of efficacy of cell culture rabies vaccine. Abstract of the paper presented at Silver Jubilee convention of ISVM at Pant Nagar 26-28 Feb 2007.

Department of Surgery and Radiology

1. George chandy K M Srinivas murthy and Vasanth M S (2006) Management of urinary incontinence following castration for bilateral testicular tumour in a dog. Indian VeterinaryJ. 83: 994-995.
2. George chandy and Vasanth M S (2006) Equine recurrent uveitis and its medical mangement - A case report. Centaur 23(2): 31-33.
3. George chandy K M Srinivas murthy and Vasanth M S (2006) An unusual case of urethral calculus in a pup. Indian VeterinaryJ. 83: 1103-1104.
4. George chandy K M Srinivas murthy and Vasanth M S (2006) Anophthalmia and microphthalmia in two great dane pups. Indian VeterinaryJ. 83: 1236-1237.
5. George chandy and Vasanth M S (2006) Rehabilitation of a paraplegic dog on a locally fabricated wheel cart. Intas polyvet 7: 83-85
6. George chandy and Vasanth M S (2006) Use of corticosteroids for the managementof traumatic paraplegia in companion animal. Vet Practitioner 7:13-14.
7. George chandy, Senthil selva kumar and Vasanth M S (2006) Cronic suppurative jugular thrombophlebitis and its mangement in a horse A case report. Centaur 22: 62-65.
8. George chandy, Raidurg R and Vasanth M S (2006) Management of rupture of caudal cruciate ligament in two dogs. Indian J. Veterinaryurg. 27: 43-44.
9. Balappanavar B R, Ranganath L, Vasanth M S, and Narayanaswamy H D (2006) studies on healing of urethral tissues after urethrorrhaphy and urethroplasty in dogs. Indian J.Veterinaryurg. 27(1): 21-23.

Dairy Science College, Hebbal, Bangalore

Important activities

Department of Dairy Economics & Business Management

Dr. Lalith Achoth delivered two lectures on "ARIMA for market Intelligence and Information" and "Uses of Markov Chain Analysis in Marketing Research" at the Summer Institute in Agribusiness Management at NAARM, Hyderabad.

Papers Published

Department of Dairy Economics & Business Management

- * Srinivas, G., P.G. Chengappa, Keshava Reddy, Lalith Achoth and G.N. Nagarja, 2005, Socio-economic determinants of Technology adoption in Sericulture An analysis, Indian Journal of Agricultural Economics, 60 (2), 264-270.
- * Srinivas.G, P.G.Chengappa, Keshava Reddy, Lalith Achoth and G.N.Nagaraja, 2005, Optimum Cropping Patern for Sericulture Dominated farms in the Southern Dry Zone of Karnataka, Agricultural Economics Research Review, 18(1), 117-132.
- * Pouchepparadjou, A, Kumarvel and Lalith Achoth, 2005, An Econometric Analysis of Green Technology Adoption in Irrigated Rice at Pondicherry Union Territory, Indian Journal of Agricultural Economics,
- * Janiah, Aldas, Lalith Achoth and Cynthia Bantilan, 2005, Has the Green Revolution Bypassed Coarse Cereals? The Indian Experience, The Electronic Journal of Agricultural And Development Economics, Vol 2(1), eJade, 20-31.

Department of Dairy Chemistry

- * Nutritional evaluation of Caseino Phospho Peptides (CPPs) isolated from rejected milk. Sunitha, C. and Narasimha Murthy, Ind. J. Dairy Biosci; 18: 45-49.

Department of Dairy Technology

- * Venkateshaiah, B.V. Venkatesh, M. and Arun kumar H. 2006. Value added dairy products (kannada article), FTI Hand book, p-44-49
- * Venkateshaiah, B.V. Mahalingaiah, M Venkatesh, M. and Arunkumar H. 2006. Practical manual on ice cream and frozen desserts.DT 305.
- * Arunkumar H. Venkateshaiah, B.V. Venkatesh, M. and. S.B.Patil. 2006, Paneer: nutritious milk product (kannada article). Krishi vignana. 30(1) Jan-March, p- 23-24
- * Venkatesh, M., Arun kumar,H.. Sachindra Babu, A. and Venkateshaiah,B.V.2006. Paneer: nutritious milk product (kannada article). Krishi vignana. 30(1) Jan-March.p- 23-24

Department of Dairy Technology

Completed postgraduate research M. Tech (Dairy Technology)

- * Development of low caloric enriched diabetic diet Sandesh
- * Development of enriched probiotic yoghurt drink
- * Extension of shelf-life of paneer by the application of hurdle technology

Ongoing PG Research

- * Extension of shelf life of enriched Shrikhand by the application of continuous microwave processing and modified atmosphere packaging
- * Development and standardization of Kunda,
- * Effect of concentration of milk on Physico-chemical and sensory characteristics of burfi,
- * Development of reconstituted whey beverage,
- * Development of ready to reconstitute whey protein and probiotic beverages.



Projects Sanctioned

HIGHLIGHTS

Characterization of Caseinophosphopeptides (CPPs) obtained from different casein fractions fermented with lactic cultures.

a. A study was undertaken to know the mineral binding ability of CPPs obtained from different casein fractions of cow and buffalo milk fermented with two lactic cultures viz, *Streptococcus thermophilus* and *Lactobacillus delbrueckii spp bulgaricus*. The study revealed that CPPs from cow milk αs - casein fermented with *Lactobacillus delbrueckii spp. bulgaricus* has more calcium binding ability than buffalo casein fractions which may be due to higher amount of an-ionic phosphoserine residues. The characterization of CPPs has been done by using RP-HPLC and SDS-PAGE. Further work on this line is in progress.

b. Studies on gelation characteristics of Soy protein isolate with WPC and its utilization in preparation of Kulfi and Yoghurt.

A study was undertaken to evaluate the gelation characteristics of Soy protein isolate with WPC and the factors affecting the same. Then the admixture of soy protein isolate and WPC was utilized to replace SNF in kulfi and yoghurt. It was found that optimum level of protein required for gel formation is 10% and admixture can be used to replace upto 25% SNF in Kulfi and yoghurt with improved body and texture and nutritional value.

c. Isolation and characterization of bio-active peptides obtained from cow and buffalo milk casein fractions.

A study was undertaken to know the characteristics of bio-active peptides from cow and buffalo milk casein fractions hydrolyzed with proteinases. The CPPs and hydrolysed fractions were analyzed for Anti-microbial activity, mineral binding and ACE inhibiting property. It was observed that in CPPs and other peptides from casein fractions

had no antimicrobial activity. Mineral-binding capacity was more from CPPs hydrolyzed with trypsin.

d. Evaluation of peda and sandesh for glycemic index value

A study was undertaken to evaluate the glycemic index of indigenous dairy products like peda and sandesh. It was found that the incorporation of soluble edible starch, cereal husk in the product at the rate of 5% had tremendously decreased the glycemic index value which is a good sign especially if such products are incorporated in meal of known diabetics.

e. Utilization of whey protein from drumstick (*Moringa Oleifera*) kernel polysaccharide gel in kulfi and yoghurt.

Gelation characteristics of Whey Protein Concentrate (WPC) with Drumstick Kernel Powder (DKP) was studied and the influence of incorporated WPC-DKP gels on sensory attributes of Yoghurt and Kulfi was assessed. It was noticed that the combination of WPC-DKP at 8% and 4% at a pH of 6.5 and added Calcium Chloride concentration of 10mm improved the physico-chemical and sensory attributes of Kulfi and Yoghurt.

Department of Dairy Economics & Business Management

One research proposal entitled "Inter Regional Appraisal of potential, opportunities and constraints for enhancing efficiency of the livestock sector in Karnataka" for funding under Rural Innovative Fund RIF of NABARD.

Department of Dairy Microbiology

Titles of research projects proposed for NATP funding:

- a. Development of a Universally Acceptable Probiotic Dairy Products and its effect on the Health of Human Beings.
- b. Development of need based biological filters.
- c. Development of Quality Kits for Rapid Milk Testing at Field Levels.

Extension Activities

Department of Dairy Economics & Business Management

- a. Conducted a short course in personality development and communication skills to the students of the final year B.Tech. (D.Tech) course by experts from Management Institutes and Industry during July 2006.
- b. The staffs of the Department were actively involved in the RAWE programme conducted by the College as part of in-plant training programme during June 2006.

Department of Dairy Microbiology

- a. Microbiological analysis of domestic water samples of University employees- 6 nos.

- b. Supply of starter cultures to students of other departments for research work.
- c. Provided freeze drying facility to preserve the starter cultures to Nandini Milk Products Limited, Bangalore.
- d. During RDWE Programme for IV year B. Tech. (D.Tech.) students during March 2007,
 - A lecture on Clean Milk Production was delivered for the gathered milk producers.
 - Staff of the Department participated in RDWE Programme for conducting exhibition.
 - Teachers of the Department participated as Camp Officers.

Department of Dairy Engineering

Consultancy is extended whenever entrepreneurs

Department of Dairy Technology

Date	Place of Activities
26.4.06	Staff members delivered a lecture cum demonstration on milk products for the farmers attended through water shed development, farmers field school programme, Sujala watershed project, Govt. of Karnataka. Batch-1.
27.4.06	Staff members delivered a lecture cum demonstration on milk products for the farmers attended through water shed development, farmers' field school programme, Sujala water shed project, Govt. of Karnataka. Batch-2.
8.5.06	Delivered a lecture on value added milk products for the Agri clinic students/entrepreneurs.
23.5.06	Delivered a lecture on possibilities and problems in dairying at Kolar during 13 th KPRS
23.5.06	Delivered a lecture cum demonstration on milk products at SEDP for the benefit Agri clinic students
10.8.06	Explained the activities of SEDP for the delegates from McGill University
1.9.06	Delivered a lecture cum demonstration on milk products on at SEDP for the benefit Agri clinic students
7.9.06	Delivered a lecture cum demonstration on milk products for the benefit of swarna jayanti self employment yojana at Mandya, organized by Vijaya Bank.
27.9.06	Delivered a lecture cum demonstration on milk products preparation for farmwomen at RK Patashala, Anwkal
7.10.06	Delivered a lecture cum demonstration on milk products on for the benefit farmers at Marasur, Anekal, Bangalore.
16.10.06	Delivered a lecture cum demonstration on milk products in view of world food day at KVK, Mangalore.
16.10.06	Lecture cum demonstration on milk products for the benefit farmers at Doddaballapur for SASY group.
29.11.06	Delivered a lecture cum demonstration on milk products on for the benefit farmers. Organized by Dept. of Agriculture, ADA office, Bangalore.
1.12.06	Delivered a lecture cum demonstration on milk products for the benefit farmers at Adiganahalli, Devanahalli
4.12.06	Delivered a lecture cum demonstration on milk products in view of Agri women day at Harohalli, Devanahalli.
31.01.07	Delivered a lecture cum demonstration on milk products for vocational training programme on animal sciences at KVK, Shimoga
1.02.07	Delivered a lecture cum demonstration on milk products for vocational training programme on animal sciences at JSS, Shimoga
2.02.07	Delivered a lecture cum demonstration on milk products for vocational training programme on animal sciences at Thirthahalli, Shimoga
4.03.07	Delivered a lecture cum demonstration on milk products for housewives and farmers at L. Muthagadahalli, Siddlagalta.



Library

The Hebbal Campus Library, KVAFSU caters to the needs of both the Dairy Science & Veterinary Colleges located on the Campus. Two hundred thirty nine titles were added to the library and these books were procured through the ICAR. Sixty five theses submitted by post graduate and Ph.D. students have been added to the collection. A total number nineteen, both foreign and Indian journals were subscribed for 2007. Two VET-CD and FSTA database were also subscribed for 2007. Xerox services are being provided in the library through a private agency for the benefit of staff and students.

Krishimela

The staff of the Dairy Science College actively participated in the Krishimela organized under the aegis of UAS Bangalore from 17 to 20 Nov. 2006.

Students Tours

- * Mr. C. Kemparna, Associate Professor, Department of Dairy Chemistry led the State Educational Tour for the III Year B. Tech. (D. Tech.) from 26th April to 5th May 2007.
- * Dr. Lalith Achoth led the All India Educational Tour for final year B.Tech (D.Tech) students from 15th March 2007 to 29th March 2007.

Sports Activities

- * The Dairy Science College hosted the inter-collegiate cricket tournament from 1st to 4th December 2006.
- * Inter class sports and athletic meet was conducted during the 3rd week of May 2007 on the occasion of the College Day celebrations.
- * Thirty students participated in the inter-collegiate athletic and sports meet held at Mangalore Campus from 27th to 29th November 2007. The students of this College secured 2nd place in Shotput (Women), Table Tennis (Men), & 4 x 100 mtrs. relay (Women). They also secured the 3rd place in High Jump

(Women & Men)

Cultural Activities

- * The college organized inter-class competitions in quiz, eating competition, dairy products judging competition, solo and group singing, light music, rangoli, debate, elocution and extempore speech in April and May 2006. More than 100 under-graduate and post-graduate students participated in these events. The prizes for the winners were distributed during College Day Celebrations held in June 2006.
- * The college day celebrations were held in June 2006. Mr. Hanumesh, Manager, Bangalore Dairy & Mr. Rajendra Prasad Reddy, Manager, Almarai Dairy, Saudi Arabia were the chief guests. Prof. R.N. Sreenivas Gowda, Hon'ble Vice-Chancellor, KVAFSU presided over the functions. Various cultural activities were organized during the college day celebrations.
- * The Social and Cultural Forum, Dairy Science College organized an Extempore Speech competition during September 2006. About 20 students participated in the event.
- * Suvarna Kannada Rajyotsava Celebration was held in the college in November 2006. Noted singer Shimoga Subbanna and former Kannada & Culture Minister, Karnataka were the chief guests.
- * The college team participated in inter-college youth festival held at Bidar 28-30th Oct 2006 in various events and the College won 11 prizes in light vocal, quiz, debate, on the spot painting, clay modeling, poster making and Rangoli competitions. Mr. Nanjunde Gowda, Ms. Swetha, Ms. Sweety and Mr. Anees Maniyar won first prizes in light vocal, poster making and clay modeling & represented the University in these events during the 8th Inter-Agricultural Universities Youth Festival (8th ARGIUNIFEST-2006) held at Raipur, Chhattisgarh State in Nov 2006.
- * The Dairy Science College celebrated its Silver Jubilee in Feb 2007. A two day seminar on "Globalization Perspective and Challenges For Dairy Institution and Industries" was held to mark the occasion. The students of the college presented many cultural events during the



the International conference on "Sustainable Fisheries Development for food and health security" during 20 - 21 December, 2006 held at College of Fisheries, Mangalore.

- * Dr.Ramachandra Bhatta, presented a paper on "Diversification of livelihood Opportunities for coastal communities of Karnataka" at the National Workshop on Livelihood Diversification and Coastal Resource Management" at Gujarat Vidya Peth, Ahmedabad, during January 11-12, 2007 and delivered a talk on Special Economic Zones and FDI flow in Coastal Karnataka at the Department of Journalism and Mass Communication, Mangalore University, Mangalagangotri March 13, 2007.
- * Dr.Ramachandra Bhatta participated in the Project Evaluation and Review Workshop of the Coastal Conservation Project at CCD Madurai March 9-10, 2007 and participated in the Fishery Policy Workshop at MANAGE, Hyderabad organized by CIFE (ICAR) and PREPARE, Chennai March 23-24, 2007.
- * Dr.Ramachandra Bhatta presented a paper on the "Assessment of Scope for Entrepreneurship Development through SHGs in Coastal Karnataka" at the Second

Public Policy and Management Workshop held at Indian Institute of Management Bangalore, during April 12-14, 2007. He also delivered a lecture on WTO and Fishery Trade at the ICAR Winter School on November 08, 2006 organized by the Department of Agricultural Economics, UAS, Dharwad.

- * Dr. S. Benakappa, Professor and Shri H.N. Anjaneyappa, Assistant Professor participated in 21 day summer school on "Advanced fish taxonomical methods for fisheries professionals" organized at Fisheries College and Research Institute, Tuticorin , Tamil Nadu from 4th to 26th September, 2006.
- * Sri S.R. Somashekara, Assistant Professor participated in UGC sponsored refresher course on "Water management and water harvesting" organized at Kuvempu University, Shimoga from 13th November to 12th December, 2006.

Deputation for higher studies

- * Mr.S.Varadaraju, Assistant Professor, Dept. of Fishery Engineering has been deputed for higher study leading to Ph.D. at N.I.T.K. Surathkal.

Cultural activities : The winners of different cultural activities are,

1	Creative Winner	Murali. S.	II B.F.Sc	II Place
2	Mock Press	Mujahid Khan	II B.F.Sc	II Place
3	Quiz	Manoj Bhaskar Rahul Singh	II B.F.Sc I B.F.Sc	II Place

The College students participated in the NITK State Level Cultural Fest 'INCIDENT 2007' held at Surathkal and won prizes

1.	Debate	Mohan. A. And Milan K. Barath	M.F.Sc. IV Year	I Place
2.	Kannada Anthakshari	Chandra.M.V	M.F.Sc.	II Place
3.	Kannada Quiz	Pradeep Kumar Rajesh Moger Prabhu Gowda Mohan. A.	IV Year II Year II Year M.F.Sc.	III Place

Mangalore Institute of Fashion Technology Cultural Fest CUTURAL "KADANA" 2007

1. Debate Group	Mujahid Khan Murali. S.	II B.F.Sc II B.F.Sc	II B.F.Sc
2. Individual	Mujahid Khan	II B.F.Sc	I Place
3. Extempore	Mujahid Khan	II B.F.Sc	I Place
	Murali. S.	II B.F.Sc	II Place
4. Mock Press	Murali. S.	II B.F.Sc	I Place
5. Painting	Mallesh. B.		I Place
	Manoj Bhaskar		II Place
6. Pencil Sketching	Manoj Bhaskar		I Place

04. Sports Activities

- * College sports team had participated in various games and sports during 2006-07. College of Fisheries, Mangalore organized the intercampus sports meet during 2006-07. In this sports meet, the College team were the winners in Table Tennis (Men), Table Tennis (Women), Shuttle Badminton (Women) and runners in Volley Ball (Men), Shuttle Badminton (Women) and Basket Ball (Men). The College team were declared as the overall champions.
- * From the College of Fisheries, Mangalore 14 students (5 girls and 9 Boys) represented KVAFSU in the All India Inter Agricultural University Sports and Games meet held at Panth University, Ludhiana. It is a proud privilege to state that the College student Miss. Asha bagged Gold medal in 800 mtrs running and Mr.N.Ravikumar bagged Bronze medal for 1500 mtrs running for our University. A Sports Day was celebrated on 21-04-2007 in the Campus and gad students and staff participated in various events.

N.S.S. Activities

During 2006-07, 87 boys and 25 girl volunteers enrolled for N.S.S. Fifty tree samplings were planted around Sports Ground and Main Campus. A 10 days NSS special camp and 120 days regular programme were conducted. A demonstration of

harvesting and conservation of rain water in pits was organized in Mogeru village. One day camp was organized to teach yoga, pranayama and meditation to students. Health programme was organized at Maple village regarding awareness for AIDS, identification of blood group and blood donation.

Hostel activities

There were both boys and girls hostels in the campus. In the Boys hostel, 156 boarders and in girls hostel, 29 boarders were staying. The H.M.C. and H.S.C. meetings were conducted every month. A combined Hostel Day was celebrated on 10-06-2006. Leading news papers and scientific magazines were supplied in the hostels.

Student Activities

- * Kannada Rajyotsava was celebrated in the college on 26-11-2006. Mr. L. Siddalingappa, Writer and High School Teacher, Government High School, Bellare was the Chief Guest. Several Competitions were held on the occasion and prizes distributed.
- * A quiz programme was held for students on 2-04-07 anchored by Mr. A. Mohan, P.G. Student.
- * Scientists - students interaction meet was held at CMFRI, Bolar, Mangalore



- * A very special programme called, STAR FISHCO CONTEST 2007 was successfully held during February, 2007 anchored by Mr. G.B. Purushotham, Ph.D Scholar with the help of II.B.F.Sc. students.
- * Adventurous Club of the college undertook trekking to Bandaje, Kumaraparvatha of the Western Ghats.
- * Our students participated in the inter collegiate competitions held at Roshni Nilaya in January 2007.
- * Miss. Milana K.B. of IV BFSc published a book of self-composed poems "BHAVA LAHARI" in March 2007.
- * Miss. Milana K.B. of IV BFSc was felicitated with "Aralu Mallige" Award at Mysore during February 2007 and performed Bharathanatyam at Kodagu Festival, 2007.

Special guest lectures arranged

- * Prof. P. Reddanna, Professor of Zoology, University of Hyderabad, delivered a talk on "Arachidonic Acid and its Role in Inflammation" on 08.06.06
- * Prof. Peter Bossier, Laboratory of Aquaculture and Artemia Reference Center, Faculty Bioscience Engineering, Ghent University, Belgium. delivered a talk on "Quorum Sensing in the Aquaculture Food Chain" on 20.02.07
- * Prof. Goebel, Professor and Head, Lehrstuhl fur Mikrobiologie, Biozentrum, Universitat der Wuerzburg, Germany, delivered a talk on "Listeria as a Vaccine Candidate" on 23.04.06
- * Dr. Peter J. Walker, Senior Scientist, CSIRO, Australia, delivered a talk on "Gill Associated Viruses of shrimps" on 27.10.06
- * Deputy Director of Fisheries delivered a guest lecture on 'Marine fishing Act of Karnataka'

Library activities

The College Library is functioning from 9.30AM

to 8.00 pm daily.

Membership usage

182 student members and 57 staff members using the library.

Acquisition of books

- a) Technicals : 149 nos
- b) Periodicals : 14 foreign and 22 Indian
- c) Binding : 456 nos.

Reprography

Reprography service provided

Elocution

Murali. S. of II B.F.Sc. Participated in 'YOUTH FESTIVAL' held at Bidar during November, 2006 and won III Place in Elocution.

Youth festival

The following students have represented the

Events	Name	Class	Position
1. Kannada	-		I Place
2. Mime	-		III
3. Dance	-		III
4. Collage	Mallesh. R	II B.F.Sc	III
5. Group song	-		III
6. Debate	-		III place
7. Extempore	Murali S.	II B.F.Sc.	III place
8. Elocution	Murali S.	II B.F.Sc.	III Place
9. Painting	Jagadesh T.D	IV B.F.Sc	II Place
10. Cartooning	Shravan Hegde	IV B.F.Sc.	III Place
11. Clay modeling	Jagadesh T.D	IV B.F.Sc.	II Place

15. Research activities

Bacteriophage therapy to improve larval survival in shrimp, Penaeus monodon

- * Several lytic bacteria against Luminous *Vibrio harveyi* have been isolated and characterized at both morphological and molecular level. The lytic ability of these bacteriophages have been tested against over 200 isolates obtained

from different parts of the world including Asia, Australia and South America. Using bacteriophage having broad spectrum of activity, technology for bacteriophage therapy of luminous bacterial disease in shrimp larvae has been developed. In hatchery trials, bacteriophage therapy led to over 80% survival in larvae while antibiotic therapy led to 40% and untreated control showed less than 20% survival. Thus it has been shown that bacteriophage therapy is an effective alternative to antibiotics in aquaculture.

New oligonucleotide probe for monitoring vibrio counts in hatcheries

- * *Vibrio* sp., including luminous *V.harveyi*, *V.vulnificus* and *V.parahaemolyticus* are major bacterial pathogens of shrimp larvae. Monitoring *Vibrio* counts in hatchery water and larval samples would be important for health management. Presently TCBS agar is used for enumeration of *Vibrio* spp, but this medium, designed for human pathogenic *Vibrio* spp is highly inhibitory and leads to about 1-2 log lower counts than actual. To overcome the problem and get realistic estimate of *Vibrio* counts, an oligonucleotide probe binding to a region of *gyrB* gene of all *Vibrio* spp has been designed. When labeled with alkaline phosphatase, this label could be used for enumeration of *Vibrio* spp in hatchery environments by colony hybridization technique.

Identification of DNA microsatellite in freshwater prawn

- * Genetic marker for population of cultured animals would be important for genetic selection of populations with commercially important traits like fast growth and disease resistance. Using microsatellite enrichment techniques, two DNA microsatellites were identified in genome of freshwater prawn, *Macrobrachium rosenbergii*. The sequences of these microsatellites, (CA)₁₃ repeats, (GA)₃₀

and (GA)₃₀ repeats have been deposited in GenBank with accession number DQ793216 and DQ 793215. Primers binding to flanking region of these microsatellites have been designed and evaluated in population of *M. rosenbergii* from Kerala and Karnataka. The discriminative ability of microsatellite was very good with heterogeneity index of 0.27 ± 0.32 and 0.92 ± 0.29 respectively. Shannon index for these microsatellites were 0.6161 ± 0.2310 and 0.6619 ± 0.2276 respectively.

Poly culture of carps and freshwater prawn

- * Scientific farming of carps and freshwater prawn in poly culture system in farmers freshwater ponds in Dakshina Kannada and Udupi districts of coastal Karnataka was popularized in a DBT funded project. Improved technology on freshwater aquaculture was disseminated through demonstrations and trainings.
- * Bioactive compounds from marine organisms : Over 7000 marine bacteria were screened for antibacterial activity. 18 isolates showed antibacterial activity against both gram positive and gram negative bacteria. Sand anemones from Karnataka coast were found to have anticancer activity.
- * It is possible to acclimatize *S.Silhama* fingerlings and adults to captivity i.e. FRP tanks with aeration and water recirculation. Studies also showed that the sex of *S.silhama* could be identified based on external characters and stripping of eggs with and without hormonal/ environmental manipulation. A water recirculatory system consisting of 12 FRP tanks has been created in the hatchery shed of the College.
- * MAb based immunodot could detect the EUS fungus two months before occurrence/ outbreak of EUS in fishes. It is an ideal prediction tool for EUS.
- * A simple monoclonal antibody based farmer kit for detection of white spot virus in shrimp



was released to farmers. The kit, first of its kind is 100x sensitive than 1 step PCR and cost Rs.50 per sample. The kit has been demonstrated to farmers/hatcheries in and outside Karnataka, with the assistance of MPEDA. The kit is being used by farmers, and hatcheries all over India.

- * Twenty ponds were taken as demonstration ponds in farmers fields and two training programs were conducted for the benefit of beneficiary farmers. Fish fingerlings were supplied (60,000) to selected farmers and stocked. Regular samplings were done for collection of data on growth of fish and water quality. Fish growth and water quality were found satisfactory.
- * Results of the sampling and data analysis of the project indicate that the water equality in the Nethravathi river is suitable for fish and aquatic animals. There is no serious threat of pollution.

* Immunoglobulin (IgM) of Indian major carps, catla and rohu were produced, purified and characterized. Monoclonal antibodies to IgM of IMC have been produced for epitop analysis and detection of IgM.

* Two cultures, *Lactobacillus curvatus* CRL 705 and *Streptococcus lactis* were used for the production of lactocin and nisin. The activity of lactocin are being evaluated. The purification of lactocin by ammonium sulphate fractionation, solid phase extraction and liquid chromatographic extraction were completed.

16. University projects

Revolving fund on Rapi dot kit is operating in the Dept. of Aquaculture with Dr.K.M.Shankar as the Principal Investigator.

17. ICAR funded projects

Dr. I. Karunasagar	Development of transgene constructs with antimicrobial peptide genes and evaluation of their suitability for production of transgenic rohu 2005 - 2008.	Rs. 25,03,500
Dr. Indrani Karunasagar	National Risk assessment program for fish and fishery products for domestic and international markets 2003 - 2006.	Rs. 12.00 lakh
Dr.N.Basavaraja	Development of induced breeding technology for the Indian sand whiting, <i>Sillago sihama</i> .	Rs. 1,59,000
Dr.K.M.Shankar	"Monoclonal antibodies for early detection, surveillance and epidemiology of EUS in fishes".	Rs.8.00 lakh
Dr.H.Sivananda Murthy	Revolving Fund Scheme on seed procution of freshwater prawn and carps.	Rs. 10.00 lakh
Dr.P.Keshavanath	Periphyton based aquaculture - A low cost technology for increasing pond fish production.	Rs.13.50 lakh
Dr.B.A.Shamsundar	Development of value added products from under utilized marine and freshwater fishes of West Coast of India.	

18. Projects funded by different sources other than ICAR

Name of the Project	Title of the project and	Amount Sanctioned (Rs. In Laks)	Funding Agency
Dr.I. Karunasagar	Programme support in Fisheries Biotechnology : 2005 - 2008	117.60	DBT
Dr.I. Karunasagar	Gene expression in <i>Penaeus monodon</i> and <i>Penaeus indicus</i> in relation to microbial infection : 2005 - 2008	76.05	DBT
Dr.Indrani Karunasagar	Distributed Information Sub Centre (DISC) Bioinformatics Centre : 2002 - 2007	60.00	DBT
Dr.Indrani Karunasagar	Employment generation and enhancement of income for women in Bengre fishing village through biotechnologies 2004 - 2007	53.30	DBT
Dr. H. Shivananda Murthy	Strengthening of prawn hatchery and Nutrition laboratory in the Dept. of Aquaculture.	21.00	DST New Delhi
Dr.H.Shivananda Murthy	Characterization of aquatic resources and enhancement of production in inland small water bodies in coastal Karnataka" 2004-2007	15.00	DBT
Dr.H.Shivananda Murthy	"Impact of deep sea fishing on traditional fishermen and pollution on fish fauna in the Nethravathi River"	3,37,510.00	Pollution Control Board, Govt. of Karnataka
Sri R.J.Katti	Ecological monitoring of Arabian Sea off Thannirbhavi receiving effluents	5.25	MCF, Ltd.
Dr.K.M.Shankar	Monoclonal antibodies (MAbs) for characterization, epidemic analysis and sensitive detection of IgM of Indian major carps (IMC)".	3.00	DBT
Dr.Ramachandra Bhatta	Marine Conservation and Enterprise Development for Sustainable Livelihood in Karnataka 2006-06	0.5	FORD- Foundation- CCD Snehakunja
Sri R.J.Katti	Monitoring of pollution impact due to discharge of treated effluent from BASF, Mangalore in the coastal waters of Chitrapur	4.10	BASF, Ltd.
Dr.H.R.V.Reddy	Integrated Coastal Zone Management plan for Karnataka	14.2	MOEF, New Delhi
Sri R.J.Katti	Treated Effluent Analysis and Monitoring of		



Dr.B.A.Shamsundar	Seawater Quality off Chitrapur, Near Marine Outfall of M/s. MRPL Application of microbial transglutaminase and neutral salts in improving the gel forming ability of the few selected fish species	5.5 10.00	MRPL D.B.T.
Dr.B.A.Shamsundar	Use of bacteriocins from lactic acid bacteria in the preservation of fish and meat	1.44	D.S.T.
Sri K.V.Radhakrishnan	Scientific approach for <i>in-situ</i> validation and demonstration of potential fishing zone.	1.00	INCOIS
Sri K.V.Radhakrishnan	Assessment of potential yield of marine resource using primary productivity estimated from satellite and <i>in-situ</i> measurements.	3.00	SAC

Projects funded by International agencies

- * Application of PCR for improved health management: 2005-2007
Rs. 20.0 lakh funded by NACA.
- * Molecular genetic studies on *Listeria monocytogenes* isolated from fish processing environments : 2003-2006 funded by DST-DAAD.
- * Use of molecular techniques to study the relation between dinoflagellate cysts , blooms and their toxicity in South West coast of India : 2004-2007 funded by Indo Swedish (SIDA).

Crop grown in farms

4870 numbers of coconuts harvested and sold.

Training Programmes and other Extension Activities Conducted

- * Two one day training programmes on "Fish and prawn culture" were organized in the College of Fisheries by the staff of the Department of Aquaculture under DBT project in which 39 and 26 farmers each were participated and benefited.
- * Training on the detection of WSSV using "Rapi Dot" kit was organized by the staff of the Department of Aquaculture for shrimp

farmers and hatchery operators in Kumta and Kundapura during April 2006.

- * One day training programme on Aquarium Fabrication and Maintenance was organized on 24-4-2006 at College of Fisheries, Mangalore, for the benefit of high school students and unemployed youth of Mangalore City Corporation area. 25 participants were benefited.
- * College of Fisheries, Mangalore in collaboration with Association of British Scholars, Mangalore and Talent Research Foundation, Mangalore organized one-day workshop on "Women Friendly Technologies" on 29-4-2006 at Pre-University College, Mangalore. Demonstration and training was given on preparation of rexine products, fast foods and fish products, fabrication and maintenances of aquarium and starting of beauty parlour.
- * In connection with "Women in Agriculture Day" a training programme on "Entrepreneurship opportunities for fisherwomen" was organized for the benefit of fisherwomen on 4-12-2006 at Nadipatna, Padubidri. 40 fisherwomen availed the benefits of the programme. A demonstration was given on the preparation of value added fish products.

Linkages and collaboration developed aboard and in India

- * Memorandum of Understanding was signed between the Dept. of Aquaculture, KVAFSU and Dept. of Wild Life and Fisheries of Texas A&M University, USA. Dr. H. Shivanda Murthy was the coordinator, which was the outcome of his visit to Texas A&M University for 3 months, earlier.
- * DST-DAAD Project with the University of Wuerzburg, Germany Indo-Swedish linkage project with the University of Goteborg, Sweden EU funded project with NRI,UK, University of Dusseldorf, Germany, Khon Kaen University, Thailand and Institute of Parasitology, China.
- * ACIAR-NACA project with CSIRO Australia, NACA, Bangkok, Department of Fisheries, Indonesia

Krishimela Conducted

Fisheries Field Day was conducted on 24th November, 2006. Common carps and Indian major carps were harvested. The fish produced were in the range of 25 kgs and were farmed using scientific methods

Scientific Publication

- * Shivananda Murthy.H, Thanuja K. 2006, Nutritional manipulation of brine shrimp. Info fish International; 2/2006,22-26.
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- * Zooplankton and selected hydrographic parameters in the Arabian Sea off Thannirbhavi, Southwest coast of India. *Indian Hydrobiology*, 9(1):83-92, 2006
- * Phytoplankton and Hydrography in the Coastal Waters of Thannirbhavi, Southwest coast of India. *Environment and Ecology*, 24(2):449-456, 2006
- * Four scientific articles of Fishery Engineering Dept. are published in Scientific journals of India

Popular articles

Two numbers in *Fishery Microbiology*

Distinguished visitor

- * Prof. Peter Bossier, Professor, Laboratory of Aquaculture and Artemia Reference Center, Faculty Bioscience Engineering, Ghent University, BELGIUM
- * Prof. Goebel, Professor and Head, Lehrstuhl fur Mikrobiologie, Biozentrum, Universitat der Wuerzburg, Germany,
- * Dr. Peter J. Walker, Senior Scientist, CSIRO, Australia
- * Dr. Marisa.S.Garo, Researcher from CERELA, Laboratory, Tucuman, Argentina

Workshops, Seminars, Summer institute organised

- * International Symposium on "Sustainable fisheries development for food and health security" was organised during December 20-21, 2006 in collaboration with COFAA at the College of Fisheries, Mangalore, Dr. H. Shivananda Murthy was the Convener.
- * A one day workshop was organized on 27th Oct.2006 in the College of Fisheries in collaboration with COFAA on "Ichthyofaunal biodiversity on aquatic systems of Karnataka", Dr. H. Shivananda Murthy was the Convener and Dr. E.G. Jayaraj was the co-



convener.

Participation of scientists

- * Dr. Malathi Shekar, Information Officer, Bioinformatics Center attended the 5th International Conference on Bioinformatics and Biotechnology (InCOB 2006) organized by the Indian Institute of Technology at Ashoka Hotel, New Delhi during 18-20th December, 2006
- * Four staff attended an international symposium on 'Sustainable fisheries development for food and health security' organised in the College of Fisheries, from the Dept. of Fisheries Environment & Ecology.
- * Dr. S. Benakappa, Professor and Shri H.N. Anjaneyappa, Assistant Professor participated in 21 day summer school on "Advanced fish taxonomical methods for fisheries professionals" organized at Fisheries College and Research Institute,

Tuticorin -628008, Tamil Nadu from 4th to 26th September, 2006.

- * Sri S.R. Somashekara, Assistant Professor participated in UGC sponsored refresher course on "Water management and water harvesting" organized at Kuvempu University, Shimoga from 13th November to 12th December, 2006.

Technologies asserted and transferred

- * Simple monoclonal antibody based kit "Rapi Dot" for detection of whitespot virus in shrimp was released to farmers.
- * DBT & KVAFSU joint patent: Provisional Patent Application No. 1818/DEL/2006. "Biocontrol of luminous bacteria in shrimp hatcheries using bacteriophages".
- * Provisional Patent Application No. 1879/DEL/2006 for "Oligonucleotide probe

Institute of Animal Health and Veterinary Biologicals Hebbal, Bangalore

The Institute of Animal Health and Veterinary Biologicals (IAH & VB) is a scientific research society under the Government of Karnataka which is run on a Grant-in-aid basis. The IAH & VB was transferred from the Dept. Of A.H. & V.S. Government of Karnataka to KVAFSU after its establishment. The budget is directly allotted by the Government of Karnataka. The Institute has the responsibility of providing total health coverage to the Livestock and Poultry of the State. For this purpose it is actively engaged in the following activities viz.

1. Production of biologicals required for the prevention and control of common bacterial and viral diseases of livestock and poultry in the state.
2. Quality control for biologicals
3. Research and Disease Investigations
4. Training

1. Biological Production

Eighteen different bacterial and viral vaccines and diagnostic reagents against livestock and poultry disease were produced in this Institute and supplied to the farmers through the Department of Animal Husbandry and Veterinary Services in Karnataka. The details of the various biologicals produced during April 2006-March 2007 belonging to the Institute are given in the Table-1.

2. Quality Control

This wing has the responsibility of testing and ensuring the quality of the biologicals produced in the Institute. All the biologicals, diluents and diagnostic reagents are subjected to potency, purity and safety tests before they are released for field use. During the period under report 28 biologicals were subjected for quality control tests.

3. Research And Disease Investigation

The main objectives of this section is to provide diagnostic services to the field veterinarians and give suitable advice regarding prevention and control of contagious diseases of livestock and poultry. This section has a Central Laboratory located at Bangalore and Six Regional Animal Disease Diagnostic Laboratories, one each at Belgaum, Bellary, Gulbarga, Mangalore, Mysore and Davangere. A diagnostic laboratory exclusively for Wild animals is functioning at Bannerghatta National Park, Bannerghatta. These laboratories are being strengthened under SDI plan. The details of the work carried out in various sections of the Disease Investigation wing are given in Table 2.

Two ICAR funded research programmes are under progress i.e., 1. Studies on epidemiology and bluetongue disease of sheep.

In addition, the following two AICRP research programmes are also in progress at this Institute viz.

- i. AICRP on Foot and Mouth Disease
- ii. AICRP on Animal Disease Monitoring and Surveillance

Other projects are

- a. Sujala water shed project on evaluation of biofilm vaccine (HS & ET)
- b. Molecular identification of wild life species project funded by Waltham Foundation.

The Southern Regional Disease Diagnostic Laboratory funded by Government of India was also continued. This laboratory will provide referral diagnostic service to the Southern states viz., Karnataka, Kerala, Andhra Pradesh and Pondicherry. Under this project the existing disease investigation laboratories are being strengthened.



4. Training conducted/attended

Sl. No	Date	Tamil Nadu		Kerala		Karnataka		Andra Pradesh		Pondicherry/ Lakshadweep		Total
		V.O	F.O	V.O	F.O	V.O	F.O	V.O	F.O	V.O	N.G.O.	
1.	27/07/06	6	--	--	--	25	--	---	---	2	--	33
2.	22/08/06	8	1	1	--	14	---	—	—	—	—	24
3.	24/10/06	2	1	3	--	17	8	2	2	2(P)	1	38
4.	15/12/06	6	1	--	---	12	1	7	0	2 (P),	1 (L)	30

Total number of Participants: 125

5. VISITORS

- 18.4.06 Dr. Shrinivas Upadhyaya, Director, CCBF, Sambalpur, Orissa.
- 18.4.06 Dr. R.P. Mishra, Livestock Officer, Ministry of Agriculture, Dept. of AH & dairying, New Delhi.
- 18.4.06 Dr. A.K.C. Patnaik, Director, CCBF, Alamedhi, Red hills, Chennai.
- 18.4.06 Dr. R.P. Shrivastava, Director, CCBF, Rajasthan.
- 18.4.06 Dr. H.Teggi, Assistant Registrar, CHRS, Govt of India, Ongole.
- 18.4.06 Dr. V.K. Patil, Director, CCBF, UP.
- 18.4.06 Dr. Surinder Pal, Livestock Officer, Ministry of Agriculture, Krishi Bhavan, Delhi.
- 18.4.06 Dr. R.K.Saxena, Director, CCBF, Gujarat
- 18.4.06 Dr. Pranab Kumar Roy, VO, CCBF, Sunabeda, Orissa.
- 4.7.06 Chandrashekhar Nair, Bigtec Pvt. Ltd.
- 20.11.06 V.A. Srinivasan, Research Director, IIL, Hyderabad.
- 23.2.07 C.J. Venugopal, IAS., Commissioner cum Secretary, Fyard, Govt. of Orissa.

6. Scientific Abstracts

1. *Clinico pathology of Swine Pasteurellosis.* Harish,B.R., Chandranai, B.M., Venkatesh, M.D., Renukaprasad, C., Jayakumar, S.R. and Krishnappa, G. *Indian Journal of Veterinary Pathology.* 2006, December issue.
2. *Buffalo pox an emerging disease of zoonotic significance-* Chandra naik, B.M, Harish, B.R, B.M.Renukaprasad, C, and Krishnappa, G (2007) *Intas PoliVeterinary*7(2):348-351
3. *Bovine Tuberculosis a practical concept for eradication in India-* Krishnappa, G., Chandra Naik, B.M and Byregowda.S.M. (2007) *Intas PoliVeterinary*7(2):236-238
4. *Buffalo pox: Investigation of outbreaks, Isolation of the virus, molecular characterization and attempts for development of live attenuated vaccine.* Chandra naik, B.M.
5. *Epidemiology of swine Salmonellosis.* Harish, B.R., Shivaraj, Chandra naik, B.M., Venkatesh, M.D., Renuka Prasad XIII ISVIB convention,

TABLE 1

Production of various Biological Products at the Institute during April 2006 - March 2007

Sl. No.	Name of the vaccine	Quantity (in lakh doses)	Value of vaccine produced (Rs. In lakh)
1.	Black quarter	12.00	12.00
2.	Haemorrhagic Septicaemia	50.30	50.30
3.	Enterotoxaemia	74.61	74.61
4.	Ranikhet 'F'	6.96	1.74
5.	RD R2B	75.36	18.84
6.	Sheep Pox Vaccine	30.93	30.93
7.	Tissue Culture rabies Vaccine	2.19	30.66
8.	PPR	54.44	54.44
9.	Anthrax	3.48	5.22
10.	B.abortus plain antigen	0.06	0.06
11.	B.abortus Rose Bengal antigen	0.02	0.16
12.	Salmonella pullorum coloured antigen	0.41	3.28
	TOTAL	310.76	282.24

TABLE 2

Total number of samples analysed at the Disease Investigation Section of the Institute during April 2006 - March 2007

Sl.No.	Name of the section	No. of samples Analysed
1.	Disease Investigation (LA)	2716
2.	Disease Investigation (poultry)	1747
3.	Diagnostic Parasitology	998
4.	Diagnostic Bacteriology and Mycology	3833
5.	Diagnostic Virology	718
6.	Sero epidemiology	3857
7.	Biochemistry and Toxicology	1575
8.	Foot and Mouth Disease Section	1614
9.	Regional Animal Diagnostic Lab, Belgaum	5445
10.	Regional Animal Diagnostic Lab, Bellary	3040
11.	Regional Animal Diagnostic Lab, Gulbarga	2859
12.	Regional Animal Diagnostic Lab, Davangere	4048
13.	Regional Animal Diagnostic Lab, Mangalore	1824
14.	Regional Animal Diagnostic Lab, Mysore	4504
15.	WADDL, Bannerghatta National Park, Bannerghatta	1715
16.	Regional Animal Diagnostic Lab, Shimoga	146
	Total	40639

ANNEXURE-3
**Statement showing the details of Grant in Aid Proposed, Allocated
Released and Expenditure incurred during the year 2006-07**

SL. No.	Head of account	Plan/ Non plan	Budget allocated	Budget released	Expenditure incurred	
1.	2404-00-191-2-03-101	Plan (GOI)	490.00	175.00	175.00	340.00
2.	2404-00-101-0-06-101	Plan	265.00	265.00	265.00	
3.	2403-00-101-0-06-101	Non plan	159.12	159.12	159.12	
		Total	914.12	599.12	599.12	340.00



Summer Crop

Hybrid napier grass	3.56
Zlucerne	1.00
Fodder demonstration (Museum)	0.20
Total	4.76

Livestock activities

Cows (Deoni)

Particulars	Male	Female	Total
Adult	7	18	25
Young ones	12	14	26
Total			51

Aquaculture

Type	No. of Ponds	No.of fingerlings maintained
Common carp	2	150

Turkey

Particulars	Male	Female	Total
Adult	2	2	4
Growers	13	8	21

Emu

Particulars	Male	Female	Total

Fisheries Research & Information Centre (Marine) Ankola, Uttara Kannada

Extension Activities

Sl. No	Place and Date	Topic discussed	No. of Participants	Organizer	
1.	Bangalore From 18.12.06 to 7.1.07	Dr. Sathyanarayananappa	Learning GIS & Gps Technology for Fisheries	20	Department of Geography Bangalore University Bangalore
2.	Gujarath state 22.3.2007 to 27.3.07	Dr. Sathyanarayananappa	Study tour to acquaint	10	MPEDA, Karwar shrimp practices of Gujarath farmers
3.	Belamba,Akola	Dr. Lakshmi pathi M.T.	Guest lecture give on	25	MPEDA, Karwar Ecofriendly shrimp farming to the Local farmers

Participation in Animal Health Camps /Livestock / Exhibition

Sl. No	Date	Place	Organised/ Participated	Total Participants
01.	25.9.06	Krishimela at UAS Dharwad	Participated	10,000
02.	16.11.06	Krishimela at Hebbal by KVAFSU, Bidar	Participated	10,000
03.	30.11.06	Celebration of Green festival at ZARS, Tiptur	Participated	200

Popular articles

Sl.No.	Authors	Title
1.	Mr. B.R. Poojar	Second crop in shrimp ponds along Karnataka and Goa coasts Replacement with brackish water fish farming needed

Seminar/ Workshops Participated

Sl. No	Place & Date	Topic Discussed	No.of Participants	Sponsored by
1.	Mangalore 24.11.06	Fisheries field day	200	College of Fisheries
2.	Brahmavar 21.2.07 to 22.2.07	ZREP- Kharif 2007 workshop	50	UAS, Bangalore
3.	Karwar 20.7.06	Workshop on Biodiversity data collection at Karwar	100	Karnataka University PG Centre, Karwar



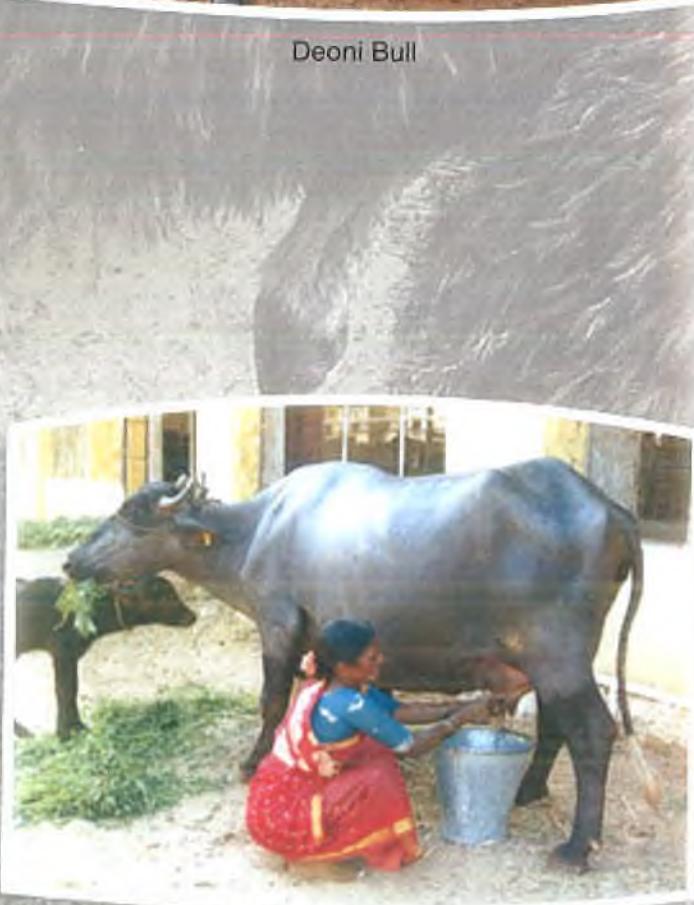
Red Kandari Cow



Deoni Bull



Deoni Cow with Calf



Graded Murah Buffalow



Veterinary College, Bidar



Veterinary College, Bangalore



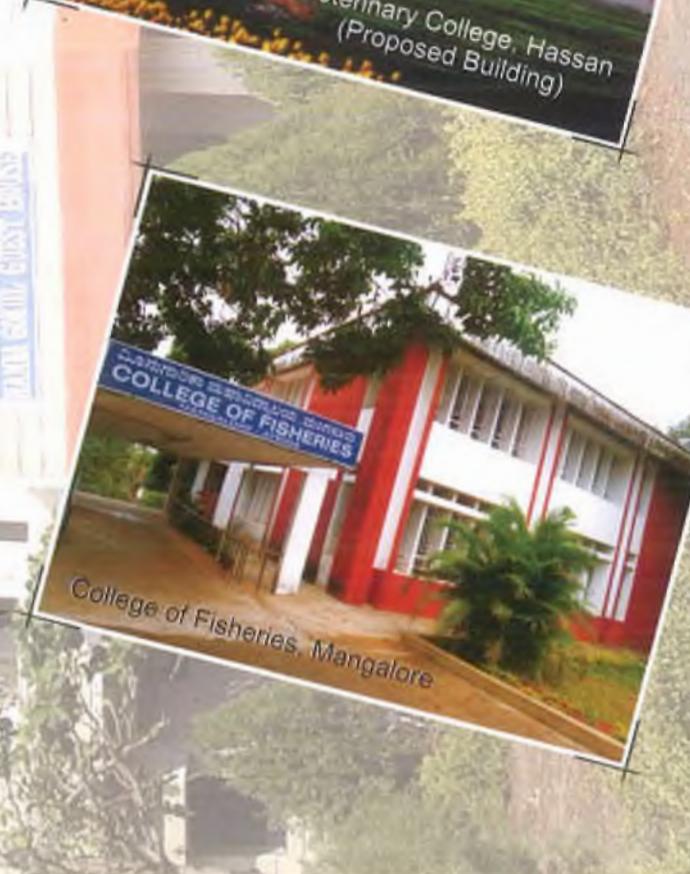
Veterinary College, Shimoga
(Proposed Building)



Veterinary College, Hassan
(Proposed Building)



Dairy Science College, Bangalore



College of Fisheries, Mangalore



Swarnadhara Poultry birds



Fishing boats



Fresh water Prawn



Students harvesting fish