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**KARNATAKA VETERINARY, ANIMAL AND  
FISHERIES SCIENCES UNIVERSITY, BIDAR**

**8<sup>th</sup>**  
**Annual Report**  
**2012-13**

## Credit Line

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# Preface



It is exhilarating to note that our University has completed 8 years of its fruitful existence. At this juncture, it is my privilege to place before you the VIII Annual Report of Karnataka Veterinary, Animal & Fisheries Sciences University (KVAFSU), Bidar, for the year 2012-13.

The primary objective and mandate of the University is to uplift the rural livestock, poultry and fish farmers with a motto of "Rural Oriented & Farmer Friendly" activities. The University has a territorial jurisdiction of entire state of Karnataka covering all the 30 districts. It is striving hard to build up the human resources, research and dissemination of knowledge developed through extension in the field of veterinary, dairy and fisheries sciences across the state.

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To impart education in the field of Animal Husbandry, Dairying and Fisheries, the University has seven constituent colleges of which, four Veterinary Colleges are located at Bengaluru, Bidar, Shivamogga and Hassan, two Dairy Science Colleges are at Bengaluru and Gulbarga and one College of Fisheries is located at Mangalore. The University offers Undergraduate, Postgraduate and Doctoral degree programmes and also capacity building at these colleges. Looking to the need of Veterinarians, the Government of Karnataka has mandated the University to start three more Veterinary Colleges one each at Gadag, Athani and Puttur which are in the initial stages of development. To develop field level workers and to retain rural youth back in livestock activities, the University has commenced a two-year Diploma in Animal Husbandry at Animal Husbandry Polytechnic, Konehally, Tiptur and Shiggaon, Haveri for the SSLC passed rural candidates. In addition to regular teaching programme, the University also conducts short term refresher training programmes in the form of continued education to the field professionals of the line departments like Animal Husbandry and Veterinary Services, Fisheries and Karnataka Milk Federation. Many of our students have excelled in ICAR junior Research Fellowship and Senior Research Fellowship at the National level during the year under report. A total of 51 students have completed their master's degree and 13 have completed their Doctoral degree in different disciplines. Apart from academics, the students of the University have also excelled in the national level sports, youth festival and NSS activities. I am happy to inform that KVAFSU, Bidar had a rare opportunity of hosting 'XIV All India Inter-Agricultural Universities Sports & Games Meet-2013' during 6-10th March, 2013 at its main campus, Nandidurg, Bidar. The meet had brought together a total number of 1897 students along with 147 team managers from 43 different universities representing 19 states. I heartily congratulate the Athletes of KVAFSU, Bidar for winning the 'Overall Championship - Runners' of the tournament.

There are several extramural funded research projects under operation in different disciplines across the University. The funding, of which is utilized for development of technologies that can be transferred to the field for the benefit of farming community. Out of the research work carried out, more than 277 publications have been made by the faculty in journals of National (190) and International (87) repute and 203 papers have been presented at different National and International symposia.

The faculty and the scientists working at Extension Education Centers, different constituent Colleges and Research & Information Centers are also engaged in extension programmes and have arranged several trainings, pashu melas, workshops, seminars, farmers-scientists interaction sessions, demonstrations, field visits across the University for the betterment of the farming community.

I would like to thank the Govt. of India, Govt. of Karnataka, Indian Council of Agricultural Research, New Delhi; DBT/DST/NFDB and other funding agencies for assisting in overall integrated development of this nascent University and complement the members of the Board of Management, Officers of the University, Faculty, students and staff of this University and all those who have contributed in building the University to the present status. Further, I appreciate the efforts of Dr. K.N. Prabhudeva, Director of Extension, KVAFSU for bringing out this report on time.

Sd/-

Place: Bidar

(C. Renukaprasad)  
Vice-chancellor

## *Editorial*



It gives me great pleasure to place before you the VIII Annual Report of the University for the period 2012-13. Relevant information from various sources within the University has been gathered and compiled in this report. It is a documentation of progress achieved by the University in different facets of Teaching, Research, Extension, Publication, Finance, Administration and Infrastructure Development etc. All the Directorates of the University / Deans of various Colleges / Heads of LRICs/FRICs/CRIC/EECs have furnished authenticated information for the preparation of this report. The information thus collected has been documented under different heads like administration, teaching, research, extension, publications, infrastructure development etc. This document would provide useful information about the functioning and responsibilities of the University.

The University is progressing well and has demonstrated a significant leadership in the areas of teaching, research and extension. Concerted efforts have been focused on upgradation of laboratory facilities for quality research; upgradation of referral Veterinary Hospitals; development of farms to enhance the supply of seed stock; development of new vaccines in Veterinary and Fisheries sectors etc. For an effective transfer of technology, the University follows "Rural-Oriented & Farmer-Friendly" approach. The vaccines produced by the University, both for animal and fish health protection, are receiving national attention. The infrastructure facilities are in the process of upgradation.

To encourage fitness and sportsmanship among students, the University has developed sports & games facilities at its head quarters and even hosted XIV All India Inter Agricultural Sports & Games Meet-2013 during 6-10<sup>th</sup> March, 2013. It is, indeed, a mega event in the annals of the University (hosting 1897 athletes for 7 days and 6 nights). It is heartening to note that there is a marked improvement in the extension activities over the years in terms of services rendered to farming community, publications, communication through radio and TV, training programmes, village adoptions, skill upgradations, attracting rural youth to animal husbandry activities etc.

I take this opportunity to sincerely thank all the Officers of the University, who have provided the required information for this document. I also extend my thanks to all the colleagues who rendered their help.

The compilation of this annual report would not have been possible without the willingness and encouragement of our beloved Hon'ble Vice-Chancellor, Dr. C. Renukprasad, who has been guiding and giving suggestions for the improvement of this document. I whole heartedly thank him for the same.

I wish to place on record my sincere appreciation to all the staff of the Directorate of Extension and other teaching faculty of the University who rendered their hard work in various stages of the preparation of this report.

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Place: Bidar

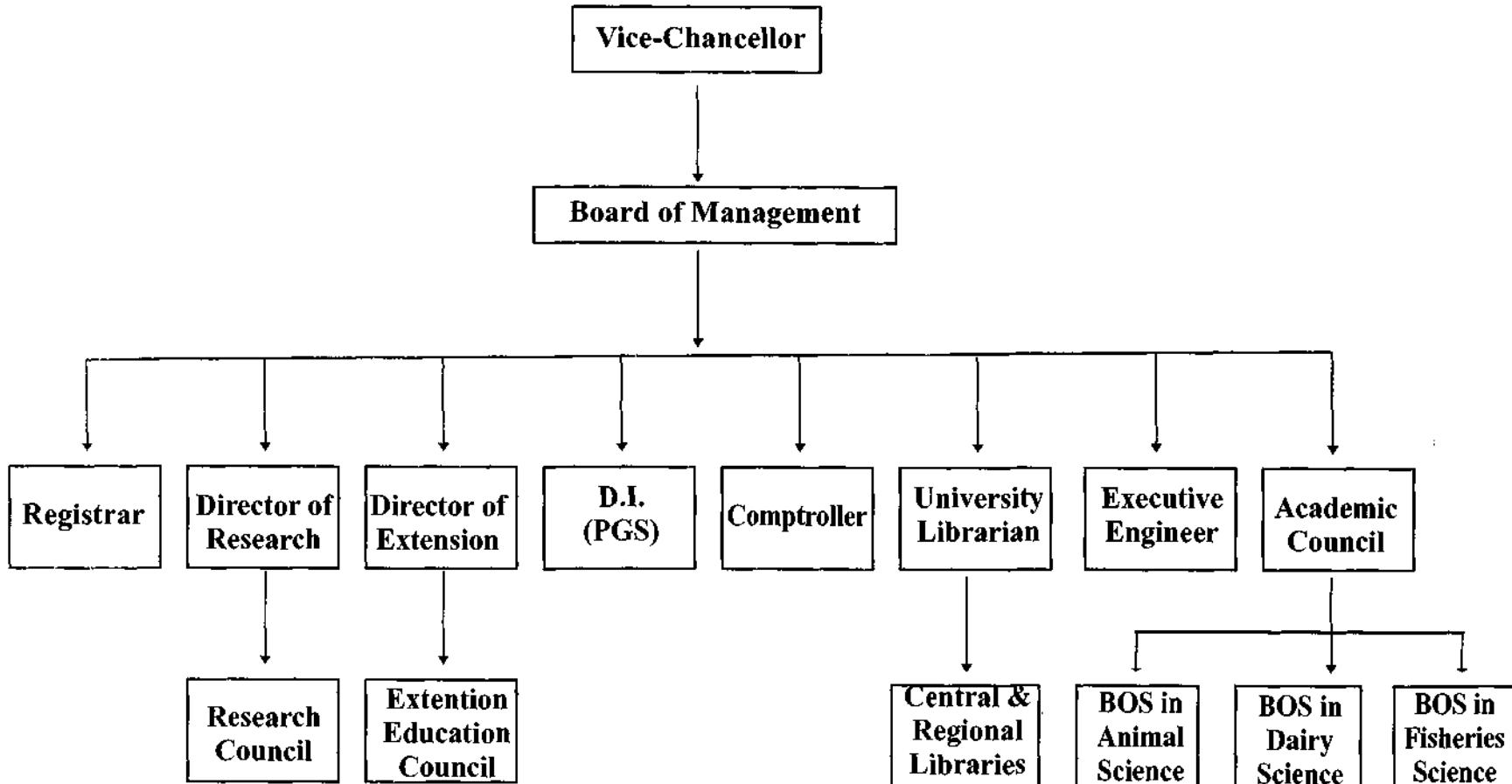
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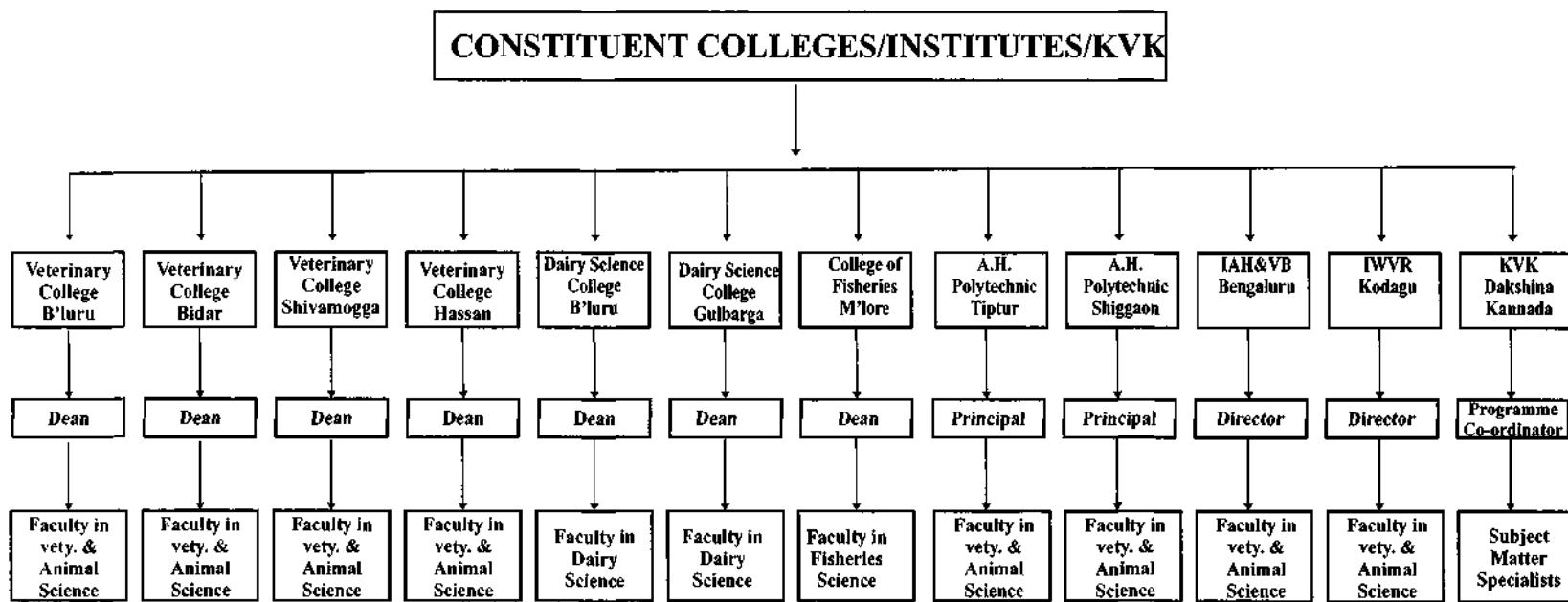
(K. N. Prabhudeva)  
Chief Editor & Director of Extension

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## ORGANIZATIONAL SETUP





## **Mandate of the University**

The prime objective 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 30 districts. The major objectives of the university include,

- \* To impart higher quality education in different branches of study, particularly veterinary and animal sciences, fisheries and other allied sciences.
- \* Advancement of learning and research, particularly in veterinary science, dairy science, fisheries science and other allied sciences to the rural people of the state.
- \* To undertake the extension education service in veterinary and animal science, dairy science, fisheries science and other allied sciences to the rural people of the state.
- \* Such other purpose as the State Government may specify by notification.

## **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 and fisheries 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. C. Renukaprasad**, Vice-Chancellor

**Ex- Officio Members :**

The Principal Secretary to Government of Karnataka, Department of AH & Fisheries or his nominee not below the rank of Joint Secretary.

The Principal Secretary to Government of Karnataka, Finance Department or his nominee not below the rank of Joint Secretary.

The Secretary to Government of Karnataka, Law Department or his nominee not below the rank of Joint Secretary.

The Director of Animal Husbandry & Veterinary Services, Government of Karnataka, Bengaluru.

The Director of Fisheries, Government of Karnataka, Bengaluru.

The Registrar of the University-Member Secretary.

**Other Members**

<i>Members of the 3<sup>rd</sup> Board of Management</i>	
<i>Sl. No.</i>	<i>Name of the Board Member</i>
1	<b>Prof B. Prabhakar Hegde</b>
2	<b>Sri Vasudeva Byndoor</b>
3	<b>Sri K.C.Shankare Gowda</b>
4	<b>Dr. D.R.Nagesh</b>
5	<b>Dr.(Smt) Vishalaxi V. Kareddy</b>
6	<b>Sri T. Mukunda Varma</b>
7	<b>President, Karnataka Veterinary Council (KVC)</b>

## **Our institutions**

### **1. Colleges**

- 1) Veterinary College, Hebbal, Bengaluru, established in 1958
- 2) Veterinary College, Nandi Nagar, Bidar, established in 1984
- 3) Veterinary College, Shivamogga, established in 2006
- 4) Veterinary College, Hassan, established in 2007
- 5) Dairy Science College, Hebbal, Bengaluru, established in 1980
- 6) Dairy Science College, Gulbarga, established in 2008
- 7) Fisheries College, Mangalore, established in 1969
- 8) Veterinary College, Gadag (to be established)
- 9) Veterinary College, Athani, Belgaum (to be established)
- 10) Veterinary College, Puttur, Dakshina Kannada (to be established)

### **2. Animal Husbandry Polytechnics**

- 1) Animal Husbandry Polytechnic, Konehalli, Tiptur, established in 2011
- 2) Animal Husbandry Polytechnic, Shiggaon, Haveri, established in 2012

### **3. Research Institute**

- 1) Institute of Animal Health and Veterinary Biologicals, Hebbal, Bengaluru, established in 1926
- 2) Livestock Research and Information Center, (Deoni), Hallikhed, Bidar
- 3) Livestock Research and Information Center (Amruth Mahal and Hallikar), Konehalli, Tiptur
- 4) Livestock Research & Information Center (Sheep), Nagamangala
- 5) Livestock Research & Information Center (Buffaloe), Dornalli, Yadgir
- 6) Canine Research and Information Center Timmapur, Mudhol, Bagalkot
- 7) Fisheries Research & Information Center, Hebbal, Bengaluru
- 8) Fisheries Research & Information Center (Inland), Hesaraghatta, Bengaluru
- 9) Fisheries Research & Information Center (Inland), Bhutnal, Bijapur
- 10) Fisheries Research and Information Center, (Marine), Ankola, Uttar Kannada
- 11) Institute of Wild Life Veterinary Research, (IWVR) Kudige, Coorg
- 12) Rural Veterinary Hospital, Yelahanka, Bengaluru
- 13) Veterinary Hospital, APMC, Bidar

### **3. Krishi Vigyan Kendra**

- 1) Krishi Vigyan Kendra, Dakshina Kannada

### **4. Extension Education Centers/Units**

- 1) Extension education Center, Bengaluru
- 2) Extension Education Center, Bidar
- 3) Extension Education Center, Hassan
- 4) Extension Education Center, Shivamogga
- 5) Farmer's Training Institute, Bidar



## Officers of the University during the period (2012– 2013)

1	Vice-chancellor, KVAFSU, Bidar	<b>Prof. Suresh, S. Honnappagol (Up to 25-07-2012) Prof. S. Mallikarjunappa (26-07-2012 to 20-09-2012) Dr. C. Renukaprasad (21-09-2012 onwards)</b>
2	Registrar, KVAFSU, Bidar	<b>Dr. H. M. Jayaprakash (From 07-03-2012)</b>
3	Comptroller, KVAFSU, Bidar	<b>Sri. V. C. Kitageri (From 06-07-2010)</b>
4	Director of Research KVAFSU, Bidar	<b>Dr. H. R. V. Reddy (From 05-05-2011)</b>
5	Director of Extension KVAFSU, Bidar	<b>Dr. K. N. Prabhudeva (From 05-05-2011)</b>
6	Director of Instruction (PGS) KVAFSU, Bidar	<b>Dr. Y. Hari Babu (From 05-05-2011)</b>
7	University Librarian (I/c) KVAFSU, Bidar	<b>Dr. Y. Hari Babu (From 25-09-2010)</b>
8	Dean, Veterinary College, Bidar	<b>Dr. S. M. Usturge (From 25-09-2010)</b>
9	Dean, Veterinary College, Bengaluru	<b>Dr. S. Yathiraj (05-05-2011)</b>
10	Dean, Veterinary College, Shivamogga	<b>Dr. M. Devaraj (From 09-05-2011)</b>
11	Dean, Veterinary College, Hassan	<b>Dr. M. S. Vasanth (From 09-05-2011)</b>
12	Dean, Dairy Science College, Bengaluru	<b>Dr. B. V. Venkateshaiah (From 05-05-2011)</b>
13	Dean, College of Fisheries, Mangalore	<b>Dr. K. M. Shankar (From 28-09-2010)</b>
14	OSD, Dairy Science College, Gulbarga	<b>Dr. L. Mahalingaiah (From 29-07-2010)</b>
15	Head of Veterinary Science Division	<b>Dr. A. Krishnaswamy</b>
16	Head of Animal Science Division	<b>Dr. U. Krishna Murthy</b>
17	Head of Poultry Science Division	<b>Dr. H. N. Narasimhamurthy</b>
18	Head of Dairy Science Division	<b>Dr. Ramachandra Rao</b>
19	Head of Fisheries Science Division	<b>Dr. Ramachandra Bhat</b>
20	Head, PPMC, KVAFSU, Bidar	<b>Dr. M.M. Appannavar Dr. T. Tirumalesh</b>
21	Executive Engineer	<b>Sri. M. K. Satish</b>

## Executive Summary

'Animal wealth is Nation's wealth'. In order to realize this and to accomplish productivity in animal husbandry, dairying, poultry and fisheries, Government of Karnataka embarked on starting the state's first Veterinary, Animal & Fisheries Sciences University at Bidar in the year 2005. With its motto of 'Rural Oriented & Farmer Friendly', the University has initiated several measures to help farmers to improve their livelihood security through livestock activities. To achieve this, the University requires huge scientific and supporting staff and hence consequently the University recruited 83 Assistant Professors and 115 service personnel in various institutions. This has eased pressure on the University to implement its programmes effectively.

### TEACHING

Education is the prime concern of the University. The teaching activities are being carried out in three major disciplines at five campuses through seven colleges under the jurisdiction of this University. Undergraduate degree programmes in Veterinary and Animal Husbandry are being offered at Bidar, Bengaluru, Shivamogga and Hassan, while, Dairy Science & Technology at Bengaluru and Gulbarga and similarly, Fisheries Science at Mangalore. In addition to these, the Government of Karnataka has sanctioned three more Veterinary Colleges at Gadag, Athani and Puttur, which are at different stages of development. Further, two Animal Husbandry Polytechnics have also been started at Konehalli of Tumkur district and Shiggaon of Haveri district.

The University offers Masters programme in 18 disciplines and Doctoral programme in 12 disciplines in Veterinary and Animal Sciences. In Dairy Science 4 Master's and 2 Doctoral programmes are currently underway. Similarly, in Fisheries Science 6

Masters and 5 Doctoral degree programmes are being offered.

Admission under various degree programmes to KVAFSU was undertaken during 2012-13 and the intake was 539 students, comprising 351 for graduate studies and 140 for postgraduate studies and 48 Ph.D., Students Among 351 under graduate students, admitted to various degree programmes 245 were for BVSc&AH degree at Bengaluru, Bidar, Shivamogga and Hassan campuses and 62 for B. Tech (Dairy). Degree and 44 for Bachelor in Fisheries Science Degree. Out of 140 post graduate students, 102 for Master's Degree in Veterinary & Animal Science and 26 for MSc degree in Dairy Technology and Business Management and 12 for Master's Degree in Fisheries Science.

A good number of graduates of this University qualified in ICAR Junior Research Fellowship and secured PG admissions in many prestigious Institutes like IVRI, CIFE, NDRI, CCS, HAU and also in overseas Institutions.

### RESEARCH

"Research without extension is hobby, but extension without research is shallow and teaching without research and extension is hollow". But, KVAFSU being a farm varsity, it carries out teaching, research and extension under its three tier system to enable its pupils to come out with good knowledge practical exposure to become entrepreneurs. Further, the teachers, scientists and extension functionaries will be able to address field oriented problems to find suitable solutions through research and practical demonstrations. KVAFSU has been operating 160 no. of Research projects amounting to Rs.8164.171 lakhs with the funding support from State Government, GOI, Dept. of Bio-technology, ICAR, private institutions and National and International

organizations. During 2012-13 as many as 37 No. of Research Projects have been completed worth Rs. 828.74 lakhs. Besides, 123 no. of ongoing projects amounting to Rs.7335.431 lakhs are in progress. This means the University is operating at present research projects worth Rs. 8164.171 lakhs through various institutions.

In order to cater to the needs of farmers in rural areas, the University has been carrying out need based research in various institutes and also established Research & Information Centers across the state. Our scientists of the University have published 277 no. of research papers in journals of National and International repute. Our veterinarians have developed early detection methods of infection among livestock, leptospirosis of dogs and mycoplasma infection in birds, while fisheries scientists have developed PCR kits for detecting viral infections in fish and shrimp for which the University is proud to place on record the achievement of Dr. K.M. Shankar, Dean, College of Fisheries, Mangalore who has received National Award for the same from the President of India.

The University has filed applications with the competent authority of the GOI, for granting of patents for the products/ technologies developed by the KVAFSU. The technologies include 'Development of Real Time PCR based Antigen detection kit for Diagnosis of Bovine Herpes Virus-1 (778/CHE/2012)' and 'Development of biofilm based vaccine against Bovine mastitis(CBR No. 100055)'. Dr. B.M. Chandranaiik and his team and Dr. Shrikrishna Isloor and his team deserve special compliments from the University.

To strengthen the research activities within the University and to provide opportunities for scientists and students of the University, the University has been making efforts to collaborate with National and International organizations. In this direction, the

University has signed two MoUs with International organizations and as many as 6 MoUs with National organizations during 2012-13. It is hoped that the collaborative works will be of immense value to the society.

## **EXTENSION**

The University has established Extension Education Centers (EECs) at Bengaluru, Bidar, Shivamogga and Hassan Campuses for the transfer of technologies developed by KVAFSU scientists to the un-reached farming community. The University is propagating and popularizing its technologies to the farmers through series of training programmes, demonstrations, animal health camps, field days, farmer-scientists interaction, awareness programmes, treatment of medical, surgical and reproductive problems at Veterinary Colleges, Krishimelas, Farmers Meet, Village adoption, Publication of folders, Bulletins and Books on Package of practices in local language for the benefit of farming community and News Letters and Annual Reports of the University. Besides farmers, the university also trains departmental staff / KVK SMSs regarding latest technological advancements and shares the knowledge with neighboring state's scientists through model training courses, etc.

The University strongly believes in integrated approach and jointly organized 'Krishi, Totagarike & Jaanuvaru Mela-2012' in collaboration with University of Agricultural Sciences, Raichur and University of Horticultural Sciences, Bagalkot at KVK, Janwada, Bidar during 29-31<sup>st</sup> Dec., 2012. Further, the Directorate of Extension had organized one more 'Jaanuvaaru, Kukkuta, Matsya & Krishi Mela-2013' at Veterinary College, Shivamogga, during 1-3<sup>rd</sup> March, 2013 with the active participation and cooperation of Veterinary College, Shivamogga and Extension Education Center, Shivamogga. Our University also took part in extension fairs organized at UAS, Dharwad and UAS, Raichur by putting up impressive stalls of animal husbandry, dairying

and fisheries activities. A large number of farmers have been benefited from these melas.

## SPORTS

KVAFSU, Bidar had a rare opportunity of hosting the XIV All India Inter-Agricultural Universities Sports & Games Meet-2013 during 6-10<sup>th</sup> March, 2013 at its main campus, Nandinagar, Bidar. The meet had brought together 1897 students along with 147 team managers from 43 different universities representing 19 states across the country. These

students stayed in Bidar for 7 days and 6 nights and participated with the spirit of sportsmanship regardless of win or loss with the zeal of appreciating the best talent.

The 'Overall Championship' of the tournament was jointly shared by PAU, Ludhiana and UAS, Bengaluru. While, the host institution i.e. KVAFSU, Bidar was declared the 'Overall Championship – Runners'. Meanwhile, the 'Overall Championship' in Athletics (men) was won by TNAU, Coimbatore and among women it went to UAS, Bengaluru.

## IMPORTANT MEETINGS HELD AT KVAFSU, BIDAR/BENGALURU DURING 2012-13

#	Meetings	Date	Place
<b>Board of Management Meetings</b>			
1	52 <sup>nd</sup> Meeting of BOM	19-04-2012	Bidar
2	53 <sup>rd</sup> Meeting of BOM	13-06-2012	Bengaluru
3	54 <sup>th</sup> Meeting of BOM	09-07-2012	Bidar
4	55 <sup>th</sup> Meeting of BOM	06-11-2012	Bidar
<b>Academic Council Meetings</b>			
1	16 <sup>th</sup> Academic Council	19-05-2012	Bidar
2	17 <sup>th</sup> Academic Council	15-12-2012	Bengaluru
<b>Research Council Meetings</b>			
1	Research Council	18-05-2012	Bidar
<b>Extension Education Council Meetings</b>			
1	Extension Education Council	18-05-2012	Bidar
<b>Sports and Cultural Council Meetings</b>			
1	Sports and Cultural Council	12-12-2012	Bidar

## Januvaru, Kukkuta, Matsya & Krishi Mela-2013

The Karnataka Veterinary, Animal & Fisheries Sciences University (KVAFSU), Bidar, organised a "Januvaru, Kukkuta, Matsya & Krishi Mela - 2013" during March 1-3, 2013 at Veterinary College, Shivamogga for the benefit of farming community of the region. The Fair (mela) was inaugurated by Dr. C. Renukaprasad. Hon'ble Vice-Chancellor, KVAFSU, Bidar. Dr. M. Devaraj, Dean, Veterinary College, Shivamogga, presided over the Inaugural Ceremony. Sri. M.V. Vedamurthy,

Deputy Commissioner, Shivamogga district was the Chief Guest. Sri. T. Mukund Varma, Dr. D.R. Nagesh and Dr. (Smt.) Vishalaxi, V. Karreddy, Hon'ble Members of Board of Management, KVAFSU, Bidar and Dr. K.N. Prabhudeva, Director of Extension, KVAFSU, Bidar were the Guest of Honours and all the Officers of the University and farmers attended the inaugural Ceremony. Dr. K.C. Veeranna, Professor & Head and Member Secretary of the mela welcomed the dignitaries, guests and

farmers. A book on 'Pashu aadharita kirunatakagala sankalana' was brought out by the Directorate of Extension, was released during the occasion.

A total of 123 stalls were erected for displaying research and extension activities of different Agricultural Universities and State Departments, Shivamogga Zilla Panchayath namely, Fisheries, Animal Husbandry, Agriculture, KMF, Watershed Development and other Departments of the State. In addition to this, various stalls were also erected by the KVAFSU. Further, good number of stalls from private entrepreneurs and industries displayed their activities. More than 10000 farmers attended the mela three days and benefited as a means of transfer of technology in Agriculture, Animal Husbandry, Dairy, Fisheries and other related areas. The main attraction of the mela was exhibition of different types and breeds of livestock namely, cattle (3 variants of Malenadu Gidda, Deoni, Khillar, Kankarj, Ongole, Gir etc.), buffaloes (Murra, Surti, Jafferbadi etc.), horses, dogs, sheep, goat, rabbit and different types of poultry birds including some of the rare breeds, fodder crops and fishes namely, food fishes, ornamental fishes etc. Technical Consultancy Cell was established to give technical guidance on different aspects of agriculture, fisheries, livestock farming and dairy science & technology during the mela for the benefit of farming community.

The Valedictory Function was held on 03-03-2013 evening. Sri. Shashikanth Senthil, CEO, ZP, Shivamogga was the Chief Guest. Dr. M. Devaraj, Dean, Veterinary College, Shivamogga presided over. Sri. Shivamurthaappa, Joint Director (Agri); Dr. Ravindra, Deputy Director, DAH&VS; Staff of Veterinary

College, Shivamogga and farmers were present on the occasion. Dr. K C. Veeranna, Professor & Head and Member Secretary of the mela extended vote of thanks.

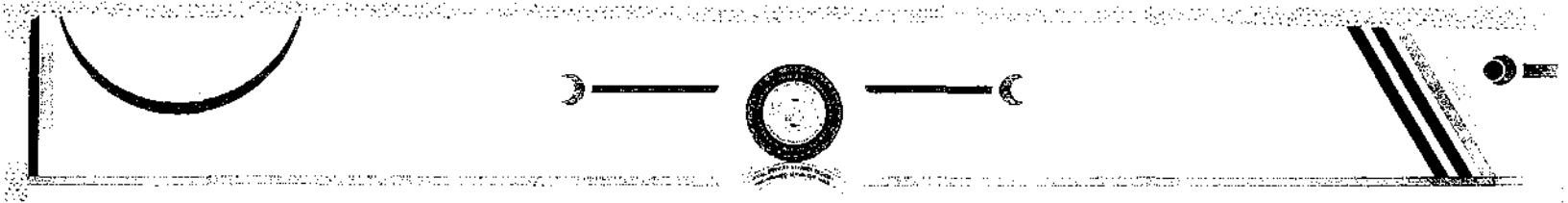
The most important impact of the mela was Farmers-to-Farmers interaction in the fields of dairying, fisheries, food processing of animal origin, agriculture, seed production, organic dairying on 3 days in 6 sessions where more than 25 progressive farmers shared their achievements among fellow farmers.

The programme was well received by the farmers and public as per the feed back the awareness was created about integrated farming involving agriculture, animal husbandry and fisheries; livestock farming activity as a source of livelihood security and fish and its utility. The Fair was very well covered in the media both in press and in electronic media (TV & Doordarshan).

The major sponsor for the mela was National Mission on Food Processing, Directorate of Agriculture, Government of Karnataka, Bengaluru.

Agencies participated in the 'Regional Jaanuvaru Mela-2013'

1. Organizers – Veterinary College, Shivamogga; Extension Education Center, Shivamogga and Karnataka Veterinary, Animal & Fisheries Sciences University, Bidar
2. Department of Animal Husbandry & Veterinary Services, GOK, Shivamogga
3. Department of Agriculture, GOK, Shivamogga
4. Department of Fisheries, GOK, Shivamogga
5. Department of Watershed Development, GOK, Shivamogga

- 
- KVAFSU
6. Department of Horticulture, GOK, Shivamogga
  7. Department of Sericulture, GOK, Shivamogga
  8. Karnataka Milk Federation (KMF), Shivamogga
  9. University of Agricultural Sciences, Bengaluru
  10. Indian Grass and Fodder Research Institute, ICAR, Dharwad.
  11. Private entrepreneurs in Agricultural Implements, Animal Husbandry & Veterinary Equipments & Diagnostics, Feed & Fodder Companies; Fertilizer & Agro Industry Companies.

### **XIV All India Inter-Agricultural Universities Sports & Games Meet-2013**

KVAFSU, Bidar had a rare opportunity of hosting the XIV All India Inter-Agricultural Universities Sports & Games Meet-2013 during 6-10<sup>th</sup> March, 2013 at its main campus, Nandinagar, Bidar. The meet had brought together 1897 students along with 147 team managers from 43 different universities representing 19 states across the country. These students stayed in Bidar for 7 days and 6 nights and participated with the spirit of sportsmanship regardless of win or loss with the zeal of appreciating the best talent.

The XIV All India Inter Agricultural Sports & Games Meet-2013 was declared open by Dr. Arvind Kumar, DDG (Edu.), ICAR, New Delhi. Dr. C. Renukaprasad, Hon'ble Vice-Chancellor of the host University presided over the inaugural function, who extended a hearty welcome to the guests and contestants across the country. Dr. R. Arvind Jannu, Principal Secretary, DAH&F, GOK, Bengaluru inaugurating the event lauded the efforts of KVAFSU, Bidar in organizing this mega event in a short time with limited resources, in a remote and resource inadequate place like Bidar city. Dr. B.V. Patil, Hon'ble Vice-Chancellor, UAS, Raichur; Dr. A. Nagana Gowda, DSW, UAS, Raichur; Dr. N. Basavaraj, DSW, UHS, Bagalkot; Dr. Revanappa, Dean, College of Horticulture, Bidar and Dr. P.C. Jaffar, Deputy Commissioner, Bidar district also graced the

occasion. Dr. (Smt) Vishalakshi, V. Karedy, Sri. Shankare Gowda and Sri. T. Mukund Varma, Hon'ble Members of Board of Management. KVAFSU witnessed the opening ceremony of the event. Dr. H.R.V. Reddy, Director of Student Welfare & Organizing Secretary, urged the students to maintain sportsman spirit throughout the tournament and accept results as they emerge. Dr. H.M. Jayaprakash, Registrar, KVAFSU, thanked all the dignitaries and teams for their active participation. At the end of each day, after the sports event the prize were distributed to the winners by Dr. C. Renukaprasad, Hon'ble Vice-Chancellor; Dr. H.M. Jayaprakash, Registrar; Dr. H.R.V. Reddy, Director of Student Welfare; Dr. S.M. Usturge, Dean (Vet) & Vice-Chairman of Sports Meet, Bidar; Dr. Y. Hari Babu, Director of Instruction (PGS); Dr. S. Yathiraj, Dean (Vet), Bengaluru; Dr. M. Devaraj, Dean (Vet), Shivamogga; Dr. M.S. Vasanth, Dean (Vet), Hassan; Dr. B.V. Venkateshaiah, Dean (D.Sc.), Bengaluru; Dr. K.M. Shankar, Dean, (Fisheries), Mangalore and Dr. K.N. Prabhudeva, Director of Extension, Bidar and Officers representing different Universities across the country.

During these five days of gala sports event (men and women), the following events were conducted: Javelin throw, Track & field event, Long jump, High jump, Discus throw, Shot put, 100m, 200m, 400m, 800m, 1500m race, Triple jump and 4x100 relay were the

individual events. The other team events include, Table tennis, Volley ball, Basket ball, Badminton, Kabbaddi and Kho-kho.

The 'Overall Championship' of the tournament was jointly shared by PAU, Ludhiana and UAS, Bengaluru. While, the host institution i.e. KVAFSU, Bidar was declared the 'Overall Championship – Runners'. Meanwhile, the 'Overall Championship' in Athletics (men) was won by TNAU, Coimbatore and among women it went to UAS, Bengaluru.

Dr. BSKVV, Dapoli was awarded with 'Runners up' in Athletics (men) and TNAU, Coimbatore was declared 'Runners up' in Athletics (women). Mr. Sudhir Sopan Morde of Dr. BSKVV, Dapoli was awarded with 'Individual Champion' of Agri-Uni Sports-2013 in men's category, while Miss. Sushmi Raju of UAS, Dharwad and Miss. Nandini, M. of

TNAU, Coimbatore shared the 'Individual Championship' among women's category.

On the closing day of the tournament, Dr. S.L. Goswamy, Director, NAARM, Hyderabad was the Chief Guest. Dr. Tyagarajan, Superintendent of Police, Bidar and Dr. B. Raju, Director of Education, UHS, Bagalkot were the Guests of Honour. Dr. C. Renukaprasd, Hon'ble Vice-Chancellor, presided over the function. Besides, all the Officers of KVAFSU and University officials of other states were present. The students who participated in the event received their respective prizes and rejoiced the occasion. Some of the officials of other states shared their experiences and lauded the arrangements made during the meet including food and accommodation. Dr. K.N. Prabhudeva, Director of Extension, proposed the vote of thanks.

**Important meetings attended by the Hon'ble Vice-Chancellor, KVAFSU, Bidar  
during the year 2012-13**

12-04-2012	Attended Karnataka Veterinary Council Executive Committee meeting at KVC, Bengaluru.
13-04-2012	Participated in the inaugural function of CMFRI, Regional Office, Mangalore along with Director General-ICAR, New Delhi. Participated in the felicitation function to the DG & DDG, ICAR New Delhi at College of Fisheries, Mangalore.
17-04-2012	Participated in the workshop on Agriculture at Babalad village, Gulbarga along with Vice-Chancellors of UAS-Dharwad, UAS-Raichur, UHS-Bagalkot and Chairman, Karnataka Krishi Mission.
27-04-2012	Meeting with the Secretary, Commonwealth Veterinary Association and Project Directorate CRUCELL regarding collaborative work on rabies diagnosis. Participated in the valedictory programme on the "Surveillance training for highly pathogenic avian influenza" with USAID, FAO, GOI and University.
28-04-2012	Inaugurated the free Anti rabies vaccination camp and distribution of Rabbit, Giriraja Chicks and fodder root slips to the farmers as a part of World Veterinary Day celebration. Delivered talk on Importance of anti microbial resistance at a seminar at KVC, Bengaluru.
30-04-2012	Participated in the Annual Day Celebration of Dairy Science College, Bengaluru. Inaugurated the Multi-Gym facility and the renovated flag post.
04-05-2012	Inaugurated the Mid Annual Convention of IAVA and National Seminar on "Innovative Teaching Methodologies in Veterinary Anatomy & Wildlife Anatomy" at Veterinary College, Bengaluru.
14-05-2012	Participated in the meeting on "Fisheries Education - Way Forward" convened by the ICAR-New Delhi.
16-05-2012	Participated in the Petition Committee Meeting along with the Principal Secretary, Department of Animal Husbandry & Fisheries, GOK, Bengaluru.
22-05-2012	Participated in the inauguration of Hatchery Building & Training Hall at Fisheries Research & Information Center, Ankola. Inaugurated the holding on Responsible Fisheries at the Bela-Bunder Village, Ankola.
28-05-2012	Met the Joint Secretary, Animal Husbandry & Fisheries Department and discussed regarding the proposals of the eligibility to Diploma Course. Participated in the Annual Day Celebrations of Veterinary College Bengaluru.
01-06-2012	Participated in the World Milk Day celebrations.
10-06-2012	Participated in the valedictory session of Annual Review Workshop of KVK's Zone VIII and addressed the delegates at Chennai.
11-06-2012	Participated in the Amruthbhoomi Yojane meeting at Karnataka Krishi Mission, Bengaluru.
15-06-2012	Attended XXIII meeting of Regional Committee of Zone VIII at TNAU-Coimbatore.
16-06-2012	Attended XXIII meeting of Regional Committee of Zone VIII at TNAU-Coimbatore.
20-06-2012	Attended meeting under the Chairmanship of Hon'ble Chief Minister, Govt. of Karnataka regarding the proposal of Veterinary College, Puttur.

29-06-2012	Attended the Paper Laid down Committee meeting along with the Principal Secretary, Department of Animal Husbandry & Fisheries, GOK, Bengaluru.
01-07-2012	Participated in the 19 <sup>th</sup> Foundation Day Celebration of SRS-NDRI, Bengaluru. Participated in the seminar on "New initiatives for dairy development".
23-07-2012	Interactive meeting with the PRT members and Assistant Director General, ICAR along with officers of the University at Regional Office, Bengaluru. Attended Karnataka Veterinary Council meeting.
24-07-2012	Held joint interaction meeting with PRT and Members of Board of Management. Participated in the inaugurations of International Student's Hostel, Staff Quarters, Produce Sale Counter, Cold Room and Animal Hoist & Effluent treatment plant.
25-07-2012	Participated in the inauguration of Boys Hostel, Staff Quarters and foundation to Girls hostel by the Hon'ble Minister for Animal Husbandry and Pro-Chancellor of the University at Dairy Science College Campus, Mahagaon, Gulbarga. Participated in the inauguration of first floor of Girls Hostel, ILFC Centre, In Patient Ward along with the members of the Board of Management. Handed over the charge of Vice-Chancellor to the Acting Vice Chancellor & appraised the development and issues on hand to the incumbent acting Vice-Chancellor.
21-09-2012	Reported as Vice-Chancellor, KVAFSU, Bidar, handed over charge of the post of Director, IAH&VB, Hebbal, Bengaluru.
22-09-2012	Met the Principal Secretary to Govt. Dept. of Animal Husbandry & Fisheries and other officers; visited the Special Secretary to Hon'ble Chief Minister GOK & officials of Hon'ble Minister for Animal Husbandry at Vidhan Soudha, Bengaluru.
24-09-2012	Met His-Excellency the Governor of Karnataka and Chancellor of the University discussed about the University matters.
10-10-2012	Met the Chairman & Members of Peer Review Team and Officials of the ICAR, New Delhi. Visited the Animal Husbandry Commissioner, GOI, New Delhi; Secretary, Veterinary Council of India, New Delhi.
11-10-2012	Meeting with Peer Review Team Members and presentation of draft peer review team report for the university to Director General, ICAR, New Delhi.
17-10-2012	Attended meeting of "Strengthening of Zonal University & starting of new colleges" under the chairmanship of Additional Chief Secretary & Development Commissioner, GOK at Bengaluru
20-10-2012	Visited Nimkar Agricultural Research Institute, Phaltan, Maharashtra. Sheep Farm and held discussions with Mr. Nimkar & Dr. Galsase regarding MOU with KVAFSU-Bidar
29-10-2012	Inaugurated Inter-Collegiate Sports & Games Meet-2012 at University Headquarters Bidar.
10-11-2012	Inaugurated Kerala Veterinary Sciences Congress-2012 at Tiruvandram.
19-11-2012	Inaugurated the Model Training Programme organized by Veterinary College, Bidar.
23-11-2012	Meeting with FAO Team regarding HPAI at IAH&VB Hebbal, Bengaluru.
24-11-2012	Inaugurated National Symposium of WSAVAPPAKCE-2012. Participated in the 17 <sup>th</sup> Foundation Day programme of NIANP, Bengaluru.
27-11-2012	Attended the Special meeting of all the members of State Veterinary Council at Karnataka Veterinary Council, Hebbal-Bengaluru.

30-11-2012	Participated in the Poultry Expo at NAARM, Hyderabad.
02-12-2012	Attended inaugural function of National Seminar on "Application of Sciences" at JSS College, Mysore.
03-12-2012	Inaugurated the Global Symposium on "Aquatic Resources for Eradication of hunger and malnutrition Opportunities & Challenges" at College of Fisheries, Mangalore
08-12-2012	Attended meeting with Dr. Sriram Rao, Vice Dean, University of Minnesota USA regarding MCU to KVAFSU and addressed students & teachers.
10-12-2012	Meeting with Additional Comptroller, State Accounts Dept., GoK regarding University audit.
13-12-2012	Meeting with Dr. Patil, Australian University regarding MCJ with Fisheries College, Mangalore. Meeting with Dr. Narasimhan, Veterinary Practitioner, Boston, USA regarding mutual interest of research.
29-12-2012	Participated in the Krishi & Januvaru Mela inaugural function at Krishi Vigyan Kendra, Janwada, Bidar. Meeting with Chairman, Karnataka Krishi Mission regarding developmental activities of the University.
31-12-2012	Attended Karnataka Krishi Mission meeting at Agriculture Department, Bengaluru.
04-02-2013	Meeting with His Excellency the Governor of Karnataka and Chancellor of the University and Chief Secretary regarding Inauguration of All India Agricultural University Sports & Games Meet-2013 at KVAFSU, Bidar.
09-02-2013	Attended Krishi Samvada Programme at Suthur, Mysore.
19-02-2013	Attended All India Agricultural Universities Vice-Chancellor's Annual Conference under the Chairmanship of Director General, ICAR, New Delhi
20-02-2013	Inaugurated Januvaru Mela at Kumta organized by Sri Kshetra Dharmastala.
23-02-2013	Attended Seminar organized by Retired Veterinarians Association at Hebbal, Bengaluru.
25-02-2013	Meeting with Mr. Puliaiah, Former MP in connection with Sheep & Goat Breeding Programmes of KVAFSU, Bidar.
01-03-2013	Inaugurated Januvaru & Matsya Mela at Shivamogga.
05-03-2013	Welcome Dr. Arvinda Kannur, Deputy Director General (Edu), ICAR, New Delhi and held meeting on Sports & Games Meet along with University officials at Bidar.
06-03-2013	Chaired the Inaugural function of XIV All India Agricultural University Sports & Games Meet-2013 at KVAFSU Campus, Bidar.
08-03-2013	Attended colloquium of MVSc Students at NRC on Meat, Hyderabad.
10-03-2013	Attended the valedictory function of All India Agricultural University Sports & Games Meet-2013 at KVAFSU Campus, Bidar
13-03-2013	Chaired the colloquium of MVSc Students of Institute Wildlife Veterinary Research, Kudige.
19-03-2013	Chaired Annual Technical Meet of Veterinary Sciences at Regional Campus, Bengaluru.
20-03-2013	Chaired Annual Technical Meet of Dairy Sciences at Regional campus, Hebbal-Bengaluru.
21-03-2013	Chaired Annual Technical Meet of Fisheries Sciences Faculty at College of Fisheries, Mangalore.
23-03-2013	Attended Annual Meeting of Senior Veterinarians Association at Karnataka Veterinary Council, Bengaluru as Chief Guest.

## I. TEACHING

### 1) Teaching Institutions

#	<b>Teaching Institute with Location</b>	<b>Year of Establishment</b>	<b>Name of the Dean / OSD / Principal</b>	<b>Degree Programmes Offered</b>
1	Veterinary College, Bengaluru	1958	Dr. S. Yathiraj	B.V.Sc.&A.H., M.V.Sc., Ph.D.,
2	Veterinary College, Bidar	1984	Dr. S. M. Usturge	B.V.Sc.&A.H., M.V.Sc., Ph.D.,
3	Veterinary College, Shivamogga	2007	Dr. M. Devaraj	B.V.Sc.&A.H.,
4	Veterinary College, Hassan	2007	Dr. M.S. Vasantha	B.V.Sc.&A.H.,
5	Dairy Science College, Bengaluru	1980	Dr. B.V. Venkateshaiah	B.Tech. (D.Tech) M.Tech. (Dairy Science) MBA in Food & Dairy Business
6	Dairy Science College, Gulbarga	2008	Dr. L. Mahalingaiah	B.Tech. (D.Tech)
7	College of Fisheries, Mangalore	1969	Dr. K. M. Shankar	B.F.Sc., M.F.Sc., Ph.D.,
8	Institute of Wildlife Veterinary Research, Kodagu	2008	Dr. M. Narayana Bhat	M.V.Sc. (Wildlife) started at Veterinary College, Hebbal on behalf of the IWVR.
9	Animal Husbandry Polytechnic, Konehalli, Tiptur	2011	Dr. H. K. Siddalingamurthy	Animal Husbandry Diploma
10	Animal Husbandry Polytechnic, Shiggaon, Haveri	2012	Dr. Shivakumar, K. Radde	Animal Husbandry Diploma

### 2) No. of students admitted/on roll to Undergraduate degree programmes and Diploma Course

<b>Sl. No.</b>	<b>Degree Programme</b>	<b>Year</b>					<b>Passed out</b>	<b>College / Institute</b>
		<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>		
1	B.V.Sc.&A.H.	84	63	74	90	59	55	Veterinary College, Bengaluru
2	B.V.Sc.&A.H.	62	59	52	62	46	53	Veterinary College, Bidar

3	B.V.Sc.&A.H.	49	47	48	39+1	8	<b>30</b>	Veterinary College, Shivamogga
4	B.V.Sc.&A.H.	50	50	41	39	04	<b>24</b>	Veterinary College, Hassan
5	B.Tech. (D.Tech)	39	35	37	37	-	<b>23</b>	Dairy Science College, Bengaluru
6	B.Tech. (D.Tech)	23	14	16	09	-	<b>08</b>	Dairy Science College, Gulbarga
7	B.F.Sc.	44	42	40	43	2	<b>20</b>	College of Fisheries, Mangalore
8	Animal Husbandry Diploma	44	50	-	-	-	-	Animal Husbandry Polytechnic, Konehalli, Tiptur
9	Animal Husbandry Diploma	50	-	-	-	-	-	Animal Husbandry Polytechnic, Shiggaon Haveri

3) No. of students admitted to Postgraduate degree and Ph.D. programmes

#	Department	Masters Degree			Ph.D.,		
		On roll		Completed	On roll		Completed
		I	II	2012-13	I	II	III
<b>VETERINARY COLLEGE, BENGALURU</b>							
1	Animal Nutrition	6	-	1	1	3	-
2	Animal Genetics & Breeding	3	4	-	1	4	3
3	Livestock Production & Management	3	3	-	2	1	-
4	Livestock Products Technology	2	3	-	1	1	-
5	Poultry Science	4	5	3	2	3	1
6	Vet. Anatomy	6	-	-	5	-	1
7	Vet. Gynaecology & Obst.	8	-	4	5	2	-
8	Vet. Microbiology	4	7	3	2	6	4
9	Vet. Medicine	6	2	-	3	4	-
10	Vet. Physiology	4	5	1	1	2	-
11	Vet. Pathology	4	3	4	3	4	1
12	Vet. Pharmacology & Toxicology	5	6	2	2	6	1
13	Vet. Parasitology	3	2	-	1	1	-
14	Vet. Surgery & Radiology	5	7	2	1	2	1
15	Vet. Biochemistry	3	2	-	1	1	-
16	Vet. & Animal Husbandry Technology	3	3	1	1	1	-
17	Vet. & Animal Husbandry Technology	3	3	1	1	1	-

**VETERINARY COLLEGE, BIDAR**

1	Animal Nutrition	5	-	-	2	-	-	-	1
2	Animal Genetics & Breeding	3	1	-	-	-	-	-	-
3	Vet. Anatomy & Histology	2	2	-	-	-	-	-	-
4	Vet. & Animal Husbandry Extension	-	-	-	-	-	-	-	-
5	Vet. Gynaecology & Obst.	2	5	-	-	-	-	-	-
6	Vet. Microbiology	-	1	-	-	-	-	-	-
7	Vet. Medicine	5	4	2	-	-	-	-	-
8	Vet. Pathology	-	-	-	-	-	-	-	-
9	Vet. Physiology	-	-	-	-	-	-	-	-
10	Vet. Surgery & Radiology	7	8	-	-	-	-	-	-
<b>Total</b>		<b>27</b>	<b>21</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>

**DAIRY SCIENCE COLLEGE, BENGALURU**

1	Dairy Technology	3	4	1	-	-	-	-	-
2	Dairy Microbiology	-	-	-	-	-	-	-	-
3	Dairy Chemistry	3	-	-	-	-	-	-	-
4	M.B.A. Programme	16	13	12	-	-	-	-	-
<b>Total</b>		<b>26</b>	<b>26</b>	<b>16</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>

**COLLEGE OF FISHERIES, MANGALORE**

1	Aquaculture	4	4	2	3	2	-	-	1
2	Fisheries Microbiology	-	2	1	1	3	-	-	1
3	Fisheries Resources & Management	2	3	-	1	1	-	-	-
4	Aquatic Environment & Management	1	1	4	6	1	-	-	2
5	Fish Processing Technology	3	2	3	1	4	1	1	1
6	Fish Engineering Technology	2	1	-	-	-	-	-	-
<b>Total</b>		<b>12</b>	<b>13</b>	<b>10</b>	<b>11</b>	<b>13</b>	<b>2</b>	<b>1</b>	<b>5</b>

#### **4) Academic Excellence**

##### **(i) Scholarships / Fellowships received**

##### **IN UNDERGRADUATE DEGREE PROGRAMME**

##### **ANIMAL AND VETERINARY SCIENCES**

#	<i>Scholarship</i>	<i>Year</i>					<i>Total</i>
		I	II	III	IV	V	
<b>General Scholarship</b>							
1	Veterinary College, Bengaluru	6	5	6	8	5	<b>30</b>
2	Veterinary College, Bidar	4	5	1	6	-	<b>16</b>
3	Veterinary College, Shivamogga	-	3	5	4	-	<b>12</b>
4	Veterinary College, Hassan	2	6	5	4	-	<b>17</b>
<b>Merit Scholarship</b>							
1	Veterinary College, Bengaluru	2	2	2	2	2	<b>10</b>
2	Veterinary College, Bidar	2	2	2	2	2	<b>10</b>
3	Veterinary College, Shivamogga	2	2	2	2	-	<b>8</b>
4	Veterinary College, Hassan	2	2	2	2	-	<b>8</b>
<b>National Talent Scholarship</b>							
1	Veterinary College, Bengaluru	9	1	2	2	4	<b>18</b>
2	Veterinary College, Bidar	-	-	-	-	-	-
3	Veterinary College, Shivamogga	-	-	-	-	-	-
4	Veterinary College, Hassan	-	-	-	-	-	-
<b>Neomec Project Shiksha</b>							
1	Veterinary College, Bengaluru	2	-	-	-	-	<b>2</b>
2	Veterinary College, Bidar	-	-	-	-	-	-
3	Veterinary College, Shivamogga	-	-	-	-	-	-
4	Veterinary College, Hassan	-	-	-	-	-	-
<b>Student Aid Fund</b>							
1	Veterinary College, Bengaluru	-	-	4	3	3	<b>11</b>
2	Veterinary College, Bidar	-	01	01	-	-	<b>2</b>
3	Veterinary College, Shivamogga	-	-	-	-	-	-
4	Veterinary College, Hassan	-	-	-	-	-	-
<b>Fee Concession</b>							
1	Veterinary College, Bengaluru	13	15	18	26	18	<b>90</b>
2	Veterinary College, Bidar	-	-	-	-	-	-
3	Veterinary College, Shivamogga	-	-	-	-	-	-
4	Veterinary College, Hassan	-	-	-	-	-	-
<b>Fee Concession Category-1</b>							
1	Veterinary College, Bengaluru	-	-	-	-	-	-

2	Veterinary College, Bidar	-	-	-	-	-	-	-
3	Veterinary College, Shivamogga	-	-	-	-	-	-	-
4	Veterinary College, Hassan	-	-	-	-	-	-	-
<b>B.C.M. Scholarship</b>								
1	Veterinary College, Bengaluru	-	-	-	-	-	-	-
2	Veterinary College, Bidar	-	-	-	-	-	-	-
3	Veterinary College, Shivamogga	-	16	15	13	1	45	
4	Veterinary College, Hassan	33	24	15	20	-	92	
<b>Govt. of India Scholarship</b>								
1	Veterinary College, Bengaluru	-	-	-	-	-	-	-
2	Veterinary College, Bidar	-	-	-	-	-	-	-
3	Veterinary College, Shivamogga	3	5	1	4	1	14	
4	Veterinary College, Hassan	8	5	5	2	-	20	
<b>NTS Fellowship</b>								
1	Veterinary College, Bengaluru	-	-	-	-	-	-	-
2	Veterinary College, Bidar	9	9	2	3	8	27	
3	Veterinary College, Shivamogga	-	-	-	-	-	-	-
4	Veterinary College, Hassan	-	-	-	-	-	-	-
<b>Sitaram Jindal Foundation Scholarship</b>								
1	Veterinary College, Bengaluru	-	-	-	-	-	-	-
2	Veterinary College, Bidar	-	-	-	-	-	-	-
3	Veterinary College, Shivamogga	3	4	3	3	-	12	
4	Veterinary College, Hassan	-	-	-	-	-	-	-
<b>E.B.I. Scholarship</b>								
1	Veterinary College, Bengaluru	-	-	-	-	-	-	-
2	Veterinary College, Bidar	-	-	-	-	-	-	-
3	Veterinary College, Shivamogga	5	-	8	6	-	21	
4	Veterinary College, Hassan	-	-	-	-	-	-	-
<b>Merit-cum-Means Scholarship</b>								
1	Veterinary College, Bengaluru	-	-	-	-	-	-	-
2	Veterinary College, Bidar	-	-	-	-	-	-	-
3	Veterinary College, Shivamogga	-	3	1	-	-	4	
4	Veterinary College, Hassan	-	-	-	-	-	-	-
<b>M.H.R.D Scholarship</b>								
1	Veterinary College, Bengaluru	-	-	-	-	-	-	-
2	Veterinary College, Bidar	-	-	-	-	-	-	-
3	Veterinary College, Shivamogga	-	6	4	1	-	11	
4	Veterinary College, Hassan	-	-	-	-	-	-	-
<b>Handicaps Scholarship</b>								
1	Veterinary College, Bengaluru	-	-	-	-	-	-	-
2	Veterinary College, Bidar	-	-	-	-	-	-	-
3	Veterinary College, Shivamogga	-	-	-	-	-	-	-
4	Veterinary College, Hassan	-	-	-	-	-	-	-
<b>Total</b>								
		108	115	104	116	45	488	

## DAIRY SCIENCE

#	Scholarship	Year				<b>Total</b>
		I	II	III	IV	
<b>General Scholarship</b>						
1	Dairy Science College, Bengaluru	5	4	5	4	<b>18</b>
2	Dairy Science College, Gulbarga	2	2	-	1	<b>5</b>
<b>Merit Scholarship</b>						
1	Dairy Science College, Bengaluru	2	2	2	2	<b>8</b>
2	Dairy Science College, Gulbarga	2	2	-	2	<b>6</b>
<b>Student Aid Fund</b>						
1	Dairy Science College, Bengaluru	-	1	-	-	<b>1</b>
2	Dairy Science College, Gulbarga	-	-	-	-	-
<b>Fee Concession</b>						
1	Dairy Science College, Bengaluru	12	17	7	10	<b>46</b>
2	Dairy Science College, Gulbarga	-	-	-	-	-
<b>Jindal Scholarship</b>						
1	Dairy Science College, Bengaluru	-	-	-	-	-
2	Dairy Science College, Gulbarga	-	-	-	-	-
	<b>Total</b>	<b>23</b>	<b>28</b>	<b>15</b>	<b>19</b>	<b>85</b>

## FISHERIES SCIENCE

#	Scholarship	Year				<b>Total</b>
		I	II	III	IV	
<b>COLLEGE OF FISHERIES, MANGALORE</b>						
1	General scholarship	-	3	-	-	<b>3</b>
2	Merit Scholarship	2	2	2	2	<b>8</b>
3	ICAR Scholarship	1	3	3	1	<b>8</b>
4	Merit-cum-Means Scholarship	2	-	-	2	<b>4</b>
5	Government of India Scholarship	6	4	6	2	<b>18</b>
6	MHRD Scholarship	1	-	-	-	<b>1</b>
	<b>Total</b>	<b>12</b>	<b>12</b>	<b>11</b>	<b>7</b>	<b>42</b>

### Abstract of Undergraduate Scholarships

#	Scholarship	VCH	VCB	VCS	HVC	DSCH	DSCG	FCM	Total
1	General Scholarship	30	16	12	17	18	05	03	101
2	Merit Scholarship	10	10	08	08	08	06	08	58
3	National Talent Scholarship	18	-	-	-	-	-	-	18
4	Neomec Project Shiksha	02	-	-	-	01	-	-	03
5	Student Aid Fund	11	02	-	-	-	-	-	13



6	Fee Concession	90	-	-	-	46	-	-	136
7	Fee Concession Category-I	07	-	-	-	-	-	-	07
8	B.C.M. Scholarship	-	-	45	92	-	-	-	137
9	Govt. of India Scholarship	-	-	14	20	-	-	18	52
10	NTS Fellowship	-	27	-	-	-	-	-	27
11	Sitaram Jindal Foundation Scholarship	-	-	12	-	-	-	-	12
12	E.B.L. Scholarship	-	-	21	-	-	-	-	21
13	Merit-cum-Means Scholarship	-	-	04	-	-	-	04	08
14	M.H.R.D Scholarship	-	-	11	-	-	-	01	12
15	Handicaps Scholarship	-	-	01	-	-	-	-	01
16	Jindal Scholarship	-	-	-	-	-	01	-	01
17	ICAR Scholarship	-	-	-	-	-	-	08	08
Total		168	55	128	137	73	12	42	615

### IN POST-GRADUATE DEGREE PROGRAMME

#### ANIMAL AND VETERINARY SCIENCES

#	Scholarship	M.V.Sc.,		Ph.D.,		Total
		I	II	I	II	
<b>Merit Scholarship</b>						
1	Veterinary College, Bengaluru	12	11	-	03	01 27
2	Veterinary College, Bidar	05	06	-	-	11
<b>Student Aid Fund</b>						
1	Veterinary College, Bengaluru	-	02	-	-	02
2	Veterinary College, Bidar	-	-	-	-	-
<b>Fee Concession</b>						
1	Veterinary College, Bengaluru	11	13	-	03	- 27
2	Veterinary College, Bidar	-	-	-	-	-
<b>Fee Concession Category-I</b>						
1	Veterinary College, Bengaluru	02	03	-	-	01 06
2	Veterinary College, Bidar	-	-	-	-	-
Total		30	35	-	06	02 73

#### DAIRY SCIENCE

#	Scholarship	M.Tech.,		Ph.D.,		Total
		I	II	I	II	
<b>Dairy Science College, Bengaluru</b>						
1	ICAR Jr. Fellowship	01	-	-	-	01
2	Merit Scholarship	03	03	-	01	08
3	Fee Concession	02	01	-	01	04
4	Rajeev Gandhi Fellowship for SC & STs	-	-	-	01	01
Total		09	04	06	02	01 37

## FISHERIES SCIENCE

#	Scholarship	M.F.Sc.,		Ph.D.			<b>Total</b>
		I	II	I	II	III	
<b>College of Fisheries, Mangalore</b>							
1	Merit Scholarship	03	01	01	01	-	<b>06</b>
2	Government of India Scholarship	02	-	-	-	-	<b>02</b>
	<b>Total</b>	<b>05</b>	<b>01</b>	<b>01</b>	<b>01</b>	-	<b>08</b>

### Abstract of Postgraduate Scholarships

#	Scholarship	VCH		VCB		DSCH		FCM		<b>Total</b>
		M.F.Sc.,	Ph.D.,	M.F.Sc.,	Ph.D.,	M.Tech.,	Ph.D.,	M.F.Sc.,	Ph.D.,	
1	Merit Scholarship	23	04	11	-	06	02	04	02	<b>52</b>
2	Student Aid Fund	02	-	-	-	-	-	-	-	<b>02</b>
3	Fee Concession	24	03	-	-	16	01	-	-	<b>34</b>
4	Fee Concession Category-I	05	01	-	-	-	-	-	-	<b>06</b>
5	ICAR JI Fellowship	-	-	-	-	01	-	-	-	<b>01</b>
6	Rajeev Gandhi Fellowship for SC & STs	-	-	-	-	-	01	-	-	<b>01</b>
7	Government of India Scholarship	-	-	-	-	-	-	02	-	<b>02</b>
	<b>Total</b>	<b>54</b>	<b>08</b>	<b>11</b>	-	<b>13</b>	<b>04</b>	<b>06</b>	<b>02</b>	<b>93</b>

### 5) Academic Research (Postgraduate Research)

#### Theses accepted during 2012-13 for Masters and Doctoral Degree Programmes

#	Thesis Title	Name of the Student	Degree	Major Advisor and Dept.
<b>VETERINARY COLLEGE, BENGALURU</b>				
1	Studies on certain aspects of metabolism in pregnant and non pregnant Bannur ewes	P.M. Gururaj	Master	T. Veena. VPY
2	Toxicity study of fungal isolates from maize stalks in rats	G. Chandrashekhar	Master	N.B. Shridhar, VPT
3	Pharmacological and toxicological studies of <i>Ficus tsahela</i> in rats	Reshu Kumar	Master	N.B. Shridhar, VPT
4	Isolation and characterization of fungi associated with bovine mastitis	Mohammad Nazar	Master	D. Rathnaimma, VMC

5	Detection of biofilm formation ability of <i>Streptococcus agalactiae</i> isolated from bovine mastitis	M. Nasim	Master	D. Rathnamma, VMC
6	Genetic determinants of antibiotic resistance and selected virulence factors in <i>Staphylococcus aureus</i> isolates from bovine mastitis cases.	B.M. Akshatha	Master	Shrikrishna Isloor, VMC
7	Immunohistochemical evaluation of prognostic value of Bcl-2 in canine mammary gland tumors	K. Anitha	Master	Suguna Rao, VPP
8	Studies on hypoglycemic effect of aged garlic extract on experimentally induced diabetes mellitus in rats	A. Nasreen	Master	M.L. Satyanarayana, VPP
9	Prognostic value of oestrogen receptor expression in canine mammary gland tumours	S. Priya	Master	Suguna Rao, VPP
10	Comparison of flank and ventral midline laparotomy for ovariohysterectomy in cats	M. Babu	Master	A. Krishnaswamy, VGO
11	Studies on incidence, risk factors and clinical management of fetal dystocia in dogs	K.S. Swetha	Master	T.G. Honnappa, VGO
12	Medical management of primary uterine inertia in female dogs	K. Vibha Raghuram	Master	A. Krishnaswamy, VGO
13	Studies on certain biochemical profiles in cross bred cows with dystocia	Assadullah	Master	T.G. Honnappa, VGO
14	Bacterial load in the neat and extended bull semen and its antibiogram	M. Navya	Master	V.C. Murthy, VGO
15	Studies on certain haematological profiles in normal calving and dystocia affected cross bred cows	Mohammad Hakim	Master	Dr. T.G. Honnappa, VGO
16	Certain studies on subacute ruminal acidosis in dairy cows	Ahmad Nawid Mirzad	Master	H.N. Upendra, VMD
17	Studies on certain aspects of bacterial respiratory tract infections in chicken	D.S. Malatesh	Master	P.T. Rameso, VMD
18	Studies on surgical management of glaucoma in dogs	P.N. Namratha	Master	M.G. Vasanth, VSR
19	Studies on the effect of Sevoflurane anaesthesia in dogs with renal and hepatic disorder	H.C. Shivaiah	Master	J. Sugunan VPP
20	The physiological process of repeat breeding in buffaloes	N. Paterkar	Master	T. Venkateswaran VPP

21	Studies on molecular methods for identification of skin and other tissues of wild animals	R. Hemalatha	Master	C. Renukaprasad, Wildlife
22	Nutritive evaluation of corn germ meal in colored broiler (Raja-II) diet with phytase enzyme supplementation	R. Kasi Sowjanya Lakshmi.	Master	R. Gideon Gloridoss, ANN
23	Effect of supplementing organic source of Iron (Fe) and Copper (Cu) in the diets on the performance of colored broilers (Raja II).	Mohammad Dawood	Master	Jayanaik, P.Sc.
24	Effect of feeding organic Zinc (Zn) and Selenium (Se) on the performance of male parental lines of Giriraja and Swarnadhara	Vittal G. Koujalagi	Master	P. Manegowda, M.Sc.
25	Study on egg production and hatchability of chickens by IVP birds	B.M. Balaji	Ph.D.	P. R. Subrahmanyam, M.Sc.
26	Development of functional table eggs as functional food	Rajinikanth Ganay	Master	S. Radhakrishnan, LPT
27	A comparative study on self help groups promoted by various institutions in Karnataka	R. Ajith	Master	K. Satyaratnam, M.A.
28	Analysis of skin and its appendages of wild animals	R. Jayaraman	Ph.D.	V. V. Venkateswaran, M.Sc.
29	Characterization and toxicity studies of fungal isolates from groundnut hay in rats	Vinay P. Nikare	Ph.D.	N.B. Shridhar, VPT
30	Molecular epidemiology of bovine herpes virus-1 and development of real time PCR based antigen detection kit for diagnosis of the viruses	B.M. Chandranai	Ph.D.	D. Rathnamma, VMC
31	Study on immunopathological and biochemical aspects of mine dust toxicity on chickens	H.K. Muniycilappa	Ph.D.	A.V.L. Saravananand, VPP
32	Evaluation of tumor induced angiogenesis in rats and chick mammary gland tumors	Mohankumar Chettai	Ph.D.	Suguna Raj, VPP
33	Influence of food proportion and diet on growth and development of the intestinal microflora in weaned chicks	M.J. Jayanthi	Ph.D.	T. S. Srinivasan, VPP

34	Effect of drying versus ensiling of maize stover on chemical composition and feeding value to lactating crossbred cows	Mahadevarappa Gouri	Ph.D.,	J. Krishnamoorthy, LPM
<b>VETERINARY COLLEGE, BIDAR</b>				
1	Study on control of adult population of <i>Culicoides</i> midges	Mahipalsingh Thakur	Master	Vivek R. Kasaralikar, VEPM
2	Study on prevalence, diagnosis and treatment of bovine mastitis	S. Shabareesh	Master	N. A. Patel, VAD
3	Studies on phenotypic and molecular characterization of coag-ulase negative staphylococci isolated from clinical and subclinical cases of bovine mastitis	S. Sundaresan	Ph.D.,	V. Hari Babu, VAC
<b>DAIRY SCIENCE COLLEGE, BENGALURU</b>				
1	Development of probiotic, nutraceutical health food for geriatrics	Vaishali Hiremath	Master	D.B. Puranik, DT
2	Studies on quality characteristics of khoa based sweets prepared with low calories sweetener	Jaymaia Kumar	Master	C. Kempanna, DC
3	Development of functional weaning food enriched with calcium and Iron binding bioactive peptides	C.S. Shashi Kumar	Ph.D.,	D.B. Puranik, DT
<b>COLLEGE OF FISHERIES, MANGALORE</b>				
1	Production of all-male population of guppy, <i>Poecilia reticulata</i> (Robert John Lechmere 1866) through the application of aromatase inhibitor	B.H. Chandra shekhara	Master	N. Basavaraja, Aqua
2	Evaluation on biofilm of <i>Aeromonas hydrophila</i> for oral vaccination of <i>Channa striatus</i> (Bloch)	Prabhugouda Siriyappagounder	Master	K.M. Shankar, Aqua
3	Development of monoclonal antibody (MAB) based flow through immunogold assay for detection of <i>Aphanomyces invadans</i> – causative agent of EUS in fish	K.V. Ghana	Master	K.M. Shankar, Aqua

4	Evaluation of combined effects of yeast cell wall extract and <i>Spirulina</i> based feed on the growth and health of <i>Catla catla</i> .	Varuna Baglodi	Master	E.G. Jayaraj, Aqua
5	Masculinization of Siamese fighting fish, <i>Betta splendens</i> (Regan, 1910) through the application of Letrozole and Norethindrone	Katare Milind Bhagwan	Master	N. Basavaraja, Aqua
6	Suitability of farm ponds for aquaculture in different regions of Dakshina Kannada district	Harsha Nayak	Master	A.T. Ramachandra Nayak, AEM
7	Studies on benthic detrital aggregate formation in cultured shrimp pond	G.P. Praveen	Master	Gangadhara Gowda, AEM
8	Oxidative stress responses in common carp ( <i>Cyprinus carpio</i> ) exposed to organophosphorous pesticide	A. Padmanabha	Master	H.R.V. Reddy, AEM
9	Utilization of seafood processing wastes for food and feed	K.P. Nithin	Master	N.S. Sudhakara, FPT
10	Naturally occurring bioactive peptide from fish and shellfish: isolation and characterization	V. Naveen Kumar	Master	B.A. Shamsundar, FPT
11	Properties of proteins from <i>Pangasius hypophthalmus</i> and its suitability for fish sausage preparation	Shwetha Joshi	Master	B.A. Shamsundar, FPT
12	Marine <i>Bacillus</i> species as bioremediators in aquaculture ponds	S.T. Sampath Naik	Master	Indrani Karunasagar, FM
13	Embryological and histological studies in indigenous carps	Mansoor Ahmad Rather	Ph.D.	N. Basavaraja, Aqua
14	Influence of environmental factors on the oyster beds Mulky estuary, south west coast of India	M. Ganapathi Naik	Ph.D.	Gangadhara Gowda, FEE
15	Temporal variability of phytoplankton assemblages in the coastal waters of Mangalore	N. Chethan	Ph.D.	H.R.V. Reddy, AEM
16	Properties of gelatin from fish processing waste and its application in product formulation	M.V. Chandra	Ph.D.	B.A. Shamsundar, FPT
17	Development of molecular based diagnostics for simultaneous detection of viruses of crustaceans	S.A. Mohan	Ph.D.	M.N. Venugopal, FM
18	Development of recombinant protein vaccine for <i>Macrobrachium rosenbergii</i> Nodavirus (MrNV)	S. Naveen Kumar	Ph.D.	M.N. Venugopal. FM

(i) Library and Information Services

(a) Print Media (books, journals/periodicals)

#	Particulars	VCH & DSCH	VCB	VCS	HVC	DSCG	FCM	AHPK	AHPS	Total
1	Books	3275	638	2876	483	1172	721	121	122	11222
2	Journals	1416	396	-	-	-	728	-	-	3030
3	Reports	931	14	-	-	-	152	-	-	1127
4	Pamphlets	711	-	-	-	-	71	-	-	712
5	Bound Volumes	10686	1976	-	-	-	614	-	-	10312
6	Gift Books	743	64	-	-	-	281	-	-	98
7	SC/ST Books	1750	1791	144	222	115	115	-	-	4472
8	Indian Journals	43	32	22	14	-	19	-	-	126
9	Foreign Journals	95	94	-	-	-	7	-	-	14
10	Back Volumes	-	1976	-	-	-	6246	-	-	6222
11	Others	-	-	-	-	-	-	2	1	03

(ii) Non-print Media (e-resources) - list of e-journals/CD

#	Particulars	VCH & DSCH	VCB	VCS	HVC	DSCG	FCM	AHPK	AHPS	Total
1	e-journals / CD	Abstracts- 2670 Full-text- 5282 Hard copy- 1075 User Logins- 3371	450	-	-	-	18	9	40	12915

## IV Leadership Committee

#	Particulars	IV Leadership Committee							Total
		DSCH	VCE	VCC	HVC	DSOC	FCM	Total	
1	Students at UG Level	347	12303	199	56	57	180	1313	
2	Students at PG Level	305	563	-	-	-	56	5246	
3	Staff	66	1316	65	25	17	65	1538	

## 7) Student Welfare Activities

### **DIRECTORATE OF STUDENT WELFARE**

1. Dr. H.R.V. Reddy, Director of Research took additional charge of Director of Student Welfare on 16-10-12.
2. The VIII Inter-Collegiate Youth Festival of KVAFSU was held at Bengaluru Campus, Bengaluru during September 27-29, 2012. The Overall Championship was bagged by Veterinary College, Bengaluru. Dairy Science College, Bengaluru was awarded with Runners Up Championship.
3. The VIII KVAFSU Inter-Collegiate Sports & Games Meet was organized by Veterinary College, Bidar during October 28<sup>th</sup> to November 1<sup>st</sup>, 2012 at Bidar Campus. All the constituent Colleges of the University viz., Veterinary College, Bidar/ Shivamogga/ Hassan/ Bengaluru; Dairy Science College, Bengaluru/ Gulbarga, and College of

Fisheries, Mangalore participated in the event. The Inter-Collegiate Sports and Games Meet-2012 was inaugurated by Dr. C. Renukaprasad (Hon'ble Vice-Chancellor), KVAFSU, Bidar; Sri. T. Mukund Varma, Sri. K. C. Shankara Gouda (Hon'ble Chairman, Board of Studies, KVAFSU, Bidar). Dr. H.R.V. Reddy, Director of Student Welfare graced the occasion. Dr. S.M. Usturge, Dean & Campus Head, Veterinary College, Bidar presided over the function. The Veterinary College, Bengaluru bagged the Overall Championship Trophy in Athletics Meet, while the Runner up Trophy was bagged by Veterinary College, Bidar. The Individual Championship in Woman Athletic was secured by Ms. Ranjitha, K.P. of Veterinary College, Bengaluru. On the other hand, Individual Championship-Men for Athletic was bagged by Mr. Venugopal of College of Fisheries, Mangalore.

### **Details of Winners and Runners of the Inter-Collegiate Sports & Games Meet**

#	Event	Winning	College
1	Cricket-Men	Joint Winners	Dairy Science College, Bengaluru Veterinary College, Shivamogga
2	Kabaddi-Men	Winner	Veterinary College, Shivamogga
		Runner	Veterinary College, Bidar
3	Kabaddi-Women	Winner	College of Fisheries, Mangalore
		Runner	Dairy Science College, Bengaluru
4	Volley Ball-Men	Winner	Dairy Science College, Bengaluru
		Runner	Veterinary College, Bidar

5	Volley Ball-Women	Winner	Veterinary College, Hassan
		Runner	Veterinary College, Bengaluru
6	Foot Ball-Men	Joint Winners	Veterinary College, Bengaluru
			Veterinary College, Bidar
7	Kho-Kho-Men	Winner	Veterinary College, Bidar
		Runner	Veterinary College, Shivamogga
8	Badminton-Men	Winner	Veterinary College, Bidar
		Runner	Veterinary College, Bengaluru
9	Badminton-Women	Winner	Veterinary College, Bengaluru
		Runner	College of Fisheries, Mangalore
10	Basket Ball-Men	Winner	Veterinary College, Bidar
		Runner	Veterinary College, Bengaluru
11	Basket Ball-Women	Winner	Veterinary College, Bengaluru
		Runner	Dairy Science ,College Bengaluru
12	Chess	Winner	Veterinary College, Shivamogga
		Runner	College of Fisheries, Mangalore
13	Table Tennis -Men	Winner	Fisheries College, Mangalore
		Runner	Veterinary College, Hassan
14	Table Tennis -Women	Winner	Veterinary Coilege, Hassan
		Runner	Veterinary College, Bengaluru

The valedictory function was organized on 01-11-2012. Dr. D.R. Nagesh, Hon'ble Member, Board of Management, KVAFSU, Bidar and Dr. U.S. Hampannanavar, Principal, Gurunanak Dev Engineering College, Bidar were the Chief Guests. Sri. V.C. Kitageri, Comptroller, KVAFSU, Bidar; Dr. Revanappa, Dean, Horticulture College, Bidar and Dr. H.R.V. Reddy, Director of Students' Welfare, KVAFSU, Bidar also participated in the function. Dr. S.M Usturge, Dean & Campus Head, Veterinary College, Bidar presided over the function.

4. In the Inter-University Youth festival was held at Jabalpur during February 24-28, 2013, KVAFSU, Bidar bagged the runner-up place at all India level.
5. The XIV All India Inter-Agricultural Universities Sports & Games Meet-2013 was held at KVAFSU, Bidar during 6<sup>th</sup>-10<sup>th</sup> March, 2013. In this event, students from 43 different Agricultural & allied Universities participated. Apart from 1750 players & 147 officials, the students and staff of KVAFSU,

Bidar took part in the event. Dr. Arvind Kumar, DDG (Edu.), ICAR, New Delhi declared the meet open on 6<sup>th</sup> March, 2013. The event was presided over by Dr. C. Renukaprasad, Hon'ble Vice-Chancellor, KVAFSU, Bidar. The other dignitaries who graced the occasion were Dr. B.V. Patil, Hon'ble Vice-Chancellor, UAS, Raichur; Dr. P.C. Jaffar, Deputy Commissioner, Bidar district; Dr. A. Naganagowda, DSW, UAS, Raichur and Dr. N. Basawaraj, DSW, UHS, Bagalkot. In addition to this, Sri. Shankare Gowda, Smt. Vishalaxi Karaddi & Sri. T. Mukund Verma, Hon'ble Members of Board of Management, KVAFSU were also present. Officers of KVAFSU, Bidar; UAS, Bengaluru and other universities of the country witnessed the event.

The following students represented KVAFSU, Bidar team in the XIV All India inter-Agricultural Universities Sports & Games Meet-2013 held at Karnataka Veterinary, Animal & Fisheries Sciences University, Bidar during 6<sup>th</sup>-10<sup>th</sup> March, 2013.

#	Name of the student's	Event
<b>VETERINARY COLLEGE, BIDAR</b>		
1	Sooraj, K	Athletics
2	Sachin M.P	Kho-Kho
3	Sachin S.P	Kho-Kho
4	Paramesh	Kho-Kho
5	Veerayya	Kho-Kho
6	Ashok	Volleyball
7	Manjesh Gowda	Kabaddi
8	Rakesh	Badminton
9	Manjunath Holagi	Basketball
10	Sebastian	Basketball
11	Bramhalinga	Basketball
12	Rohith	Basketball
13	Chandrashekhar	Basketball
14	Nidha	Volleyball
15	Megha	Volleyball
16	Sowjanya	Basketball
17	Sangeetha	Volleyball
18	Pannaga	Basketball
19	Harshitha	Basketball
<b>VETERINARY COLLEGE, BENGALURU</b>		
20	Yathish Gowda	Kabaddi
21	Venkatesh	Badminton
22	Ashish	Basketball
23	Chetan Yadav	Kho-Kho
24	Ranjitha, K.P.	Athletics
25	Swetha, S.M.	Volleyball
26	Aditi Handa	Basketball
27	Preeti Goswamy	Basketball
<b>VETERINARY COLLEGE, SHIVAMOGGA</b>		
28	Rakesh	Kho-Kho
29	Beerappa	Kho-Kho
30	Naveen Kumar, B.S.	Kho-Kho
31	Karthik	Kabaddi
32	Shivakumar	Kabaddi
33	Sachin	Kabaddi
34	Md. Arshad	Table Tennis

**VETERINARY COLLEGE, HASSAN**

35	Ramesh	Kho-Kho
36	Mahesh S.Ugar	Kho-Kho
37	Pramod, J.K.	Volleyball
38	Nithin	Volleyball
39	Arun	Kabaddi
40	Nithin, B.S.	Table Tennis
41	Suprith Surya	Basketball
42	Sagar Lochan	Basketball
43	Hitheshini	Table Tennis
44	Sindhu	Table Tennis
45	Vinutha	Table Tennis
46	Nirupama	Volleyball
47	Ashitha Suresh	Athletics

**DAIRY SCIENCE COLLEGE, BENGALURU**

48	Mallikarjun, B.M.	Athletics
49	Nishanthi	Athletics
50	Santhosh, M.D.	Volleyball
51	Darshan, G.B.	Volleyball
52	Abhishek, U.J.	Volleyball
53	Nithin, K.P.	Kabaddi

**DAIRY SCIENCE COLLEGE, GULBARGA**

54	Shaskar Reddy	Athletics
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**FISHERIES COLLEGE, MANGALURU**

55	Venugopal	Athletics
56	Roopesh Kumar	Kho-Kho
57	Aditya	Volleyball
58	Pramod Suvarna	Volleyball
59	Vivek	Kabaddi
60	Shashikumar, B.N.	Kabaddi
61	Ajay Kumar, Y.M.	Badminton
62	Abhijith, S.G.	Table Tennis
63	Bhavanjatti	Tennis

**Achievement of KVAFSU Teams in the XIV All India Inter-Agricultural Universities Sports & Games Meet-2013 held at KVAFSU, Bidar during 6<sup>th</sup>-10<sup>th</sup> March, 2013**

*a) Group Games*

#	<i>Names</i>	<i>College</i>
<b>Basket Ball Women Team - Runners up (Silver Medal)</b>		
1	Aditi Handa	Veterinary College, Bengaluru
2	Prithi Gowswamy	Veterinary College, Bengaluru
3	Swetha, S.M.	Veterinary College, Bengaluru
4	Nidha	Veterinary College, Bidar
5	Pannaga	Veterinary College, Bidar
6	Harshita	Veterinary College, Bidar
7	Sowjanya	Veterinary College, Bidar
<b>Volleyball Men Team - Runners Up (Silver Medal)</b>		
1	Darshan, G.B.	Dairy Science College, Bengaluru
2	Ashok, R.V.	Veterinary College, Bidar
3	Santosha, M.D.	Dairy Science College, Bengaluru
4	Adithya	College of Fisheries, Mangalore
5	Abhishek, U.J.	Dairy Science College, Bengaluru
6	Nithin kumar, G.N.	Veterinary College, Hassan
7	Pramod, J.K.	Veterinary College, Hassan
8	Pramod Suvarna	College of Fisheries, Mangalore
9	Malikarjun, B.M.	Dairy Science College, Bengaluru
10	Suprith Surya	Veterinary College, Hassan
11	Rakesh Agadi	Veterinary College, Shivamogga
12	Ajay Kumar, Y.M.	College of Fisheries, Mangalore
<b>Table Tennis Men Team - Runners Up (Silver Medal)</b>		
1	Nithin, B.S.	Veterinary College, Hassan
2	Abhijeeth, S.G.	College of Fisheries, Mangalore
3	Md.Arshad	Veterinary College, Shivamogga
<b>Table Tennis Women Team - Runners Up (Silver Medal)</b>		
1	Hithishini	Veterinary College, Hassan
2	Sindhu	Veterinary College, Hassan
3	Vinutha	Veterinary College, Hassan
<b>Kabaddi Men Team - Runners Up (Silver Medal)</b>		
1	Manjesh Gowda	Veterinary College, Bidar
2	Vivek	College of Fisheries, Mangalore
3	Shashikumar, B.N.	College of Fisheries, Mangalore
4	Karthik	Veterinary College, Shivamogga
5	Shivakumar	Veterinary College, Shivamogga
6	Sachin	Veterinary College, Shivamogga
7	Nishanth	Dairy Science College, Bengaluru
8	Yathish Gowda	Veterinary College, Bengaluru
9	Arun	Veterinary College, Hassan

<b>Details of Special Camping Activities</b>			
#	Name of the activity	Work Done	Remarks
1	Shramadhan	<ul style="list-style-type: none"> <li>▪ Cleaning of public places (School, Panchayat etc)</li> <li>▪ Cleaning and clearing of drainage surrounding drinking water sources in village</li> <li>▪ Made village roads, school &amp; Panchayat compounds plastic free</li> </ul>	Volunteers along with rural youth participated in Shramadhan for 6 days
2	Special lectures	<ul style="list-style-type: none"> <li>▪ 12 guest speakers from public, agriculture, veterinary &amp; women development domain were invited for delivering lectures on a range of topics for the benefit rural farmers and youth</li> </ul>	Volunteers took active part in organizing lectures & on an average 400-500 villagers were benefitted from lectures
3	Educational awareness in Children	<ul style="list-style-type: none"> <li>▪ An interaction of volunteers and programme officers with village school children was routine activity of the annual camp</li> <li>▪ Quiz competition was conducted for the children of primary school to inculcate competition</li> </ul>	Volunteers took lead in organizing Quiz
4	Creating Awareness of Profitable Dairying	<ul style="list-style-type: none"> <li>▪ During special camp, demonstration on Azolla cultivation (4 units) &amp; training on 'Scientific dairy farming' was organized for SHGs members (45 farm women) under Extension Education Centre, Bidar</li> <li>▪ Free animal health &amp; vaccination camp was organized for the benefit of livestock owners of village with the help of Clinical Departments of Veterinary College, Bidar</li> </ul>	Through active participation, volunteers got wide exposure on organizing animal husbandry extension activities in rural areas

### VETERINARY COLLEGE, SHIVAMOGGA

#### NSS Regular Activities

Main activities includes cleaning of campus, plantation at campus, watering and manuring of saplings, Blood donation camp, celebration of birthday of national leaders, lectures by resource persons and sharing of information among volunteers are the regular activities of NSS. Apart from this, NSS volunteers actively participated in Publicity, Feed, Fodder and Food, Maintenance and Stall committees of Januvaru Mela- 2013 which was held at college campus.

#### NSS Annual Special Camp

NSS Annual Special camp was held at Balekoppa Village of Shivamogga Taluk from 6<sup>th</sup> to 12<sup>th</sup> February 2013. For NSS Annual Special camp, Dr. Giridhar, K. S was Programme officer; Sub Programme officers were Dr. Venkatesh, M.M and Dr. Shankaregowda and Sri Nagaraj was the camp sports officer. Sri Manju, D and Kum. Sushmita were the student leaders.

During camp, as a part of Shramadhan work, sanitation and hygiene of village was given importance, volunteers cleaned drainages, premises of school, anganawadi and panchayat premises, play grounds and bus-stand and also eradicated all waste plastics of village.

Volunteers planted about 120 saplings in village.

For the villagers, practice of organic agriculture, soil fertility tests, balanced cattle feed preparation, lectures from resource persons and health check up camp was organized. Animal health camp included deworming, vaccination and treatment. Live stock show were also conducted. For women, preparation of milk products at home, rangoli competition and role of animals in sustainable livelihoods were arranged.

In camp, 150<sup>th</sup> birth anniversary of Swami Vivekananda was celebrated. All the volunteers actively participated and exhibited their talents and conducted various programmes. Yoga class, quiz programme and village livestock and related census was also conducted in the camp. This camp helped them to find a close relationship among themselves and with villagers.

## VETERINARY COLLEGE, HASSAN

### I. Regular Activities:

- Sincere effort was made in cleaning of the campus.

### II. Annual Special Camp

Camp Director : Dr. Vasanth M. Shetty, Dean, Veterinary College, Hassan

Camp Officer : Dr. Manjunatha, L., NSS Programme Officer

Camp Co-Officers : Sri. Subraya Prabhu, Asst. Prof. Dept. of Physical Education

: Dr. Eshwar, A., Asst. Prof. Dept. of Physical Education

Student Leaders : Madhu and Ashwini

Annual special camp was carried out from 05-02-13 to 11-02-13 at Hirikadalur village, Hassan taluk. Highlights of the camp are as follows.

- a. Cleaning of the village and thus creating awareness on sanitation and general health of the village.
- b. Cleaning of Vishnu Temple, an old monument present in the village
- c. Animal Health Camp in association with Dept. of AH & VS, GoK & TVCC, HVC
- d. Calf deworming and rally in association with EEC, Hassan
- e. Dental health check –up in association with Hasanamba Dental College
- f. Health check –up in association with Ayush Dept.
- g. Awareness about govt. programmes through street plays & folk songs by Dept. of Information and Broadcasting

- h. Workshop on personality development
- i. Drawing competition to the village students
- j. Series of lecture programmes in the evening focusing on various animal husbandry, agriculture & other general issues
  - Modern agricultural practices by scientists of KVK, Hassan
  - General issues in dairy farming
  - Improved backyard poultry rearing
  - Scientific sheep & goat rearing
  - Awareness on calf rearing
  - Preparation of milk and milk products
- k. Cultural programmes in association with Dept of Kannada & Culture by students and villagers.

## **DAIRY SCIENCE COLLEGE, BENGALURU**

The Dairy Science College, Bangalore conducted a special camp for 50 volunteers at Somathanalli Village, Devanahalli Taluk, Bengaluru North from 21-03-2013 to 27-03-2013.

### **Activities at the Camp**

1. Organized human health camp for old aged people – about 60 people were tested for BP, sugar and general check up.
2. Donated a plaque in granite and installed at the entrance of the village which was inaugurated by Assistant Director, Animal Husbandry.
3. Vanamahotsava was organized and trees were planted in the village. A temple

was inaugurated by IAS Officer, Forest department.

4. An awareness Camp was organized for the village people about superstitions (moodanambikegalu) by Hunikal Nataraj.
5. Cleaning and sanitization of village.
6. Daily flag hoisting, yogasana and shramadhana were carried out in the village.
7. Discussion on clean milk production, feed and fodder, poultry farming, preparation of milk products, cultural programmes were conducted.

**Other Activities:** 5 Volunteers were deputed to attend the Maddur NSS Programme on 1 & 2 January, 2013.

### **NSS Regular Activities:**

<b>Date</b>	<b>Particulars of the activities</b>	<b>Strength</b>	<b>Time (hours)</b>
18.07.2012	Cleaning of the experimental dairy surroundings	100	2
11.08.2012	Shramadhana at Experimental Dairy	100	2
05.09.2012	Shramadhana at hospital surroundings	100	3
09.10.2012	Shramadhana at canteen surroundings	100	2
03.11.2012	Shramadhana at library surroundings	100	3
28.11.2012	Shramadhana at main building surroundings	100	3

## **DAIRY SCIENCE COLLEGE, GULBARGA**

\* The NSS Summer Mega Camp organized at Vishakapattanam during 6<sup>th</sup> to 16<sup>th</sup> June 2012 was attended by six Students from Dairy Science College, Gulbarga representing Karnataka state. Dr. Sharangoud Patil, Dairy

Science College, Gulbarga was team manager.

- \* NSS special camp was organized at Dannur (R) village, Hallikhed, Basava Kalyana (Tq) from 24<sup>th</sup> to 31<sup>st</sup> December 2012. During this period, Animal Health Camp was also organized in association with Veterinary College, Bidar and Karnataka Milk Federation along with various activities.

### Guest Lectures (during NSS camp)

<b>#</b>	<b>Date</b>	<b>Topic</b>	<b>Resource person</b>
1	27-12-2012	Clean Milk Production	Dr. B.P. Pushpa, Dept. of Dairy Chemistry
2	29-12-2012	Genesis and challenges of Dairy co-operative society in India	Dr. K.B. Vedhamurthy, Dept. of Dairy Economics & Business Management
3	30-12-2012	Demonstration –Adultration in Milk	Dr. Ramesh.V. Dept. of Dairy Chemistry

## **COLLEGE OF FISHERIES, MANGALORE**

### **National Service Scheme (NSS)**

The motto of National Service Scheme is 'NOT ME BUT YOU'. This expresses the essence of democratic living, upholds the need for selfless service and appreciation of other man's point of view, consideration for fellow human beings. It underlines the welfare of an individual thereby ultimately dependent on welfare of the society as a whole. Therefore, it should be the aim of the NSS to demonstrate this motto in its day-to-day programme.

The college NSS wing has organized a seven day annual special camp from 4 to 10 May, 2012 for IV B.F.Sc. students (2008-2012 batch) in collaboration with M/s Mogaveera Mahasabha, Mahila Samaja and Maruthi Sports Club, Mitrapatna, Sashihitlu. During the camp, activities such as road repair, cleaning of temple surrounding, school premises, water tanks repair, beach cleaning, gardening, camp firing, demonstration of fishing net and boat operation, fish drying methods, aquarium fabrication and maintenance etc., were carried out. In addition to these, sports and cultural programmes were also arranged involving local youths and house wives during leisure hours.

NSS unit also conducts regular activities such as campus cleaning, vermicompost preparation, watering to the garden plants, teak plants, preparation of kitchen garden, etc. Further, efforts are also made to convert the college campus a plastic free zone.

## **ANIMAL HUSBANDRY POLYTECHNIC, KONEHALLY, TIPTUR**

1. Animal Husbandry Polytechnic staff along with students conducted awareness programme on proper utilization of fodder by farmers from surrounding villages on 25-09-2012.
2. Animal Husbandry Diploma students were involved in the activities of cleaning in and around premises of the campus at regular interval.

### **9) Other Co-curricular Activities**

## **VETERINARY COLLEGE, BENGALURU**

The staff members of various departments served as members of different clubs in the college such as Literary club, Science club, Social service club and Adventure club. The staff were members of different committees for the College Day Celebration and Freshers Day celebration in the College and other cultural events organized by the Veterinary College, Bengaluru as part of the College Day during the year 2012 - 13.

## **VETERINARY COLLEGE, BIDAR**

#	Date	Brief report
1	14-04-2012	Organization and celebration of Dr. Babasaheb Ambedkar Jayanti
2	24-04-2012	Organization and celebration of Basava Jayanti
3	28-04-2012	Celebration of World Veterinary Day on 28-04-12 and organized seminar on "Antimicrobial resistance" in collaboration with KVC, Bengaluru
4	05-09-2012	Teachers Day celebrations
5	28-10-2012	Organization and celebration of Maharshi Valmiki Jayanti
6	14-11-2012	Organization and celebration of 28 <sup>th</sup> College and Hostel Foundation day

7	01-12-2012	Organization and celebration of Kanakadasa Jayanti
8	20-01-2013	Dog show in Bidar town
9	21-01-2013	40 students were sent to IAS/IPS coaching organized by District Administration at Rangamandir, Bidar
10	02-02-2013	University level Debate competition sponsored by Dept. of Co-operation was organized and five students received the prizes. Mr. Mahendra and Mr. Sharat Joshi of Veterinary College, Bidar represented KVAFSU in State level competition
11	03-02-2013	United Nations Communication center for India and Bhutan sponsored National level Essay competition was conducted at College. Mr. Sanjivkumar IV BVSc student bagged Zonal level Bronze medal and Ms. Pannaga III year and Ms. Soujanya IV year received best Institute level prize
12	05-02-2013	Mr. Mahendra bagged State level III prize in the Debate competition organized by Dept. of Co-operation at GVKV campus of UAS, Bengaluru
13	11-02-2013 to 16-02-2013	Personality Development Programme- Youth Empowerment and Skill Development (YES+) was organized in collaboration with Art of Living Foundation, Bengaluru for the Students of Veterinary College, Bidar. Dr. M.D.Suranagi and Dr. Prakashkumar Rathod acted as the coordinators for the programme.
14	Feb.-March, 2013	Computer Tutorial Classes were organized in 3 batches during February and March 2013 for SC-ST students of Veterinary College, Bidar. DR. M.D.Suranagi and Dr. Prakashkumar Rathod acted as the coordinators for the programme.
15	18-03-2013 to 30-03-2013	ICAR JRF/SRF Coaching classes were organized for SC-ST students of Veterinary College, Bidar. Dr. Shivashankar Usturge, Dean, VCB was the Course Director while DR. M.D.Suranagi, Dr. Prakashkumar Rathod and Dr. Siddaling swamy Hiremath acted as the coordinators for the programme.
16	-	Students of Veterinary College, Bidar are were enrolled for Emergency Blood Donation at District Hospital, Bidar. Five students donated blood during the year 2012-13

### VETERINARY COLLEGE, SHIVAMOGGA

#	Date	Activity
1	14.04.2012	121 <sup>st</sup> Ambedkar Jayanti was celebrated in Veterinary College, Shivamogga
2	21.04.2012	A Blood donation camp jointly organized with Sanjeevini Red Cross Blood Bank, Shivamogga. 40 units of blood were collected from the students and staff. Inaugurated by Sri. Raghavendra, MP, Shivamogga.
3	24.04.2012	Basava Jayanti was celebrated in Veterinary College, Shivamogga. Sri. S.V. Thimmayya. Secretary, National Education Trust was the Chief Guest of the occasion. Dr. Devaraj. M, Dean, delivered his presidential remarks.

4	28.04.2012	Veterinary College, Shivamogga organized "World Veterinary Day" in Association with Department of A.H.&V.S., Shivamogga. More than 60 Veterinary Officers, Assistant Directors and Teaching faculty and students of Veterinary College, Shivamogga participated in "World Veterinary Day" celebration. The present year theme was "Anti Microbial Resistance". This celebration had Inaugural Session and Technical Session. The celebration was inaugurated by District Commissioner of Shivamogga Mr. M.V. Vedamurthy. Chief Guest of the programme Dr. N.S. Basavaraj, Deputy Director of AH&VS, Shivamogga addressed the gathering and informed the importance of this day. The inaugural session was presided by Prof. M. Devaraj, Dean, Veterinary College, Shivamogga. The vote of thanks was proposed by Dr. Kotresh, Assistant Professor, Veterinary College, Shivamogga. Later, Technical Session was started with first lecture on "Anti microbial resistance and its significance in Public Health" by Dr. Halesh, Professor and Head, Department of Microbiology, Medical College, Shivamogga. The second lecture of the technical session was delivered by Dr. Madavaprasad.C.B., Professor, Department of Veterinary Public Health and Epidemiology, Veterinary College, Shivamogga on "Veterinary Drug Residues, Antimicrobial Resistance and Veterinary Public Health implications".
5	21.08.2012	Second batch (2007 to 2012) of Veterinary College, Shivamogga organized Souvenir releasing function "Supta Chetana". Prof. Prabhakar Hegde, Hon'ble Member of Board of Management, KVAFSU, Bidar was the Chief Guest and released the souvenir. Prof. M. Devaraj, Dean, Veterinary College, Shivamogga presided over the souvenir releasing function. Dr. Basavaraj Benni and Sri Gangavathi Pranesh had made souvenir releasing function eventful by their vocal talent in 'Hasya Sanje'.
6	18.09.2012	NSS unit of Veterinary College, Shivamogga celebrated Vanamahotsava by planting 1500 plants in the college campus. Sri S.N. Chennabasappa, President, CMC, Shivamogga inaugurated the programme by planting a tree. Dr. Prof. M. Devaraj, Dean Veterinary College, Shivamogga presided over the function. Staff and NSS volunteers participated and planted the plants.

### DAIRY SCIENCE COLLEGE, BENGALURU

1	30.07.2012	Orientation Programme for I Year students
2	13.09.2012 to 14.09.2012	IV B. Tech. students Christopher Kavimani and Jaykant Kumar participated at the 5 <sup>th</sup> National Food & Dairy Quiz & Nandan, M., and Rajashekhar Guraddi in the 9 <sup>th</sup> National Judging Contest hosted by SMC College of Dairy Science, Anand, Gujarat and advanced as Semi-Finalists.
3	07.11.2012	Freshers' Day for I Year students
4	21.12.2012 to 30.12.2012	Rural Dairy Work Experience, a village stay programme for final year students
5	16.01.2013 to 31.01.2013	South India Educational Tour for III Year B. Tech. (D. Tech.) students.



6	18.02.2013	M/s. Almarai Co., Saudi Arabia conducted campus interview and the following final year students were selected to work as Dairy Technologists: (1) Jaykant Kumar, (2) Janardhana R., (3) Nandan, M., (4) Prathap, N.V., (5) Rajashekhar Guraddi (6) Ashwathanarayananareddy
7	11.03.2013 to 31.03.2013	North India Educational Tour for IV Year B. Tech. (D. Tech.) students

### DAIRY SCIENCE COLLEGE, GULBARGA

#	Date	Activity
1	30-12-2012	Yoga camp conducted on 30-12-2012
2	March 2013	Seven days personality development programme in collaboration with Art of living, Bengaluru

### COLLEGE OF FISHERIES, MANGALORE

#	Date	Activity
1	05.06.2012	Environmental day-Taken up planting of forest sapling in the premises of KVK

### ANIMAL HUSBANDRY POLYTECHNIC, KONEHALLY, TIPTUR

#	Date	Activity
1	14-04-2012	Dr. B.R. Ambedkar Jayanti
2	15-08-2012	Independence Day
3	02-10-2012	Gandhi Jayanti
4	26-01-2013	Republic Day

### ANIMAL HUSBANDRY POLYTECHNIC, SHIGGAON, HAVERI

#	Date	Activity
1	01-11-2012	Kannada Rajyotsava – Rangoli, Patriotic songs, Quiz competitions were conducted
2	28-02-2013	National Science day was celebrated. Dr. Vishalakshi Karaddi, Hon'ble Member, Board of Management, KVAFSU, Bidar was chief guest and addressed students on regarding development of scientific temper.

### III. RESEARCH

University is vested with the mandate of Teaching, Research and Extension. Various research activities in the sphere of Veterinary, Animal, Dairy and Fisheries Sciences are being undertaken at different organizations/institutions. During the year 2012-13, a total of 37 research projects worth Rs. 828.74 lakhs have been completed, of which, 18 research projects were funded by external source to the tune of Rs. 823.53 lakhs. The remaining 19 research projects were funded by KVAFSU for youngsters and also to those projects that the University considered as need based. The details of the completed research projects, ongoing research projects, research collaborations, awards and other recognitions etc. are outlined below.

#### **1) Completed Projects**

##### *a) Project Details*

#	Title	Funding Agency	Budget (in lakhs)	Yr. of Comt.	Yr. of Compl.	Principal Investigator
<b>VETERINARY COLLEGE, BENGALURU</b>						
Dean	Modernization of Regional Referral Hospital of Veterinary College and Establishment of Technology Transfer Centre	RKVV	181.25	2009-10	2012-13	S. Yathiraj
VPH & E	Seroprevalence of Brucellosis in bovines in Karnataka	KVAFSU	0.30	2011-12	2012-13	G. Leena
VGO	Effect of GnRH administration at the time of mating on conception rate in dogs	KVAFSU	NF	2012	2013	A. Krishnaswamy
AHEE	Capacity building of livestock farmers of Haniyuru village	KVAFSU	0.50	2010	2013	V. Jagadeeswary
VPA	Immuno diagnosis of bovine Schistosomiasis	KVAFSU	0.50	2011	2013	Placid E.D'Souza
TVCC	Certain studies on sub-acute ruminal acidosis in dairy cows	KVAFSU	NF	-	2012	H.A. Upendra

VMC	Bovine mastitis: unraveling molecular details of host microbe interaction and development of molecular diagnostic methods	ICAR-NAIP	40.23	2008	2012	Shrikrishna Isloor
LPT	Studies on decontamination of chicken carcasses using garlic and clove extracts	Life Line Feed (I) Pvt. Ltd.,	1.61	2010	2012	Mohamed Nadeem Fairoze
LPM	Assessment of post-harvest changes in nutritional qualities of maize straw and sorghum straw and development of interventions to prevent these changes	KVAFSU	NF	2010	2013	U.Krishnamoorthy
P Sc.	Evaluation for season wise occurrence of aflatoxins in poultry feeds and feedstuffs	KVAFSU	0.65	2011	2013	V. Malathi
VMD	Prevalence of toxoplasmosis in cats in and around Bengaluru	KVAFSU	0.30	2011	2012	M.C. Anil Kumar
AGB	Evaluation of reproductive traits of indigenous goats in selected villages of Bengaluru Rural District	KVAFSU	0.16	2010	2012	R. Jayashree
<b>VETERINARY COLLEGE, BIDAR</b>						
VMD & TVCC	Clinico-therapeutic evaluation of AV/SDS/16 and AV/DAC/16 in various digestive disorders and restoration of rumen function	Dabur Ayurved, Himachal Pradesh	0.35	2006	2012	Vivek R. Kasaralikar
VMD & TVCC	Efficacy of prophylactic feeding of 'Cow magnet' for prevention of traumatic reticuloperitonitis	M/s Sneha Industries, Hubli	0.11	2006	2012	Vivek R. Kasaralikar

LPM	Comparative efficacy of herbal and synthetic anti-stressor products ameliorating heat stress by assessing growth, performance and immunity parameters in layers	M/s Ayurvet Ltd.,	1.00	2012	2012	N. V. Jadhav
LPM	Effect of flushing on birth weight of lambs in Kenguri breed of sheep	KVAFSU	0.05	2011	2013	Prashant Waghmare
VSR	Clinical evaluation of LCP and DCP plates for long bone fractures in canines and small ruminants	KVAFSU	0.25	2010	2013	D. Dilipkumar
VPB	Evaluation of calcium and phosphorus in fracture healing	KVAFSU	0.10	2010	2012	Karthikesh

#### **VETERINARY COLLEGE, SHIVAMOGGA**

LPT	Studies on the effect of curing and combinations of flour on quality of enrobed chicken	KVAFSU	0.05	2008	2013	Chidanandaiah
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#### **DAIRY SCIENCE COLLEGE, BENGALURU**

DM	Application of sewage isolates to hasten the oxidation of effluent in dairies	KVAFSU	0.25	2012	2013	R. Prabha
DT	Indo-Argentina project on use of bacteriocins from lactic acid bacteria for bio-preservation of traditional dairy products	DST, New Delhi	6.60	2008	2012	D. B. Puranik

#### **COLLEGE OF FISHERIES, MANGALORE**

AEM	Assessment of status of riverine fisheries and linking with water quality restoration-Tunga, Bhadra and Tungabhadra River, Karnataka	KSPCB	20.0	2009	2012	Gangadhara Gowda
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AEM	Impact of anthropological wastes on ecological and microbiological parameters of Nethravathi-Gurupur estuary	KVAFSU	0.80	2011	2012	Mridula Rajesh
Aqua.	Evaluation and validation of proprietary biological formulations for water quality management and enhancing fish production in aquaculture ponds	Lonestar Intl., USA	4.00	2011-12	2012-13	E.G. Jayaraj
Aqua.	Production of all-male population of ornamental fishes through application of aromatase inhibitor	DBT, New Delhi	34.93	2009	2013	N. Basavaraja
Aqua.	Rearing of murrel fry: standardisation of protocols	KVAFSU	0.80	2011-12	2012-13	Iqlas Ahmed
Aqua.	Enhancing production through management of traditional paddy-cum-shrimp culture systems in Uttara Kannada district, Karnataka	RKVY	120.00	2009-10	2012	K.M. Shankar
FET	To study the efficiency of fabricated conventional and mechanical aerators in shrimp / fish ponds	KVAFSU	0.35	2010	2012	S. Varadaraju
FPT	Community based enterprise development for the women groups in coastal Karnataka	RKVY	20.60	2010	2012	C.V. Raju
FPT	Utilization of marine and freshwater fishes for value addition	RKVY	102.83	2008	2012	B.A. Shamasundar
<b>INSTITUTE OF WILDLIFE VETERINARY RESEARCH, KODAGU</b>						
IWVR	Studies on renal insufficiency in wild felines	ZAK	1.00	2011	2013	M. Narayana Bhat
IWVR	Studies on the health status of captive elephants in Kodagu district based on body condition index	KVAFSU	NF	2011	2013	M. Narayana Bhat

<b>LIVESTOCK RESEARCH &amp; INFORMATION CENTER (DEONI), HALLIKHED, BIDAR</b>						
LRIC	Studies on parameters of Bidar district milk production and milk procurement	KVAFSU	0.15	2011	2012	Satish Biradar
<b>LIVESTOCK RESEARCH &amp; INFORMATION CENTER (SHEEP), NAGAMANGALA</b>						
LRIC(S)	Influence of weaning age and weaning weight on post-weaning growth performance in Mandya Lambs	ICAR	Under MSSP (MS) Project	2012	2013	R. Nagaraja
<b>LIVESTOCK RESEARCH &amp; INFORMATION CENTER (A), KONEHALLI, TIPTUR</b>						
LRIC	Establishment of nucleus herds of elite Yorkshire pigs in different agroclimatic zones of Karnataka for production of superior quality breeding pigs	DAH&VS	56.85	2008-09	2011-12	H.K. Siddalinga Murthy
<b>FISHERIES RESEARCH &amp; INFORMATION CENTER, BHUTNAL, BIJAPUR</b>						
FRIC	Establishment of Fisheries Research and Information Centre at Bhutnal, Bijapur	RKVY	223.10	2008	2013	S.M. Shivaprakash
<b>MARINE FISHERIES RESEARCH &amp; INFORMATION CENTER, ANKOLA</b>						
MFRIC	Demonstration of brackish water polyculture technology for rural development in coastal Karnataka	NABARD	9.07	2010	2013	M.T. Laksmipathi

*Note: NF – Non Financing and RF – Revolving Fund*

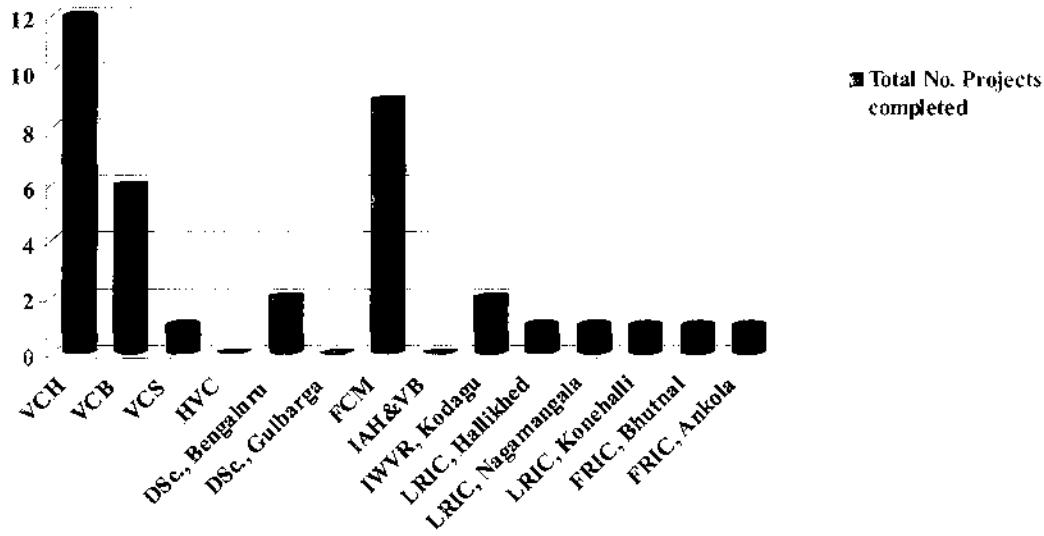
#### **ABSTRACT OF COMPLETED RESEARCH PROJECTS**

#	College /Institute	Research Projects		Funding Source and Amount (Rs. in Lakhs)			
		Total Nos.	Amount	External		KVAFSU	
				Total Nos.	Amount	Total Nos.	Amount
1	Veterinary College, Bengaluru	12	225.50	03	223.09	9	2.41
2	Veterinary College, Bidar	06	1.86	03	1.46	03	0.40
3	Veterinary College, Shivamogga	01	0.05	00	0.00	01	0.05
4	Veterinary College, Hassan	00	0.00	00	0.00	00	0.00
5	Dairy Science, College, Bengaluru	02	6.85	01	6.60	01	0.25
6	Dairy Science, College, Gulbarga	00	0.00	00	0.00	00	0.00
7	College of Fisheries, Mangalore	09	304.31	06	302.36	03	1.95

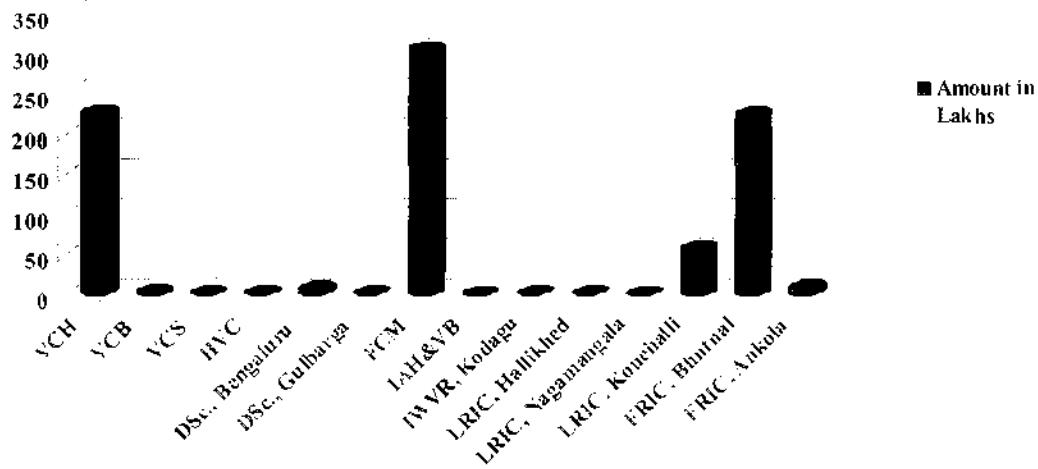
8	IAH&VB, Bengaluru	00	0.00	00	0.00	00	0.00
9	IWVR, Doddaluvara, Kodagu	02	1.00	01	1.0	01	0.00
10	LRIC, (Deoni), Hallikhed, Bidar	01	0.15	00	0.00	01	0.15
11	LRIC, (Sheep), Nagamangala	01	0.00	01	0.00	00	0.00
12	LRIC (A), Konehalli, Tiptur	01	56.85	01	56.85	00	0.00
13	FRIC, Bhutnal, Bijapur	01	223.10	01	223.10	00	0.00
14	FRIC, Ankola	01	9.07	01	9.07	00	0.00
<b>TOTAL</b>		<b>37</b>	<b>828.74</b>	<b>18</b>	<b>823.53</b>	<b>19</b>	<b>5.21</b>

## Graphical Presentation of Completed Projects

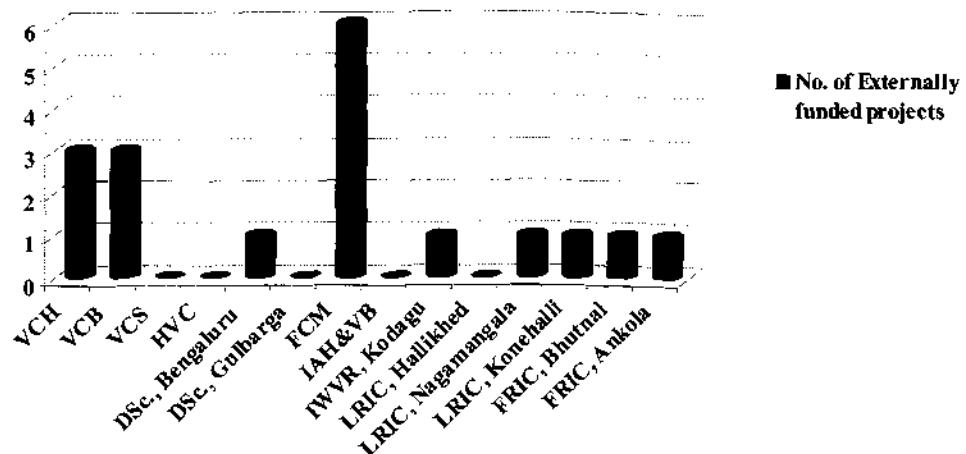
Total No. of Projects completed by Colleges/Institutes



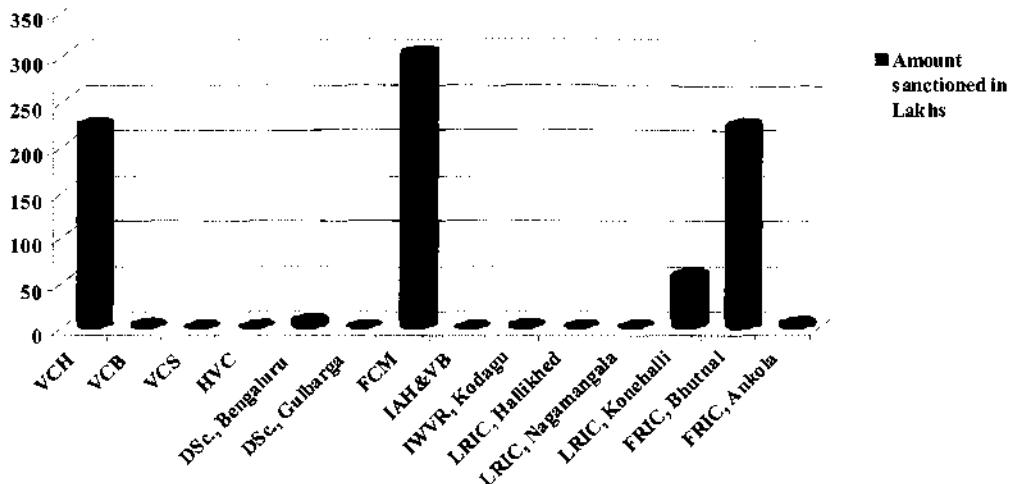
Utilization of grants by different Colleges/Institutes during 2012-13 (in Lakhs)



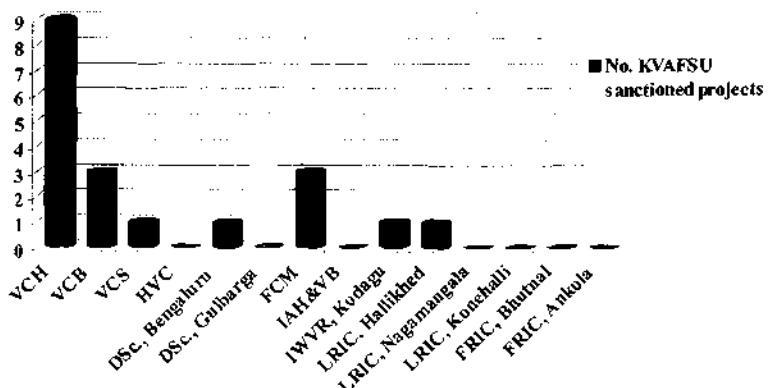
### Number of externally funded projects operated in different college/institutes during 2012-13



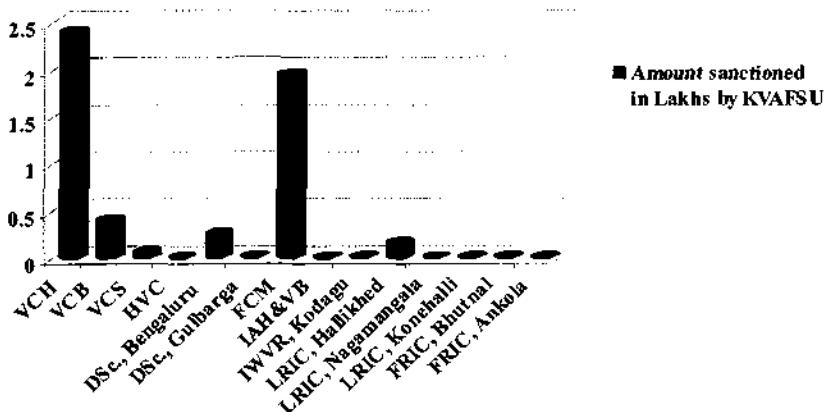
### Grants supported by External agencies to different college/institutes during 2012-13



### Number of research projects sanctioned by KVAFSU during 2012-13



**Research grants provided by KVAFSU to different college/institutes during 2012-13  
(in lakhs)**



**b) Research Highlights**

**VETERINARY COLLEGE, BENGALURU**

- 1) **Title: Seroprevalence of brucellosis in bovines in Karnataka**
  - \* Prevalence of bovine brucellosis in Karnataka was observed.
  - \* RBPT detected less positive (18%) reactors than STAT (23%).
  - \* RBPT and STAT in combination was found to be good test for detecting bovine brucellosis.
- 2) **Title: Effect of GnRH administration at the time of mating on conception rate in female dogs**
  - \* The mean conception rate in Labrador breed of dogs administered with GnRH @ 4mcg, 8mcg & in the control group were 85%, 90% & 60%, respectively.
  - \* The conception rate was significantly higher in animals administered with GnRH compared to the control group and within the treated group the conception rate was marginally superior with 8mcg.
  - \* The litter size was also significantly higher in GnRH treated animals (6.8, 6.4 & 5.2).
  - \* GnRH may be administered to improve the conception rate in dogs.
- 3) **Title: Immuno diagnosis of bovine Schistosomosis**
  - \* Standardized immunodiagnosis of visceral schistosomosis in bovines by Indirect-ELISA

with sensitivity of 77.27% and specificity of 75% was carried out.

- \* In sandwich-ELISA the sensitivity was 88.65% and specificity was 90.90%. Enzyme immunotransfer blot revealed five polypeptides of 66, 43, 34, 18 and 14 kDa in cattle while in buffaloes it was 43, 34 and 18 kDa.
- \* PCR of *Schistosoma spindale*, *S. indicum* and *S. nasale* species isolates indicate that Indian schistosomes were distinct from those of Sri Lankan and Bangladesh schistosomes.
- 4) **Title: Immunohistochemical studies on the stage specific involvement of FAS in the buffalo ovarian follicular apoptosis**
  - \* FAS/FASL interaction is a potential signal for the initiation of apoptosis, resulting in follicle atresia.
  - \* Studies on atresia and apoptosis have considerable implication on fertility control and treatment of infertility.
  - \* Identification of mechanism involved in the process of follicular atresia will provide an insight into the intricate factors in augmenting buffalo reproduction.
- 5) **Title: Bovine mastitis: Unravelling molecular details of host microbe interaction and development of molecular diagnostic methods**
  - \* The multiplex PCR assay developed in the present study was an easy and rapid method to detect five major mastitis pathogens viz.,

- Staphylococcus aureus*, *S. agalactiae*, *S. dysgalactiae*, *S. uberis* and *E. coli* in bulk milk simultaneously.
- \* Regular analysis of bulk milk by m-PCR may be a useful tool for determining the herd status with regard to the detection of contagious and environmental mastitis pathogens.
- 6) Title: Studies on decontamination of chicken carcasses using garlic and clove extracts**
- \* Efficacy of garlic extract at 0.25% and 0.5% in decreasing microbial load in carcass was evaluated.
  - \* The microbial load at different stages of poultry processing line was evaluated.
- 7) Title: Assessment of post-harvest changes in nutritional qualities of maize straw and sorghum straw and development of interventions to prevent these changes**
- \* Wet stover of maize and sorghum, soon after grain harvest can be converted into haylage by the addition of jaggery at 2% wet weight of stover.
  - \* Feeding of haylage of maize stover and sorghum stover results in increase in milk yield by 1.5 to 2 liters in crossbred cows and buffaloes compared to feeding of dried stover.
- 8) Title: Evaluation for seasonwise occurrence of aflatoxins in poultry feeds and feedstuffs**
- \* The moisture content and Aflatoxin analysis of different feed ingredients in different seasons indicate that Aflatoxin B1 was very high in winter and rainy season compared to summer.
  - \* Farmers and feed manufacturers should be careful while using the feed ingredients for feeding livestock during winter and rainy seasons.
- 9) Title: Prevalence of toxoplasmosis in cats in and around Bengaluru**
- \* Out of 100 samples screened, 23 samples were positive for IgG antibodies only 7 samples were positive for IgM antibodies only and 5 samples were positive for both IgG and IgM antibodies.
  - \* Out of 30 samples positive 23 were female cats and 7 were male cats.
  - \* Cats of 4 months old to 1 year old were more affected compared to those cats aged more than one year.
- 10) Title: Evaluation of reproductive traits of indigenous goats in selected villages of Bengaluru rural district**
- \* Age at first heat was 8 to 10 months.
  - \* Age at first conception was 13 to 16 months.
  - \* Service period was 2-4 months.
  - \* Age at first service of males was 10-12 months of age.
  - \* Average gestation period was 145 days.
  - \* Lactation period was 4-5 months.
  - \* Inter kidding interval was 210 days or three kidding for every two year period.
  - \* Multiple births were frequent in the second and third parity with 55% as twins and 28% triplets.

## VETERINARY COLLEGE, BIDAR

- 1) Title: Clinico-therapeutic evaluation of AV/SDS/16 and AV/DAC/16 in various digestive disorders and restoration of rumen function**
- \* The clinical trial on AV/SDS/16 and AV.DAC/16 showed that both the products were safe at recommended therapeutic dose and can be used for restoring rumen function in ruminal disorders.
  - \* AV/DAC/16 was superior to AV/SDS/16 as the per cent efficacy was higher on 5<sup>th</sup> day post-treatment ( $87.10 > 81.40\%$ ).

**2) Title: Efficacy of prophylactic feeding of 'Cow magnet' for prevention of traumatic reticulo-peritonitis**

- \* Prophylactic feeding of 'Cow magnet' indicate that the product was well tolerated in rumen ecosystem, over a period of observation, for more than six months with no adverse changes in rumen fluid parameters.
- \* 'Cow magnet' can be effectively used as the strategy for prevention of TRP due to metallic foreign bodies.

**3) Title: Comparative efficacy of herbal and synthetic anti-stressor products ameliorating heat stress by assessing growth, performance and immunity parameters in layers**

- \* Feeding of Vit. C and herbal products (Ayucee, AV/LAP/19) both improved total body weight gain, egg production percentage, feed efficiency and egg weight in layers between age group of 56 to 67 weeks.
- \* The herbal preparations further elevated performance of layers in respect of percentage egg production, feed efficiency and egg weight in comparison with feeding of Vit. C in layers.
- \* The supplementation of herbal preparations had higher beneficial effects (reduced concentrations) on serum cortisol, SGPT and SGOT levels when compared with supplementation of Vitamin C in layers.
- \* Feeding of herbal products in layers resulted in elevation of antibody titers against Rahnikhet disease, thereby reducing stress on birds and indirectly boosting performance of layers.

**4) Title: Effect of flushing on birth weight of lambs in Kenguri breed of sheep**

- \* Twenty per cent twinning was observed in flushed animals, which was found to be non-significant.

**VETERINARY COLLEGE,  
SHIVAMOGGA**

**1) Title: Studies on the effect of curing and combinations of flour on quality of enrobed chicken**

- \* Enrobed chicken cured in 6% salt pickle solution was ranked well in sensory attributes viz., saltiness, flavor & overall acceptability etc.
- \* Tyrosine value between storage intervals and minimal changes in proximate composition.
- \* Based on physico-chemical, sensory evaluation and microbiology of the product, the shelf life of enrobed chicken was 7 days at 4-5°C.

**DAIRY SCIENCE COLLEGE,  
BENGALURU**

**1) Title: Application of sewage isolates to hasten the oxidation of effluent in dairies**

- \* The isolated and characterized dairy influent microflora, when added at 1.5% level, reduced the Biological Oxygen Demand (BOD) of dairy effluent from 800 ppm to 200 ppm whereas addition of 1% yeast extract further reduced the BOD to 125 ppm.
- \* Addition of yeast extract to influent is a better option than cultured microflora in reducing air pollution from the dairy effluent.

**2) Title: Indo-Argentina project on use of bacteriocins from lactic acid bacteria for bio-preservation of traditional dairy products**

- \* Paneer and Khoa can be preserved at ambient temperature for 15 days and at refrigerated temperature for 40 days by using bacteriocins.

### **FISHERIES COLLEGE, MANGALORE**

**1) Title: Assessment of status of riverine fisheries and linking with water quality restoration-Tunga, Bhadra and Tungabhadra River, Karnataka**

- \* The surface waters of rivers Tunga, Bhadra and Tungabhadra were moderately polluted with respect to organic and bacterial pollution.
- \* The population density of herbivorous and intolerant fish species reduced while, omnivorous and carnivorous, exotic and tolerant species increased in the moderately polluted sites in the rivers.
- \* The abundance and distribution of fishes were influenced primarily by water temperature, phytoplankton, zooplankton and benthos and also influenced by concentrations of BOD, chloride, ammonia and dissolved oxygen together with water flow of water in the rivers.
- \* The species of phytoplankton, zooplankton and benthic organisms can be used as indicators to monitor the quality of river water.
- \* The index of biotic integrity (IBI) is best used index for linking the water quality and assemblage of fishes to monitor the quality of river water.
- \* The flow of water in the river should be sufficient for protecting the structure and functions of an ecosystem and its dependent species.

**2) Title: Impact of anthropological wastes on ecological and microbiological parameters of Nethravathi-Gurupur estuary**

- \* Lot of sewage enters Nethravathi Gurupur estuary without proper treatment which in turn increases the organic load.
- \* If this continues further, there will be lot of human pathogenic bacteria into the environment and thereby the aquatic biota in the estuary will be under stress.

**3) Title: Evaluation and validation of proprietary biological formulations for water quality management and enhancing fish production in aquaculture ponds**

- \* Application of bacterial formulations in a liquid carrier resulted in high survival and growth of rohu fish from spawn to fry and fry to fingerlings.
- \* The bacterial formulations decreased ammonia to the lowest levels resulting in uniform growth of fry and fingerlings of rohu.
- \* In grow out farming, common carp with uniform and high mean weight indicates the need for maintaining beneficial bacteria for water quality management and enhancing fish production.

**4) Title: Production of all-male population of ornamental fishes through application of aromatase inhibitor**

- \* Rabbit polyclonal antibodies were raised against antigenic peptides of gonadal (anti-CVEQKRREMEQADKL) and brain (anti-CEDDDIEGTKIRKGT) aromatase isoforms in guppy.
- \* Rabbit polyclonal antibodies were raised against antigenic peptides of brain (CHKYFETWQNELIKPDI) and gonadal (CNPTPDGADTVVSDSC) aromatase isoforms in the Siamese fighting fish.

- \* Antibody developed against brain aromatase was found to be reacting to radial glial cells at the pre-optic area and hypothalamus regions of 5 day old fish. Antibodies specific to gonadal aromatase was localized to theca cells and granulosa cells of the developing ovaries.
- 5) Title: Rearing of murrel fry-standardisation of protocols**
- \* Fry can be reared initially on zooplankton and gradually weaned to formulated feeds.
  - \* Optimum stocking densities were found to be 700 – 800 nos. per cubic meter.
  - \* Fry grew from a size of 5 mm to 52 mm in two months with an average survival of 33%.
- 6) Title: Efficiency of fabricated conventional and mechanical aerators in shrimp / fish ponds**
- \* Nine models of conventional aerators were fabricated and used for experiments.
  - \* Fabricated conventional aerators increase the dissolved oxygen content in the pond water.
  - \* Horizontal perforated sheet model showed highest deficiency followed by three and rotating wheel models are found better compared to the others.
- 7) Title: Community based enterprise development for the women groups in coastal Karnataka**
- \* Those women trained on value added fish products participated actively in various activities such as exhibition cum sale programme in Matsyamela in Karwar; Livestock, Poultry & Fisheries Exhibition in Bidar and Matsya Mela in Bengaluru.
  - \* One woman started an enterprise by name “Manthana” and started producing fish and fish products and now the products are marketed through KFDC and local shops.
- 8) Title: Utilization of marine and freshwater fishes for value addition**
- \* Stabilization of mince from pelagic fishes.
  - \* Extending the shelf life of fish sausages using crude nisin.
  - \* Technology of fish sausages/mince from fresh water fishes was transferred to KFDC and KFFC.

#### **INSTITUTE OF WILDLIFE VETERINARY RESEARCH, KODAGU**

- 1) Title: Studies on renal insufficiency in wild felines**
- \* Significant increase in creatinine, blood urea nitrogen and phosphorous levels were observed in tigers and lions aged above 10 years compared to those tigers and lions aged less than 10 years respectively.
- 2) Title: Studies on health status of captive elephants in Kodagu district based on body condition index**
- \* Overall condition of the twenty nine elephants from 2 Jungle Camps (DEC; Dubare Elephant Camp, MEC; Mattigodu Elephant Camp) of Kodagu was very good and no nutritional or management changes are required.

#### **LIVESTOCK RESEARCH & INFORMATION CENTER (SHEEP), NAGAMANGALA**

- 1) Title: Influence of weaning age and weight on post-weaning growth performance in Mandya Lambs**
- \* Mandya lambs, as early as two-month-old with optimal live weight in the range of 8 to 12 kg could be successfully weaned.
  - \* This system of lamb rearing could be a

value addition in terms of accomplishing best possible post-weaning growth performance in Mandya breed of lambs.

### LIVESTOCK RESEARCH & INFORMATION CENTER (A), KONEHALLI, TIPTUR

- 1) Title: Establishment of nucleus herds of elite Yorkshire pigs in different agro-climatic conditions of Karnataka for the production of superior quality breeding pigs to distribute among the rural farmers**

- \* The overall least squares means for litter size at birth, litter size at weaning, litter weight at birth and litter weight at weaning were  $8.085 \pm 0.18$ ,  $7.078 \pm 0.16$ ,  $9.24 \pm 0.24$  and  $62.35 \pm 1.65$  kgs respectively.
- \* The means for birth weight and weaning weight of piglets were  $1.21 \pm 0.06$  kg and  $8.16 \pm 0.08$  kg respectively.
- \* The overall pre weaning piglet mortality was 12.1%.
- \* The weaning for age at first farrowing recorded was  $378.86 \pm 2.68$  days.

## 2) Ongoing Projects

### a) Research Details

Depts.	Title	Funding Agency	Budget (in lakhs)	Yr. of Comt.	Principal Investigator
<b>VETERINARY COLLEGE, BENGALURU</b>					
VPH&E	Detection of adultrants in market milk from Bengaluru city	KVAFSU	0.25	2012-13	G. Leena
VPB	Evaluation of efficacy of assay property of diagnostic kits in dog and cattle	Span Diagnostics Ltd.,	1.08	2010	V. Girish Kumar
VPB	IEF study of LDH isozymes in colored birds	KVAFSU	NF	2012	V. Girish Kumar

### FISHERIES RESEARCH AND INFORMATION CENTRE (I), BHUTNAL, BIJAPUR

- 1) Title: Establishment of Fisheries Research and Information Centre at Bhutnal, Bijapur**

- \* Rearing, brood stock and demonstration ponds have been repaired and constructed.
- \* New laboratory and office building is under construction.

### MARINE FISHERIES RESEARCH AND INFORMATION CENTER, ANKOLA

- 1) Title: Demonstration of brackish water polyculture technology for rural development in coastal Karnataka**

- \* In an on-farm polyculture demonstration (*Etroplus*, Mullets, Milkfish and Tiger prawn), a total production of 411 kg/ha of fish and prawn was got while in the farmer's pond, the production of 760 kg/ha was obtained.
- \* The demonstration induced many farmers in the region to take up polyculture of fish and prawns.

VGO	Enhancement of reproductive efficiency in sheep through estrous synchronization and artificial insemination	RKVY	90.00	2012-13	A. Krishnaswamy
VGO	Endometrial thickness as a predictor of fertility in bovines using ultrasonography	KVAFSU	0.50	2012-13	G. Sudha
VGO	Bacterial flora of the vagina of fertile and infertile bitches	KVAFSU	0.20	2012-13	T.G. Honnappa
TVCC	Studies on visceral gout in commercial broiler chicks.	M/s BLBF, Bengaluru	1.10	2012	H.A.Upendra
TVCC	Studies on therapeutic, hematologic and biochemical management of wounds in captive wild animals	Dept. of Forest, GOK.	1.00	2012	H.A.Upendra
VAN	Eradication of pollution by recycling plastic tea cups and thermocol in the preservation of biological specimens used for teaching and museum purpose	KSPCB/ AW	3.00	2009	R.V. Prasad
VAN	Flash based innovative technique as an aid in teaching Veterinary Anatomy	VGST	30.00	2011	R.V.Prasad
VMC	Rational development of an effective vaccine for the prevention of <i>Staphylococcal</i> mastitis in bovines using mouse mastitis as a model system	DBT-Indo-Australian	46.53	2010	Shrikrishna Isloor
LPT	Antibiotic use and residues in chicken and milk samples from Karnataka and Punjab	PHFI	0.732	2013	Manish Kakkar Mohamed Nadeem Fairoze
LPM	Effect of feeding different energy levels on growth and kindling performance in rabbits	KVAFSU	0.62	2010	Y.B.Rajeshwari
LPM	Genetic upgradation of cattle and buffaloes	RKVY	119.00	2010	U. Krishnamoorthy
LPM	Feed and fodder evaluation & development of cost effective feeding strategies to increase ruminant production & reduce environmental impact	RKVY	32.00	2010	U. Krishnamoorthy

P.Sc.	Survey characterization and evaluation of indigenous / desi chicken in the selected districts of Karnataka	RF	-	2011	H.N.N. Murthy
P.Sc.	Evaluation of performance of synthetic coloured broilers on replacing inorganic source of Zinc & Manganese with organic source	KVAFSU	0.30	2011	Jaya Naik
VPT	Pharmacological and therapeutic evaluation of cattle urine	GOK	414.00	2006-07	K. Jayakumar
VPT	Multimycotoxin analysis of feeds and different feed ingredients	GOK	16 .00	2010-11	K. Jayakumar
VPT	Comparative efficacy evaluation of some herbal products in broilers and turkeys	M/s Ayurvet Ltd.,	1.586	2012-13	S. Jagadeesh Sanganal
VPT	Efficacy of herbal mycotoxin binders in amelioration of induced mycotoxicosis in layers	M/s. Ayurvet Ltd.,	1.508	2012-13	S. Jagadeesh Sanganal
VPT	Pharmacological and toxicological evaluation of few herbal preparations with a special reference to <i>Asteracantha longifolia</i>	Herbal Science Trust	2.64	2011-12	N.B. Shridhar
VPT	Efficacy and safety study of a herbal nutraceutical with special reference to <i>Pterocarpus marsupium</i> , <i>Caralluma</i> and coffee extract in rats	BAL Pharma	2.53	2011-12	N.B. Shridhar
VPT	Anti-cancerous and safety study of <i>Bridelia retusa</i> in rats	NM Academy	3.43	2011-12	N.B. Shridhar
VPT	Evaluation of anti-diabetic property of few breeds of cow urine in rats	Dharmachakra Trust	5.73	2012-13	N.B. Shridhar
VPP, VMD, VSR & VPA	Innovative methods for diagnosis of diseases in animals	ICAR	592.00	2012	H.D. Narayana swamy
VPP	Outreach programme on zoonotic diseases	ICAR	75.00	2009	M.L. Satyanarayana

VPP	Centre of excellence in pathology and establishment of modern histopathology	VGST-GOK	60.00	2010	M.L. Satyanarayana
VPP	Funds for improvement of infrastructure in Para-clinical Division	DST	33.00	2008	M.L. Satyanarayana
VPP	A study on comparative efficacy evaluation of various dose of Avilamycin, bacitracin and enramycin on Necrotic Enteritis caused by <i>Clostridium perfringens</i> in broilers	ELANCO	3.9	2012	M.L. Satyanarayana
AICRP on Poultry	AICRP on poultry breeding for meat	ICAR	75.00	2012-13	H.N.N. Murthy
AICRP on Poultry	Survey, characterization and evaluation of indigenous/desi chicken in selected districts of Karnataka	KVAFSU	RF	2009-10	H.N.N. Murthy
AGB & LRIC(S)	Mega Sheep Seed Project on Mandya Sheep	ICAR	32.25	2013	R. Nagaraja.
AGB & LRIC(S)	Effect of free and restricted suckling on growth performance in Mandya lambs	ICAR	Part of MSSP-MS	2012	R. Nagaraja.
VMD	Epidemiological and diagnostic features of Malassezia pachydermatitis in dogs	KVAFSU	0.15	2013	Santosh P Sarangamath
<b>VETERINARY COLLEGE, BIDAR</b>					
VPP	Pathology of female reproductive tract of sheep in and around Bidar	KVAFSU	0.10	2011	D.T. Naik
VPT	Study of hematological and biochemical changes after prolonged Enrofloxacin usage in dogs	KVAFSU	NF	2013	Vinay.P.Tikare
VPT	Analysis of hematological and biochemical changes after prolonged ampicillin+ cloxacillin administration in dogs	KVAFSU	NF	2013	Vinay.P.Tikare

VPT	Study of hematological and biochemical changes after antibiotic ceftriaxone administration in cows	KVAFSU	NF	2013	C.R. Santhosh
VPT	Study of hematological and biochemical changes after antibiotic Gentamicin usage in cows	KVAFSU	NF	2013	C.R. Santhosh
VPE	Standardisation of methodology for detection of Deltamethrin residues in milk by HPLC	KVAFSU	0.50	Project date extended	Pradeep Kumar
V&AHE	Gap assessment between current and standard organic production practices in Bidar district	KVAFSU	0.25	2012	Prakashkumar Rathod
AGO	Studies on pregnancy diagnosis using ultrasonography in caprines	KVAFSU	0.10	2011-12	S.D. Sonwane
VMC	Isolation and characterization of bacteriophages against <i>Staphylococcus aureus</i> causing mastitis	KVAFSU	0.35	2010-11	Basavaraj Awati

#### VETERINARY COLLEGE, SHIVAMOGGA

ANN	Documentation of potential sources of unconventional livestock feed and fodder resources in the district of Shivamogga and development of database of their chemical composition	KVAFSU	0.20	2011-12	V. Nagabhushana
ANN	A comprehensive study on dairy production practices and herd health status in urban and peri-urban Shivamogga	KVAFSU	0.50	2013-14	K.S. Giridhar
AGB	Malnad Gidda Cattle Research Project	GOK	100.00	2012	Head of the Department
VPT	Pharmacological and toxicological studies on <i>Diplocyclus palmatus</i> (L.)	KVAFSU	0.40	2013	N. Prakash
VPE	Application of polyclonal hen egg yolk antibodies for the prevention of zoonotic food borne <i>Salmonellae</i> of poultry	DST	24.8	2013	Nagappa S. Karabasanavar

VPE	Development of rapid test for detection of starch adulteration in milk	KVAFSU	0.20	In process	Nagappa S. Karabasanavar
VPE	Experimental studies on inoculation, sanitation and recovery of <i>Listeria monocytogenes</i> in raw shelled eggs at ambient and refrigeration temperature and its risk assessment for egg safety	KVAFSU	0.25	In process	Santosh A. Sajjan
VMD	Epidemiological investigation of nematodal infestation in goats	KVAFSU	0.25	2012-13	L. Nagaraja
VAHE	Livelihood security through resource and entrepreneurship management in Bidar District	ICAR	212.86	2008	K.C. Veeranna
<b>VETERINARY COLLEGE, HASSAN</b>					
LPT	Evaluation of antimicrobial and antioxidant activity of organo and turmeric leaves in chicken mince	KVAFSU	0.25	2012-13	S. Wilfred Ruban
VPT	Survey, identification and preparation of herbarium of poisonous plants related to cattle in Hassan District	KVAFSU	0.20	2009	C. Ravikumar
VMC	Studies on prevalence of subclinical mastitis in dairy cattle in and around Hassan	KVAFSU	0.40	2012	L. Rashmi
VAHE	Meat consumption pattern in Hassan city	KVAFSU	0.20	2012	L. Manjunatha
<b>DAIRY SCIENCE COLLEGE, BENGALURU</b>					
DM	VTCC – Veterinary Type Culture Collection Dairy Microbes	NRCE, Hissar	3.40	2010	H. Manjunatha
DM	Development of rapid quality kit to determine the quality of raw milk	KVAFSU	0.25	2011	H. Manjunatha
DM	Identification of exopolysaccharides producing LAB in fermented foods using PCR specific primers	KVAFSU	0.25	2011	B. Ramachandra

DT	Development of health food for enhancement of immunity in geriatric	DST	19.45	2011	D. B. Puranik.
DT	Development of fiber rich low caloire lactose hydrolysed gulab jamun	KVAFSU	0.25	2012	Harini Venugopal
<b>COLLEGE OF FISHERIES, MANGALORE</b>					
AEM	Ecological monitoring of Arabian sea receiving effluents from MCF Ltd.,	MCF	8.12	2012	Gangadhara Gowda
AEM	Bio-monitoring studies of treated effluent	SS, Ltd.,	0.17	2012	Gangadhara Gowda
AEM	Monitoring of pollution impact by discharge of treated effluents from BASF, Mangalore	BASF, Mangalore	8.04	2012	H.R.V. Reddy
AEM	Coastal water quality monitoring of Padubidri near the sea water intake and effluent discharge location by UPCL	UPCL	12.87	2012	H.R.V. Reddy
AEM	Treated effluent analysis and monitoring of seawater quality of Chitrapur near the marine outfall of effluent from MRPL-ONGC, Mangalore	MRPL- ONGC	9.48	2012	Mridula Rajesh
Aqua	Effect of carotenoids on growth, survival, body coloration and immune response in tiger shrimp, <i>Penaeus monodon</i>	M/s Avesthage n Ltd., Bengaluru	1.20	On going	H.Shivananda Murthy
Aqua	Effect of amino acid supplemented diets on growth and survival of Indian major carp, <i>Labeo rohita</i>	M/s Evonik Industires, Mumbai	1.70	On going	H.Shivananda Murthy
Aqua	A value chain on production and utilization of Indian major carps and prawn from aquaculture system	ICAR- NAIP-	189.11	2008	K.M. Shankar
Aqua	Biofilm of bacterial vaccine for aquaculture - further evaluation and standard - Platform on fish and shellfish vaccine development	DBT	56.43	2009	K.M. Shankar

Aqua	Standardization of paddy straw dosage as biofilm substrate for low cost and eco-friendly production of carps	KVAFSU	0.50	On going	M. Ganapathi Naik
Fish. Micro	Capture and removal of ammonia from fish processing waste using Archaea	NFBSFAR A-ICAR	91.14	2011	B.B. Nayak
Fish. Micro	Defense genes of tiger shrimp (Penaeus Monodon) with respect to bacteria (Vibrio harveyi) and white spot virus (WSSV) infection	ICAR	68.65	2012	S.K. Otta
Fish. Micro	Prevalence & impact of antibiotic resistance bacteria of non-human origin (Associated with livestock practices) on human health management	ICMR	40.80	2012	Indrani Karunasagar
Fish. Micro	Development of shrimp densovirus dsRNA as an immunoprotectant and delivery via probiotics and nanoparticle mode"	DBT Indo-Australian	61.39	2011	Indrani Karunasagar
Fish. Micro	DBT- Programme support for Research in Aquaculture and Marine Biotechnology - Under Competitive Grant of Center of Excellence Scheme	DBT	160.64	2007 On going	Indrani Karunasagar
Fish. Micro	Bioinformatics application in aquaculture and marine biotechnology	DBT	15.00	On going	Indrani Karunasagar
Fish. Micro	Use of molecular techniques to study the relation between Dinoflagellate cysts, blooms and their toxicity in South West coast of India and Inter-relationship between vibrios and toxic phytoplankton	Indo-Swedish Project (SIDA funded)	3.50	On going	Indrani Karunasagar
Fish. Micro	Training and analysis of samples from aquaculture farm, industry, processing plant, domestic, dairy related and any miscellaneous samples	RF	5.00	On going	Indrani Karunasagar

Fish. Micro	Indo Norwegian platform for fish and shellfish vaccine development - Development and evaluation of bacterial vaccines for finfish	DBT	71.90	2009	Indrani Karunasagar
Fish. Micro	Use of molecular techniques in the study of dinoflagellate cysts, blooms and their toxicity and mitigating the effects of harmful algal blooms in the Arabian sea	SIDA	30.50	2005	Indrani Karunasagar
Fish. Micro	Network project on fish health	CIBA	134.49	2013	Indrani Karunasagar
FET	Development of artificial reefs in inshore waters for enhancing fish stocks for sustainable fisheries.	RKVVY	62.00	2011	B. Hanumanthappa
FPT-1	AICRP on PHT	ICAR	133.00	2009	C.V. Raju
FPT-3	Improving food security by reducing post harvest losses in the fisheries sector	EU	160.00	2012	B.A. Shamasundar
FPT-4	Development of e-courses for BFSc degree programme	NAIP	293.89	2008	B.A. Shamasundar
<b>INSTITUTE OF ANIMAL HEALTH &amp; VETERINARY BIOLOGICALS, BENGALURU</b>					
IAH&V B	AICRP on Animal Disease Monitoring and Surveillance	ICAR	-	On going	C. Renukaprasad
Regional Centre, IAH&V B	AICRP on Epidemiological studies on foot and mouth disease	75% ICAR; State-25%.	55.00	1997	C. Renukaprasad
IAH&V B	Southern Regional Disease Diagnostic Laboratory	GOI	455.00	1999	C. Renukaprasad
BPD	All India Network Project on Blue Tongue Disease	ICAR	12.00	2001-02	C. Renukaprasad
BPD	Strengthening of biological production division of IAH&VB for increased production of vaccines for total health coverage of livestock and poultry rural farmers	RKVVY	1447.00	2009-10	Director Scientist-4 & Scientists in Biological production wing.

BPD	Up gradation of vaccine production laboratories as per GMP for consistent supply of vaccines to livestock and poultry of farming community	RKVY	400.00	2010	Director
BPD	Centre for development of vaccines and diagnostics with special reference to emerging diseases affecting livestock and poultry of farming community	RKVY	400.00	2010	Director
BPD	Development of vaccine and diagnostic antigen for mycoplasma infection in small ruminants	RKVY	100.00	2011-12	C. Renukaprasad
BPD	Development and evaluation of vaccine for duck pasteurellosis	IAH&VB	0.65	2012-13	S. M. Byregowda
BPD	Development of Brucella S-19 vaccine facilities	IAH&VB	NF	2012-13	S. M. Byregowda
BPD	Development of <i>Clostridium perfringens</i> Type A vaccine	IAH&VB	NF	2012-13	S. M. Byregowda
BPD	Influence of time and space on vaccine production under ethno veterinary practices	IAH&VB	NF	2012-13	C. Renukaprasad
BPD	Elucidation of oncolytic pathways of bluetongue virus by <i>invitro</i> and <i>invivo</i> studies	IAH&VB	1.90	2012-13	S. M. Byregowda
BPD	Development of Mycoplasma vaccine and diagnostic antigen for small ruminants.	IAH&VB	2.00	2012-13	Saritha

#### INSTITUTE OF WILDLIFE VETERINARY RESEARCH, KODAGU

IWVR	Studies on normal heamatology, biochemistry and medical management of injured spectacled Cobra ( <i>Naja naja</i> ) and Indian Rock Python ( <i>Python molurus</i> )	Mysore Zoo	1.00	2013	M. Narayana Bhat
IWVR	Studies on prevalence of salmonellosis in captive wild birds	Mysore Zoo	1.00	2013	M. Narayana Bhat

#### LIVESTOCK RESEARCH & INFORMATION CENTER (DEONI), HALLIKHED, BIDAR

LRIC (D)	Effect of feeding UMMB (urea molasses mineral block) on the performance of deoni cattle	KVAFSU	0.05	2013	M.S. Rudraswamy
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LRIC (D)	Evaluation of clean milk production practices on the performance of deoni cattle	KVAFSU	0.06	2012-13	M.S. Rudraswamy
LRIC (D)	Upgradation of genetic pool of local goats by crossbreeding with Osmanabadi goats	RKVV	40.00	2012-13	H.R.V.Reddy
LRIC (D)	Least cost formulation for the Osmanabadi goats	KVAFSU	0.085	2013	M.S. Rudraswamy
LRIC (D)	Efficacy of nasal irrigation of various concentration of salt solutions in goats	KVAFSU	0.01	2013	M.S. Rudraswamy
LRIC (D)	Construction of 3.60 ha fish seed rearing ponds	NFDB	11.34	2012-13	K.N.Prabhudeva

#### LIVESTOCK RESEARCH & INFORMATION CENTER (SHEEP), NAGAMANGALA

LRIC	Mega Sheep Seed Project (Mandya Sheep)	ICAR	140.30	April 2009	R. Nagaraja
LRIC	Effect of free and restricted suckling on growth performance in Mandya lambs	ICAR	Under MSSP (MS)	April 2012	R. Nagaraja
LRIC	Effect of trace mineral supplementation on the performance in Mandya lambs and ewes	ICAR	Under MSSP (MS)	Dec., 2012	G.U. Manju
LRIC	A study on physical characteristics of Mandya sheep under field conditions	ICAR	Under MSSP (MS)	May 2012	S. Naveen Kumar

#### LIVESTOCK RESEARCH & INFORMATION CENTER (A), KONEHALLY, TIPTUR

LRIC	Establishment of Amrithmahal Cattle Breeding Station at LRIC, Konehalli	DAH&VS	251.00	2009-10	H.K.Siddalinga Murthy
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#### FISHERIES RESEARCH & INFORMATION CENTER, HEBBAL, BENGALURU

FRIC	Development of brood bank for Common carp	NFDB	60.50	2011	Y. Basavaraju
FRIC	Growth and survival of monosex Nile tilapia <i>Oreochromis Niloticus</i> under monoculture	KVAFSU	0.50	2012	K.B.Rajanna

#### FISHERIES RESEARCH & INFORMATION CENTER, ANKOLA

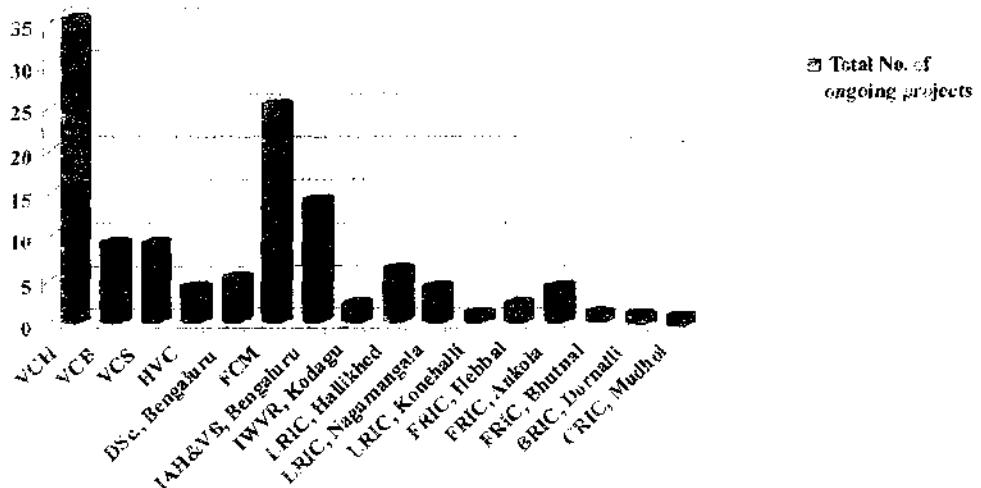
FRIC	An attempt to culture brackish water fishes (Mullet) as an alternative to shrimp farming	DoA, Karwar	1.50	2012-13	Mansingh Naik
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FRIC	Dial feeding periodicity of pearl spot, Etroplus suratensis (Bloch) in Ankola waters	DoA, Karwar	1.47	2012-13	Mansingh Naik
FRIC	Development of captive brood stock of sand whiting and pearl spot	KVAFSU	0.50	2012-13	N. Manjappa
FRIC	Development and adoption of best management practices (BMP) of shrimp farming to maximize benefits to small stake holders for improved livelihood	VGST	10.00	2013	N. Manjappa
<b>FISHERIES RESEARCH &amp; INFORMATION CENTER, BHUTNAL, BIJAPUR</b>					
FRIC	Construction of 0.40 ha fish seed rearing ponds	NFDB	1.26	2012-13	K.N.Prabhudeva
<b>BUFFALO RESEARCH &amp; INFORMATION CENTER, DORNALLI, YADGIR</b>					
BRIC	Construction of 3.60 ha fish seed rearing ponds	NFDB	11.34	2012-13	K.N. Prabhudeva
<b>CANINE RESEARCH &amp; INFORMATION CENTER, MUDHOL, BAGALOKOT</b>					
CRIC	Livelihood security through Mudhol Hound rearing	SCP-TSP	300.00	2012	Mahesh S. Dodamani

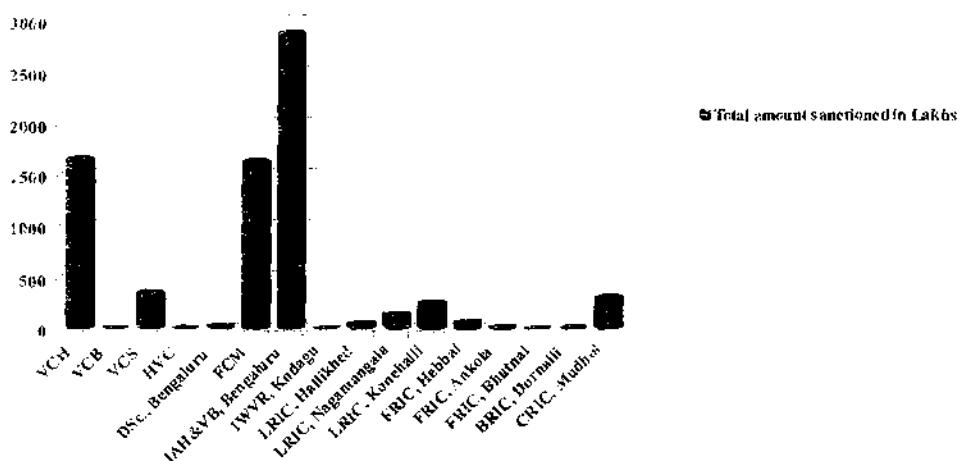
### ABSTRACT OF ONGOING RESEARCH PROJECTS

#	College /Institute	Research Projects		Funding Source and Amount (Rs. in Lakhs)			
		Total Nos.	Amount	External		KVAFSU	
				Total Nos.	Amount	Total Nos.	Amount
1	Veterinary College, Bengaluru	35 6	1645.03	26	1643.016	09	2.02
2	Veterinary College, Bidar	09	1.30	00	0	09	1.30
3	Veterinary College, Shivamogga	09	339.46	03	337.60	06	1.86
4	Veterinary College, Hassan	04	1.05	0	0	04	1.05
5	Dairy Science College, Bengaluru	05	23.60	02	22.85	03	0.75
6	College of Fisheries, Mangalore	25	1619.52	24	1619.02	01	0.50
7	IAH&VB, Bengaluru	14	2873.55	08	2869.00	06	4.55
8	IWVR, Doddaluvara, Kodagu	02	2.00	02	2.00	0	0
9	LRIC (Deoni), Hallikhed, Bidar	06	51.545	02	51.34	04	0.205
10	LRIC (Sheep), Nagamangala	04	140.30	04	140.30	0	0
11	LRIC (A), Konehally, Tiptur	01	251.00	01	251.00	0	0
12	FRIC, Hebbal	02	61.00	01	60.50	01	0.5
13	FRIC, Ankola	04	13.47	03	12.97	01	0.5
14	FRIC, Bhutnal	01	1.26	01	1.26	0	0
15	BRIC, Dornalli	01	11.34	01	11.34	0	0
16	CRIC, Mudhol	01	300.00	01	300	0	0
		<b>TOTAL</b>	<b>123</b>	<b>7335.431</b>	<b>79</b>	<b>7322.196</b>	<b>44</b>
							<b>13.235</b>

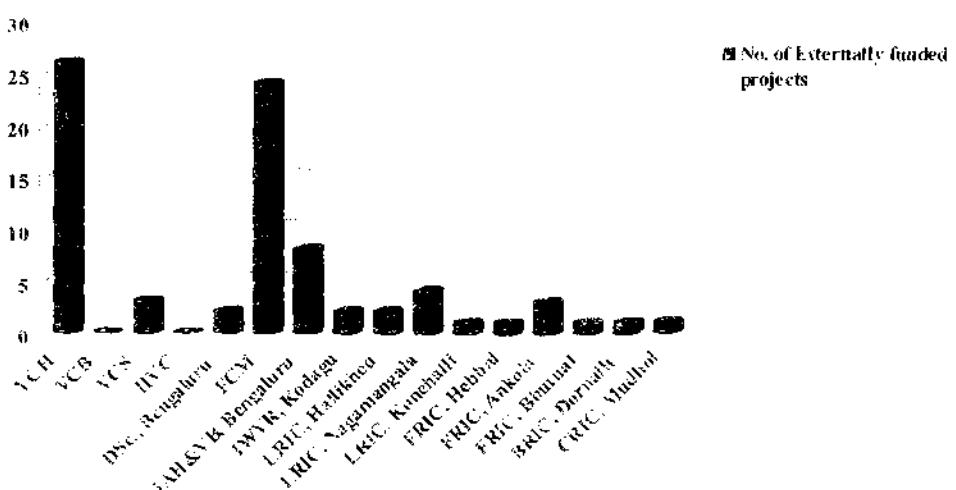
### Number of ongoing research projects in different college/institutes during 2012-13



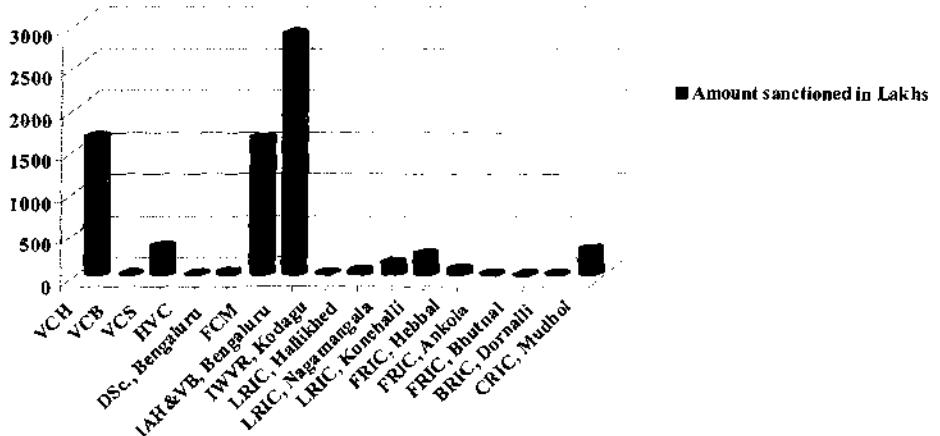
### Research grants sanctioned to different college/institutes during 2012-13 (in lakhs)



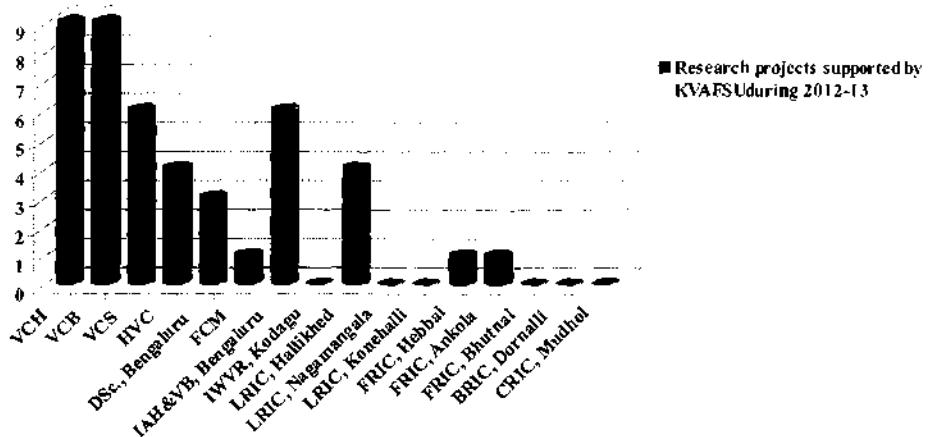
### Number of externally funded projects operated by different college/institute during 2012-13



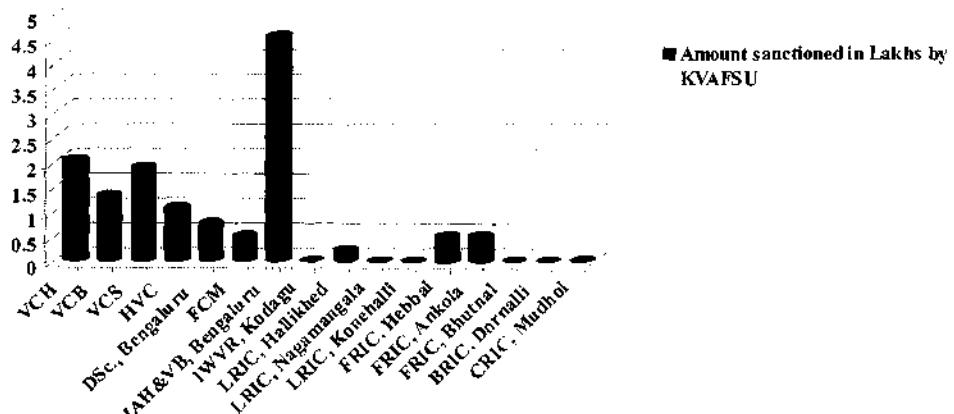
**Grants received by external agencies by different college/institutes during 2012-13 (in lakhs)**



**Research projects supported by KVAFSU to different college/institute during 2012-13**



**Research grants supported by KVAFSU to different college/institutes during 2012-13 (in lakhs)**



## b) Research Highlights

### VETERINARY COLLEGE, BENGALURU

#### 1) Title: Detection of adulterants in market milk from Bengaluru city

\* Screened 18 milk samples for the presence of adulterants.

#### 2) Title: Evaluation of efficacy of assay property of diagnostic kits in dog and cattle

\* Presence of an androgen dependant protein in epididymal tissue of normal and castrated bulls (*Bos taurus*) using two dimensional SDSS PAGE and MALDI has been identified and successful evaluation of biochemical test kit manufactured for their efficacy is carried out.

#### 3) Title: Eradication of pollution by recycling plastic tea cups and thermocol in the preservation of biological specimens used for teaching and museum purpose

\* Plastic tea cups and thermocol can be recycled and used in the preservation of biological specimens.

\* By this method irritation due to formalin usage is avoided.

\* By recycling large quantities of tea cups and thermocol reduces environment pollution.

\* Distribution of plastinated specimens to rural schools and colleges will inculcate interest in the minds of rural children to pursue their career in Agriculture, Veterinary, Fisheries and other allied biological sciences.

#### 4) Title: Rational development of an effective vaccine for the prevention of *Staphylococcal* Mastitis in bovines using

#### mouse mastitis as a model system

\* The phenotypic biofilm forming ability of 152 Coagulase-negative staphylococci (CoNS) isolates were investigated with Tissue culture plate (TCP) and Congo red agar (CRA) assay.

\* Of these, 43, 49 and 60 isolates were classified as strong, weak and non biofilm formers respectively by TCP method, whereas, 48 and 60 isolates were classified as biofilm formers and non biofilm formers respectively by CRA method.

\* PCR assay for the detection of virulence genes in 152 CoNS isolates (*icaA*, *icaD* and *bap*) revealed the presence of *icaA*, *icaD* and *bap* genes in 20, 8 and 15 isolates, respectively.

#### 5) Title: Antibiotic use and residues in chicken and milk samples from Karnataka and Punjab

\* Fifty three per cent of the chicken meat samples revealed residue levels of Enrofloxacin, a common antibiotic used in poultry, above the maximum residue limits.

\* Systematic study of antimicrobial usage and the resultant residue levels in the meat is under way.

#### 6) Title: Effect of feeding different energy levels on growth and kindling performance in rabbits

\* High energy diet will influence the kindling performance in rabbits.

#### 7) Title: Evaluation of performance of synthetic coloured broilers on replacing inorganic source of Zinc and Manganese with organic source

\* Analysis of the test feed formulations for proximate principles have been done.

\* Biological trial on coloured broilers will be completed before June 2013 and the results

- will be analysed before October 2013.
- 8) Title: Outreach programme on zoonotic diseases with special reference to Rabies and Anthrax**
- \* Diagnosis of Rabies based on Negri body demonstration with Sellar's stain, Fluorescent Antibody Technique (FAT) and dRIT - Direct Rapid Immunohistochemical Tests were standardized and adopted as routine rabies diagnostic test.
- 9) Title: Centre of excellence in pathology and establishment of modern histopathology**
- \* Hypoglycaemic effects of the following indigenous herbal extracts., *Gymnema sylvestre*, *Momordica charantia*, aged Garlic, green tea, *Pterocarpus marsupium*, *Swertia chirayita*, *Trigonella foenum gratum* and *Coccinia indica* have been evaluated in experimentally induced diabetes in comparison with a known sulphonylurea preparation - Glibenclamide®.
  - \* The antidiabetic/hypoglycemic effect of herbal extracts was on par with effects of Glibenclamide.
- 10) Title: Funds for improvement of infrastructure in Para-clinical Division**
- \* The equipments sanctioned by the Department of Science and Technology were procured for the division of Para-clinical studies. Books were procured. Computer with Internet facility was established for the benefit of all the post-graduate students. Detailed progress report, statement of expenditure, AUC have been submitted for release of second installment.
- 11) Title: A study on comparative efficacy evaluation of various dose of Avilamycin, Bacitracin and Enramycin on necrotic enteritis caused by *Clostridium perfringens* in broilers**
- \* Antibiotic growth promoters showed a significant benefit in controlling necrotic enteritis challenge.
  - \* Avilamycin @ 10 PPM under tropical weather conditions showed much better economics which is next to Enramycin @ 5PPM level.
  - \* Further work on gross and histopathological evaluation is under progress.
- 12) Title: Innovative tests for the diagnosis of animal diseases**
- \* Procurement of instruments is under progress.
  - \* Research activities on mycotoxins (aflotxin, T-2 toxin and ochratoxin) is under progress.
  - \* Leptospirosis screening work is under progress and about 250 serum sample are collected and screening is under progress.
- 13) Title: AICRP on Poultry Breeding for Meat**
- \* The per cent fertility in different strains maintained was more than 88%.
  - \* The hatchability on FES was more than 87%.
  - \* The per cent survivability from 0-5 weeks was more than 97%.
  - \* The body weight at 5 weeks of age was 1041g in PB1 and 1021g in PB2.
  - \* The body weight at weeks had been optimized in PB2 (2145g) and Control (2217g).
  - \* The ASM had been reduced from 179d to 172d in Pb1.
  - \* HEP and Survivors EP up to 40 weeks had increased from 59-67 and 60-76, respectively in PB2 during the year.

- \* The performance in the 38<sup>th</sup> RSBT at Gurgoa was interesting. Although the performance with respect to body weight at 6 and 7 weeks (1.216 and 1.688kg) was less compared to last year, it is on par with the performance of Ludhiana center and better than the CARI center. Further, the difference observed in performance between colored broilers and commercial white broilers of Venkateshwara hatcheries has been reduced from 500g at 7 weeks during last year to 250g this year.
- \* The center has supplied 1,26,995 day old chicks to the farmers during the year and is highest since inception of the project.
- \* The center has generated Rs. 29,82,975/- during the year and is highest since inception of the project.

#### **VETERINARY COLLEGE, BIDAR**

- 1) **Title: Pathology of female reproductive tract of sheep in and around Bidar**
  - \* Of the 20 cases recorded, the following conditions had been recorded in postmortem and histopathological investigation. Perioophoritis-04(20%), endometritis-08(40%), cystic ovaries-02(10%), mixed infections -06(30%).
- 2) **Title: Gap assessment between current and standard organic production practices in Bidar district**
  - \* Data collected from 200 farmers, by pre-tested interview schedule, in congruence with the organic animal husbandry standards developed by Government of India on the lines of International Standards for Organic Production (IFOAM) and focused group discussions.
  - \* The collected data is under tabulation and analysis.

- \* The final findings and conclusions will be stated accordingly.

- 3) **Title: Clinical evaluation of LCP and DCP plates for long bone fractures in canines and small ruminants**

- \* It is possible to use LCP and DCP plates in canines and small ruminants for long bone fracture treatment.

- 4) **Title: Isolation and characterization of bacteriophages against *Staphylococcus aureus* causing mastitis**

- \* Bacterial Isolation and morphological, cultural and biochemical characterization of *Staphylococcus aureus* causing mastitis is completed.
- \* The culture characteristics, staining morphology, catalase test, coagulase test and mannitol fermentation tests were carried out for the isolates.

#### **VETERINARY COLLEGE, SHIVAMOGGA**

- 1) **Title: Livelihood security through resource and entrepreneurship management in Bidar Dist.**

- \* Under livelihood security project till date 48 Livestock Interest Groups (LIG's) and 24 Village level co-ordination committees were promoted.
- \* Four community managed AI centers were established and are functioning.
- \* 1045 AI services were provided, 512 crossbred calves and 186 Deoni calves were added to cattle population in the area.
- \* In goat rearing, 7920 Kids were born with an average of 33/ house hold for 240 families yielding income of Rs. 9900/- family.
- \* In addition, 260 Osmanabadi bucks were introduced to upgrade local goats.

**DAIRY SCIENCE COLLEGE,  
BENGALURU**

**1) Title: "VTCC"-Veterinary type culture collection of dairy microbes**

- \* A total of 23 lactic acid bacterial isolates phenotyped as well as genotyped showed predominance of *Lactobacilli* and *Enterococci* and studied the special characteristics of lactic acid, diacetyl and exopolysaccharide production of the cultures.
- \* A total number of 40 isolates were picked from 10 dahi samples in and around Hassan and Bidar zones which showed predominance of *Streptococcus thermophilus* and *Lactobacilli*.

**2) Title: Development of rapid quality kit to determine the quality of raw milk**

- \* Among the can milk samples of KVAFSU, Dairy farm, Hebbal, Bengaluru and Can milk samples of 10 each from Haalu Utpadakara Sangha, Gopsandra, Chintamani Taluk, a common correlation existed between direct microbiological test i.e., Total Bacterial Count(TBC) which takes longer time to grade the milk with Direct Microscopic count (DMC) which is also a direct test that takes just 10 minutes and also with Methylene Blue Reduction Test (MBRT), a indirect test that takes half an hour to judge the microbiological quality of raw milk.
- \* With well established relation between TBC and DMC; MBRT, the kit can be developed easily for a society for microbiological grading of raw milk.

**3) Title: Identification of exopolysaccharides producing LAB in fermented foods using PCR specific primers**

- \* In 12 dahi and shrikhand samples, collected from north and south Karnataka, presence

of lactic acid bacteria, predomination of *Lactococci* & *Leuconostoc* were noticed.

Highest cell mass producers were Leu 2 as *Leuconostoc mesenteroides* ssp. *mesenteroides*; Leu 10 & Leu 15 as *Leuconostoc mesenteroides* ssp. *Dextranicum* and confirmed the identity through genotyping. *Leuconostoc mesenteroides* ssp. *dextranicum* Leu15 revealed the production of exopolysaccharide.

**4) Title: Development of health food for enhancement of immunity in geriatrics**

- \* Health food for enhancement of immunity in geriatrics has been successfully developed by incorporation of whey protein isolate, lactoferrin, probiotics and bacteriocins.

**5) Title: Development of fibre rich low caloire lactose hydrolysed gulab jamun**

- \* The effect of enzyme concentration and incubation time temperature of enzyme activity was optimized for 50, 75, and 100% of lactose hydrolysis in milk in the preparation of lactose hydrolyzed gulab jamun.

**COLLEGE OF FISHERIES,  
MANGALORE**

**1) Title: Effect of carotenoids on growth, survival, body coloration and immune response in tiger shrimp, *Penaeus monodon***

- \* There was no significant difference between growth parameters and survival among the shrimps fed with experimental diets and control diets.

The experimental feeds carried Marigold oleoresin and lutein-meso zeaxanthin at concentrations 60ppm, 120ppm and

180ppm of carotenoid substrate to the basal diet having 38% protein, while T<sub>0</sub> without carotenoid served as control.

\* The ingredients used in the formulation of different experimental diets were fish meal, squid meal, soybean meal, wheat flour, rice bran, groundnut oil cake, vitamin and mineral premix.

**2) Title: Effect of amino acid supplemented diets on growth and survival of Indian major carp, *Labeo rohita***

\* Growth study: After 45 days feeding trial, growth was higher (62g) in Rohu in diet (T<sub>1</sub>) as compared to control (49g) respectively.  
\* Water parameters: Water parameters recorded during experimental period such as temperature, pH, DO<sub>2</sub>, Alkalinity, CO<sub>2</sub>, ammonia was in ideal ranges.

**3) Title: A value chain on production and utilization of Indian major carps and prawn from aquaculture system**

\* Artificial technology being demonstrated in farmers farm – Karnataka and Andhra Pradesh  
\* Farmer level monoclonal antibody (mAb) based diagnostic kits developed for *Aeromonas hydrophila*, *A. invadans* of EUS of fish and *M. rosenbergii* WMD virus  
\* Production of bioactive peptides from meat of IMC standardized  
\* ACE-inhibitory activity of bioactive peptide evaluated.

**4) Title: Bio-film of bacterial pathogen vaccine for aquaculture - further evaluation and standard - Platform on fish and shellfish vaccine development**

\* Development of BF of *Vibrio anguillarum*  
\* Biofilm development of *Vibrio anguillarum* standardized. Antigen

expression studied - difference in antigen between biofilm and free cells determined.

\* Sub unit of *A. hydrophila* in *E-coli* expressed - Further work on bio-film of transformed *E-coli* under progress.  
\* Biofilm oral vaccine of *Vibrio anguillarum* in seabass-work under progress.

**5) Title: Capture and removal of ammonia from fish processing waste using Archaea**

\* Novel primers designed for 16S rRNA, 23S rRNA and amo A gene were found to be better than hitherto reported primers for the detection of ammonia oxidizing microbes  
\* Ammonia oxidizing genes submitted to Gene Bank were assigned the accession numbers from KC570459 to KC570463.  
\* Attempts to isolate and culture ammonia oxidizing microbes to reduce ammonia in the water to make it reusable are in progress.

**6) Title: Development of shrimp densovirus (PmDNV and PstDNV) dsRNA as an immunoprotectant and delivery via probiotics and nanoparticle mode**

\* The genes coding for Non structural and structural proteins of PstDNV were targeted for making dsRNA  
\* The double stranded RNA synthesised by in vitro and in vivo methods have been delivered to shrimp. It was found to protect against disease  
\* Technologies developed/ transferred: dsRNA for PmDNV and PstDNV developed and Mab based detection kit for PmDNV and PstDNV

**7) Title: Defense genes of tiger shrimp (*Penaeus Monodon*) with respect to bacteria (*Vibrio harveyi*) and white spot virus (WSSV) infection**

- \* The normal expression of defense genes in different tissues was studied. Haemolymph, heart, lymphoid organs, hepatopancreas, stomach, pleopod, muscle, eyestalk, and gills were collected from the shrimp and stored immediately in -80°C. Total RNA was extracted and cDNA synthesized which was stored at -20°C for further use.
- \* Selected defence genes were tested for the tissue distribution and expression using semi-qPCR.
- \* Study of the expression level at different time points of some of the potent defence genes in different tissues like hemocytes, lymphoid organ, gills etc. with the infection of *Vibrio harveyi*, WSSV and combined infection with *Vibrio harveyi* and WSSV was also undertaken.
- \* Quantitative real-time PCR analysis of defense gene expression was standardized for some of the antimicrobial peptides such as ALF3, crustin, Penaeidin, C-lectin and internal control (Elongation factor 1a).
- \* Novel defense genes will be further analyzed for the expression level.
- \* Tissues from WSSV, *V. harveyi* and both WSSV and *V. harveyi* infected shrimp (*P. monodon*) and control shrimp (non-infected) have been used for transcriptome analysis.
- \* The study is under progress. We expect high-quality reads from the infected shrimps that would reveal the expression understanding of many novel immune related genes and also for the mining of many more novel genes of interest.
- 8) Title: Prevalence & impact of antibiotic resistance bacteria of non-human origin (associated with livestock practices) on human health management**
- \* Antibiotic resistance of non-typhoidal *Salmonella* isolated from fish, shrimps and aquatic environments studied.
  - \* Class 1 integrons in *Salmonella* Weltevreden and silent antibiotic resistance genes in some seafood associated non-typhoidal isolates of *Salmonella* detected
  - \* Studied the genes responsible for biofilm formation by *Salmonella Weltevreden*
  - \* Diagnostic kits have been developed for *Salmonella* in seafood and antibiotic resistant salmonella in clinical samples.
- 9) Title: Identification of defense genes of *Penaeus monodon* with respect to *Vibrio Harveyi* & white spot virus (WSSV) infection**
- \* Studied the normal expression of defense genes in different tissues from the shrimp and the expression of potent genes in *P. monodon*, injected with purified white spot syndrome virus and luminous *V. harveyi*.
  - \* Real-time PCR has been standardized for specific gene expression level of latent, early, and late genes following infection. Transcriptome studies are in progress.
- 10) Title: Training and analysis of samples from aquaculture farm, industry, processing plant, domestic, dairy related and any miscellaneous samples (revolving fund project)**
- \* Water (for chemical, physical and microbiological parameters)
  - \* ETP Samples (for all parameters)
  - \* Milk for somatic cell count, microbiological and chemical analysis
  - \* Shrimp viruses by PCR and also for microscopic test
  - \* Revenue generated during 1<sup>st</sup> April 2012 to 31<sup>st</sup> March 2013: Rs. 20,00,000/-
- 11) Title: Development of shrimp densovirus dsRNA as an immunoprotectant and delivery via probiotics and nanoparticle mode**
- \* The genes coding for non structural and structural proteins of PstDNV were targeted for making dsRNA

- \* The double stranded RNA synthesised by *in vitro* and *in vivo* methods have been delivered to shrimp. It was found to protect against disease
  - \* Technologies developed/ transferred: dsRNA for PmDNV and PstDNV developed and Mab based detection kit for PmDNV and PstDNV9)
- 12) Title: RNA interference (RNAi) as an antiviral mechanism against hepatopancreatic parvovirus (HPV) Densovirus such as HPV cause serious problems in shrimp culture by growth stunting**
- \* Complete nucleotide sequence of HPV genome and three genes of HPV (accession No. EU447743, EU617324, FJ265774 & complete genome acc. No. NC011545) from India available in Gene Bank
  - \* This is the first whole genome of an aquatic animal virus submitted from India and has helped the development of recombinant protein and dsRNA for disease management by delivery through feed.
- 13) Title: Indo Norwegian platform for fish and shellfish vaccine development - Development and evaluation of bacterial vaccines for finfish**
- \* *Omp* genes coding for virulence proteins of the two fish pathogens *Edwardsiella* and *Aeromonas* were cloned, sequenced and studied as candidate vaccines for cultured Indian major carps, Common carps and catfish.
  - \* All the recombinant proteins were found to be highly immunogenic by ELISA and protective to fish as seen by the survival of vaccinated fish. Field trials using nanoparticle delivery is in progress.
- 14) Title: DBT- Programme support for Research in Aquaculture and Marine Biotechnology - Under Competitive Grant of Center of Excellence Scheme**
- \* A rapid detection kit for infectious IHHNV was developed.
  - \* Development of RT-PCR assay for the detection of White Muscle Disease (WMD) in *Macrobrachium rosenbergii* and extended to regular health monitoring of prawns.
  - \* Development of a novel diagnostic: A digoxigenin labelled DNA probe based on the sequence of a highly conserved outer membrane protein in various serovars of *A. hydrophila* developed and found to be a useful diagnostic probe for detection of this pathogen in fish species – ready for patenting and technology transfer.
  - \* *Vibrio anguillarum* vaccine for use in Seabass has been developed. Trials are on in Kumta Seabass farm. Vaccine developed has helped in the successful culture of Asian Seabass in Kumta.
  - \* Diagnostic kits based on PCR and colony hybridization have been developed for *Vibrio parahaemolyticus* and *Vibrio vulnificus* for detection and enumeration
  - \* Monoclonal antibody based ELISA kits have been developed for *Vibrio parahaemolyticus* for use by the seafood industry and for clinical samples.
  - \* Development of bacteriophages for biocontrol of pathogens (patent obtained)
  - \* High value estuarine fish Pearlspot has been bred in captivity and successfully cultured and farmers are being encouraged to adopt it in their aqua farms.
- 15) Title: Use of molecular techniques in the study of dinoflagellate cysts, blooms and their toxicity and mitigating the effects of harmful algal blooms in the Arabian sea**
- \* PCR based molecular techniques are developed for the detection of toxic dinoflagellates and their cysts.
  - \* The inter-relationship between vibrios and dinoflagellates were studied using conventional and molecular techniques
  - \* Several Genebank submissions had been

- made for the microsatellites of the dinoflagellate *Skeletonema*.
- 16) Title: DBT Programme Support for Research in Aquaculture and Marine Biotechnology**
- \* Protein-interaction-network study of Type III secretion system of *Vibrio vulnificus*
  - \* Bioinformatics study of outer membrane proteins of fish pathogens MP based bacterial vaccines for finfish.
  - \* *In silico* identification and characterization of potential binding sites on the surface of thermostable direct hemolysin (TDH) of *Vibrio parahaemolyticus*.
  - \* Studies on genomics and proteomics of Infectious hypodermal necrosis virus (IHHNV).
- 17) Use of molecular techniques to study the relation between dinoflagellate cysts, blooms and their toxicity in South West Coast of India and Inter-relationship between vibrios and toxic phytoplankton**
- \* PCR based molecular techniques developed for the detection of toxic dinoflagellates and their cysts.
  - \* Impact of climate change and the inter-relationship between vibrios and dinoflagellates studied.
  - \* Several gene bank submissions have been made for the microsatellites of the dinoflagellate *Skeletonema* for studying the lineage and phylogeny.
- 18) Title: Development of molecular based diagnostics for simultaneous detection of viruses of crustaceans**
- \* All the four DNA viruses (MBV, HPV, IHHNV, WSSV) occur simultaneously in shrimps.
  - \* It is necessary to develop a multiplex PCR for the simultaneous detection of these viruses.
  - \* Developed 11 different combinations of
- multiplex PCR for the detection of DNA viruses. The multiplex PCR combinations developed offers a more rapid, efficient and stringent screening of viruses based on severity of viral infection in both postlarvae as well as in adult shrimps. This was validated on several samples and is ready for patent application.
- 19) Title: Studies on nodavirus disease of *Macrobrachium rosenbergii***
- \* White tail disease (WTD) is a newly emerging disease of cultured *M. rosenbergii* caused by *Macrobrachium rosenbergii* nodavirus (MrNV) and extra small virus (XSV). The RNA1 (1175 bp) and complete sequence of RNA2 (3126 bp) of an Indian isolate MrNV was generated for the first time. The efficacy of bacterially expressed recombinant proteins (capsid proteins) of MrNV and XSV in protecting *M. rosenbergii* against WTD was investigated. A new RT-PCR developed & optimised for the detection of upto 24 copy numbers of shrimp nodavirus, which can be extended for regular health monitoring of prawns.
  - \* The capsid and B2 proteins of nodavirus MrNV affecting *Macrobrachium rosenbergii* have cloned, sequenced and expressed and it was observed to be an immunogenic as in Western blot reactions. The capsid protein can be fed through diet and can afford the required protection. The nodavirus of fish was studied for its virulence. GenBank accession No(s): HM017076 (Betanodavirus LCNV coat protein gene, partial cds). HM017077 (Betanodavirus T4NV coat protein gene, partial cds).
- 20) Title: Studies on fish pathogens**
- \* New OMPs were studied in detail and tested for their protective efficacy.

- \* OmpK was found to have application in diagnostics for the sensitive, specific detection of *Vibrio anguillarum* by dot blot hybridization.
- \* Diagnostic kits were developed for the most important pathogens associated with seafood such as *Vibrio parahaemolyticus*, *Vibrio vulnificus* and *Salmonella*.
- \* Monoclonal antibody based ELISA kits were developed that can be used both by the seafood industry as well as for clinical samples.

**21) Title: Study of Type-III secretion system in *Vibrio parahaemolyticus* associated with seafood**

- \* The presence of T3SS gene cluster was documented in clinical isolates of *V. parahaemolyticus* and known to play an essential role in pathogenesis mechanism.
- \* Analyzed the distribution of T3SS2-beta variant in *trh<sup>+</sup>* *V. parahaemolyticus* isolates from seafood harvested along southwest coast of India. All of the *trh*+ve and *tdh<sup>+</sup>/trh<sup>+</sup>* isolates used, possessed T3SS2-beta gene cluster.
- \* The study of T3SS2 along with other virulence factors will help in better understanding of pathogenesis mechanisms of *V. parahaemolyticus*.
- \* This is the first report from India confirming the presence of T3SS2-beta in *V. parahaemolyticus* isolated from marine environments.

**22) Title: DBT Bioinformatics (Sub-DIC) project**

- \* The Centre has made significant progress in the following research areas:
- \* Analysis of OMPs of *Edwardsiella tarda*, *E. ictaluri*, *Aeromonas hydrophila*, *A. veronii*, *V. anguillarum* for the development of OMP based bacterial vaccines for finfish.
- \* Study on Type III secretion system protein of *V. vulnificus*.

- \* Studies on genomics & proteomics of infectious hypodermal necrosis virus.
- \* The centre has deposited over >500 nucleotide sequences and ~6000 EST sequences in Gene Bank.
- \* Two complete genome sequences for HPV and IHHNV Indian isolates have also been deposited.
- \* Analysis of WSSV genome for VNTR regions for genotyping of the virus.
- \* Development of diagnostic tool for human health pathogens such as *Salmonella*, *E.coli*, other enteric pathogens.
- \* The conserved pockets *tdh* gene of *V. parahaemolyticus* identified in this study could be considered as potential allosteric sites, while the variable pocket (P1) identified could be evaluated for further understanding the protein structure or in designing molecules that can interfere with the function or modulate the activity of this protein
- \* Databases pertaining to genomics and proteomics of *V. parahaemolyticus* *V. vulnificus*, *Aeromonas hydrophila* and *P. monodon* was prepared. A number of papers with bioinformatics support has been published in both National and International journals.

**23) Title: Development of artificial reefs in inshore waters for enhancing fish stocks for sustainable fisheries**

- \* Uppunda, Tharapathi and Kirimanjeswar in Udupi district had been identified as suitable areas to put up the artificial reefs structures.
- \* Canoes with out-board engine was used to conduct fishing by using energy efficient fishing gears.
- \* Assessing the existing fishery resources and biological components in and around areas suitable for erecting artificial reefs, investigate the several relevant aspects on building of artificial reefs and examine the types of fish that adopt to artificial habitats

and to protecting the natural fish stocks of commercial importance besides safe guarding the artisanal fisher folk.

**24) Title: AICRP on PHT**

- \* Cellulose casing was identified as an alternative to animal casing for the production of fish sausage with a shelf life of 28 days after smoke treatment (at 70°C for 2 to 3 hours).
- \* A prototype of fish vending and display unit was made up of food grade stainless steel and double jacketed wall with good insulation which has capacity of 175 liters.
- \* The insulation capacity showed that the ice remained for 48 h with a melting rate of 10%/day.
- \* Preliminary test for freshness of fatty and lean fish stored in unit showed that the fish remained in good condition for 3 and 4 days respectively.
- \* The fish ham prepared using shrimp chunks instead of cured meat in fibrous casing were achieved.
- \* Fish patties using pugnacious spices were prepared with fortification of button mushrooms with other ingredients. The optimization process was completed using 9 point hedonic scale sensory evaluation system. The final product was prepared using 25% mushroom to the weight of fish meat.
- \* Standardization of starch percentage and time of cooking for the development of fish chikuwa showed that corn flour got higher average organoleptic scores than the one prepared with rice flour and chikuwa prepared with 10 % flour got higher average scores than the one containing 5 %

flour. A convectional cooking using a lab model micro oven showed that, the grilling time of 20 min was ideal.

**25) Title: A value chain in production and utilization of Indian major carps and prawn from aquaculture system**

- \* Process for gelatin from mrigal bone was standaradized.
- \* Stability of protein hydrolysates against digestive enzymes was studied.
- \* Isolation of natural actomyosin from IMC and mode of action of proteolytic enzymes were studied.

**26) Title: Improving food security by reducing post harvest losses in the fisheries sector**

- \* Utilization of fish processing waste for high value products by application of proteolysis.
- \* Effect of freeze drying and oven drying fish protein hydrolysates on the antioxidant and ACE inhibitory activity was established.
- \* The bio-activity peptides from traditional fermented products were studied.
- \* A prototype of solar –cum biomass hybrid drier was designed and fabricated. Trial runs showed that the complete drying of fish could be achieved within 20 hrs.

**27) Title: Development of e-courses for BFSc degree programme**

- \* All the 54 courses were uploaded to website.
- \* Refinement of multimedia content is still going on.
- \* The workshop on sensitizing the faculty of other Fisheries Colleges in the country is under progress.

## INSTITUTE OF ANIMAL HEALTH & VETERINARY BIOLOGICALS, BENGALURU

### **1) Title: AICRP on Animal Disease Monitoring and Surveillance**

*Details of the outbreaks, attacks and deaths due to notifiable diseases in Karnataka state during 2012-13*

#	Disease	Outbreaks	Attacks	Deaths
1	Haemorrhagic Septicaemia	40	320	119
2	Black Quarter	90	448	186
3	Enterotoxaemia	05	292	79
4	Rabies	02	20	20
5	Anthrax	03	103	11
6	Peste des Petits Ruminants	13	1935	106
7	Sheep and Goat Pox	01	02	00
8	Blue Tongue	01	02	00

### **2) Title: AICRP for Epidemiological Studies on Foot and Mouth Disease**

*Progress report of Foot and Mouth Disease (Bengaluru Regional Centre) during the period 2012-13*

Months	No of outbreaks	Virus identified during outbreaks	No. of clinical Samples processed	Virus type identified				No. of pre/post & Diva vaccinal sera samples processed	Total no. of samples processed
				O	A	Asia 1	VNR		
Apr- 12	3	O & Asia-1	10	3	-	2	5	903	913
May- 12	2	O	13	13				1233	1246
June- 12	8	O, A & Asia-1	18	3	2	6	7	2083	2009
July- 12	6	A & Asia-1	12	8	-	5	-	2110	2122
Aug-12	5	O	8	7	-	-	1	2187	2195
Sept- 12	3	A & O	8	1	2	-	5	2521	2529
Oct- 12	3	A & Asia-1	13	-	3	1	9	2189	2202
Nov- 12	2	A & Asia-1	-	-	-	-	-	3124	3130
Dec- 12	-	-	-	-	-	-	-	3036	3036
Jan-13	5	O	11	7	-	-	4	3986	3997
Feb-13	4	O	19	11	-	-	8	2743	2762
Mar-13	4	O	17	6	-	-	11	2484	2495
<b>Grand Total</b>	<b>45</b>		<b>129</b>	<b>59</b>	<b>7</b>	<b>14</b>	<b>50</b>	<b>28599</b>	<b>28626</b>

### **3) Title: Southern Regional Disease Diagnostic Laboratory**

\* A total of 34,009 samples were analyzed at SRDDL in different sections viz., Diagnostic pathology-980, Diagnostic

parasitology-1097, Diagnostic bacteriology and mycology-2757, Diagnostic virology-1432, Seroepidemiology-26975 and Biochemistry and toxicology-768.

- 4) Title: All India Network Project on Blue Tongue Disease**
- \* During the year 2012-13, totally 131 blood samples were tested for the presence of BTV by RT-PCR. All samples were found to be negative.
  - \* 280 sera samples were collected from different districts.
  - \* Suitable primers for Real time RT-PCR had been designed and standardized of RT-PCR for blood samples was done.
  - \* Four new isolates have been confirmed and it will be sent to Hissar for identification and serotyping.
- 5) Title: Strengthening of biological production division of IAH&VB for increased production of vaccines for total health coverage of livestock and poultry rural farmers**
- \* Modification of labs and fermentor room.
  - \* Strengthening of small animal house.
  - \* Procurement of equipments required for vaccine production.
  - \* Procurement of consumables for increased production of vaccine.
  - \* Required chemicals, media, reagents and bottles and other materials required for vaccine production procured.
  - \* The labs proposed and the fermenter room were modified
  - \* Animal house was built, necessary equipment were procured and strengthening of production division has been carried out for augmenting vaccine production.
- 6) Title: Up gradation of vaccine production laboratories as per GMP for consistent supply of vaccines to livestock and poultry of farming community**
- \* Upgradation of laboratories as per the GMP ( Schedule M) suitable for vaccine production.
  - \* Procurement of required equipments, maintenance of the AHUS, chillers, bio-safety cabinets, their validation, certification required as per Schedule-M.
- 7) Title: Centre for development of vaccines and diagnostics with a special reference to emerging diseases affecting livestock and poultry of farming community**
- \* Building infrastructure as per GMP and GLP norms.
  - \* Equipment for GMP and GLP labs.
  - \* Supporting facilities.
  - \* Engaged the contract scientists and technicians for R&D work.
  - \* Purchase of required consumables for R&D work.
  - \* The building work is under progress.
  - \* Tenders have been invited for some of the equipments.
- 8) Title: Development of vaccine and diagnostic antigen for mycoplasma infection in small ruminants**
- \* Modification of lab.
  - \* Procurement of equipments.
  - \* Isolation and standardization of diagnostic antigen and development of vaccine for small ruminants.
  - \* Contractual labor for the research work, filed trials, sample collection etc.
  - \* Modification of lab work is under progress.
  - \* Equipments have been procured.
  - \* Five isolates were obtained from sheep and standardization work of diagnostic antigen is under progress.
- 9) Title: Development and evaluation of vaccine for duck pasteurellosis**
- \* Isolated the *Pasturella multocida* organisms from ducks and turkeys.
  - \* Characterized the organisms.

- \* Prepared an inactivated vaccine.
- \* Successful trials were undertaken in turkey and duck farms.

**10) Title: Development of *Brucella S-19* vaccine facilities**

- \* The seed which was preserved was revived.
- \* Good growth was observed in the plates.

**11) Title: Development of *Clostridium perfringens* Type-A vaccine**

- \* The organisms were isolated.
- \* The isolated organisms were typed ads *Cl. perfringens* type A.
- \* Standardized the inactivated vaccine preparation technique.
- \* Prepared 4000 doses of the vaccine and supplied to three sheep farms.
- \* The vaccine successfully controlled the disease and mortality.

**12) Title: Influence of time and space on vaccine production under Ethnoveterinary practices**

- \* The effect of time of inoculation on growth of *Clostridial* organisms and *Pasteurella* organisms were studied. It was observed that the more growth was observed when the broth was inoculated during Rahu kala.
- \* The experiment was repeated thrice and in all the three repetitions, the similar observations were found.

**13) Title: Elucidation of oncolytic pathways of Blue Tongue Virus by *invitro* and *invivo* studies**

- \* BTV-10 and BTV-16 were propagated and titrated. The master stock of virus was kept ready for the study.

**14) Title: Development of mycoplasma vaccine and diagnostic antigen for small ruminants**

- \* Three isolates have been made and a test batch of diagnostic antigen has been prepared.

**LIVESTOCK RESEARCH & INFORMATION CENTER (A), KONEHALLI, TIPTUR**

**1) Title: Establishment of Amrithmahal Cattle Breeding Station**

- \* An Amrithmahal Cattle Breeding Station was established.
- \* Procured 25 female Amrithmahal calves and 2 male Amrithmahal calves from the Dept. of AH & VS.
- \* The behaviour changes of these animals after confinement have been recorded to know the behavioral changes in semi wild nature to docile nature.
- \* Data on body measurements such as height at wither, body length, chest girth and paunch girth are being recorded at regular interval to study the growth pattern, gain in body weight at different ages.
- \* Faecal samples and skin scrapings were examined for the prevalence of endo and ecto parasitic infestations.
- \* 30 acres of uncultivable land is developed for cultivation of fodder crops for feeding of Amrithmahal cattle.

**FISHERIES RESEARCH AND INFORMATION CENTER, HEBBAL, BENGALURU**

**1) Title: Development of brood bank for common carp**

- \* Breeder seed was supplied to hatcheries and also for demonstrations.
- \* Two demonstrations were conducted to evaluate the performance of Amur with local common carp i.e. on station (FRIC, Hesaraghatta) and farmers pond (Nadavi, Bellary District).
- \* The growth performances of Amur and Local Common Carp under polyculture

were  $223.41 \pm 24.38$ g &  $145.00 \pm 8.57$ g at FRIC, Hesaraghatta and  $883.75 \pm 4.02$  g and  $607.25$ g  $\pm 0.95$ g Nedavi, Bellary respectively.

- \* The performance of Amur was found superior over the Local common carp in both the demonstrations indicating the better suitability this breed for low input aquaculture systems.
  - \* The breeder seed of Amur common carp was also supplied to NFFBB, (NFDB), Bhubaneswar, Odisha, Central State Farm – Jawalgera, Sindhamur Tq, Raichur and FRIC, Bhutnal, Bijapur.
- 2) Title: Growth and survival of monosex Nile tilapia *Oreochromis niloticus* under monoculture**
- \* The growth evaluation was undertaken in cement ponds.
  - \* The experimental duration was about 6 months.
  - \* The stocking density was 10000, 15000 and 20000 numbers/ha.
  - \* The initial mean weights of tilapia in the above SD were  $0.43 \pm 0.02$ g,  $0.45 \pm 0.01$ g and  $0.38 \pm 0.01$ g.
  - \* The mean weight attained over a period of 5 months was  $176.09 \pm 11.15$ g,  $172.36 \pm 10.10$ g and  $139.85 \pm 7.68$ g respectively.

#### FISHERIES RESEARCH & INFORMATION CENTER, ANKOLA

- 1) Title: Culture of brackishwater fishes (Mullet) alternative to shrimp farming**
- \* Demonstration of brackishwater fish culture as an alternative to shrimp farming was undertaken.
- 2) Title: Dial feeding periodicity of pearl spot, *Etroplus suratensis* (Bloch) in Ankola waters**
- \* Effective feed utilization which helps in the culture of pear spot in order to

encourage the individual fish farmers to take up this culture.

- 3) Title: Development of captive brood stock of sand whiting and pearl spot**  
Brood stock development and breeding techniques of sand whiting and pearl spot.

#### LIVESTOCK RESEARCH & INFORMATION CENTER (SHEEP), NAGAMANGALA

- 1) Title: Mega Sheep Seed Project on Mandya Sheep**
- \* Over 9000/475 animals/farmers registered/covered under the project.
  - \* Established of 548 elite Mandya breeding sheep flock at the farm (including Uni 108 animals).
  - \* Till date 67 elite-breeding rams have been distributed and performance studies are in progress.
- 2) Title: Effect of free and restricted suckling on growth performance in Mandya lambs.**
- \* Result revealed the difference in ADG between free suckling lambs till one month and two month of age was significantly higher ( $P= 0.05$ ) than restricted suckling lambs.
  - \* Mandya lambs that had free suckling or continuous access to their dams during early part of their growing phase had improved growth performance in contrast to restricted suckling lambs.
- 3) Title: Effect of trace mineral supplementation on the performance in Mandya lambs and ewes**
- \* The study revealed positive influence of organic trace mineral supplementation on prenatal growth performance in terms of improved birth weight and augmented postnatal ADG in Mandya lambs.

### 3. Research Collaborations / MoUs

#### DIRECTORATE OF RESEARCH, KVAFSU, BIDAR

**Details of Memorandum of Understandings (MoUs) signed by KVAFSU, Bidar with International and National Institutions/Universities/Agencies during the year 2012-13**

*a) At International level*

#	Institutions involved in MOU	Date of MoU	Details Regarding MOU	Remarks
1	CRUCELL Holland B.V. The Netherlands with CVA	27.04.2012	(a) To determine glycoprotein (G) gene sequence of India rabies virus (RV isolates for phylogenetic and cluster analysis with a view to select representative strains. (b) To assess the in vitro neutralizing capacity of monoclonal antibody (mAb) cocktail "CL184" a combination of two mAbs, CR57 and CR4098 against representative Indian RV strains.	5 years
2	M/s. Altech, USA	13.02.2013	Feed and fodder evaluation and development of cost effective feeding strategies to increase ruminant production and reduce environmental impact	5 years

*b) At National Level*

#	Institutions involved in MOU	Date of MOU	Details Regarding MOU	Remarks
1	FRT Agri. Farms, Hyderabad	10.05.2012	Establishment of skill development centers in the field of dairy and training to rural youth	2 years
2	Waltham Desk, Mars India, New Delhi	11.05.2012	Education and training in veterinary medicine	5 years
3	FRT Dairy Ventures Pvt., Ltd., Bengaluru	26.05.2012	For training rural youths in dairying	-
4	PDP, Hyderabad	15.11.2012	AICRP on poultry breeding for meat	ICAR, New Delhi
5	CIPHET, Ludhiana	17.11.2012	Collaborative Research	5 years
6	CSWRI, Avikanagar	06.12.2012	Collaborative Research	5 years

**4) Patents****DIRECTORATE OF RESEARCH, KVAFSU, BIDAR****Patents Filed/Applied during 2012-13**

#	<i>Title</i>	<i>Patent App. No.</i>	<i>Scientist</i>
1	Development of Real Time PCR based Antigen detection kit for Diagnosis of Bovine Herpes Virus-1	778/CHE/2012	B.M. Chandranaik D. Rathnamma S.S. Patil, S. Isloor K.P. Ramesha B.M. Veeregowda C. Renukaprasad
2	Development of biofilm based vaccine against Bovine mastitis	CBR No. 100055	Shrikrishna Isloor D. Rathnamma B.M. Veeregowda S. Yathiraj Suguna Rao H.D. Narayana Swamy Y.B. Rajeshwari

**5) Awards/Recognitions**

#	<i>Name of the Scientist</i>	<i>Award</i>	<i>Year</i>	<i>Agency</i>
<b>VETERINARY COLLEGE, BENGALURU</b>				
1	S. Yathiraj	Global Companion Animal Veterinarian of India 2012	2012	The Mars India Global Award for Veterinarian in India by Waltham
2	Placid E. D'Souza	Best Citizens of India Award	2012	International Publishing House, New Delhi
3	Placid E. D'Souza	Dr. S.R. Rao memorial Oration Award	2013	Bombay Veterinary College Alumni Association
4	Sanweer Khatoon	Best Oral Presentation Award	2012	IAAVP
5	S.S. Honnappagol	Indira Gandhi Sadhbavana Gold Medal Award	2013	Global Economic Progress and Research association
6	V.C. Murthy	Award of Honor	2013	Indian society for the study of canine practice
7	K. Manjunatha	Best Paper Presentation	2012	Annual Convention of IAVA at Mannuthy, Kerala
8	Vinodkumar Divatar	Best M.V.Sc., thesis award	2012	Annual Convention of IAVA at Mannuthy, Kerala
9	R.V. Prasad V. Ramakrishna	Best Poster Award	2012	5 <sup>th</sup> Annual KSTA Conference-2012- Bengaluru
10	L. Ranganath	Fellow of Indian Society for Advancement of Canine Practice (FISACP)	2013	ISACP, Lucknow, UP

11	L. Ranganath	Award for Social Service	2012	Chinmaya Seva Sanga, Bengaluru
12	H. N. N. Murthy Mahesh Patil Srikrishna Isloor	Best Poster Award	2012	IPSA, SVVU, Tirupati
<b>VETERINARY COLLEGE, SHIMOGA</b>				
1	M. Dhoollappa	Summer Research Fellowship	2013	Indian Academy of Sciences
<b>VETERINARY COLLEGE, HASSAN</b>				
1	Mahadevappa D. Gouri	Best Poster Award	2012	20 <sup>th</sup> Annual convention, ISAPM
<b>DAIRY SCIENCE COLLEGE, BENGALURU</b>				
1	Harini Venugopal	International award for poster and paper presentation	2012	Foods-12 organized by MOP College, Chennai
<b>INSTITUTE OF ANIMAL HEALTH &amp; VETERINARY BIOLOGICALS, BENGALURU</b>				
1	C. Renukaprasad	Letter of Appreciation	2012	Project Coordinator, Janajagaran, Belgaum for the production of Blue tongue vaccine for sheep.
2	C. Renukaprasad Raveendra Hegde	Certificate of Appreciation	2012	Annual scientists meet of PD FMD held at Mathura (AICRP, FMD RC, Bengaluru adjudged as the second best performing centre in the country)
3	B.M.Chandranaiik	Member, State Level Expert Committee	2013	Management of wild animals in Nagarhole and Bandipur forest areas during acute drought conditions

**6. Research Council & Important decisions taken during Research Council Meeting**

a) Utilization of Institutional Charges

The Research Council approved the following guidelines for the utilization of institutional charges provided by different funding agency under research projects, as shown below.

- \* 40% to the Principal Investigators
- \* 20% to the Director of Research
- \* 20% to the Comptroller

- \* 20% to the respective Colleges/ Research Station/KVKS
- b) Prescribing fee for conducting training and providing research facilities for outside student/scholars/faculty

The Research council recommended the following fees for conducting training and providing research facilities to outside student/scholars/faculty

#	Training Period	National Fellows (in Rs.)	International Fellows (in US \$)
1	Up to 1 week	2500.00	100.00
2	Above 1 week & up to 1 month	10,000.00	350.00
3	Above 1 month & up to 3months	15,000.00	1150.00
4	Above 3 months & up to 6months	30,000.00	2300.00
5	Above 6months & up to 12 months	60,000.00	4500.00

The Research fellows have to meet the cost of consumables and other operational cost towards research activities. The fee prescribed above is bench fee of the University for providing facilities.

## IV. EXTENSION

The University is striving hard to improve the socio-economic conditions of the farming community through its extension education activities. In order to achieve this, the university is organizing training programmes, demonstrations, farmer-scientist interaction sessions, field visits, farm and livestock melas etc, through its constituent colleges and research stations spread across the state.

### **1. Conference/ Workshops/Seminars / Trainings/Workshops/Seminars organized**

#### *i) International level programmes*

##### *a) Conference*

#	Date	Place	Title	Organized by
<b>VETERINARY COLLEGE, BENGALURU (VCH)</b>				
1	28.01.2013 to 29.01.2013	KVC, Bengaluru	Strengthening of Rabies Diagnosis and Dog population Control in the Indian Subcontinent	VCH & CWVA
<b>COLLEGE OF FISHERIES, MANGALORE (FCM)</b>				
1	3.12.2012 to 6.12. 2012	FCM	Aquatic resources for Eradication of hunger and malnutrition- Opportunities and challenges	AFSIB & KVAFSU

*Note: VCH-Veterinary College, Hebbal; CWVA-Common Wealth Veterinary Association; AFSIB-Asian Fisheries Society, Indian Branch; KVAFSU-Karnataka Veterinary, Animal & Fisheries Sciences University, Bidar.*

##### *b) Workshops*

#	Date	Place	Title	Organized by
<b>VETERINARY COLLEGE, BENGALURU (VCH)</b>				
1	08.10.2012 to 10.10.2012	Bengaluru	Preclinical GLP Study Director Workshop	Dept. of VPT & American College of Toxicology

##### *c) Seminars*

#	Date	Place	Title	Organized by
<b>COLLEGE OF FISHERIES, MANGALORE (FCM)</b>				
1	24.01.2013	Dept. of Microbiology	Challenges of food safety and International trade	Raj Patel, Runnemede Bioscience, University of London, UK
2	19.03.2013	Dept. of Microbiology	Expression of virulence genes of vibrios belonging to the Harveyi clade in the brine shrimp Artemia	Darshanee Ruwandeepika Sabaragamuwa University, Sri Lanka

*d) Training programmes*

#	Date	Place	Title	Organized by
<b>VETERINARY COLLEGE, BENGALURU (VCH)</b>				
1	07.10.2012 to 08.10.2012	VCH	Examination for Diplomate of American Board of Toxicology	Dept. of VPT
<b>COLLEGE OF FISHERIES, MANGALORE (FCM)</b>				
1	02.07.2012 to 14.07.2012	FCM	Internship programme for foreign students on marine biodiversity, conservation & management	Dept. of AEM
2	24/04/2012 to 18/03/2013	FCM	Epidemiology of antimicrobial resistance and virulence genes associated with clinical and food <i>Salmonella</i> isolates	Dept. of Microbiology, DST, New Delhi and CICS

*ii) National level programmes*

*a) Conference*

#	Date	Place	Title	Organized by
<b>VETERINARY COLLEGE, BENGALURU (VCH)</b>				
1	04.05.2012	VCH	Innovative methods of teaching veterinary anatomy and wild life anatomy	Dept. of VAN
2	12.12.2012 to 14.12.2012	VCH	Role of nutraceuticals in animal health and 12 <sup>th</sup> Annual conference of Veterinary Pharmacology and Toxicology (ISVPT)	Dept. of VPT
3	28.01.2013 to 31.01.2013	VCH	Rabies conference & dRIT	CWVA & KVAFSU

*b) Workshops*

#	Date	Place	Title	Organized by
<b>VETERINARY COLLEGE, BENGALURU (VCH)</b>				
1	16.02.2013	VCH	Effect of mining on livestock and implementation of disease control programme in Karnataka state with special reference to control and containment of bird flu	DAH&VS
2	30.01.2013 to 31.01.2013	VCH	Direct rapid immunohisto-chemistry (dRIT)	CWVA, KVAFSU and CRUCELL
<b>COLLEGE OF FISHERIES, MANGALORE (FCM)</b>				
1	17.10.2012 to 18.10.2012	FCM	Lecture series for post graduate students on marine biodiversity & conservation	Dept. of AEM
<b>INSTITUTE OF WILDLIFE VETERINARY RESEARCH, KODAGU (IWVR)</b>				
1	11.12.2012	IWVR	Human wildlife conflict in Kodagu district	IWVR



c) Seminars

#	Date	Place	Title	Organized by
<b>VETERINARY COLLEGE, BENGALURU (VCH)</b>				
1	16.08.2012	MSRMC Bengaluru	Auto immune disease from bench to bed side	Dept. of Microbiology & MSRMC, Bengaluru
2	28.01.2013 to 30.01.2013	VCH	Technical seminar of CWA on rabies	Veterinary College, Bengaluru and CWA
<b>COLLEGE OF FISHERIES, MANGALORE (FCM)</b>				
1	27.08.2012	FCM	The tale of two component systems of bioinformatics	Dept. of Microbiology
2	18.12.2012	FCM	Introduction to Caenorhabditis elegans model for research	Dept. of Microbiology
3	21/12/2012	FCM	Role of two component systems in fish pathogenesis by Edwardsiella spp	Dept. of Microbiology

d) Trainings

#	Date	Place	Title	Organized by
<b>VETERINARY COLLEGE, BENGALURU (VCH)</b>				
1	19.11.2012 to 09.12.2012	VCH	Biotechnological Applications in Veterinary Parasitology	CAFT, Dept. of VPA
2	29.01.2013	VCH	Management of ewes and rams for high fertility	VCH
3	16.02.2013	VCH	Field approaches to reproductive problems in dairy cattle	Dept. of VGO & XVII Annual State Level ISSAR, Karnataka chapter
4	09.04.2012 to 11.04.2012	Dept. of VAHE	Recent updates on diagnostic and therapeutics with emphasis on large animals	Veterinary College, Bengaluru
5	16.04.2012 to 18.04.2012	Dept. of VAHE	Pashupalanae mattu nirvahane	Veterinary College, Bengaluru.
6	25.04.2012 to 27.04.2012	Dept. of VAHE	Recent updates on diagnostic and therapeutics with emphasis on large animals	Veterinary College, Bengaluru.
7	02.05.2012 to 04.05.2012	Dept. of VAHE	Pashupalanae mattu Nirvahane	Veterinary College, Bengaluru.
8	18.06.2012	Dept. of VAHE	Livestock management and fodder production	Veterinary College, Bengaluru.

9	19.06.2012	Dept. of VAHE	Livestock management and fodder production	Veterinary College, Bengaluru
10	21.06.2012	Dept. of VAHE	Livestock management and fodder production	Veterinary College, Bengaluru
11	18.10.2012	Dept. of VAHE	Livestock management and fodder production	Veterinary College, Bengaluru
12	29.11.2012	Dept. of VAHE	Bio medical waste management in veterinary hospitals	Veterinary College, Bengaluru
13	30.11.2012	Dept. of VAHE	Bio medical waste management in veterinary hospitals	Veterinary College, Bengaluru
14	2012-2013	Haniyuru village	Capacity building trainings (10 trainings organized)	Dept. of VAHE, Veterinary College, Bengaluru.
15	17.04.2012	VCH	RKVY farmers training - Disease identification in livestock	Veterinary College, Bengaluru
16	05.04.2012	VCH	RKVY training on Diseases of livestock	Veterinary College, Bengaluru
17	14.05.2012	VCH	RKVY farmers training - Disease identification in livestock	Veterinary College, Bengaluru
18	29.07.2012	VCH	EMPRI TOT program - Biomedical waste management	EMPRI, GOK
19	28.01.2013 to 30.01.2013	VCH	Technical seminar of CWA on rabies	Veterinary College, Bengaluru and CWA
20	17.07.2012	VCH	Emerging diseases of poultry	Veterinary College, Bengaluru
21	10.04.2012	VCH	RKVY hands on training program	Veterinary College, Bengaluru
22	-	Dept. of Poultry Sc.	Backyard poultry rearing (Giriraja and Swarnadhabra)	Dept. of Poultry Science

#### **VETERINARY COLLEGE, BIDAR (VCB)**

1	07.11.2012 to 09.11.2012	VCB	Role of livestock in integrated farming system	Dept. of VAHE
2	19.11.2012 to 26.11.2012	VCB	Model training on Application of ICT in animal husbandry	Dept. of AGB
3	13.12.2012 to 18.12.2012	VCB	Foundation training for newly recruited teaching faculty by NAARM	Veterinary College, Bidar
4	08.01.2013 to 10.01.2013	VCB	RKVY sponsored Scientific livestock production	Veterinary College, Bidar

**VETERINARY COLLEGE, SHIVAMOGGA (VCS)**

1	10.12.2012 to 17.12.2012	VCS	Intensive and semi intensive sheep rearing as source of rural employment and livelihood security	EEC, Shivamogga & MoA, GOI
2	20.11.2012 to 21.11.2012	VCS	Sheep and goat rearing under stall feeding (Regional Level Training)	EEC, Shivamogga
3	16.01.2013	Hole Hatty, Shivamogg a Tq.	Economical dairy farming (Regional Level Training)	EEC, Shivamogga & DAH&VS
4	10.02.2013	Balekoppa Shivamogg a Tq.	Integrated dairy farming (Regional Level Training)	EEC, Shivamogga and NSS Unit

**VETERINARY COLLEGE, HASSAN (HVC)**

1	13.03.2013 to 18.03.2013	KVK, Hassan	Dairy farming	KVK & Veterinary College, Hassan
2	28.03.2013	HVC	Scientific sheep & goat rearing	EEC, Hassan & Dept. of ILFC

**DAIRY SCIENCE COLLEGE, BENGALURU (DSCH)**

1	13.12.2012 to 15.12.2012	DSCH	Clean milk production	Dept. of Dairy Microbiology
2	01.03.2013 to 03.03.2013	VCS	Preparation and marketing of value added traditional milk products	KVAFSU, BIDAR
3	22.03.2013	Chikballapur	Preparation of value added dairy products	KMF, Chikballapur
4	26.11.2012 to 03.12.2012	DSCH	Dairy entrepreneurship development	Dept. of DEBM & MoA, GOI

**COLLEGE OF FISHERIES, MANGALORE (FCM)**

1	05.02.2013 to 14.03.2013	FCM	Isolation, identification and molecular characterization of vibrios associated with seafood	Dept. of Microbiology
2	25.02.2013 to 23.03.2013	FCM	Cloning and sequencing of 'chey' gene of <i>Aeromonas hydrophila</i> derived through neural network	Dept. of Microbiology
3	13.03.2013 to 16.03.2013	FCM	Application of bioinformatics in marine sciences	Dept. of Microbiology

**INSTITUTE OF ANIMAL HEALTH & VETERINARY BIOLOGICALS, BENGALURU  
(IAH&VB)**

1	09.04.2012	NICNET, Bengaluru	Reporting of disease outbreak and laboratory reports under NADRES	DAH&VS & IAH&VB.
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**INSTITUTE OF WILDLIFE VETERINARY RESEARCH, KODAGU (IWVR)**

1	22.01.2013 to 24.01.2013	IWVR	Post-mortem and forensic aspects in wild animals	IWVR, Kodagu
2	26.02.2013 to 28.02.2013	IWVR	Post-mortem and forensic aspects in wild animals	IWVR, Kodagu

**KRISHI VIGYAN KENDRA, DAKSHINA KANNADA (KVK-DK)**

1	10.04.2012 to 14.04.2012	KVK-DK	Ornamental fish production and rearing	MPEDA & KVK
2	14.05.2012 to 19.05.2012	KVK-DK	Farmer facilitators training under bhoochethana programme	KSDA & KVK
4	15.05.2012	Karambaru village	Importance of soil testing and soil sampling demonstration	KVK
5	18.05.2012	Tenkamijaru Village	Integrated crop management in paddy	KVK
6	18.05.2012	Tenkamijaru village	Acid soil management	KVK
7	29.05.2012	Iruvailu village	Integrated nutrient management in Arecanut	KVK
8	29.05.2012	Iruvailu village	Management of root grub in Arecanut	KVK
9	08.06.2012	Kumbara Grama	'Cultivation of high yielding variety of Cassava' (HYV-Sri Vijaya)	KVK
10	12.06.2012	KVK-DK	Importance, uses and demonstration of jackfruit value added products	KVK
11	13.06.2012	Chandapadi (Vittla)	Management of koleroga in Arecanut	KVK
12	15.06.2012	KVK-DK	Fish culture	KVK
13	11.07.2012	Ujirandi palke	Integrated crop management in Jasmine	KVK
14	31.07.2012	Chandapadi (Vittla)	Potash management in Arecanut	KVK
15	01.08.2012 to 03.08.2012	KVK-DK	Polyculture of fish for food and nutritional security	ATMA & KVK
16	24.08.2012	KVK-DK	Integrated crop management in horticulture crops	KVK

17	28.08.2012	KVK-DK	Importance, uses and nutrition value of ragi	KVK
18	07.09.2012,	Bolmar Salethur Bantwal	Borewell recharge method demonstration	KVK
19	20.09.2012	Urva Store, Mangalore	Jasmine cultivation practices:	KVK
20	22.09.2012	Moodabidri	Pepper & pineapple cultivation practices	KVK
21	28.09.2012	Kanyana	Integrated crop management in banana (FLD)	KVK
22	28.09.2012	Manila	Banana bunch feeding cow dung with a mixture of nutrients (FLD)	KVK
23	29.09.2012	Muchuur	Quick wilt disease management in pepper	KVK
24	30.09.2012.	Bantwal Kasba	Mechanised paddy cultivation	KVK
25	11.10.2012	KVK-DK	Cultivation and management in horticulture crops	KVK
26	15.10.2012	Bantwal Kasba	Dapog method of paddy nursery raising method demonstration	KVK
27	16.10.2012	KVK-DK	World Food Day	KVK
28	20.10.2012	Bantwal Kasba	Dapog method of paddy nursery raising method demonstration	KVK
29	26.10.2012	Bantwal Kasba	Dapog method of paddy nursery raising method demonstration	KVK
30	28.10.2012	Bantwal Kasba	Mechanised paddy transplanting method demonstration	KVK
31	05.11.2012	Tenkamajar u	Integrated nutrient management in bitter gourd	KVK
32	05.11.2012	Tenkamajar u	Integrated nutrient management in ridge gourd	KVK
33	07.11.2012	Golthamajalu, Bantwal	Mechanised paddy transplanting and method demonstration	KVK
34	09.11.2012	Punjalakkatt e, Bantwal	Mechanised paddy transplanting and method demonstration	KVK
35	10.11.2012	Hosangady, Belthangady	SRI method of paddy cultivation	KVK
36	25.11.2012	Panjikallu, Bantwal	Mechanized paddy transplanting and method demonstration	KVK
37	03.01.2013	Kudmaru, Puttur taluk	Management of tea mosquito bug in cashew	KVK
38	05.01.2013	KVK-DK	Integrated fish farming	KVK
39	09.01.2013	Polali	Vegetable cultivation practices	KVK

40	28.01.2013 to 02.02.2013	KVK-DK	Friends of coconut tree	Coconut Development Board, Bengaluru
41	04.02.2013	KVK-DK	Women in agriculture day	KVK
42	07.02.2013	Kajoor Belthangady	Production technology of sesamum oilseed crop	KVK
43	09.02.2013	KVK-DK	Integrated farming systems and method demonstration of vermicompost making	KVK
44	12.02.2013	KVK-DK	Aquarium fabrication and maintenance	KVK
45	12.02.2013	Kuthlur Belthangady	Production technology of blackgram	KVK
46	12.02.2013	Kuthlur Belthangady	Production technology of Co-4 fodder crops	KVK
47	13.02.2013	KVK-DK	Preparation of fruit value added products (such as jam, Squash, Ketchup)	KVK
48	19.02.2013	Kasaba village, Bantwal Taluk	Management of inflorescence dieback in Arecanut	KVK
49	21.02.2013	Hosangadi	Storage of paddy for seed purpose using metal bin	KVK
50	04.03.2013 to 09.03.2013	KVK-DK	Friends of coconut tree	Coconut Development Board, Bengaluru
51	11.03.2013 to 16.03.2013	KVK-DK	Friends of coconut tree	Coconut Development Board, Bengaluru
52	16.03.2013	Mudubidre	Backyard rearing of swarnadhabra poultry chicks	KVK
53	18.03.2013	KVK-DK	Value addition to fish	KVK
54	19.03.2013	KVK-DK	Clean milk production and value addition to milk	KVK
55	20.03.2013	KVK-DK	Value addition to fruits	KVK
56	21.03.2013	KVK-DK	Scientific pig farming	KVK
57	22.03.2013	KVK-DK	Integrated fish farming	KVK
58	23.03.2013	KVK-DK	Aquarium fabrication and maintenance	KVK
59	28.03.2013	Konaje Village, Mangalore Taluk	Management of rhinocerous beetle in coconut	KVK
60	30.03.2013	Vogga	Drying of pepper by solarization method using LDPE sheets	KVK



**LIVESTOCK RESEARCH AND INFORMATION CENTER, KONEHALLI, TIPTUR (LRIC)**

1	30.08.2012	LRIC, Konehalli	Dairy farming	LRIC & AHP, Konehalli
2	05.11.2012	LRIC, Konehalli	Importance of conserving native breeds of cattle	LRIC & AHP, Konehalli
3	06.11.2012	LRIC, Konehalli	Importance of clean milk production	LRIC & AHP, Konehalli
4	07.11.2012	LRIC, Konehalli	Importance of wormi compost	LRIC & AHP, Konehalli
5	08.11.2012	LRIC, Konehalli	Modern rearing of sheep and goats	LRIC & AHP, Konehalli
6	31.01.2013 to 02.02.2013	LRIC, Konehalli	Scientific rearing of pig	LRIC & AHP, Konehalli
7	04.02.2013 to 06.02.2013	LRIC, Konehalli	Modern pig rearing	LRIC & AHP, Konehalli
8	13.02.2013	LRIC, Konehalli	Modern pig rearing	LRIC & AHP, Konehalli
9	22.02.2013	LRIC, Konehalli	Modern pig rearing	LRIC & AHP, Konehalli

**LIVESTOCK RESEARCH AND INFORMATION CENTER (DEONI), HALLIKHED (LRIC)**

1	04.02.2013	LRIC, Hallikhed	Profitable dairying for rural farmers	LRIC & DAH&VS, Bidar
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**LIVESTOCK RESEARCH AND INFORMATION CENTER (SHEEP), NAGAMANGALA (LRIC)**

1	15.03.2013	LRIC, Nagamangala	Scientific sheep husbandry practices for farmers	LRIC
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**FISHERIES RESEARCH AND INFORMATION CENTER, HEBBAL (FRIC)**

1	16.08.2012	FRIC, Hebbal	Fish Farming Practices	DoA, GOK & FRIC
2	20.12.2012	FRIC, Hebbal	Fish Farming Practices	DoA, GOK & FRIC

**FISHERIES RESEARCH AND INFORMATION CENTER, BHUTNAL, BIJAPUR (FRIC)**

1	18.01.2013	KVK, Raichur	Fish culture in krushi hondas to augment additional income to farmers	FRIC; DoA, GoK & KVK, Raichur
2	02.02.2013	KVK, Raichur	Fish culture in krushi hondas to augment additional income to farmers	FRIC; DoA, GoK & KVK, Raichur
3	20.02.2013	KVK, Raichur	Fish culture in krushi hondas to augment additional income to farmers	FRIC; DoA, GoK & KVK, Raichur
4	28.03.2013	KVK, Raichur	Fish culture in krushi hondas to augment additional income to farmers	FRIC; DoA, GoK & KVK, Raichur



**FISHERIES RESEARCH AND INFORMATION CENTER, ANKOLA (FRIC)**

1	6.02.2013 to 20.02.2013	FRIC, Ankola	Fish and shellfish culture	FRIC, Ankola
2	May, 2013	FRIC, Ankola	Hygienic handling, preparation of fish value added fish products and solar drying of fish	FRIC, Ankola

**ANIMAL HUSBANDRY POLYTECHNIC, SHIGGAON, HAVERI (AHP)**

1	02.01.2013	AHP, Shiggaon	Profitable dairy farming	AHP & DAH&VS
2	17.01.2013	AHP, Shiggaon	Management of livestock during drought conditions	AHP & DAH&VS
3	31.01.2013	AHP, Shiggaon	Reproduction management in dairy animals	AHP & DAH&VS

**EXTENSION EDUCATION CENTER, HASSAN**

1	31.07.2012	HVC	Poultry rearing in rural areas	EEC and Dept. of ILFC
2	02.08.2012	HVC	Poultry rearing in rural areas	EEC and Dept. of ILFC
3	18.10.2012	HVC	Improvised poultry rearing	EEC and Dept. of ILFC
4	19.10.2012	HVC	Improvised poultry rearing	EEC and Dept. of ILFC
5	03.11.2012	HVC	One day training programme on improved poultry farming	EEC and Dept. of ILFC
6	28.12.2012	H. Mynahalli, Hassan	Awareness campaign on “Scientific calf rearing”	EEC, HVC
7	11.01.2013	HVC	Improvised poultry rearing	EEC, Hassan & Dept. of ILFC
8	12.01.2013	HVC	Improvised poultry rearing	EEC, Hassan & Dept. of ILFC
9	23.01.2013	HVC	Improvised goat rearing	EEC, Hassan & Dept. of ILFC
10	11.02.2013	Hirikadalur, Hassan	Awareness campaign on “Scientific calf rearing”	EEC, Hassan
11	14.03.2013	HVC	“Fodder production and its effective utilization	EEC, Hassan & Dept. of ILFC
12	28.03.2013	HVC	Scientific sheep & goat rearing	EEC, Hassan & Dept. of ILFC

**EXTENSION EDUCATION CENTER, BIDAR (EEC)**

1	05.06.2012	VCB	Importance of vaccination and deworming in livestock	EEC, Bidar
2	18.06.2012	VCB	Scientific dairy farming	EEC, Bidar
3	20.12.2012	VCB	Hands on experience -training programme on Preparation of value added milk products.	EEC, Bidar



4	20.12.2012	VCB	Training on scientific dairy farming	EEC, Bidar
5	16.01.2013	VCB	Dairying and preparation of value added milk products	EEC, Bidar and BRDI, Bidar
6	04.02.2013 to 06.02.2013	Sirkatnalli, Bidar	Scientific dairy farming	EEC, Bidar
7	13.02.2013 to 15.02.2013	VCB	Trainers training programme on Entrepreneurial opportunities in livestock sector	EEC, Bidar

**2. Participation as Resource Scientist in Conference / Training Programmes / Workshops/ Seminars/Symposia/Winter School, etc.**

#	Institution	Conferences	Training Programmes	Workshops	Seminars	Symposia	Winter/ Summer Schools	Total
1	Veterinary College, Bengaluru	11	59	01	23	-	02	96
2	Veterinary College, Bidar	-	108	01	-	01	-	110
3	Veterinary College, Shivamogga	-	38	4	12	-	-	54
4	Veterinary College, Hassan	4	37	1	1	2	-	45
5	Dairy Science College, Bengaluru	-	02	02	-	-	-	04
6	College of Fisheries, Mangalore	08	09	01	01	12	-	31
7	IAH&VB, Hebbal, Bengaluru	-	27	01	01	-	-	29
8	Institute of Wildlife Veterinary Research, Kodagu	-	7	-	-	-	-	7
9	Krishi Vigyan Kendra, Dakshina Kannada	-	61	01	10	-	-	72
10	FRIC, Hebbal, Bengaluru	-	02	-	-	-	-	02
11	FRIC, Hesaraghatta, Bengaluru	-	02	01	-	-	-	03
12	FRIC, Ankola, Uttar Kannada	-	15	-	-	-	-	15
13	FRIC, Bhutnal, Bijapur	-	08	-	-	-	-	08
14	LRIC, Konehalli, Tiptur, Tumkur	-	01	-	-	-	-	01
15	EEC, Bidar	-	12	-	-	-	-	12
16	AHP, Konehalli, Tiptur, Tumkur	-	02	-	-	-	-	02
17	AHP, Shiggaon, Haveri	-	6	-	-	-	-	6
<b>Total</b>		<b>23</b>	<b>396</b>	<b>13</b>	<b>48</b>	<b>15</b>	<b>2</b>	<b>497</b>

**3. Participation as Trainee Scientists in Conference / Training Programmes / Workshops / Seminars/Symposia/Winter School, etc.**

#	Institution	Conferences	Training Programmes	Workshops	Seminars	Symposia	Winter/Summer Schools	Total
1	Veterinary College, Bengaluru	06	13	03	07	01	01	31
2	Veterinary College, Bidar	01	26	01	01	02	04	35
3	Veterinary College, Shivamogga	2	4	4	-	2	1	13
4	Veterinary College, Hassan	2	8	1	1	4	2	18
5	Dairy Science College, Bengaluru	-	02	-	02	-	-	04
6	Dairy Science College, Gulbarga	-	4	1	1	-	-	06
7	College of Fisheries, Mangalore	03	09	04	01	13	-	30
8	IAH&VB, Bengaluru	-	01	-	02	-	-	03
9	Krishi Vigyan Kendra, Dakshina Kannada	-	3	4	3	1	-	11
10	FRIC, Hebbal, Bengaluru	-	-	01	-	-	-	01
11	FRIC, Ankola, Uttar Kannada	-	03	-	-	-	-	03
12	FRIC, Bhutnal, Bijapur	-	01	-	-	-	-	01
13	LRIC, Nagamangala, Mandya	-	02	-	-	-	-	02
		<b>Total</b>	<b>14</b>	<b>76</b>	<b>19</b>	<b>18</b>	<b>23</b>	<b>8</b>
								<b>158</b>

**4. Radio Talk/TV programmes**

*a) Radio Talks*

#	Date	AIR Station	Scientist	Topic
<b>DIRECTORATE OF EXTENSION, KVAFSU, BIDAR</b>				
1	15-05-2012	AIR, Raichur	K.N. Prabhudeva	Extension activities of KVAFSU
<b>VETERINARY COLLEGE, BENGALURU</b>				
1	30.12.2012	AIR, Bengaluru	M. Narayana Swamy	Physiological disorders in cattle and sheep
2	18.06.2012	AIR, Bengaluru	K. Sathyanarayan	Haalu uthpadaneyalli yemmegala paathra
3	16.10.2012	AIR, Bengaluru	H.A. Upendra	Zoonotic diseases of livestock
4	28.04.2012	AIR, Bengaluru	R.Gideon Gloridoss	Silage making
5	23.07.2012	AIR, Bengaluru	Siddaramanna	Feeding of calf and heifers
6	11.10.2012	AIR, Bengaluru	D.Rathnamma	Vaccination schedule for dairy animals

7	16.08.2012	AIR, Bengaluru	Shrikrishna Islloor	Control of enterotoxaemia and PPR diseases in sheep
8	28.10.2012	AIR, Bengaluru	B.M.Veeregowda	Vaccination schedule for poultry birds
9	30.11.2012	AIR, Bengaluru	R. Sharada	Common infectious diseases in animals & control
10	09.08.2012	AIR, Bengaluru	Nadeem Fairoze	Clean meat production
11	08.11.2012	AIR, Bengaluru	Nadeem Fairoze	Meat production for children and aged persons
12	11.05.2012	AIR, Bengaluru	K. Venkata Reddy	Information about the poultry.
13	17.05.2012	AIR, Bengaluru	K. Venkata Reddy	Backyard poultry farming using Giriraja and Swarnadhara
14	28.06.2012	AIR, Bengaluru	K. Venkata Reddy	Small scale poultry management
15	17.08.2012	AIR, Bengaluru	N.B. Shridhar	Use of medicinal plants in veterinary practice
16	08.10.2012	AIR, Bengaluru	G. Leena	Zoonotic diseases and their preventive measures

#### **VETERINARY COLLEGE, BIDAR**

1	09.11.2012	AIR,Gulbarga	T. Thirumalesh	Feeding of lactating cows and buffaloes
2	15.02.2013	AIR, Gulbarga	B. Ramachandra	Unconventional feeds & fodders
3	13.06.2012	AIR, Gulbarga	Shivakumar, K. Radder	First aid in cattle
4	17.12.2012	AIR, Gulbarga	Channappagouda Biradar	Animal husbandry information sources available in Hyderabad – Karnataka region
5	28.09.2012	AIR, Gulbarga	S.P. Satheesha	Cough and pneumonia in animals and its prevention and control
6	20.10.2012	AIR, Gulbarga	S.P. Satheesha	Tetanus in animals
7	30.12.2012	AIR, Gulbarga	S.P. Satheesha	Leptospirosis in animals and its zoonotic threat
8	03.09.2012	AIR, Gulbarga	Ravindra Bhoyar	Ruminal acidosis in animals
9	10.09.2012	AIR, Gulbarga	Ravindra Bhoyar	Calf rearing and its management
10	24.09.2012	AIR, Gulbarga	Ravindra Bhoyar	Brucellosis in animals
11	21.01.2013	AIR, Gulbarga	Ravindra Bhoyar	Importance of vaccination in animals

#### **VETERINARY COLLEGE, SHIVAMOGGA**

1	02.10.2012	AIR, Bhadrapur	U. S. Biradar	Rearing of calf to produce good draft bullocks
2	24.10.2012	AIR, Bhadrapur	C.B. Madhavaprasad	Antibiotic residues in animal foods
3	29.10.2012	AIR, Bhadrapur	K.Ganesh Udupa	Common diseases of domestic animals and their remedies

4	26.03.2013	<i>Prasar Bharathi, Bhadravati</i>	L.V. Lokesh	Sources of toxicity in livestock and their remedies
5	08.10.2012	AIR, Bhadravati	K.C. Veeranna	Stall feeding of sheep and goat
6	15.01.2013	AIR, Bhadravati	K.C. Veeranna	Animal welfare fortnight and its significance
7	19.03.2013	AIR, Bhadravati	B.P. Ravikumar	Reproductive disorder and remedies in dairy cows

#### **VETERINARY COLLEGE, HASSAN**

1	22.04.2012	AIR, Hassan	T.M. Prabhu	Nutrition and feeding of buffalo
2	24.10.2012	AIR, Hassan	S. Wilfred Ruban	Milk and milk products
3	26.05.2012	AIR, Gulbarga	P. Ravikumar	Bala belagida kiru kamadhenu
4	18.05.2012	AIR, Hassan	R.B. Dhabale	Advantages of artificial insemination and symptoms of heat

#### **COLLEGE OF FISHERIES, MANGALORE**

1	23.12.2012	AIR, Mangalore	M. Shivakumar	World fisheries day
2	08.01.2013	AIR, Mangalore	M.T. Lakshmi pathi	Kannada yuvavani kalasanje
3	28.06.2012	AIR, Mangalore	Mridula Rajesh	Inland fish culture
4	05.11.2012	AIR, Mangalore	S.R. Somashekara	Fish aggregating devices

#### **KRISHI VIGYAN KENDRA, DAKSHINA KANNADA**

1	28.05.2012	AIR, Mangalore	Ashok Bennur	Extension activities of KVK
2	13.07.2012	AIR, Mangalore	T. S. Anappaswamy	Carp seed production and rearing
3	21.08.2012	AIR, Mangalore	Harish Shenoy	Fertilizer use efficiency in different crops
4	12.10.2012	AIR, Mangalore	H Hanumanthappa	Inland fisheries
5	21.01.2013	KCR, UAS, Dharwad	Harish Shenoy	Sri method of paddy cultivation
6	22.01.2013	KCR, UAS, Dharwad	Harish Shenoy	Importance of soil testing
7	07.02.2013	AIR, Mangalore	H Hanumanthappa	Activities of KVK & training programmes
8	28.02.2013	AIR, Mangalore	Harish Shenoy	Production technology of pulses and oilseeds

#### **FISHERIES RESEARCH AND INFORMATION CENTER, BHUTNAL, BIJAPUR**

1	17.10.2012	AIR, Mangalore	S.M. Shivaprakash	Shrimp farming
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2	20.02.2013	AIR, Raichur	Ravindragouda Patil	Meenu kolagala siddhapadisuvike
3	20.02.2013	AIR, Raichur	Ravindragouda Patil	Mishra meenu paalane
4	20.02.2013	AIR, Raichur	Ravindragouda Patil	Meenu saakanike

**MARINE FISHERIES RESEARCH AND INFORMATION CENTER, ANKOLA**

1	11.10.2012	AIR, Karwar	Mansing Naik	Better management of shrimp culture
2	11.10.2012	AIR, Karwar	N. Manjappa	Sea bass culture
3	11.10.2012	AIR, Karwar	Chandrakant Lingadhal	Brakishwater fish culture

**CANINE RESEARCH AND INFORMATION CENTER, MUDHOL, TIMMAPUR**

1	11.10.2012	AIR, Karwar	N. Manjappa	Sea bass culture
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**ANIMAL HUSBANDRY POYLTECHNIC, SHIGGAON, HAVERI**

1	05.11.2012	AIR, Dharwad	Shivakumar, K. Radder	Importance of indigenous breeds of livestock
2	08.11.2012	AIR, Dharwad	K.P. Chethan	Importance of balanced ration to animals
3	06.11.2012	AIR, Dharwad	B.C. Girish	Prevention and control of insecticide poisoning in livestock

b) TV Programmes

#	Date	DD Station	Scientist	Topic
<b>DIRECTORATE OF EXTENSION, KVAFSU, BIDAR</b>				
1	01.05.2012	DDK, Gulbarga	K.N. Prabhudeva	Extension activities of veterinary university
2	27.12.2012	DDK, Bengaluru	K.N. Prabhudeva	Krishi, Totagarike & Jaanuvaru Mela-2012
<b>VETERINARY COLLEGE, BENGALURU</b>				
1	27.04.2012	DDK, Bengaluru	G. Leena	Management of Haemorrhagic Septicaemia
2	10.04.2012	DDK, Bengaluru	Placid E.D'Souza	Management of Theileriosis
3	07.03.2013	DDK, Bengaluru	V.C. Murthy	Hoof disorders in cattle and foot care
4	06.06.2012	DDK, Bengaluru	V.C. Murthy	Fertility problems in cows
5	23.09.2012	DDK, Bengaluru	V.C. Murthy	Management of mastitis in cattle
6	18.07.2012	DDK, Bengaluru	V.C. Murthy	Management of dairy cattle in summer
7	07.02.2013	DDK, Bengaluru	V.C. Murthy	Code and ethics of veterinary profession
8	22.06.2012	DDK, Bengaluru	H.N.N.Murthy	Coloured broiler chicken
9	29.06.2012	DDK, Bengaluru	Siddaramanna	Scientific feeding of livestock

10	01.08.2012	DDK, Bengaluru	Siddaramanna	Feeding management of livestock during drought
11	12.10.2012	DDK, Bengaluru	Siddaramanna	Fodder management in drought
12	04.05.2012	DDK, Bengaluru	B.M. Veeregowda	Management of black quarter
13	05.06.2012	DDK, Bengaluru	U. Krishnamoorthy	Monocotyledon (cereal) fodder crops
14	16.07.2012	DDK, Bengaluru	U. Krishnamoorthy	Monocotyledon perennial fodder crops
15	26.07.2012	DDK, Bengaluru	U. Krishnamoorthy	Legume fodder crops
16	30.08.2012	DDK, Bengaluru	U. Krishnamoorthy	Unconventional fodder crops and feeding practices
17	21.06.2012	DDK, Bengaluru	K. Venkata Reddy	Poultry farming
18	22.06.2012	DDK, Bengaluru	K. Venkata Reddy	Giriraja and Swarnadhara birds
19	17.01.2013	Samaya 24 x 7	K. Venkata Reddy	Bird flu
20	04.10.2012	DDK, Bengaluru	P.T. Ramesh	Enterotoxaemia in sheep
21	15.01.2013	DDK, Bengaluru	Ansar Kamaran	Babesiosis in cattle
22	27.11.2012	Jannashree Channel	L. Ranganath	Insertion of micro-chip in the dogs
23	30.11.2012	Kasturi Channel	L. Ranganath	Insertion of micro-chip in the dogs
24	07.12.2012	Jannashree Channel (LIVE)	L. Ranganath	Panel discussion on ethics in veterinary surgery
25	18.12.2013	Jannashree Channel	L. Ranganath	Mammary tumour in animals

#### VETERINARY COLLEGE, BIDAR

1	22.08.2012	DDK, Gulbarga	Arun G Kharate	Zoonotic diseases and their control
2	18.04.2012	DDK, Gulbarga	B.V.Shivaprakash	Surgical intervention in livestock management
3	30.08.2012	Chandana, Gulbarga	D. Dilipkumar	Danagalalli sidigaalu mattu adar neeyanthrana

#### VETERINARY COLLEGE, SHIVAMOGGA

1	11.12.2012	DDK, Bengaluru	K.C. Veeranna	Stall feeding of sheep and goat
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#### VETERINARY COLLEGE, HASSAN

1	15.03.2013	DDK, Bengaluru	Mahadevappa. D. Gouri	Annual fodder crop production
2	07.03.2013	DDK, Bengaluru	S.B. Prasanna	Feeding strategies for rearing of pregnant pigs

#### DAIRY SCIENCE COLLEGE, BENGALURU

1	27.12.2012	E-TV Kannada	H. Arun Kumar	Clean milk production
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**COLLEGE OF FISHERIES, MANGALORE**

1	10.02.2013	DDK, Bengaluru	H. Shivananda Murthy	Farming of freshwater prawn in ponds
2	15.03.2013	DDK, Bengaluru	H. Shivananda Murthy	Pungus cat fish farming
3	30.03.2013	DDK, Bengaluru	H. Shivananda Murthy	Polyculture of Pungus cat fish and Indian major carps

**INSTITUTE OF ANIMAL HEALTH AND VETERINARY BIOLOGICALS, BENGALURU**

1	17.09.2012	DDK, Bengaluru	Amita Reena Gomes	PPR Control
2	27.10.2012	TV9 (Kannada)	M. D. Venkatesha	Avian influenza

**KRISHI VIGYAN KENDRA, DAKSHINA KANNADA**

1	23.04.2012	V4 Channel	H. Hanumanthappa	Halasina mela
2	16.03.2013	Suvarna Channel	H. Hanumanthappa	Friends of coconut tree

**FISHERIES RESEARCH AND INFORMATION CENTER, BHUTNAL, BIJAPUR**

1	06.11.2012	DEN TV Channel, Bijapur	S.M. Shivaprakash	Infrastructure facilities available at FRIC, Bhutnal, Bijapur for the benefit of farmers of Northern Karnataka
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**FISHERIES RESEARCH AND INFORMATION CENTER, ANKOLA**

1	19.10.2012	DDK, Bengaluru	Mansing Naik	Methods/important aspects involved during Shrimp harvest (Phase-I)
2	19.10.2012	DDK, Bengaluru	N. Manjappa	Shrimp harvesting and preservation methods (Phase-II)
3	19.10.2012	DDK, Bengaluru	Chandrakant Lingadhal	Brief information with regard to training facilities available at the FRIC(M) for fish/shrimp farmers

**CANINE RESEARCH AND INFORMATION CENTER, MUDHOL, BAGALKOT**

1	01.11.2012	DDK, Bengaluru	N. Manjappa	Brakishwater polyculture technology
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**ABSTRACT OF RADIO TALKS AND TV PROGRAMMES DURING 2012-13**

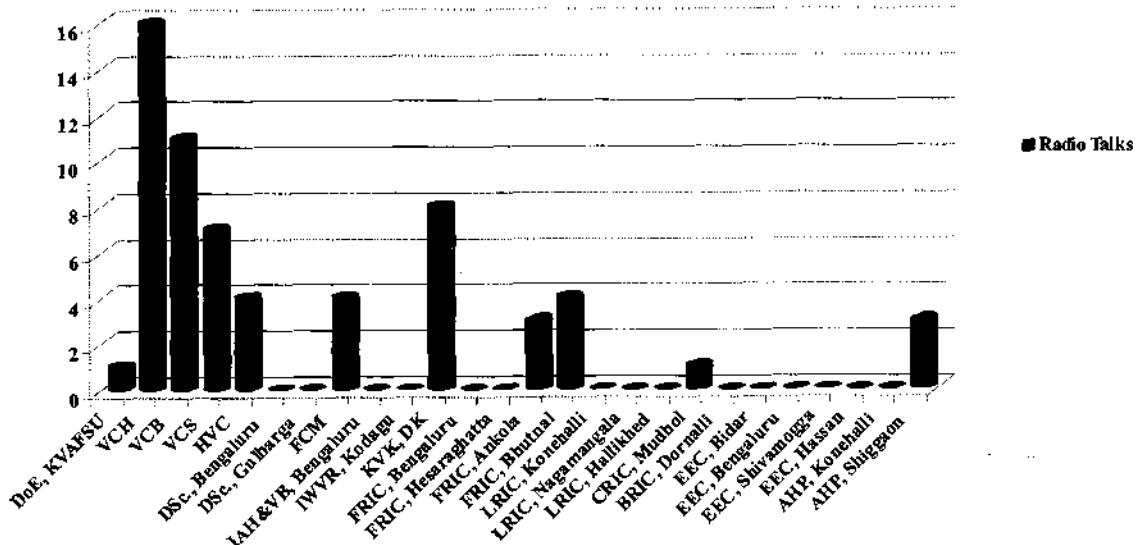
#	College/Institute	Radio Talks	TV programmes	Total
1	Directorate of Extension, KVAFSU, Bidar	01	02	03
2	Veterinary College, Bengaluru	16	25	41
3	Veterinary College, Bidar	11	03	14
4	Veterinary College, Shivamogga	07	01	08
5	Veterinary College, Hassan	04	02	06
6	Dairy Science College, Bengaluru	-	01	01
7	Dairy Science College, Gulbarga	-	-	-
8	College of Fisheries, Mangalore	04	03	07
9	IAH&VB, Bengaluru	-	02	02
10	IWVR, Kodagu	-	-	-

11	KVK, Dakshina Kannada	08	02	10
12	FRIC, Hebbal, Bengaluru	-	-	-
13	FRIC, Hesaraghatta, Bengaluru	-	-	-
14	FRIC, Ankola, Uttara Kannada	03	03	06
15	FRIC, Bhutnal, Bijapur	04	01	05
16	LRIC, Konehalli, Tiptur, Tumkur	-	-	-
17	LRIC, Nagamangala, Mandya	-	-	-
18	LRIC, Hallikhed, Bidar	-	-	-
19	CRIC, Mudhol, Bagalkot	01	01	02
20	BRIC, Dornalli, Yadgir	-	-	-
21	Extension Education Center, Bidar	-	-	-
22	Extension Education Center, Bengaluru	-	-	-
23	Extension Education Center, Shivamogga	-	-	-
24	Extension Education Center, Hassan	-	-	-
25	Animal Husbandry Polytechnic, Konehalli, Tiptur, Tumkur	-	-	-
26	Animal Husbandry Polytechnic, Shiggaon, Haveri	03	-	03
<b>Total</b>		<b>62</b>	<b>46</b>	<b>108</b>

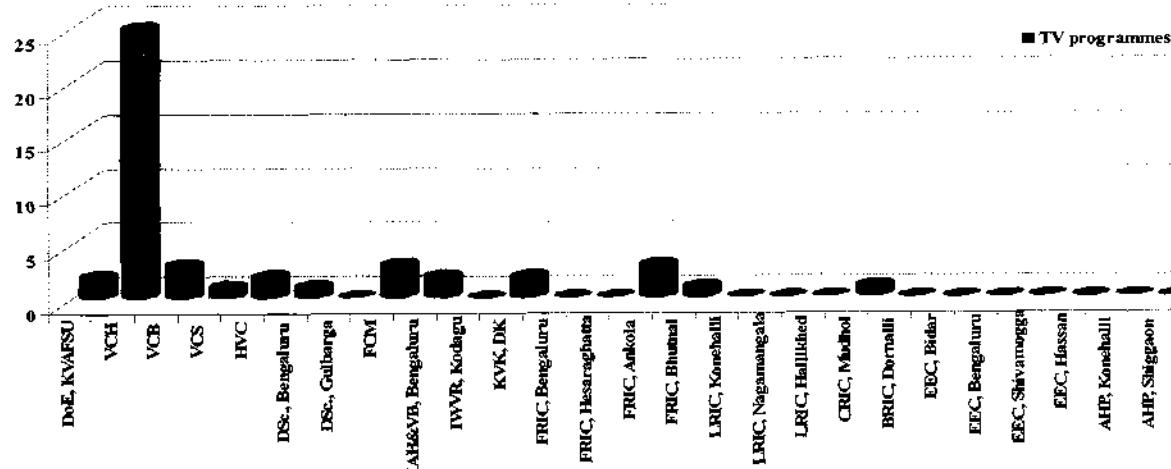
### 5. Animal Health Camps

#	Name of the College/Institute	No. of Animal Health Camps	No. of cases treated/advised
1	Veterinary College, Bengaluru	23	1836
2	Veterinary College, Bidar	05	548
3	Veterinary College, Shivamogga	05	3035
4	Veterinary College, Hassan	04	400
5	Dairy Science College, Bengaluru	01	100
6	Dairy Science College, Gulbarga	01	-
7	College of Fisheries, Mangalore	-	-
8	IAH&VB, Bengaluru	03	259
9	IWVR, Kodagu	-	-
10	KVK, Dakshina Kannada	-	-
11	FRIC, Hebbal, Bengaluru	NA	NA
12	FRIC, Hesaraghatta, Bengaluru	NA	NA
13	FRIC, Ankola, Uttara Kannada	NA	NA
14	FRIC, Bhutnal, Bijapur	NA	NA
15	LRIC, Konehalli, Tiptur, Tumkur	01	14
16	LRIC, Nagamangala, Mandya	11	1419
17	LRIC, Hallikhed, Bidar	-	-
18	CRIC, Timmapur, Bagalkot	06	188
19	Extension Education Center, Bidar	-	-
20	Extension Education Center, Bengaluru	-	-
21	Extension Education Center, Shivamogga	-	-
22	Extension Education Center, Hassan	04	400
23	Animal Husbandry Polytechnic, Konehalli, Tiptur, Tumkur	-	-
24	Animal Husbandry Polytechnic, Shiggaon, Haveri	01	38
<b>Total</b>		<b>65</b>	<b>8237</b>

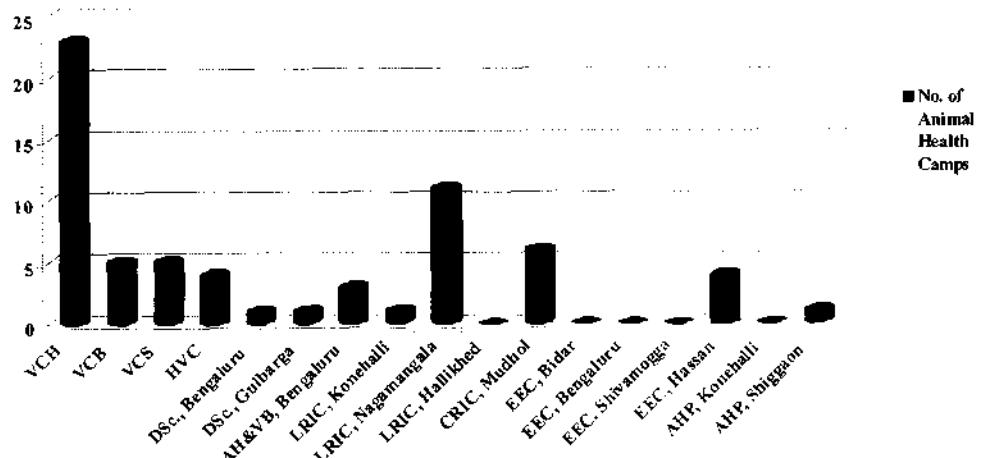
**Radio Talks given by different faculty members of KVAFSU during 2012-13**



**TV programmes given by different faculty of KVAFSU during 2012-13**



**No. of Animal health camps conducted by different Colleges/Institute during 2012-13**



## 6. Demonstrations / Exhibitions / Field Days / Pashu / Matsya Mela

Name of the College/Institute	No. of Demonstrations	Pashu/Matsya Mela
Veterinary College, Bengaluru	04	04
Veterinary College, Bidar	06	01
Veterinary College, Shivamogga	16	07
Veterinary College, Hassan	04	01
Dairy Science College, Bengaluru	-	-
Dairy Science College, Gulbarga	-	-
College of Fisheries, Mangalore	05	01
IAH&VB, Bengaluru	01	-
IWVR, Kodagu	05	01
KVK, Dakshina Kannada	08	12
FRIC, Hebbal, Bengaluru	-	02
FRIC, Hesaraghatta, Bengaluru	-	-
FRIC, Ankola, Uttar Kannada	02	03
FRIC, Bhutnal, Bijapur	-	01
LRIC, Konehalli, Tiptur, Tumkur	02	01
LRIC, Nagamangala, Mandya	50	01
LRIC, Hallikhed, Bidar	-	02
CRIC, Timmapur, Bagalkot	-	03
Extension Education Center, Bidar	10	01
Extension Education Center, Bengaluru	-	-
Extension Education Center, Shivamogga	16	07
Extension Education Center, Hassan	06	01
Animal Husbandry Polytechnic, Konehalli	04	01
<b>Total</b>	<b>139</b>	<b>50</b>

## 7. Animal health care services to farmers

College / Institute	Service Provided	Total Nos.
Veterinary College, Bengaluru	Service provided to farmers, cattle & buffaloes, sheep & goat, pet animals etc.,	46207
Veterinary College, Bidar	Service provided to farmers, cattle & buffaloes, sheep & goat, pet animals etc.,	12174
Veterinary College, Shivamogga	Treatment of sick animals, vaccination, deworming, pregnancy diagnosis, artificial insemination, major and minor surgeries	7239
Veterinary College, Hassan	Service provided to farmers, cattle & buffaloes, sheep & goat, pet animals etc.,	3864

Dairy Science College, Bengaluru	-	-
Dairy Science College, Gulbarga	-	-
College of Fisheries, Mangalore	-	-
IAH&VB, Bengaluru	Service provided to farmers	156
IWVR, Kodagu	-	-
KVK, Dakshina Kannada	-	-
FRIC, Hebbal, Bengaluru	-	-
FRIC, Hesaraghatta, Bengaluru	-	-
FRIC, Ankola, Uttar Kannada	-	-
FRIC, Bhutnal, Bijapur	-	-
LRIC, Konehalli, Tiptur, Tumkur	Service provided to farmers, large animals and pigs	557
LRIC, Nagamangala, Mandya	Service provided to farmers, vaccination and deworming of small ruminants	40
LRIC, Hallikhed, Bidar	Service provided to farmers, cattle, sheep & goat	86
CRIC, Timmapur, Mudhol, Bagalkot	-	148
Extension Education Center, Bidar	-	-
Extension Education Center, Bengaluru	-	-
Extension Education Center, Shivamogga	-	-
Extension Education Center, Hassan	-	-
Animal Husbandry Polytechnic, Konehalli	Service provided to farmers, cattle, sheep & goat	31
Animal Husbandry Polytechnic, Shiggaon	-	-

#### 8. Diagnostic services provided

#	Institution	Diagnostic Services provided	Total No.
1	Veterinary College, Bengaluru	Examination of samples like blood/serum/milk, skin scrapings, faecal samples disease investigation, veterolegal cases-suspected samples like skin, nails, horns, tusks and bones, analysis of feed samples for chemical composition, microbial and antimicrobial assays, screening of veterinarians, VLIs, attendants and other personnel for human brucellosis, ultra sound scanning, antibiotic sensitivity testing, radiography, gastroscopic examination, exploitative cytology, histopathology and post mortem examination etc.,	48902
2	Veterinary College, Bidar		2746
3	Veterinary College, Shivamogga		2432
4	Veterinary College, Hassan		515
5	Dairy Science College, Bengaluru	-	-

6	Dairy Science College, Gulbarga		-
7	College of Fisheries, Mangalore	Examined the mortality of fishes at Udyavara river & estuary and coastal water, Pithrodi village, Udupi. The death of fishes was due to low dissolved oxygen and increased concentration of ammonia-nitrogen. Fish meal factories were advised to treat their waste and release. Coast of Thannirbhavi, Panambur, Chitrapur, Sasihithalu, Dakshina Kannada district, examined for fish mortality and it was observed due to the bottom water disturbance at 5-10 m depth zone lead to anoxic condition near the bottom. The event was monitored for a week. It was a natural phenomenon.	02
8	IAH&VB, Bengaluru	Various blood, serum, urine, skin samples examined for the diagnosis of infectious and non-infectious diseases of animals	83,287
9	IWVR, Kodagu	-	-
10	KVK, Dakshina Kannada	Visited paddy field severely infected by blast/leaf roller pest and provided solution	03
11	FRIC, Hebbal, Bengaluru	Soil, water and fish health investigation services, feed analysis and plankton analysis etc.,	616
12	FRIC, Hesaraghatta, Bengaluru	-	-
13	FRIC, Ankola, Uttar Kannada	-	-
14	FRIC, Bhutnal, Bijapur	-	-
15	LRIC, Konehalli, Tiptur, Tumkur	Faecal samples and skin scrapings examination, Postmortem examination	49
16	LRIC, Nagamangala, Mandya	-	-
17	LRIC, Hallikhed, Bidar	Service provided to pesticide poisoning in cattle, weed infested fish pond at Northern Bidar, tick infestation in buffaloes causing tick toxæmia at Sindbandagi village, Azolla getting red tinge during cultivation at Anadoor village and Gobar gas production from dung at Hallikhed	68
18	CRIC, Timmapur, Bagalkot	-	-
19	EEC, Bidar	-	-
20	EEC, Bengaluru	-	-
21	EEC, Shivamogga	-	-
22	EEC, Hassan	-	-
23	AHP, Tiptur	-	-
24	AHP, Shiggaon	Clinical Pathology: blood / urine / feces / postmortem	07

**9. Supply of chicks/animals/fish/fodder seeds/root slips/other farm produce to farmers**

#	<b>Department/Farm</b>	<b>Supplied item and Quantity</b>	<b>Remarks</b>
1	Veterinary College, Bengaluru	Root slips and fodder seeds, Laboratory animals and Broiler rabbits, Day old chicks 126995 + 2408, Hatching eggs-918, Table eggs-24544, Broken eggs- 1814, Birds-9005, Manure-19.00 tons, Day old chicks-155095+2803, Day old parent chicks-12694+217, Hatching eggs-15868, Table eggs-20065, Broken eggs-3625, Feed-88153.5 kgs, Manure-27.5 tons, Birds-7637, Paddy husk-474 kgs, Local cross day old chicks-5599, 1 <sup>st</sup> week Local cross day old chicks-1176, 2 <sup>nd</sup> week Local cross day old chicks-200, 3 <sup>rd</sup> week Local cross day old chicks-238, 4 <sup>th</sup> week Local cross day old chicks-188, 5 <sup>th</sup> week Local cross day old chicks-96, Local cross birds-495, Cattle-32, Sheep-54, Piglets-669, Root slips-27,663, Broiler Rabbits- 111, Laboratory Animals-579	Revenue generated= Rs. 1,54,16,566/-
2	Veterinary College, Bidar	-	-
3	Veterinary College, Shivamogga	6,000 Giriraja birds (4 week old) 119 large White yorkshire, pigs/piglets	Rs. 4,80,000=00 Rs. 3.02,610=00  -----  Rs. 7,82,610=00
4	Veterinary College, Hassan	Chicks-3000, Piglets-300, Goats-21, Rabbits-110, Root Slips-10,000	Supplied to Farmers
5	D.Sc. College, Bengaluru	-	-
6	D.Sc. College, Gulbarga	-	-
7	College of Fisheries, Mangalore	Carp seeds: Catla-13,400; Rohu-21,390; Common carp-15,130 Ornamental fishes: Guppies-10,500; Koi-3456; Gold fish-1167; Angels-280; Mollies-585; Platies-300	-
8	IAH&VB, Bengaluru	-	-
9	IWVR, Kodagu	-	-
10	KVK, Dakshina Kannada	Poultry Birds-396 No., Pig/Piglets-24 No., Sale of milk-9890 Lt, Vegetables-441 Kg, Banana-140 Kg, Mo4 Paddy seeds-337 Kg, Mo4 Bulk Paddy-5750 Kg, Paddy Straw-474 Kg, Coconut-8270 No., Auction sale of Mango, jack, cashew, Sapota fruits-Rs. 12500/-, Ragi malt-7 kg, Trichoderma-46 kg, Vermi Compost-146 Kg, Banana Special-8 Kg, Vegetable Special-5.5 kg, Black Gram-8 Kg, Jasmine plants-3950 No.,	Supplied to Farmers

11	FRIC, Hebbal	Fish seed - 3,336, 20 Nos. Ornamental fish - 44,572 Nos.	Farmers & Aqua shops
12	FRIC, Hesaraghatta	Cultivable fish seed-62,120, Ornamental fishes-11,709; Cultivable fish seed-1,08,755, Ornamental fishes-86,607	Supplied to farmers
13	FRIC, Ankola	-	-
14	FRIC, Bhutnal	Catla - 1,18,600; Amur - 6,600; Common Carp - 1,83,045 and Ornamental fish -5,476	Subsequent monitoring of growth performances in farmers' ponds is under way
15	LRIC, Konehalli	Piglets-70 Nos.; Sheep-32, Goat-08 & Dairy animals-14; Sheep-30 & Goats-20; Cattle-10 and Sheep-05	Distributed to farmers; culled due to age factor and transferred to ILFC, HVC & VCH;
16	LRIC, Nagamangala	27 Mandya Rams & Root slips of different fodder varieties and azola	Distributed to beneficiary farmers
17	LRIC, Hallikhed	Root slips-55,800, Giriraja birds-5040, Milk-1,07,976, Cattle auction-89,200, Sale of Jowar-7,200, Sale of Lucerne Seeds-4950, Empty gunny bags and old paper-600	Rs. 2,70,766.00
18	CRIC, Mudhol	-	-
19	EEC, Bidar	-	-
20	EEC, Bengaluru	Distribution of 200 poultry birds (Giriraja) on cost basis	-
21	EEC, Shivamogga	-	-
22	EEC, Hassan	Chicks-40; Goats-14; Rabbits-02 Units (1+2)-02; Root slips- 4000; COFS29-10 Kgs; Sesbania-2 Kgs & Lucerne-1 Kgs	(All as part of demonstration conducted by EEC)
23	AHP, Konehalli	-	-
24	AHP, Shiggaon	-	-

## 10. Consultancy / Advisory Services

#	College / Institute	Total Number	Remarks
1	Veterinary College, Bengaluru	3377	
2	Veterinary College, Bidar	564	
3	Veterinary College, Shivamogga	514	
4	Veterinary College, Hassan	343	Consultancy services to farmers and other stakeholders on various aspects of establishment, feeding and management of livestock, dairy, poultry farming and fish farming, project report preparation, vaccination, deworming, disease diagnosis, microbiological analysis of samples etc., were given by the faculty and research scientists
5	Dairy Science College, Bengaluru	03	-
6	Dairy Science College, Gulbarga	-	-
7	College of Fisheries, Mangalore	42	Providing advisory services to farmers, undertaking farm visits to aquaculture farms, hatcheries, processing plants and industries all round the year as and when approached. Analysis of samples of water for potability, samples of fish, shrimp culture pond water for chemical and microbiological analysis, samples of shrimp larvae for viral & bacterial pathogens, ETP samples from several industries such as Infosys, MRPL, BASF, hospitals and hotels, and advised to general public, shrimp/fish farmers, hatcheries. Fish culture and health management in aquaculture, fish and shrimp culture, freshwater prawn & ornamental fish farming, fish farm construction
8	IAH&VB, Bengaluru	-	-
9	IWVR, Kodagu	06	-
10	KVK, Dakshina Kannada	2586	Analysis of soil and water samples, field visits
11	FRIC, Hebbal	53	Fish culture, disease diagnosis, fish mortality in tanks, water quality, nutrition, ornamental fish culture etc.,
12	FRIC, Hesaraghatta	50	Pond construction, fish breeding, integrated farming, ornamental fish breeding and culture, aquarium maintenance, water quality management in ponds, freshwater prawn farming etc.,
13	FRIC, Ankola	-	-
14	FRIC, Bhutnal	286	Fish culture, disease management, feed and feeding fish

15	LRIC, Konehalli	08	Advisory service was given to farmers on dairy farming and poultry farming
16	LRIC, Nagamangala	12	Advised the farmers regarding sheep rearing activities, diseases and control measures. On an average 3-4 telephonic enquiries/ day on sheep rearing and livestock activities have been answered
17	LRIC, Hallikhed	14	Dairy farming, sheep & goat farming, Emu farming, Rabbit farming, Integrated farming system etc.,
18	CRIC, Timmapur, Bagalkot	-	-
19	EEC, Bengaluru	-	-
20	EEC, Shivamogga	-	-
21	EEC, Hassan	30	-
22	EEC, Bidar	-	-
23	AHP, Konehalli	-	-
24	AHP, Shiggaon	09	Dairy farmers

## 11. Activities on Village/Farm Adoption

### VETERINARY COLLEGE, BENGALURU

Various training programmes conducted on scientific rearing of livestock and fodder production and management. Demonstration of chicken slaughtering procedure and demonstration of various egg products to the farm women at adopted village Haniyur.

### VETERINARY COLLEGE, BIDAR

Veterinary College, Bidar adopted Kanganakot village, Bidar for overall livestock development. In this context, regular ambulatory clinical services are being provided once in a week by clinical departments. The college has also organized 2 demonstrations and 3 training programmes for the benefit of livestock farmers. Further, regular needy consultancy services on animal husbandry practices are being provided on routine basis.

### VETERINARY COLLEGE, SHIVAMOGGA

Tyajavalii village of Shivamogga taluk has been adopted by the Veterinary College, Shivamogga. Clinical services are being made on every Friday and Saturday from August 2011, through ambulatory visits by the TVCC and the drugs and contingency items for the treatment are being met by the RKVY project. Treatment of sick animals, deworming, ectoparasitic control, pregnancy diagnosis, examination and treatment for gynecological problems such as repeat breeding, anoestrus, metritis and minor surgical treatment are being made.

### VETERINARY COLLEGE, HASSAN

Study of calf rearing practices was undertaken. Based on the results it was found that deworming was not done regularly. Likewise, awareness on calf rearing practices was poor. Deworming campaign cum calf health check up camps are being regularly conducted (Once in three months) and are planned for one year. Already two such camps have been conducted.

**DAIRY SCIENCE COLLEGE,  
BENGALURU**

Somathanahalli village, Devanahalli Tq., Bengaluru rural district has been adopted to carry out activities like clean milk production for the benefit of the milk producers, detection of adulterants and

preservatives and value added dairy products. In addition to the above, the college is actively involved in guiding the farmers to take up poultry, piggery and sheep rearing for their additional income. The staff of the college is visiting the village once in a month to get information from farmers with respect to dairy.

**INSTITUTE OF ANIMAL HEALTH AND VETERINARY BIOLOGICALS, BENGALURU**

Village adopted in 2012-13

#	Name of the Centre	Name of the village adopted
1	ADDL & IC, Mysore	Mellahalli Village, Mysore Taluk, Mysore District
2	ADDL & IC, Bellary	Halakundi Village, Bellary Taluk, Bellary District
3	ADDL & IC, Mangalore	Moodusidde Village, Mangalore Taluk, Mangalore District
4	ADDL & IC, Shivamogga	Hosahalli Village, Shivamogga Taluk, Shivamogga District
5	ADDL & IC, Gulbarga	Srinivasa Saradagi Village, Gulbarga Taluk, Gulbarga District
6	ADDL & IC, Bidar	Asattagi Village, Bidar Taluk, Bidar District
7	ADDL & IC, Belgaum	Shinadoli Village, Belgaum Taluk, Belgaum District
8	ADDL & IC, Davangere	Naganuru Village, Davangere Taluk, Davangere District

In the villages adopted by ADDL&IC, Regional Research Officers (RROs) are involved in complete vaccination programme, conducting awareness programmes about diseases and vaccination at farmer's door step and conducting animal health camps.

**12. Distinguished Visitors to the Institutes**

#	Name, Designation & Institute	Date	Purpose
<b>VETERINARY COLLEGE, BENGALURU</b>			
1	Prof. Mohammed Hafeez, Former Vice-Chancellor (I/c) & Director of Research, SVVU, Tirupati	19-11-2012 to 09-12-2012	Resource scientists and Experts for the XVI National training programme on "Biotechnological applications in Veterinary Parasitology" of CAFT in Veterinary Parasitology
2	Dr. H. Krishnamurthy, Head, Facility for Flow & Imaging, NCBS, GVK Campus, Bengaluru		
3	Dr. V. Chengalva Rayulu, Prof. & Head, Dept. of Parasitology, College of Veterinary Science, SVU, Produttor, Andhra Pradesh		
4	Dr. Gayathri Arakere, Senior Scientist, Society for Innovation & Development, IISc Campus, Bengaluru		

5	Dr. G. R. Reddy, Principal Scientist, IVRI, Bengaluru		
6	Dr. S.K. Jalali, Principal Scientist (Agri. Entomology), NBAII, Bengaluru		
7	Dr. M. Nagesh, Principal Scientist, NBAII, Bengaluru		
8	Dr. Nagendra. R. Hegde , Group Leader (Virology), Ella Foundation, Hyderabad		
9	Dr. M. Raman, Professor, Dept. of Parasitology, Madras Veterinary College, TANUVAS, Chennai		
10	Dr. C. Sreekumar, Professor, Livestock Research Station, TANUVAS, Kattupakam, Chennai		
11	Dr. K. P. Ramesha, Principal Scientist (AGB), NDRI, Adugodi, Bengaluru		
12	Dr. P. Azhahianambi, Dept of Veterinary Parasitology, Madras Veterinary College, Chennai		
13	Dr. V. V. Suryanarayana, Emeritus Scientist, IVRI, Bengaluru		
14	Dr. Dechamma, Senior Scientist, IVRI, Bengaluru		
15	Dr. Bibek Ranjan Shome, Principal Scientist, PD-ADMAS, Bengaluru		
16	Dr. Wilfred Marrisen, Project Director, Crucell, Ardsimedeswang, Netherlands	25.04.2012 & 16.07.2012	To see the facilities for Rabies diagnostics
17	Dr. Susheel Kumar, PRT member, ICAR, New Delhi	22.07.2012	For accreditation purpose
18	Dr. Shiranganathan, Professor, Virginia Tech University, Maryland USA	27.07.2012	Interacted with PG students
19	Dr. Aguswardhana, Embong Kenongo 9 Surabaya, 60271, Indonesia	22.01.2013	To see the facilities
20	Dr. Hugh White, Centre for Veterinary University, Sydney	16.05.2012	To discuss about the project collaboration
21	Dr. S.K. Mitra, CEO, Emami Company, Ahmedabad	24.06.2012	-do-
22	Nicholas Adams, Global Director, Alltech	30.07.2012	-do-
23	Divya Balgiri, Student of 12 <sup>th</sup> grade in United States	June 2012	To learn surgical techniques
24	Dr. Jit Singh, ICAR PRT Member	22.07.2012	For accreditation purpose
25	Dr. Sanjeev Gupta, Principal Scientist and AICRP I/C, CARI,	03.05.2012	Visited AICRP on Poultry Farm
26	Dr. B.P.Hedge .Hon'ble BOM, KVAFSU(B)	15.05.2012	Regarding Extension Activities of the University
27	Dr. Susheel Kumar, Member, PRT, ICAR, New Delhi	25.05.2012	For accreditation purpose

28	Dr. S. N. Sharma, Member, QRT	17.10.2012	To review the AICRP On Poultry, Bengaluru Centre
29	Dr. S.C. Mishra, Member, VCI Reviewer	21.02.2013	Visited AICRP on Poultry Farm
30	Mr. Giriraj Singh Hon'ble Minister for Animal Husbandry and Fisheries Sciences, Govt. of Bihar	11.10.2012	Visited University Poultry Farm to see Giriraja birds

*Foreign Visitors / Important Visitors to the Veterinary College, Bengaluru*

1	Dr. K.Raghatham, Purdue University, USA	10.05.2012	
2	Dr. Manfred Pietsch from J.Rettenmaier & Shone, Germany	10.07.2012	
3	Dr. S.A.H.Abidi, Dr. Sushil Kumar and Dr. Jit Singh, ICAR PRT Members	26.08.2012	
4	Dr. A.R.Phani, Director, Nano-RAM Technologies	29.08.2012	
5	Dr. William J. Brock, Principal, Brock Scientific Consulting, USA	08.10.2012	
6	Prof. Kin-Chow Chang, University of Nottingham on	18.10.2012	
7	Dr. M.K. Padhi, I/c. AICRP Cell and QRT Member	18.10.2012	
8	Smt. Vanasree Vipinsing, IFS, Director, EMPRI	29.11.2012	
9	Dr. Srinivas Kaveri, Director, INSERM, Paris	14.12.2012	
10	Manoj K. Pastey, College of Veterinary Medicine, Oregon State University, USA	15.02.2013	
11	Mr. Matthew Smith, Asia Pacific - Director, Alltech, Dr.Aman Sayed, General Manager South Asia, Alltech	28.02.2012	
12	Lt.Gen (Dr.) Narayan Mohanty, President, Veterinary Council of India, New Delhi	28.01.2013	
13	Maj. Gen. (Retd.) Dr. R.M. Kharb, AVSM, Chairman, Animal Welfare Board of India, Ministry of Environment and Forests, GOI	28.01.2013	
14	Dr. Dharmendra Sinha, Secretary General, IVA and Director, Dept. of Animal Husbandry, Govt. of Bihar	28.01.2013	
15	Dr. S.Abdul Rahman, President, Commonwealth Veterinary Association	28.01.2013	
16	Shri. Arvind, R. Jannu Principal Secretary, DAHF, GOK	28.01.2013	

**VETERINARY COLLEGE, BIDAR**

1	Ms. Manjula V Principal Secretary, AHVS, Govt of Karnataka	18.06.2012	Reviewed the activities of the college
2	Dr. Abidi, Dr. Jeet Singh and Dr. Sushil Kumar Members of ICAR, PRT, New Delhi	25-08-2012 to 28-08-2012	For accreditation purpose
3	Dr. Hampannanavar Prioncipal, GND Engg College, Bidar	02.11.2012	Valedictory Programme of Inter-Collegiate Sports and Games Meet-2013
4	Dr. Revanappa Dean, Horticulture College, Bidar	02.11.2012	
5	Dr. Meena Kumari DDG (Fisheries), ICAR, New Delhi	07.11.2012	Visited the campus and reviewed the activities of the college
6	Dr. S.L. Goswami Director, NAARM, Hyderabad	18.12.2012	Valedictory Programme of Faculty Orientation Programme
7	Dr. S. A. Patil Chairman, Karnataka Krishi Mission, GOK	28.12.2012	Visited the campus and reviewed the activities of the University
8	Dr. P.C. Jaffer Deputy Commissioner, Bidar	17.01.2013	Bidar District Adoption for Integrated Dairy Development
9	Dr. S.A. Patil Chairman, Karnataka Krishi Mission, Govt of Karnataka	17-01-2013	Bidar district adoption for integrated dairy development
10	E Ashwat Narayan SC-ST Cell Commissioner, Govt of Karnataka	11-02-2013 to 12-02-2013	Visited the campus and reviewed the activities for SC-ST students and staff.
11	Alexander Naessens, European Representative of India Platform Organization	19.02.2013	To study the research opportunities for collaboration
12	Dr. Aravind Kumar DDG (Education), ICAR, New Delhi	06.03.2013	Inauguration of Inter-University Sports & Games Meet-2013
13	Aravind Jannu Principal Secretary, AHVS, Govt of Karnataka	06.03.2013	
14	Dr. Tyagarajan K Superintendent of Police, Bidar	10.03.2013	Valedictory Programme of Inter-University Sports and Games Meet-2013
15	Dr. S L Goswami Director, NAARM, Hyderabad	10.03.2013	
16	Mrs. Suma Krishnamurthy, Social Worker, Bengaluru	-	Evaluation of RKVY Project

**VETERINARY COLLEGE, SHIVAMOGGA**

1	Sri K.S. Eshwarappa, MLA (Shivamogga) and President, BJP, Karnataka	04.04.2012	To inaugurate College day
2	Sri. S.N. Channabasappa, President, City Municipal Council, Shivamogga	04.04.2012	As a Chief Guest for College day
3	Sri Raghavendra, MP, Shimoga Lokasabha	21.04.2012	To inaugurate Blood Donation Camp and Multi Gymnastic facility at Boys Hostel
4	Sri. M.V. Vedamurthi, Deputy Commissioner, Shivamogga District	28.04.2012	To inaugurate World Veterinary Day
5	Dr. Susheel Kumar, Member, PRT, ICAR	20.07.2012	Accreditation
6	Prof. Prabhakar Hegde, Hon'ble Member, Board of Managemnt, KVAFSU, Bidar	21.08.2012	To attend Souvenir releasing function
7	Dr. Jeeth Sing, Member, PRT, ICAR	28.08.2012	Accreditation
8	Dr. C. Renukaprasad, Hon'ble Vice-Chancellor, KVAFSU, Bidar	01.11.2012	To visit various departments of the college
9	Dr. K.N. Prabhudev, Director of Extension, KVAFSU, Bidar	17.12.2012	As a Chief Guest in valedictory function of model training course
10	VCI Team headed by 1. Dr. S.C. Mishra 2. Dr. G.S. Dhaliwal 3. Dr. P. Ameer Hamza	15.02.2013 to 17.02.2013	To inspect the facilities to impart Minimum Standard of Veterinary Education for B.V.Sc. & A.H students
11	Dr. C. Renukaprasad, Hon'ble Vice-Chancellor, KVAFSU, Bidar	01.03.2013	To inaugurate Jaanuvaaru & Matsya Mela-2013
12	Dr. K.N. Prabhudev, Director of Extension, KVAFSU, Bidar	01.03.2013	
13	Sri T. Mukunda Varma, Member, Board of Managemnt, KVAFSU, Bidar	01.03.2013	To attend inaugural function of Jaanuvaaru & Matsya Mela-2013
14	Dr.(Smt.) Vishalakshi V. Kareddy, Member, Board of Managemnt, KVAFSU, Bidar	01.03.2013	

**VETERINARY COLLEGE, HASSAN**

1	Dr. Ravikumar, Research Officer, NIF, Dept. of DST, GOI, Ahmedabad	04.10.12	To collaborate research programmes
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**DAIRY SCIENCE COLLEGE, BENGALURU**

1	a) Dr. Kate Rudge, Content Manager, IFIS, United Kingdom b) Dr. Gary Taylor, Production Scientist, IFIS, United Kingdom	19.3.2013	Conducted a workshop for the staff and students of DSCH focusing on relevance to research and studies
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### **DAIRY SCIENCE COLLEGE, GULBARGA**

1	Dr. S.A.H. Abidi, Member, PRT, ICAR	25.08.2012	PRT review team
2	Dr. Sushilkumar, Member, PRT, ICAR	28.08.2012	PRT review team
3	Dr. Jeeth Singh, Member, PRT, ICAR	25.08.2012	PRT review team

### **FISHERIES COLLEGE, MANGALORE**

1	Dr. Anna Godhe, Ms. Gurpreet Kaur Kahlon and Dr. Lars Edler, Emeritus Scientist, University of Gothenburg, Sweden	01.12.2012 to till date	To carry-out collaborative research work under the Indo-Swedish project
2	Dr. (Prof.) Ann Sofi Rehnstahm, Kristianstadt University, Sweden	01.12.2012 to till date	
3	Dr. Darshanee Ruwandeepika , Sabaragamuwa University, Sri Lanka	March, 2013	
4	Dr. Nazlin Howell and other European partners	4-7 <sup>th</sup> Dec., 2012	To discuss the operational part of EU funded project meeting

### **INSTITUTE OF ANIMAL HEALTH AND VETERINARY BIOLOGICALS, BENGALURU**

1	Wilfred Marissen, Project Director, Crucell Leiden, The Netherlands	25.04.2012	-
2	Dr. Manish Kakkar & Elizabeth Ragawsti, Public Foundation of India	09.08.2012	-
3	Dr. Peter Mertens, Pirbright Institute, Pirbright, Surrey, U.K.	04.09.2012	-
4	Kin - Chou Chang, University of Nottingham & Suresh Varma Racchpudi	17.10.2012	-
5	Dr. G. Dinakar Raj, M. Raman & K. G. Tirumurugan, TRPVB, TANUVAS, Chennai	16.11.2012	-
6	Aravind, R. Jannu, Principal Secretary, DAHF, Bengaluru	20.11.2012	-

### **INSTITUTE OF WILDLIFE AND VETERINARY RESEARCH, KODAGU**

1	Dr. S.A.H. Abidi Chairman of ICAR-PRT along with committee members	31.08.2012	For accreditation purpose
2	Hon'ble Board of Management Members Prof. B. Prabhakar Hegde, Shri. K. C. Shankare Gowda and Sri. T. Mukunda Varma	25.01.2012	Inspection

### **FISHERIES RESEARCH AND INFORMATION CENTER, HEBBAL**

1	Sri. B.R. Sethuram, Barode Manipal School of Banking, Heggadadevanahalli, Bengaluru	26.04.2012	For information
2	Sri. K.C. Udupa & Basavaraju, Barode Manipal School of Banking, Bengaluru	03.05.2012	For information
3	Sri. K.C. Udupa, Faculty BMSB, Bengaluru	04.05.2012	For information
4	Dr. S.A.H. Abidi, Chairman, PRT, ICAR	27.08.2012	Visited FRIC(I)

5	Dr. (smt.) Vishalaxi Kareddy, BOM, KVAFSU,Bidar	07.09.2012	Visited FRIC(I)
6	Dr. S. Noorjahan Beevi, Joint Director of Fisheries, Dept. of Fisheries, Govt. of Tamil Nadu, Chennai	25.10.12	Farmers of Tamil Nadu
7	Mrs. Christy & Mr. Kumar, Siksha Sagar High School, Sanjay Nagar, Bengaluru	04.12.2012	Students & staff visited
8	Sri.Jawahar G. Patil, NCMCES, University of Tasmania, Australia	07.12.2012	For collaborative research

#### **FISHERIES RESEARCH AND INFORMATION CENTER, BHUTNAL, BIJAPUR**

1	Hon'ble Members of Board of Management of KVAFSU Dr. Vishalaxi V. Kareddi, Shri. T. Mukunda Verma, Dr. B. Prabhakar Hegade, Shri. Vasudeva. Baindur, Shri. K.C. Shankaregowda and Dr. D.R. Nagesh	07.11.2012	Farm Development Committee to study the problems of the centre and to offer suggestions for its improvement.
2	Dr. H. R. V. Reddy Director of Research, KVAFSU, Bidar	9.08.2012	Supervision of developmental activities of the centre
3	Dr. Vishalaxi, V. Kareddi Member, Board of Management	25.10.2012	Supervision of developmental activities of the centre
4	Dr. K.N. Prabhudeva, Director of Extension	10.10.2012	
5	Dr. C. Renukaprasad, Hon'ble Vice-Chancellor, Dr. H. R. V. Reddy, Director of Research and Dr. K.N. Prabhudeva, Director of Extension	07.01.2013	

#### **LIVESTOCK RESEARCH AND INFORMATION CENTER, KONEHALLI, TIPTUR**

1	Dr. Suresh. S Honnappagol, Hon'ble Vice-Chancellor, KVAFSU, Bidar	26.06.2012	To review the progress of the Farm
2	Dr. B. Prabhakar Hegde Member, BOM, KVAFSU, Bidar	21.08.2012	To review the activities of the Farm
3	Dr. S.Malikarjunappa, Hon'ble Vice-Chancellor KVAFSU, Bidar	04.09.2012	
4	Dr. D.R. Nagesh, Hon'ble Member of BOM, KVAFSU, Bidar	23.11.2012	To review the developmental activities of the Centre.
5	Dr. K. Chandrapal Singh, ADR, KVAFSU, Bidar	23.11.2012	To review the progress of the Farm
6	Dr. Venkatesh, Joint Director, DAH&VS	13.03.2013	To attend Amrithmahal Bull calves auction
7	Dr. M. Surendranath, Deputy Director Amrithmahal Cattle Breeding Station, Ajjampura	13.03.2013	

#### **LIVESTOCK RESEARCH AND INFORMATION CENTER, NAGAMANGALA**

1	Dr. H.R.V Reddy, Director of Research, KVAFSU	04.04.2012	To review the farm activities and health status of sick animals
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2	Dr. K.V. Kulkarni, JD (Extn. & Tr), DAH&VS, Bengaluru	07.04.2012	
3	Sri. H.T. Krishnappa, Ex. Minister, Nagamangala	25.04.2012	
4	Sri. H.T. Krishnappa, Ex. Minister, Nagamangala	05.05.2012	
5	Sri. Basavaraja Horatti, Ex. Minister, Hubli	18.07.2012	
6	Sri. K.C. Shankaregowda, Member, BOM, KVAFSU	18.07.2012	
7	Dr. D.R. Nagesh, Member, BOM, KVAFSU	05.12.2012	
8	Dr. P. Krishnappa Retd. Professor, Dept. of Animal Nutrition, UAS, Bengaluru	15.03.2013	Participated as a resource person in one day training programme
9	Dr. Parameshwarappa , Assistant Director, DAH&VS	15.03.2013	
10	Dr. H.R.V Reddy, Director of Research, KVAFSU	23.03.2013	To distribute Mandya rams to the beneficiary farmers under MSSP-MS
11	Dr. K.N. Prabhudeva, Director of Extension, KVAFSU	23.03.2013	

#### LIVESTOCK RESEARCH AND INFORMATION CENTER, HALLIKHED, BIDAR

1	Dr. Renukaprasad, Hon'ble Vice-Chancellor; Dr. H.M. Jayaprakash, Registrar; Dr. H.R.V. Reddy, Director of Research and Dr. N A Patil, ADR	Oct., 2012	General Visit
2	Dr. Muniyappa, Deputy Director, DAH&VS, Bidar	04.02.2013	To deliver inaugural address during training
3	Board Members and Dr. H.R.V. Reddy, Director of Research, KVAFS, Bidar	Dec., 2012	General Visit

#### KRISHI VIGYAN KENDRA, DAKSHINA KANNADA

1	Dr. S S Honnappagol Hon'ble Vice-Chancellor, KVAFSU Bidar	13.04.2012	To visit and review the activities of KVK
2	Smt. K.T. Shailaja Bhat, President, DK ZP, Mangalore	23.06.2012	
3	Dr. K N VijayaPrakash, CEO, ZP, Mangalore	23.06.2012	
4	Dr. K N Prabhudeva, Director Extension, KVAFSU Bidar	23.06.2012	To Participate in Jackfruit Mela -2012
5	Shri. Sampath Samrajya, Member, Board of Regents, UHS, Bagalkot	23.06.2012	
6	Dr. C V Sairam, Principal Scientist (Agri. Scientist), ZPD, Bengaluru	29.06.2012	
7	Dr. K N Prabhudeva Director Extension, KVAFSU Bidar	29-06-2012	To Participate in SAC meeting
8	Shri Sampath Samrajya Hon'ble Member, Board of Regents, UHS, Bagalkot	10.08.2012	To discuss about arranging Seminar on horticultural crops
9	Dr. Sushil Kumar & Dr. Jeeth Singh Members, PRT, ICAR	22.08.2012	To acquaint with the activities of KVK.

10	Dr. K S Anil Kumar NBSSLP, Regional Centre, Bengaluru	27.11.2012	To study the soil Profile of Coastal Areas
11	Dr. C. Renukaprasad Hon'ble Vice-Chancellor, KVAFSU Bidar	03.12.2012	To visit KVK and review the various activities of KVK
12	Dr. M.J. Chandregowda, Principal Scientist, Zonal Project Directorate , ICAR, Bengaluru	29.01.2013	To Review the progress of Action Plan-2012-13 and Field Visits
13	Dr. K N Prabhudeva Director Extension, KVAFSU Bidar	29.01.2013	To Review the progress of Action Plan-2012-13 and Field Visits accompanying PS of ICAR
14	Dr. C Renukaprasad Hon'ble Vice-Chancellor, KVAFSU Bidar	15.02.2013	To review the progress and various activities of KVK.
15	Shri K C Shankaregowda Shri T. Mukund Verma Dr.(Smt) Vishalaxi V Kareddy Members, BOM, KVAFSU, Bidar	15.02.2013	To acquaint with the activities of KVK.
16	Dr. M. Hanumanthappa Associate Director of Research, ZARS, Brahmavar	08.03.2013	To participate as resource person in on campus training programme

### **13. Activities of Directorate of Extension, KVAFSU, Bidar & Important decisions taken during Extension Education Council Meeting**

#### **Extension activities carried out by the Directorate of Extension during 2012-13**

##### **Krishi, Totagarika & Jaanuvaru Mela-2012**

The University of Agricultural Sciences, Raichur; Karnataka Veterinary, Animal & Fisheries Sciences University (KVAFSU), Bidar and University of Horticultural Sciences, Bagalkot, jointly organised “Krishi, Totagarika & Jaanuvaaru Mela - 2012” during December 29-31<sup>st</sup>, 2012 at KVK, Janwada, Bidar for the benefit of farming community. The KVAFSU arranged more than 35 stalls wherein it exhibited different breeds of animals, dogs, fishes, fodders and different activities of the University. The Directorate of Extension coordinated this joint event.

##### **Jaanuvaru & Matsya Mela-2013**

The Directorate of Extension, KVAFSU, Bidar organised “Jaanuvaatu & Matsya Mela-2013” during March 1-3, 2013 at Veterinary College, Shivamogga for the benefit of farming community of the region. Dr. C. Renukaprasad, Hon'ble Vice-Chancellor inaugurated the mela. Sri. T. Mukund Verma, Dr. D.R. Nagesh and Dr. (Mrs.) Vishalaxi, V. Kareddy, Hon'ble Members of Board of Management graced the occasion. National Mission on Food Processing of the Directorate of Agriculture, GOK joined hands with KVAFSU for organizing this mega event.

## ***Bidar district adoption programme for Dairy development***

The Karnataka Veterinary, Animal & Fisheries Sciences University, Bidar in collaboration with District Administration, KMF, Lead Banks, DCC Bank, NGOs, DAH&VS, launched 'Bidar district adoption programme for integrated dairy development' on 17-01-2013 at KVAFSU Campus, Bidar on the occasion of University Foundation Day. Under this, programme like setting up of new dairies, training of farmers on scientific dairy and animal husbandry, artificial insemination of dairy animals, health management of animals in Bidar district are planned.

### ***Model Training Courses***

The following National Level Model Training Courses were conducted at different Colleges by the Directorate of Extension, KVAFSU, Bidar funded by Ministry of Agriculture, Government of India, New Delhi. The participants from different states participated in the programme. The Ministry of Agriculture, New Delhi appreciated the University for attracting large numbers of participants from different states and successfully completing all the 3 sanctioned courses as per schedule.

1. Dairy entrepreneurship development during 26<sup>th</sup> Nov., 2012 – 2<sup>nd</sup> Dec., 2012 at Dairy Science College, Bengaluru.
2. Application of information and communication technology in animal husbandry during 19<sup>th</sup> – 26<sup>th</sup> November, 2012 at Veterinary College, Bidar.
3. Intensive and semi intensive sheep rearing as a source of rural employment and

livelihood security during 10-17<sup>th</sup> December, 2012 at Veterinary College, Shivamogga.

### ***Training Programmes for Subject Matter Specialists of KVK***

The following training programmes were conducted at different colleges by the Directorate under financial support from Zonal Project Directorate, ICAR, Bengaluru. The subject Matter specialists (SMS) of KVK and departmental officials participated in the programme.

1. "Entrepreneurial opportunities in livestock sector" at Veterinary College, Bidar during 13-15<sup>th</sup> Feb., 2013.
2. "Clean Milk Production" at Dairy Science College, Hebbal, Bengaluru during 13-15<sup>th</sup> December, 2012.

### ***Training Programmes for Field Veterinarians***

The Institute of Wildlife Veterinary Research, Doddaluvara, Kudige organized 3 training programmes during 2012-13 sponsored by Directorate of Extension. Two training programmes on "Post-mortem and forensic aspects in wild animals" and one training programme on "Human Wildlife Conflict in Kodagu District". Field Veterinarians of Department of AH&VS participated in the programmes.

### ***Training-cum-Demonstrations at KVK, Dakshina Kannada***

The Krishi Vigyan Kendra, Dakshina Kannada organized following 6 training-cum-demonstration programmes under

Technology Week for the benefit of farmers on different aspects during February, 2013, sponsored by Directorate of Extension.

1. Clean milk production
2. Value added milk products
3. Value added from fish
4. Integrated fish farming system
5. Scientific pig farming
6. Aquarium fabrication and maintenance

#### **Participation on Krishi Melas during 2012-13**

- The Directorate of Extension, KVAFSU, Bidar participated and set up stalls at Krishi Melas organized by different Universities.
1. At UAS, Raichur during December 1-3, 2012.
  2. At KVK, Janwada, Bidar during December 29-31, 2012.

#### **Projects operated and funds mobilized by the Directorate during 2012-13 for various institutes of the University**

#	Funding Agency	Purpose	Grants Received (Rs. In lakhs)
1	NFDB, Hyderabad	To construct fish ponds (LRIC, Hallikhed – 3.60 ha, BRIC, Dornalli – 3.60 ha and FRIC, Bhutnal – 0.40 ha	23.94
2	NMFP, Directorate of Agriculture, GOK, Bengaluru	To organize “Jaanuvaaru and Matsya Mela-2013” at Veterinary College, Shivamogga	03.00
3	Ministry of Agriculture GOI, New Delhi	For 3 Model Training Courses 1. Dairy entrepreneurship development 2. Application of information and communication technology in animal husbandry 3. Intensive and semi intensive sheep rearing as a source of rural employment and livelihood security	06.04
<b>Total</b>			<b>32.98</b>

#### **Important decisions taken during 7<sup>th</sup> Extension Education Council Meeting held on 18-05-2012 at KVAFSU, Bidar**

1. Animal health camps and their impact assessment should be documented with facts and figures.
2. Success stories of technology transfer has to be prepared by all Institutions of the University.
3. Conduct demonstrations on green fodder cultivation and silage making at all LRICs.
4. All Deans of Veterinary Colleges to work out modalities for starting tele-veterinary medicine

5. College of Fisheries, Mangalore to take the help of KVK, Mangalore for village adoption and other extension activities.
6. Extension Education Centers (EECs) to conduct training on all disciplines viz, Veterinary, Animal, Dairy and Fisheries Sciences.
7. EEC-Bidar to conduct on-farm demonstration on silage making at Sedam.
8. Conduct regular trainings to farmers on Dairy Farming at LRIC, Konehally.
9. Intensify extension activities under Poultry Science Division.
10. More extension activities through electronic media are to be carried out by Fisheries Science Division.
11. Faculty from College of Fisheries to adopt villages in interior Karnataka on inland fisheries activities.
12. Establish fisheries demonstration farms at various locations of Karnataka.
13. Conduct at-least one short term certificate course at each of the Institutions of the University depending upon the facilities and expertise available.

## V. PUBLICATIONS

### 1. Research Papers

#### i) International Publications

##### a) In Journals

#	<i>Authors, Year of publication, Title of the paper and Journal</i>	<i>NAAS Rating</i>
<b>VETERINARY COLLEGE, BENGALURU</b>		
1	Sebastian, A., Girish Kumar, V., Nandi, S. and Murthy, V.C., 2012. Blood haematological and biochemical parameters in normal cycling, pregnant and repeat breeding buffaloes ( <i>Bubalus bubalis</i> ) maintained in isothermal and isonutritional conditions. <i>Asian Pacific J. Reprod.</i> , 1(2): 117-119.	
2	Gurunathgouda Patil, Girish Kumar, V., Ramachandra, S.G., Rao, A.J. and Nandi, S., 2012. Two dimensional SDS PAGE analysis of epididymal tissue proteins in normal and castrated bulls ( <i>Bos taurus</i> ) and identification of an androgen dependant protein. <i>Asian Pacific J. Reprod.</i> , 1(3): 203-211.	
3	Chandranaiik, B. M., Rathnamma, D., Patil, S.S., Ramesh, C.K., Jyotsana Dhawan, Ranganatha, S., Islloor, S., Mohmd Rumman, Renukaprasad, C. and Prabhudas, K., 2012. Application of TaqMan probe based real time PCR for detection of bovine Herpes Virus-1. <i>Asian Pacific J. Trop. Biomed.</i> , 1-6.	6.8
4	Manafi, Narasimhamurthy, H.N. and Narayanaswamy, H.D., 2012. Evaluation of different mycotoxin binders on Aflatoxicosis in broiler breeders induced with Aflatoxin B1: Effects on biochemical and immunological parameters. <i>American-Eurasian J. Agric. and Environ. Sci.</i> , 12 (4):429-433.	
5	Manafi, Narasimhamurthy, H.N. and Narayanaswamy, H.D., 2012. Evaluation of different mycotoxin binders on broiler breeders induced with Aflatoxin B1: Effects on visceral organ weight and organ lesions parameters. <i>American-Eurasian J. Agric. and Environ. Sci.</i> , 12 (5): 574-578.	
6	Manafi, Narasimhamurthy, H.N. and Narayanaswamy, H.D., 2012. Comparative study of several mycotoxin binders during aflatoxicosis in body weight, feed consumption, Feed efficiency and egg production parameters of broiler breeders. <i>Global Veterinaria</i> , 8(5): 484-490.	
7	Manafi, Narasimhamurthy, H.N., Mohan, K. and Narayanaswamy, H.D., 2012. Evaluation of different mycotoxin binders on broiler breeders induced with Aflatoxin B1: Effects on fertility, hatchability, embryonic mortality, residues in egg and semen quality. <i>Global Veterinaria</i> , 8(6):642-648.	
8	Manafi, Narasimha Murthy, H.N., Noor Ali, M. and Narayanaswamy, H.D., 2012. Evaluation of different mycotoxin binders on broiler breeders induced with Aflatoxin: Effects on egg quality parameters. <i>World Applied Sci. J.</i> , 17(3):271-277.	
9	Ekhtiari Sadegh, M., Nagaraja, C.S., Jayashankar, M.R. and Narasimhamurthy, H.N., 2012. Nucleotide sequencing and DNA polymorphism studies on ghrelin gene in chicken. <i>Int. J. Adv. Biotech. Res.</i> , 2(2):71-78.	

10	Mallikarjuna, G., Suguna Rao, Shridhar, N.B., Sathyaranayana, M.L. Byregowda, S.M. and Ravikumar, 2013. Efficacy of <i>gymnema sylvestre</i> in alleviation of Streptozotocin induced diabetes in rats. <i>Int. J. Ad. Bio. Res.</i> , 3(1):51-57.	
11	Darshan Raj, G., Swathi Shetty, Govindaiah, M.G., Nagaraja, C.S., Byregowda, S.M. and Jayashankar, M.R., 2012. Genetic polymorphic study of $\alpha_s2$ – Casein gene in different breeds of buffaloes. <i>Buffalo Bulletin</i> , 31(3):153-162.	6.6
12	Thiagarajan, R. and Jayashankar, M.R., 2012. Influence of genetic and non-genetic factors on number of crimps in indigenous and crossbred sheep. <i>Int.J.Food Agri. Vet.Sci.</i> , 2(1):58-61.	
13	Thiagarajan, R. and Jayashankar, M.R., 2012. Influence of genetic and non-genetic factors on shrinkage percentage of wool in indigenous and crossbred sheep. <i>Int.J. Livestock Res.</i> , 2(3):112-115.	
14	Thiagarajan, R. and Jayashankar, M.R., 2012. Clean fleece weight under the influence of genetic and non-genetic factors in indigenous and crossbred sheep. <i>Int. J. Livestock Res.</i> , 2(3):116-119.	
15	Amol, R. Padol, Jayakumar, K., Shridhar, N.B., Narayana Swamy, H.D., Mohan, K. and Manochaya, S., 2012. Efficacy of the silk protein based bio-films as a novel wound healing agent. <i>Int. J. Toxicol. Appl. Pharmacol.</i> , 2(3):31-36.	
16	Chandrasekhar, L., Prasad, R.V. and Jamuna, K.V., 2012. Ultra-structural studies of involuting bursa and thymus of Giriraja birds ( <i>Gallus domesticus</i> ). <i>Int. J. Poult. Sci.</i> , 11:397-399.	4.2
<b>VETERINARY COLLEGE, BIDAR</b>		
1	Vinayakumar, S., Ramachandra, B. and Thirumalesh, T., 2012. Invitro and Invivo evaluation of pulse byproducts based complete diets on the performance of lactating Bidri goats. <i>Int. J. Livest. Res.</i> , 2(2):92-101.	
2	Ramachandra, B., Thirumalesh, T., Ashok Pawar, Suranagi, D.M., 2012. Effect of urea molasses mineral block (UMMB) on nutrient utilization in Deoni bullocks under sorghum ( <i>Sorghum bicolor</i> ) stover based feeding system. <i>Int. J. Livest. Res.</i> , 2(3):159-162.	
3	Prakashkumar Rathod, Nikam, T.R., Sariput Landge and Amit Hatey, 2012. Entrepreneurial behaviour of dairy farmers in Western Maharashtra, India. <i>Int. J. Com. Busi. Mgmt.</i> , 5(2):256-261.	3.5
<b>VETERINARY COLLEGE, SHIVAMOGGA</b>		
1	Kiran, L., Nagabhushana, V., Prakash, N., Madhavaprasad, C.B., Ashok Pawar, Ramachandra, B. and Shettar, V.B., 2012. Effects of jojoba oil meal ( <i>simmondia chinensis</i> ) in rabbits. <i>J. Lab. Anim. Sci.</i> , 1(2):1-4.	
2	Waghe Prashanthkumar, Sethi, R.S., Devendra Pathak, Rampal, S. and Saini, S.P.S., 2012. Testicular damage after chronic exposure to carbendazim in male goats. <i>Toxicological &amp; Environ. Chem.</i> , 94 (7):1433-1442.	

3	Waghe Prashantkumar, Saini, S.P.S., Ghuman, S.P.S., Rampal, S., Prakash, N. and Lokesh, L.V., 2012. Carbendazim disrupts sexual maturity in male goats ( <i>Capra hircus</i> ). <i>Int. J. Pharm. and Bio. Sci.</i> , 2(3):75-84.	
4	Prakash, N., Waghe Prashantkumar, Lokesh, L.V., Pavithra, B.H., Ashok Pawar, Girish, M.H. and Sharanagouda, 2013. Curcumin ameliorate carbendazim induced toxicopathological changes in male wistar rats. <i>Int. J. Pharm. &amp; Toxic. Sci.</i> , 3(1): 22-31.	
5	Waghe Prashantkumar, Saini, S.P.S., Rampal, S., Prakash, N. and Lokesh, L.V., 2013. Sub-chronic exposure to carbendazim induces biochemical and hematological alterations in male Goats. <i>Toxic. &amp; Environ. Chem.</i> , 95(2):330-336.	
6	Nagappa, S.K., Singh, S.P., Deepak Kumar and Sunil, N.S., 2013. Development and application of highly specific PCR for detection of chicken ( <i>Gallus gallus</i> ) meat adulteration. <i>European Food Res. and Technol.</i> , 236:129-134.	7.6
7	Nagappa, S.K. and Singh, S.P., 2012. Occurrence of endosulphan residues in dairy milk in plains of Uttarakhand, India: Short communication. <i>Int. J. Dairy Tech.</i> , 65: 1-5.	7.5
8	Deepak Kumar, Singh, S.P., Nagappa, S.K., Rashmi Singh and Umapathi, V., 2012. Authentication of beef, carabeef, chevon, mutton and pork by a PCR-RFLP assay of mitochondrial cyt b gene. <i>J. Food Sci. and Technol.</i> , DOI 10.1007/s13197-012-0864-z.	6.9
9	Nagappa, S.K., Singh, S.P. and Manish Kumar Singh, 2012. Monitoring for chlorpyrifos residues in animal feed and fodder of Tarai region of Uttarakhand, India. <i>Toxicol. &amp; Environ. Chem.</i> , 94 (2): 275-280.	
10	Chidanandaiah and Rajendra Kumar, K., 2012. Effect of flour combinations in batter mixes on sensory and physico-chemical quality of battered chicken. <i>Fleisch Wirtschaft Int.</i> , 27(4): 63-68.	
11	Balasundara Kavitha Rani, Shekhy Ganga Naik, Konanur Javaregowda Ananda, Basavanal Eswarappa Shambulingappa, Suresh Revanna Patel and Mosarukunte Devaraj, 2012. Necrotic stomatitis and haemorrhagic enteritis in an Indian rock python. <i>Eurasian J. Vet. Sci.</i> , 28, (1): 60-63.	
<b>VETERINARY COLLEGE, HASSAN</b>		
1	Naveen Kumar, G.S., Wilfred Ruban, S., Pradeep and Shivakumar, M.C., 2013. Kenguri as meat breed of southern Karnataka. <i>Middle East J. Sci. Res.</i> , 13 (1):5-8.	
2	Rashmi, R., Jayakumar, K., Narayana Swamy, M. and Avinash Bhat, 2012. Acute Oral Toxicity Study of Norfloxacin in Female Rats. <i>Int. J. Phar. and Biosci.</i> , 3(1):98-101.	
3	Rashmi, R., Jayakumar, K., Narayana Swamy, H.D. and Bayer, M.D., 2012. Organ Directed Toxicity of Norfloxacin in a Repeated Dose 28 Day Oral Toxicity Study in Female rats. <i>Int. J. Phar. and Biosci.</i> , 3(1):81-97.	

4	Jayaramu, G.M., Satyanarayana, M.L., Ravikumar, P., Jagadish, S., Phaniraj, K.L. and Suguna Rao, 2012. Effect of feeding Ochratoxin A and Citrinin toxins on certain biochemical parameters in broiler chicken. <i>Global J. Biosci. and Biotechnol.</i> , 1(2):186-190.	
5	Jayaramu, G.M., Satyanarayana, M.L., Ravikumar, P., Shilpa, V.T. and Jagadish, S., 2012. Effect of Ochratoxin A and Citrinin toxins on certain mineral and electrolyte levels in broiler chicken. <i>Global J. Biosci. and Biotechnol.</i> , 1(2):157-159.	
6	Jayaramu, G.M., Satyanarayana, M.L., Ravikumar, P. and Lakshman, M., 2012. Ultrastructural Pathology of Ochratoxin A and Citrinin toxicosis in broiler chicken. <i>Int. J. Ad. Bio. Res.</i> , 2(4):775-777.	
7	Jayaramu, G.M., Satyanarayana, M.L., Ravikumar, P. and Narayanaswamy, H.D., 2012. Evaluation of the immune status of broiler chicken during Ochratoxin, Citrinin and their combined toxicity. <i>Int. J. Ad. Biol. Res.</i> , 2(4):756-759.	
<b>DAIRY SCIENCE COLLEGE, BENGALURU</b>		
1	Narasimha Murthy, Amaravathamma, K.S. and Anjum, 2013. Cas einophosphopeptides mediated enhancement of blood serum minerals and bone mineral density. <i>Commu. Agric. and Appl. Biol. Sci.</i> , 78(1): 2013.	
<b>COLLEGE OF FISHERIES, MANGALORE</b>		
1	Prakash, V.P., Shivananda Murthy, H., Tejpal, C. and Naveen Kumar, B.T., 2012. Effect of brewer's yeast on immune response of giant freshwater prawn, <i>Macrobrachium rosenbergii</i> and its resistance to white muscle disease. <i>Aqua. Int.</i> , 20(5): 951-964.	7.4
2	Ramachandra Naik, A.T. and Shivananda Murthy, H., 2012. Effect of dietary administration of sardine oil on growth and survival of <i>Macrobrachium rosenbergii</i> (de Man). <i>Israeli J. Aqua. (Bamedgeh)</i> , 686(64): 1-6.	7.4
3	Shivananda Murthy, H., Yogeeshbabu, M.C. and Tejpal, C.S., 2012. Preliminary Evaluation of the Potential of <i>B. plicatilis</i> for use as a live food for freshwater prawn larvae. Open Access Scientific Reports, <a href="http://dx.doi.org/10.4172/scientificre ports.383">http://dx.doi.org/10.4172/scientificre ports.383</a> .	
4	Das, R., Rather, M.A., Basavaraja, N., Sharma, R. and Udit, U.K., 2012. Effect of nonsteroidal aromatase inhibitor on sex reversal of <i>Oreochromis mossambicus</i> (Peters, 1852). <i>Israeli J. Aqua. (Bamidgeh), IJA_64</i> .2012.703, 6 pages.	7.4
5	Basavaraja, N., Chandrasekhara, B.H. and Rather, M.A., 2012. Production of an all-male population of guppy, <i>Poecilia reticulata</i> (Schneider). <i>Curr. Sci.</i> , 103(10): 1151-1152.	7.4
6	Raj Reddy Patil, Shankar, K.M., Naveen, B.T., 2012. Development of a monoclonal antibody based flow through immunoassay (FTA) for detection of White Spot Syndrome Virus (WSSV) in black tiger shrimp <i>Penaeus monodon</i> (Fabricius). <i>J. Fish Dis.</i> , doi: 10.1111/jfd.12050.	7.6
7	Ganapathi Naik, M. and Gangadhara Gowda, 2013. Survey of oyster beds of Mulky estuary, south west coast of India. <i>J. Acad. Indus. Res.</i> , 1(10): 601-605.	

8	Ganapathi Naik, M. and Gangadhara Gowda, 2013. Assessment of rate of oyster spat fall in a tropical estuary, south west coast of India. <i>Int. J. Curr. Res.</i> , 5(3): 728-733.	
9	Ganapathi Naik, M. and Gangadhara Gowda, 2013. Assemblages of macrobenthos with transplanted oysters in Mulky estuary, west coast of India. <i>Int. J. Curr. Res.</i> , 5(5): 1131-1137.	
10	Ganapathi Naik, M., Rajesh, K.M. and Shankar, K.M., 2012. Monoclonal antibody (MAb) based immunodot for early detection of <i>Aphanomyces invadans</i> in fish. <i>Int. J.Sci. and Knowledge</i> , 1(1): 47-55.	
11	Deekshit, V.K., Kumar, B.K., Rai P., Rohit, A. and Karunasagar, I., 2013. Simultaneous detection of <i>Salmonella</i> pathogenicity island 2 and its antibiotic resistance genes from seafood. <i>J. Microbio. Methods</i> , 93(3): 233-238.	7.7
12	Singaiah Naveen Kumar, Malathi Shekar, Indrani Karunasagar and Iddy Karunasagar, 2013. Genetic analysis of RNA1 and RNA2 of Macrobrachium rosenbergii Nodavirus (MrNV), isolated from India. <i>Virus Res.</i> , 173(2):377-385.	7.8
13	Hettipala Arachchige Darshane Ruwandeepika, Thotawaththage Sanjeeva Prasad Jayaweera, Patit Paban Bhownick, Indrani Karunasagar, Peter Bossier and Tom Defoird, 2013. Pathogenesis, virulence factors and virulence regulation of vibrios belonging to the <i>Harveyi</i> clade. <i>Reviews in Aqua.</i> , 4(2): 59-74.	
14	Shetty, M., Maiti, B., Venugopal, M.N., Karunasagar, I. and Karunasagar, I., 2013. First isolation and characterization of <i>Edwardsiella tarda</i> from diseased striped catfish, <i>Pangasianodon hypophthalmus</i> , (Sauvage). <i>J. Fish Dis. (Article in press)</i> .	7.6
15	Shetty, V.A., Kumar, S.H., Shetty, A.K., Karunasagar, I. and Karunasagar, I., 2012. Prevalence and Characterization of Diarrheagenic <i>Escherichia coli</i> Isolated from Adults and Children in Mangalore, India. <i>J. Lab. Physicians.</i> , 4(1):24-9.	
16	Choudhury, T.G., Maiti, B., Venugopal, M.N. and Karunasagar, I., 2012. Effect of total dissolved solids (TDS) and temperature on bacteriophage therapy against luminous vibriosis in shrimp. <i>Israeli J. Aqua. (Bamidgeh)</i> , IJA_64.2012.761.	7.4
17	Deekshit, V.K., Kumar, B.K., Rai, P., Shabrinath, S., Karunasagar, I. and Karunasagar, I., 2012. Detection of class 1 integron in <i>Salmonella Weltevreden</i> and silent antibiotic resistance genes in some seafood associated non-typhoidal isolates of <i>Salmonella</i> in South West coast of India. <i>J. Applied Microbiol.</i> , 112(3): 113-22.	7.7
18	Maiti, B., Shetty, M., Shekar, M., Karunasagar, I. and Karunasagar, I., 2012. Evaluation of two outer membrane proteins, Ahal and OmpW of <i>Aeromonas hydrophila</i> as vaccine candidate for common carp. <i>Vet. Immunol. Immunopathol.</i> , 149: 298-301.	7.7
19	Khushiramani, R., Maiti, B., Shekar, M., Girisha, S.K., Akash, N., Deepanjali, A., Karunasagar, I. and Karunasagar, I., 2012. Recombinant <i>Aeromonas hydrophila</i> outer membrane protein 48 (Omp48) induces protective immune response against <i>Aeromonas hydrophila</i> and <i>Edwardsiella tarda</i> . <i>Res. Microbiol.</i> , 163(4):286-91.	7.8
20	Shekar, M., Karunasagar, I. and Karunasagar, I., 2012. In silico identification and comparison of surface binding pockets of <i>Vibrio parahaemolyticus</i> thermostable direct hemolysin proteins. <i>Int. J. Pharm. Bio. Sci.</i> , 3(3): 280-288.	

21	Mohammed Abdullatif Hamod, Muliya Sankappa Nithin, Nahil Shukur Yassamin, Karunasagar, I. and Karunasagar, I., 2012. Outer membrane protein K as a subunit vaccine against <i>V. anguillarum</i> . <i>Aqua.</i> , 354–355:107–110.	7.7
22	Kumar Naik, A.S., Jitendra Kumar, Mahesh, V. and Benakappa, S., 2013. Assessment of Fish diversity of Tunga River, Karnataka, India. <i>Nature and Sci.</i> , 11(2): 82-87.	
23	Kumar Naik, A.S., Jitendra Kumar, Somashekara, S.R., Benakappa, S., Anjaneyappa, H.N., Mahesh, V. and Srinivas, H.H., 2012. Ichthyofaunal Biodiversity of Tunga Reservoir (Gajanoor Dam), Karnataka (India). <i>Bull. Env. Pharmacol. Life Sci.</i> , 1(11): 35-40.	
24	Kumar Naik, A.S., Benakappa, S., Somashekara, S.R., Anjaneyappa, H.N., Jitendra Kumar, Mahesh, V., Srinivas, H.H. and Rajanna, K.B., 2013. Studies on Ichthyofaunal Diversity of Karanja Reservoir, Karnataka, India. <i>Int. Res. J. Environ. Sci.</i> , 2(2):1-5.	
25	Kumar Naik, A.S., Jitendra Kumar, Mahesh, V., Anjaneyappa, H.N., Benakappa, S., Somashekara, S.R. and Rajanna, K.B., 2013. Status of Fish Diversity of Varada River, Karnataka, India. <i>Environ. Ecol.</i> , 31 (2A): 786-792.	2.1
26	Srinivas, H.H., Shivaprakash, S.M., Anjanayappa, H.N., Somashekara, S.R., Benakappa, S., Kumar Naik, A.S., Ganesh Prasad, L., Kamalesh Panda and Jitendra Kumar, 2013. Breeding Biology of Indian Mackerel, <i>Rastrelliger kanagurta</i> (Cuvier). <i>Environ. Ecol.</i> , 31 (2A): 683-688.	2.1
27	Srinivas, H.H., Shivaprakash, S.M., Anjanayappa, H.N., Somashekara, S.R., Benakappa, S., Kumar Naik, A.S., Ganesh Prasad, L. and Jitendra Kumar, 2013. Length-Weight Relationship of <i>Rastrelliger kanagurta</i> (Cuvier) from Mangalore Region. <i>Environ. Ecol.</i> , 31(2A): 676-678.	2.1
28	Srinivas, H.H., Shivaprakash, S.M., Anjanayappa, H.N., Somashekara, S.R., Benakappa, S., Kumar Naik, A.S., Ganesh Prasad, L. and Jitendra Kumar, 2013. Food and Feeding Habits of Mackerel, <i>Rastrelliger kanagurta</i> (Cuvier) from Mangalore Region. <i>Environ. Ecol.</i> , 31(2A): 672-675.	2.1
29	Rajanna, K.B., Benakappa, S., Anjanayappa, H.N., Mallesh and Honnananda, B.R., 2012. Maturation and spawning of the Horse mackerel <i>Megalaspis cordyla</i> (Linnaeus) from Mangalore Waters. <i>Environ. Ecol.</i> , 30 (1): 41 – 44.	2.1
30	Kumar Naik, A.S., Somashekhar, S.R., Jitendra Kumar and Mahesh, V., 2013. Assessment of Fish Biodiversity in Upper Mullamari Reservoir, Basavakalyan, Karnataka (India). <i>Int. J. Fish. and Aqua. Sci.</i> , 3(1): 13-20.	
31	Anjanayappa, H.N., Benakappa, S., Shivaprakash, S.M., Somashekara, S.R., Kumar Naik, A.S., Jitendra Kumar and Mahesh, V., 2013. Breeding periodicity of the Mullet, <i>Liza macrolepis</i> from Mangalore waters. <i>Trends in Biosci.</i> , (In press).	2.7
32	Kumar Naik, A.S., Jitendra Kumar, Benakappa, S., Somashekara, S.R., Anjanayappa, H.N., Manjappa, N. and Mahesh, V., 2013. Distribution and Richness of the Ichthyofaunal Diversity from the Chulkinala Reservoir, Basavakalyan, Karnataka, India. <i>Anim. Sci. Reporter</i> (In press).	3.0

33	Somashekara, S.R., Shivaprakash, S.M., Kumar Naik, A.S., Anjanayappa, H.N., Benakappa, S., Jitendra Kumar, Kamalesh Panda and Mahesh, V., 2013. Population characteristics of pink perch, <i>Nemipterus mesoprion</i> from Mangalore waters. <i>J. Anim. and Plant Sci.</i> , (In press).	
34	Anjanayappa, H.N., Benakappa, S., Shivaprakash, S.M., Somashekara, S.R., Kumar Naik, A.S., Jitendra Kumar, Rajanna, K.B., Mahesh, V. and Nayana, P., 2013. The length-weight relationship and relative condition factor of <i>Priacanthus hamrur</i> off Mangalore coast. <i>The Bioscan</i> , (In press).	5.1
35	Chandra, M.V., Raju, C.V. and Vijay Kumar Reddy, S., 2012. Influence of heat penetration on the quality of canned ribbon fish ( <i>Trichiurus lepturus</i> ). <i>JFPP</i> , (In press).	7.0
36	Dileep, A.O., Shamasundar, B.A., Binsi, P.K., Badri, F. and Howell, N.K., 2012. Composition, physicochemical and rheological properties of fresh bigeye snapper fish ( <i>Priacanthus hamrur</i> ) mince. <i>J. Food Biochem.</i> , 36:577–586.	7.3
37	Binsi, P.K. and Shamasundar, B.A., 2012. Purification and characterization of transglutaminase from four fish species: effect of added transglutaminase on the viscoelastic behavior of fish mince. <i>Food Chem.</i> , 132:1922-1929.	8.0
38	Nareshkumar Mehta, Elavarasan, K., Manjunath Reddy, A. and Shamasundar, B.A., 2012. Effect of ice storage on the functional properties of protein from a few species of freshwater fish (Indian Major Carps) with special emphasis on gel forming ability. <i>J. Food Sci. Technol.</i> , DOI 10.1007/s 13197-011-0558-y.	6.9
39	Elavarasan, K., Naveen Kumar, V. and Shamasundar, B.A., 2012. Antioxidant and functional properties of fish protein hydrolysates from fresh water carp ( <i>catla Catla</i> ) as influenced by the nature of enzyme. <i>JFPP</i> , DOI: 10.1111/jfpp.12081	7.0
40	Chandra, M.V. and Shamasundar, B.A., 2013. Visco-elastic and flow properties of gelatin from the bone of fresh water fish ( <i>Cirrhinus mrigala</i> ). <i>J. Food Science</i> (In press).	7.6

#### INSTITUTE OF ANIMAL HEALTH AND VETERINARY BIOLOGICALS, BENGALURU

1	Nithinprabhu, K., Ruban, W.S., Raveendra Hegde and Naveenkumar, G.S., 2012. Methicillin resistance pattern of <i>Staphylococcus aureus</i> from mastitis milk in correlation to its possession of methicillin resistance gene. <i>Milk Science International</i> (MILCAD), 67:151-154.	
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#### INSTITUTE OF WILDLIFE VETERINARY RESEARCH, KODAGU

1	Madhukar, S.D. and Narayana Bhat, M., 2013. Mobile phones affect multiple sperm quality traits: a meta-analysis. <i>F1000 Research</i> , 2:40.	
2	Madhukar, S.D., 2012. Parasite stress predicts offspring sex ratio. <i>PLoS ONE</i> , 7(9): e46169.	
3	Avinash, T., Telang, R.S., Chandresh Varshney, Pradeep Kumar and Madhukar, S.D., 2012. Pharmacodynamic interaction of doramectin with acepromazine in mice. <i>Int. Ad. J. Vet. Sci. and Tech.</i> , 1(1):1-8.	

4	Avinash, T., Telang, R.S., Chandresh Varshney, Pradeep Kumar and Madhukar, S.D., 2012. An experimental study on pharmacodynamics interaction of doramectin with anticonvulsants and anaesthetics in mice. <i>Int. Ad. J. Vet. Sci. and Tech.</i> , 1(1): 9-18.	
5	Madhukar, S.D., 2013. Human sex ratio at birth, HIV/AIDS and Tuberculosis. <i>J. Epidemiol. Comm. Health</i> , 67(4):378.	

#### LIVESTOCK RESEARCH AND INFORMATION CENTER, HALLIKHED

1	Chaithanya, M.S., Nagendrappa, G., Vaidya, V. P. and Rudraswamy, M.S., 2013. Synthesis, antibacterial, antifungal and antiinflammatory activities of 4-aryl-2-(4-chlorophenyl)-4H-pyrimido-[2,1- <i>b</i> ][1,3]-benzothiazoles. <i>Der Pharmacia Lettre</i> , 5(1):94-99.	
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#### FISHERIES RESEARCH AND INFORMATION CENTER, HEBBAL

1	Basavaraju, Y., Narasimha Reddy, A. and Prashnath, N.T., 2012. Evaluation of growth and survival of two stocks of common carp under poly culture in Karnataka. <i>J. Environ. Ecol.</i> (In press).	
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#### FISHERIES RESEARCH AND INFORMATION CENTER, BHUTNAL, BIJAPUR

1	Shivaprakash, S.M., 2012. Energy distribution pattern in the edible and inedible body parts of <i>Etroplus suratensis</i> (Bloch). <i>Int. J. Sci. Environ. Tech.</i> , 1(5): 462-472.	
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#### b) In Conferences / Seminars / Symposia / Workshops etc.,

#	Authors/Year/Title of Paper/Conference
<b>VETERINARY COLLEGE, BENGALURU</b>	
1	Senthilnathan, G., Isloor, S., Rathnamma, D., Suryanarayana, T. and Shenbagam, S., 2012. Development and Evaluation of Genus specific Indirect ELISA for Seroprevalence of Leptospirosis in Bovines. XXVI IAVMI and International Seminar on Future of Live Stock Health-A Paradigm Change to Maximize Productivity for Economic gains at Madras Veterinary College, TANUVAS, Chennai, 6- 8 <sup>th</sup> September, 2012.
2	Akshatha, B.M., Sundaresan, S., Veeresh Hanchinal, B., Nuthana Lakshmi, V., Rathnamma, D. and Shome, B.R., 2012. Development of Duplex PCR for detection of <i>cfa</i> and <i>isda</i> surface proteins of <i>Staphylococcus aureus</i> of Bovine Mastitis origin. XXVI IAVMI and International Seminar on Future of Live Stock Health-A Paradigm Change to Maximize Productivity for Economic gains at Madras Veterinary College, TANUVAS, Chennai, 6-8 <sup>th</sup> September, 2012.
3	Nasim Sohail, M., Rathnamma, D., Isloor, S., Veeregowda, B.M. and Avinash, B., 2012. Analysis of <i>Streptococcus agalactiae</i> biofilm and free cell components using Fourier Transform Infrared (FTIR) Spectroscopy. XXVI IAVMI and International Seminar on Future of Live Stock Health-A Paradigm Change to Maximize Productivity for Economic gains at Madras Veterinary College, TANUVAS, Chennai, 6 <sup>th</sup> to 8 <sup>th</sup> September, 2012.
4	Nasim Sohail, M., Rathnamma, D., Isloor, S., Veeregowda, B.M. and Sharada, R., 2012. Detection of biofilm formation ability of <i>Streptococcus agalactiae</i> isolated from Bovine Mastitis. Awarded Best poster presentation award. XXVI IAVMI and International Seminar on Future of Live Stock Health-A Paradigm Change to Maximize Productivity for Economic gains at Madras Veterinary College, TANUVAS, Chennai during 6 <sup>th</sup> to 8 <sup>th</sup> September, 2012.

5	Nasim Sohail, M., Isloor, S., Rathnamma, D., Patil, S.S., Sundareshan, S. and Akshatha, B.M., 2012. Growth kinetics and Protein expressions in biofilms of <i>Streptococcus agalactiae</i> isolated from Bovine Mastitis. IAVMI, Madras Veterinary College, Chennai.
6	Mohammad Nazar Faisal, Rathnamma, D., Isloor, S., Veeregowda, B.M., Sharada, R. and Shridhar, N.B., 2012. Isolation and characterization of Fungi from clinical Bovine Mastitis cases. IAVMI, Madras Veterinary College, Chennai.
7	Akshatha, B.M., Sundareshan, S., Veeresh Hanchinal, B., Nuthana Lakshmi, V., Rathnamma, D. and Shome, B.R., 2012. Biofilm formation and Antibiotic resistance in <i>Staphylococcus aureus</i> isolates from Bovine Mastitis. IAVMI, Madras Veterinary College, Chennai.
8	Krishnaveni. N., Isloor, S., Hegde, R., Suryanarayana, V.V.S., Rathnamma, D., Veeregowda, B.M., Nagaraja, C.S. and Sundaresan, S., 2012. Incidence and prevalence of <i>Streptococcus</i> spp. and its relationship with Somatic Cell Count and electrical conductivity in Sub-clinical Bovine Mastitis. IAVMI, Madras Veterinary College, Chennai.
9	Chandre Gowda, C.T., Fairoze, N., Girish, P.S., Bhagale, S. and Renukaprasad, C., 2012. Authentication of Pork by Sequence Analysis of Mitochondrial Cytochrome B gene. International Symposium One Health: Way Forward to Challenges in Food Safety and Zoonoses in 21 <sup>st</sup> Century and XI Annual Conference of IAVPHS from 13 <sup>th</sup> -14 <sup>th</sup> Dec., GADVASU, Ludhiana, Punjab.
10	Nagaraju, G.N., Prasad, R.V., Jamuna, K.V., Baddi, S.Y. and Ramkrishna, V., 2012. Forensic Identification of Confiscated Skin of Wild and Domestic Animals by using Histological Techniques. Abstracted in XXIX Congress of the European Association of Veterinary Anatomists, Stara Zagora, Bulgaria, July, 25-28, Abst No: L022. In <i>Bulgarian J. Vet. Med.</i>
11	Prasad, R.V., Bhat, A., Nagaraju, G.N., Jamuna, K.V., Shoaib, A.H. and Jaykumar, K., 2012. HATR FT-IR and Linear Discriminant Analysis of Hairs of Tiger, Leopard, Spotted Deer, Cattle and Goat-A Forensic Approach. Abstracted in XXIX Congress of the European Association of Veterinary Anatomists, Stara Zagora, Bulgaria, July, 25-28, Abst No: L023. In <i>Bulgarian J. Vet. Med.</i>
12	Ranganath, L., 2012. Arthritis in dogs. XI WSAVA, Veterinary College, Bengaluru, Nov. 24-28, 2012.

#### VETERINARY COLLEGE, HASSAN

1	Priyanka, D., Dhanalakshmi, Dhabale, R.B. and Thimmareddy, P.M., 2013. Erlichiosis in a Cow: A case report. XXXI Annual Convention of ISVM and National Symposium held at Mhow in MP during 9-11 January, 2013, P 84.
2	Suchitra, B.R., Sahadev, A., Dhabale, R.B. and Renukaradhya, G.J., 2012. Clinical management of foetal dystocia due to hydrocephalus in a crossbred cow by caesarean section with partial fetotomy. XXVIII Annual Convention of the ISSAR held from Nov., 21-23, at Guwahati, Assam. P 17:341.
3	Chethan Kumar, G.K., Nagaraju, N. and Suchitra, B.R., 2012. Dystocia in cattle due to Systosoma reflexes – a case report. XXVIII Annual Convention of the ISSAR held from Nov., 21-23, Guwahati, Assam. P 29:348.

### **DAIRY SCIENCE COLLEGE, BENGALURU**

- 1 Narasimha Murthy, 2013. Caseinophosphopeptides mediated enhancement of blood serum minerals and bone mineral density through weaning foods. The Indo-European Health Conference-2013 during 10-12<sup>th</sup> Feb., Chennai, Organized by IIT Chennai, Ghent University Belgium and TANUVAS-Chennai.

### **COLLEGE OF FISHERIES, MANGALORE**

- 1 Faisal, R.S., Raju, C.V., Lakshmisha, I.P. and Singh, R.R., 2012. Abstract: Biochemical and microbiological changes in treated minced meat of horse mackerel (*Trachurus trachurus*). Global symposium on aquatic resources for eradicating hunger and malnutrition – Opportunities and Challenges. Dec., 3-6, 2012, Mangalore.
- 2 Lakshmisha, I.P. and Raju, C.V., 2012. Abstract: Optimization of process temperature and time for fish ham in fibrous casing. Global symposium on aquatic resources for eradicating hunger and malnutrition – Opportunities and Challenges. Dec., 3-6, 2012, Mangalore.
- 3 Raju, C. V. and Lakshmisha, I.P., 2012. Abstract: Studies on the quality of fish sausage in cellulose casing with smoke treatment. Global symposium on aquatic resources for eradicating hunger and malnutrition – Opportunities and Challenges. Dec., 3-6, 2012, Mangalore.
- 4 Raju, C.V. and Lakshmisha, I.P., 2012. Women friendly fish vending and display unit. Global symposium on aquatic resources for eradicating hunger and malnutrition – Opportunities and Challenges. Dec., 3-6, 2012, Mangalore.
- 5 Girija Phadke, Elavarasan, K. and Shamasundar, B.A., 2012. Angiotensin converting enzyme-I inhibitory and antioxidant activities of protein hydrolysates from threadfin bream (*Nemipterus Spp*) frame waste. Global symposium on aquatic resources for eradicating hunger and malnutrition – Opportunities and Challenges. Dec., 3-6, 2012, Mangalore.
- 6 Girija Phadke, Elavarasan, K. and Shamasundar, B.A., 2012. Evidence for angiotensin converting enzyme (ACE)-I inhibitory activity and antioxidant activity of traditional fermented fish product *Ngari* from North East India as influenced by fermentation period. Global symposium on aquatic resources for eradicating hunger and malnutrition – Opportunities and Challenges. Dec., 3-6, 2012, Mangalore.
- 7 Chandra, M.V. and Shamasundar, B.A., 2012. Use of fish skin gelatin to improve the textural properties of ribbonfish gel. Global Symposium on Aquatic resources for eradicating hunger and malnutrition – Opportunities and Challenges. Dec., 3-6, 2012, Mangalore.
- 8 Elavarasan, K. and Shamasundar, B.A., 2012. Antioxidant and angiotensin converting enzyme (ACE)-I inhibitory activity of digest prepared from fresh and cooked fish *C. mrigala* using in vitro pepsin and pancreatin simulated gastrointestinal digestion. Global symposium on aquatic resources for eradicating hunger and malnutrition – Opportunities and Challenges. Dec., 3-6, 2012, Mangalore.
- 9 Naveenkumar and Shamasundar, B.A., 2012. Antioxidant and alcoholic extracts from the muscle of sardine and clams. Global symposium on aquatic resources for eradicating hunger and malnutrition – Opportunities and Challenges. Dec., 3-6, 2012, Mangalore.

10	Murthy, H.S., Naveen Kumar, B.T. and Biradar, S., 2012. Effect of chitin and phytase on growth, immune response and resistance to white tail disease in freshwater prawn <i>macrobrachium rosenbergii</i> . Global symposium on aquatic resources and malnutrition - Opportunities and Challenges. Dec., 3-6, 2012, Mangalore.
11	Himanshu, S.S., Murthy, H.S., Meshram, S.J. and Jagadish, T.D., 2012. Effect of stocking density on growth and survival of <i>Pangasius hypophthalmus</i> fry reared in cement cisterns fed by formulated feed. Global symposium on aquatic resources and malnutrition - Opportunities and Challenges. Dec., 3-6, 2012, Mangalore.
12	Meshram, S.J., Murthy, H.S., Ali, H., Jagdish, T.D. and Himanshu, S.S., 2012. Nursery rearing of <i>Macrobrachium rosenbergii</i> post larvae in outdoor and indoor rearing units. Global symposium on aquatic resources and malnutrition - Opportunities and Challenges. Dec., 3-6, 2012, Mangalore.
13	Peterson, O., Asplund, M.E., Karunasagar, I. and Godhe, A., 2012. Phytoplankton community composition and diversity effects on the growth of marine <i>Vibrio</i> bacteria. <i>International Society for the Study of Harmful Algae and Intergovernmental Oceanographic Commission of UNESCO 2012 ISBN 978-87-990827-3-5. Pp.161-163.</i>
14	Venkatesh, B., Nayak, P.C. and Varadaraju, S., 2012. Assessment of gradual changes in hydrologic response of river basins in western ghat of India- A case study. International Symposium on VI World Aqua Congress-2012, Water Vision- 2050.

#### FISHERIES RESEARCH AND INFORMATION CENTER, BHUTNAL, BIJAPUR

1	Shivaprakash, S.M., 2012. Digestive enzyme profile in juvenile and adult pearl spot ( <i>Etroplus suratensis</i> ) from Mangalore waters. Global symposium on aquatic resources for eradicating hunger and malnutrition – Opportunities and Challenges. Dec., 3-6, 2012, Mangalore.
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#### ii) National Publications

##### a) Publications in Journals

#	Authors /Year/Title of Paper/Journal	NAAS
<b>VETERINARY COLLEGE, BENGALURU</b>		
1	Placid, E. D'Souza, Dhanalakshmi, H. and Mamatha, G.S., 2012. Parasitic Gastroenteritis in ruminants. <i>The Blue Cross Book</i> , 26:12-19.	
2	Veena, M., Placid, E. D'Souza, Sreenivasamurthy, G.S. and Renukaprasad, C., 2012. Serodiagnosis of cryptosporidiosis in cattle by IFAT. <i>Indian J.Ani.Res.</i> , 46(1):70-73.	6.1
3	Placid, E. D'Souza, Pradeep, B.S. and Renukaprasad, C., 2012. Evaluation of a new biocide against hornflies, cat fleas and bed bugs. <i>Indian Vet. J.</i> , 89(8):108-109.	6.0
4	Sreenivasa Murthy, G. S., Placid, E. D'Souza and Islloor, S., 2013. Evaluation of a polyclonal antibody based sandwich ELISA for the detection of faecal antigens in <i>Schistosoma spindale</i> infection in bovines. <i>J.Para. Dis.</i> , 37(1):47-51.	4.3
5	Raju Metri, Placid, E. D'Souza, Narasimhamurthy, H.N. and Umakanta, B., 2012. Efficacy of commonly used coccidiostats in <i>E. tenella</i> infection in breiler chickens. <i>J.Vet.Para.</i> , 26(1):53-56.	3.5

6	Nazir Ahmad Tookhy and Placid, E. D'Souza, 2012. Studies on Gastrointestinal Parasitic Infections in Goats. <i>The Blue Cross Book</i> , 27:79-81.	
7	Placid, E. D'Souza, 2012. Prevalence, treatment and control of Nasal Schistosomosis in cattle and buffaloes. <i>The Blue Cross Book</i> , 27:19-23.	
8	Sunita Choudhary, Muralidhara, A., Yathiraj, S., Placid, E.D., Suryanarayana, T. and Sengupta, P.P., 2012. Epidemiological study of <i>E.canis</i> in Bengaluru. <i>Indian J. Vet. Med.</i> , 32(1):54-55.	4.5
9	Veena, M. and Placid, E. D'Souza, 2012. Cryptosporidiosis in cattle of Bengaluru district. <i>Indian J. Vet. Med.</i> , 32 (2):126-127.	4.5
10	Placid, E. D'Souza, 2013. Biotechnological applications in animal health and disease. <i>J.Commonwealth Vet. Assoc.</i> , 29(1):12-20.	
11	Rahmani, S.F., Jayashankar, M.R., Nagaraja, C.S., Bhaskaran, R., Byregowda, S.M. and Satyanarayan, K., 2012. Association of genotypes at promoter region of lactoferrin gene with mastitis in crossbred cattle. <i>I. J. Ani. Sci.</i> , 82 (7):718 -720.	6.6
12	Siddaramanna, Gideon Gloridoss, R., Chandrapal Singh, K., Krishnamoorthy, U., Bhaskaran, K., Nagaraja, C.S. and Prabhu, T.M., 2012. Effect of supplementation of surfactant and cellulolytic enzymes on the performance of growing crossbred cattle fed with urea treated Rhodes hay ( <i>Chloris gayana</i> ). <i>I. J. Ani. Nutri.</i> , 28(3): 392-397.	4.6
13	Siddaramanna, Gideon Gloridoss, R., Chandrapal Singh, K., Krishnamoorthy, U., Bhaskaran, K., Nagaraja, C.S. and Prabhu, T.M., 2012. Effect of supplementation of surfactant and cellulolytic enzymes on the performance of growing crossbred cattle fed with urea treated Paddy Straw. <i>I.J. Dairy Biosci.</i> , 22:7-13.	1.8
14	Shashidhara, M.P., Prabhu, T.M., Anandaraj, S., Chandrapal Singh, K. and Gloridoss, R.G., 2012. Nutritional studies in lambs fed salt processed castor ( <i>Ricinus communis</i> ) bean meal as protein supplement. <i>Front. J. Vet. Ani. Sci.</i> , 1(1):52-54.	
15	Lohith, J.A., Obireddy and Siddaramanna, 2012. A study on incidence of hoof problems in crossbred dairy cattle under field conditions. <i>I. J. Dairy Biosci.</i> , 23:34-38.	1.8
16	Nagaraju, G.N., Prasad, R.V., Jamuna, K.V., Satyanarayan, M.L., Jayakumar, K. and Ramkrishna, V., 2012. Comparative histology of the skin of leopard ( <i>Panthera pardus</i> ) and tiger ( <i>Panthera tigris</i> ). <i>Front. J. Vet. Ani. Sci.</i> , 1:30-33.	
17	Nagaraju, G.N., Prasad, R.V., Jamuna, K.V. and Ramkrishna, V., 2012. Histomorphological features in the differentiation of skin of spotted deer ( <i>Axix axix</i> ), cattle ( <i>Bos indicus</i> ) and goat ( <i>Capra hircus</i> ). <i>I. J. Vet. Anat.</i> , 24(1):10-12.	3.5
18	Chandrasekhar, L., Prasad, R.V. and Jamuna, K.V., 2012. Steriological analysis of the tissue compartments of the bursa of fabricius of Giriraja birds ( <i>Gallus domesticus</i> ). <i>I.J. Vet. Anat.</i> , 89:44-46.	6.0
19	Prasad, R.V., Dhoolappa, M. and Jamuna, K.V., 2012. Newer approaches for the management of laminitis in farm animals. <i>Intas Polyvet.</i> , 13(II):204-207.	4.1
20	Hemanna Gowda, Baddi, S.Y., Nagesha, A.M. and Ramakrishna, V., 2012. A case of shifting capped hock in a HF crossbred Indian cow. <i>I. Vet. J.</i> , 89:63-64.	6.0

21	Hemanna Gowda, Baddi, S.Y. and Ramakrishna, V., 2012. Shifting capped hock and its management in a cow. <i>Intas Polivet</i> , 13(II):293-294.	4.1
22	Baddi, S.Y., Hemanna Gowda, Naveenkumar, G.T. and Ramakrishna, V., 2012. A case report of dicephalus tetrapus tetrabrachius in buffalo. <i>I. Vet. J.</i> , 89(12):83-84.	6.0
23	Baddi, S.Y., Hemanna Gowda, Mahendra, A.M. and Ramakrishna, V., 2012. Perosomus elumbis monster - A case report. <i>I.J. Vet. Anat.</i> , 24(1):45.	3.5
24	Jagadeesh, S.S., Jayakumar, K., Vinay Tikare, Shridhar, N.B. and Chandrashekhar, G., 2012. Antiinflammatory activity of cod liver oil in rats. <i>Front. J. Vet. Ani. Sci.</i> , 1(1):7-9.	
25	Girish, K.R., Appannavar, M.M. and Jayashankar, M.R., 2012. Molecular genetic distance study between Kenguri, Deccani and Bannur sheep breed using random amplified DNA markers. <i>Front. J. Vet. Ani. Sci.</i> , 1(1):10-12.	
26	Harini, H., Nagaraja, C.S., Byregowda, S.M. and Jayashankar, M.R., 2012. DNA fingerprinting for identifying wild and domestic animals. <i>I.Vet. J.</i> , 89(9):9-11.	6.0
27	Raveendra Hegde, Isloor, S., Nithin Prabhu, K., Shome, B.R., Rathnamma, D., Suryanarayana, V.V.S., Yatiraj, S., Renuka Prasad, C., Krishnaveni, N., Sundareshan, S., Akhila, D.S., Gomes, A.R., Nagendra and Hegde, R., 2012. Incidence of sub-clinical mastitis and prevalence of major mastitis: Pathogens in organized farms and unorganized sectors. <i>I.J. Microbiol.</i> Published Online, 23, Nov., 2012.	7.0
28	Chandranaik, B.M., Rathnamma, D., Patil, S.S., Ramesha Kovi, Dhawan, J., Ranganatha, S., Isloor, S., Renukaprasad, C. and Prabhudas, K., 2012. Development of a probe based real time PCR assay for detection of bovine herpes virus-1 in semen and other clinical samples. <i>I.J. Virol.</i> Published online 16 <sup>th</sup> Dec., 2012.	7.4
29	Akshata, S.A., Narayanaswamy, H.D., Satyanarayana, M.L., Suryanarayana, T., Shridhar, N.B. and Rathnamma, D., 2012. Gross and histopathological changes in broiler chickens during individual and combined effect of aflatoxicosis and mycoplasmosis in experimental conditions. <i>Front. J. Vet. Ani. Sci.</i> , 1(1):43-46.	
30	Bindya, L.A. and Narasimhamurthy, H.N., 2012. Heritability of part period egg production in a coloured broiler dam line. <i>I.Vet. J.</i> 89(8):131-133.	6.0
31	Nanjesh, B.S., Narasimhamurthy, H.N., Sathyanarayana, K., Jagadeeswary, V., Dharnesha, N.K. and Pavankumar, K.N., 2012. Adoption of scientific management practices by farmers rearing improved varieties of coloured plumaged chicken. <i>M.J.A.S.</i> , 46(1):156-159.	2.9
32	Bindya, L.A., Narasimhamurthy, H.N. and Jayashankar, M.R., 2012. Genetic analysis of part term egg production in a coloured broiler dam line. <i>I.J.Poult.Sci.</i> , 47(1):106-108.	4.2
33	Nithin Prabhu, Isloor, S., Raveendra Hegde, Shome, B.R., Suryanarayana, V.V.S., Rathnamma, D., Veeregowda, B.M., Rajeshwari Shome and Narasimhamurthy, H.N., 2012. Development of polymerase chain reaction for detection of predominant streptococcal isolates causing subclinical bovine mastitis. <i>I.J.Biotechnol.</i> , 12(4):208-212.	7.0

34	Prashanth, V., Girishkumar, V., Narasimhamurthy, H.N. and Nandish, S., 2012. Haematological and biochemical parameters in domestic ( <i>Gallus gallus demistica</i> ) with respect to strain, age and sex. <i>I.J.Poul. Sci.</i> , 47(3):340-344.	4.2
35	Srikanth, M., Sathyanarayana, M.L., Manjunatha, K.P., Rao, S. and Mallikarjuna, G., 2013. Pathological studies on the effect of garlic extract in Acetaminophen induced liver damage in rats. <i>J.Cell.Tissue Res.</i> , 13(1):3577-3580.	4.7
36	Shettar, M., Rao, S., Byregowda, S.M., Dathyanarayana, M.L., Purushottam, K.M., Ramachandra, S.G., Suryanarayana, V.V.S. and Shridhar, N.B., 2012. Immunohistochemical and quantitative real time PCR expression of vascular endothelial growth factor) in canine mammary tumours. <i>J.Cell. Tissue Res.</i> , 12(2):3133-3139.	4.7
37	Kadagi, M., Jayakumar, K., Shridhar, N.B., Narayanaswamy, H.D., Narayanaswamy, M. and Manjunatha, K.P., 2012. Evaluation of hypoglycemic effect of cow urine distillate in streptozotocin induced diabetic rat model. <i>J.Cell. Tissue Res.</i> , 12(3):3317-3322.	4.7
38	Manjunath, K.P., Suguna Rao, Byregowda, S.M., Satyanarayana, M.L., Purushotham, K.M., Narayana Swamy, H.D. and Ansar Kamaran, C., 2012. Sequential pathology of bluetongue virus infection in chicken embryos. <i>J.Cell. Tissue Res.</i> , 12(3):3327-3331.	4.7
39	Vishwanatha, B. and Ranganath, L., 2012. Comparison of laparoscopic methods of endostapling and endoloop suturing for ovariohysterectomy in female dogs. <i>I.J. Vet.Surg.</i> , 33:24-26.	4.0
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<b>VETERINARY COLLEGE, HASSAN</b>		
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#### DAIRY SCIENCE COLLEGE, BENGALURU

1	Sajana Sreekumar, Narasimha Murthy and Anjum, 2012. Physico-chemical properties of milk-fat fractions and their utilization in peda. <i>Mysore J. Agric. Sci.</i> , 46(4):830.	2.9
2	Sajana Sreekumar, Narasimha Murthy and Anjum, 2012. Influence of high melting milk-fat fractions on physico-chemical and sensory attributes of Mysore pak. <i>I.J.Dairy Biosci.</i> , 22:9-13.	1.8
3	Jayashri, P.H., Pratima, B.K. and Roopa Devi, 2012. Nutritional quality of weaning foods enriched with caseino-phospho-peptides (CPP). <i>I. J. Nutri. Dietetics</i> , 49(12):531.	

4	Srinivas, Arunkumar. H., Ramachandra Rao and Venkatesh, M., 2012. Effect of WPC on the quality of enriched probiotic shrikhand. <i>Mysore J.Agric. Sci.</i> , 46(4):836-841.	2.9
5	Arunkumar. H., Ramachandra Rao., Venkateshaiah, B.V. and Venkatesh, M., 2013. Effect of incorporation of WPC and sodium caseinate on the physicochemical and sensory characteristics of chhana spread. <i>Front. J. Vet. Ani.Sci.</i> , 1(2):168-170.	
6	Chitra, M.K. and Ramachandra Rao, H.G., 2012. Effect of incorporation of aloe vera, mint and clove on sensory characteristics of Paneer. <i>I.J. Nutri. Dietetics.</i> , 49:233.	
7	Apurba Giri and Ramachandra Rao, H.G., 2012. Effect of partial replacement of sugar with stevia on the quality of Kulfi. <i>J. Food Sci. Technol.</i> , Published online.	6.9

#### FISHERIES COLLEGE, MANGALORE

1	Shivananda Murthy, H., Shrikala, D.R., Shankar and Tejpal, C.S., 2013. Effect of carrageenan on growth, survival and feed utilization of common carp, <i>Cyprinus carpio</i> . <i>IJF</i> (Accepted).	6.2
2	Sharanappa Biradar, Shivananda Murthy, H., Jayaraj, E.G., Prakash Patil and Naveen Kumar, B.T., 2013. Effect of microbial phytase on growth and survival in freshwater prawn, <i>Macrobrachium rosenbergii</i> . <i>Fishery Technol.</i> (In press).	4.1
3	Kangku, O.N.S. and Basavaraja, N., 2012. Comparative growth and survival of hatchery produced and wild fingerlings of Deccan mahseer, <i>Tor khudree</i> (Sykes). <i>IJF</i> , 59(1):89-93.	6.2
4	Basavaraja, N., Pau Biak Lun, Rather, M.A. and Katare, M.B., 2012. Successful induced breeding of the Cauvery carp, <i>Puntius carnaticus</i> (Jerdon). <i>Fishing Chimes</i> , 32(4):44-45.	
5	Iqlas Ahmed, 2012. Effect of transportation stress on the humoral immunity of catla fry and fingerlings. <i>J. Acad. Indus. Res.</i> , 1(7):401-403.	
6	Iqlas Ahmed, 2013. Cortisol response of catla fry and fingerlings to handling stress. <i>Environ. Ecol.</i> , 31(2):477-480.	2.1
7	Nareshkumar Mehta, Elavarasan, K., Manjunath Reddy, A. and Shamasundar, B.A., 2012. Effect of ice storage on the functional properties of protein from a few species of freshwater fish (Indian Major Carps) with special emphasis on gel forming ability. <i>J.Food Sci. Technol.</i> , DOI 10.1007/s 13197-011-055-v.	6.9
8	Prakash Pavadi, Shivananda Murthy, H., Ramachandra Naik, A.T., Shivakumar, M., Lakshmi pathi, M.T., Manjappa, N., Ramesha, T.J. and Shankar, R., 2012. Dietary administration of a feed attractant (Aquasavor) on growth, nutrient utilization and biochemical composition of freshwater prawn ( <i>Macrobrachium rosenbergii</i> ). <i>J.Sci.Environ. Technol.</i> , 1(5):439-446.	
9	Mridula Rajesh, K.S., Venkatesh Moorthy and Chethan, N., 2012. Distribution of heavy metals and sediments of coastal waters of Mangalore, Karnataka. <i>Front. J. Vet.Ani. Sci.</i> , 1(1):62-64.	

10	Shivaprakash, S.M., Shivashankar, N., Manjappa, N. and Ramachandra Naik, A.T., 2012. Energy distribution pattern in the edible and inedible body parts of <i>Etroplus suratensis</i> (Bloch). <i>J. Sci., Environ. Technol.</i> , 1(5):462-472.	
11	Shivakumar, M., Naveenkumar, B.T., Shivananda Murthy, Ramachandra Naik, A.T. and Vasudevappa, C., 2012. Studies on effect of claw-ablation on growth and survival of <i>Macrobrachium rosenbergii</i> (de Man). <i>J. Sci., Environ. Technol.</i> , 1(5):491-498.	
12	Jitendra Kumar, Pandey, A.K., Dwivedi, A.C., Kumar Naik, A.S., Mahesh, V., Benakappa, S., 2013. Ichthyofaunal diversity of Faizabad District (Uttar Pradesh). <i>J. Exp. Zool. India</i> , 6(1):1-6.	3.7
13	Bhowmick, P.P., Shabrinath, S., Devegowda, D., Shekar, M., Rawandeepika, H., Karunasagar, I. and Karunasagar, I., 2012. Serotyping and molecular characterization for study of genetic diversity among seafood associated nontyphoidal <i>Salmonella</i> serovars. <i>I.J. Med. Res.</i> , 135:371-81.	7.6
14	Shetty, M., Maiti, B., Santhosh, K.S., Venugopal, M.N. and Karunasagar, I., 2012. Betanodavirus of marine and freshwater fish: Distribution, genomic organization, diagnosis and control measures. <i>I.J. Virol.</i> , 23(2):114-123.	7.4
15	Malathi Shekar, Pradeep Balakrishnan and Indrani Karunasagar, 2012. White spot syndrome virus: genotypes, epidemiology and evolutionary studies. <i>I.J. Virol.</i> , 23(2):175-183.	7.4
16	Muhammed, P., Safeena, Praveen Rai and Indrani Karunasagar, 2012. Molecular biology and epidemiology of hepatopancreatic parvovirus (HPV) of penaeid shrimp. <i>I.J. Virol.</i> , 23(2):191-202.	7.4
17	Praveen Rai, Muhammed P. Safeena, Kjersti Krabsetsve, Kathy La Fause, Leigh Owens and Indrani Karunasagar, 2012. Genomics, molecular epidemiology and diagnostics of infectious hypodermal and hematopoietic necrosis virus (IHNV). <i>I.J. Virol.</i> , 23(2): 203-214.	7.4
18	Balakrishnan Pradeep, Praveen Rai, Seethappa, A., Mohan, Mudagandur, S., Shekhar and Indrani Karunasagar, 2012. Biology, host range, pathogenesis and diagnosis of White Spot Syndrome Virus (WSSV). <i>I.J. Virol.</i> , 23(2):161-174.	7.4
19	Viswanatha, B.S., Munireddy, R., Anjanayappa, H.N., Vijay, A.R., Devivaraprasad Reddy, A. and Manjunatha Reddy, A., 2012. Fish supply chain management in Karnataka. <i>J.Interacademicia</i> , 16(4):938-945.	3.0
<b>INSTITUTE OF ANIMAL HEALTH AND VETERINARY BIOLOGICALS, BENGALURU</b>		
1	Raveendra Hegede, Amitha Reena Gomes, Byregowda, S.M. and Renukaprasad, C., 2012. Thermo stability of live attenuated PPR vaccine. <i>I. Vet.J.</i> , 89:11-12.	6.0
2	Chakraborty, S., Chandranaiik, B.M., Veeragowda, B.M. and Patil, S.S., 2012. Application of one step RT PCR for detection of classic swine fever 5'NTR gene from pooled tissue materials. <i>J.Interacademicia</i> , 16(2):494-498.	3.0
3	Patil, S.S., Hemadri, D., Chandranaiik, B.M. and Prabhudas, K., 2012. Genetic characterization of bovine herpes virus-1 isolates in India. <i>I.J. Ani. Sci.</i> , 82(8):848-850.	6.6

4	Chandranai, B.M., Rathnamma, D., Patil, S.S., Ranganath, S., Renukaprasad, C. and Prabhudas, K., 2012. Application of probe based RT PCR for detection of bovine herpes virus-1. <i>Tropical Biomedicinae</i> . 21(2):982-987.	
5	Raveendra Hegde, Isloor, S., Nithin, K., Prabhu, Shome, B.R., Rathnamma, D., Suryanarayana, V.V.S., Yathiraj, S. and Renukaprasad, C., 2012. Incidence of subclinical mastitis and prevalence of major mastitis pathogens in organized farms and unorganized sectors. <i>I.J.Microbiol.</i> , DOI 10.1007/S12088-012-0336-1.	7.0
6	Muniyelappa, H.K., Satyanarayana, M.L., Gowda, N.K.S. and Giridahra, P., 2012. Abstract on an analytical study of gizzard erosion in commercial layers. <i>Poult. Sci.</i> , 91(1):72.	7.6
7	Muniyelappa, H.K., Satyanarayana, M.L., Isloor, S. and Renukaprasad. C., 2012. Abstract on effects of mine dust on immune status of layer chicken. <i>Poult. Sci.</i> , 91(1):30.	7.6
<b>INSTITUTE OF WILDLIFE VETERINARY RESEARCH, KODAGU</b>		
1	Jouher Sulthana, C.M. and Narayana Bhat, M., 2012. Studies on prevalence of newcastle disease in certain captive birds. <i>Front. J. Vet. Ani. Sci.</i> , 1(1):58-59.	
2	Kavitha, K., Yathiraj, S., Ansar Kamram, C., Narayana Bhat, M., Ramachandra, S.G. and Suguna Rao, 2012. Microalbuminuria as an indicator of renal damage in dogs. <i>Front. J. Vet. Ani. Sci.</i> , 1(1):60-61.	
<b>LIVESTOCK RESEARCH AND INFORMATION CENTER (DEONI), HALLIKHED</b>		
1	Rudraswamy, M.S., Sukanya, T.S., Yogesh, G.S. and Suresh, T., 2012. Supplementation of urea molasses mineral block to grass fed local cattle of malenad region. <i>Mysore J. Agric. Sci.</i> , 46(4):846-850.	2.9
2	Rudraswamy, M.S. and Das, T.K., 2013. Incorporation of isobutyric acid as feed additive for small ruminants. <i>I.J. Ani.Nutri.</i> , 30(1):56-59.	4.6
3	Rudraswamy, M.S., Anand Manegar, G., Arun, M.S., Chaithanya, M.S. and Siddalinga Swamy Hiremath, 2012. Effect of the novel herbal supplement Actovet Growth as growth promoter for broilers. <i>Fron. J. Vet.Ani.Sci.</i> , 1(2):143-146.	
<b>LIVESTOCK RESEARCH AND INFORMATION CENTER (SHEEP), NAGAMANGALA</b>		
1	Roopa Devi, Y. S., Narayanaswamy, H., Chandrashekara, N. and Sathyanarayana, M.L., 2012. Studies on pathology of chlorpyrifos toxicity in chick embryos. <i>J. Cell Tissue Res.</i> , 12(3):3307-3309.	4.7
<b>FISHERIES RESEARCH AND INFORMATION CENTER, BENGALURU</b>		
1	Narashima Murthy, L., Satyan Kumar Panda and Rajanna, K.B., 2012. Effect of cryo protectants on the functional properties of proteins from tilapia ( <i>Oreochromis Niloticus</i> ) during frozen storage. <i>Fishery Technol.</i> , 49:155-160.	4.1
2	Narasimha Reddy, A., Basavaraju, Y. and Raghunath, M.R., 2012. Use of benzocaine as an anesthetic in fresh water carp, <i>Labeo fimbriatus</i> , <i>I.Vet. J.</i> (In press).	6.0

3	Rajanna, K.B., Narasimha Reddy, A. and Basavaraju, Y., 2012. Effect of stocking density on growth and survival of freshwater prawn <i>Macrobrachium rosenbergii</i> . <i>Environ. Ecol.</i> , 30(4A):1521-1524.	2.1
4	Basavaraju, Y., Rajanna, K.B., Narasimha Reddy, A., Prashanth, N.T. and Shivaraja, 2012. Water quality and sediment structure of Ulsoor lake. <i>Environ. Ecol.</i> (In press).	2.1

#### **FISHERIES RESEARCH AND INFORMATION CENTER, BHUTNAL, BIJAPUR**

1	Srinivas, H.H., Shivaprakash, S.M., Anjanayappa, H.N., Somashekara, S.R., Benakappa, S., Kumar Naik, A.S., Ganesh Prasad, L., Kamlesh Panda and Jitendra Kumar, 2013. Breeding Biology of Indian Mackerel, <i>Rastrelliger kanagurta</i> (Cuvier). <i>Environ. Ecol.</i> , 31 (2A):683-688.	2.1
2	Srinivas, H.H., Shivaprakash, S.M., Anjanayappa, H.N., Somashekara, S.R., Benakappa, S., Kumar Naik, A.S., Ganesh Prasad, L. and Jitendra Kumar, 2013. Length-weight relationship of <i>Rastrelliger kanagurta</i> (Cuvier) from Mangalore region. <i>Environ. Ecol.</i> , 31(2A):676-678.	2.1
3	Srinivas, H.H., Shivaprakash, S.M., Anjanayappa, H.N., Somashekara, S.R., Benakappa, S. Kumar Naik, A.S., Ganesh Prasad, L. and Jitendra Kumar, 2013. Food and feeding habits of mackerel, <i>Rastrelliger kanagurta</i> (Cuvier) from Mangalore region. <i>Environ. Ecol.</i> , 31(2A):672-675.	2.1
4	Somashekara, S.R., Shivaprakash, S.M., Benakappa, S., Anjanayappa, H.N., Srinivas, H.H. and Kamlesh Panda, 2012. Food and feeding habit of the grey mullet, <i>Liza melinoptera</i> (Velancennes) from Mangalore waters. <i>Ecol. Fish.</i> , 4(1):1-8.	
5	Anjanayappa, H.N., Benakappa, S., Shivaprakash, S.M., Somashekara, S.R., Kumar Naik, A.S., Jitendra Kumar and Mahesh, V., 2013 Breeding periodicity of the Mullet, <i>Liza macrolepis</i> from Mangalore waters. <i>Trends in Biosci.</i> , (In press).	2.7
6	Somashekara, S.R., Shivaprakash, S.M., Kumar Naik, A.S., Anjanayappa, H.N., Benakappa, S., Jitendra Kumar, Kamlesh Panda and Mahesh, V., 2013. Population characteristics of pink perch, <i>Nemipterus mesoprion</i> from Mangalore waters. <i>J. Ani. Plant Sci.</i> (In press).	7.0
7	Anjanayappa, H.N., Benakappa, S., Shivaprakash, S.M., Somashekara, S.R., Kumar Naik, A.S., Jitendra Kumar, Rajanna, K.B., Mahesh, V. and Nayana, P., 2013. The length-weight Relationship and relative condition factor of <i>Priacanthus hamrur</i> off Mangalore coast. <i>Bioscan</i> (In press).	5.1

b) In Conferences / Seminars / Symposia / Workshops etc.

#	Authors /Year / Title of Paper / Conference
<b>VETERINARY COLLEGE, BENGALURU</b>	
1	Placid, E. D'Souza, 2012. An overview on the application of molecular techniques in the detection, diagnosis and control of animal parasites. XXIII National Congress. <i>Vet. Parasitol.</i> , 12-14 Dec., 2012, Guwahati, 103-113.

2	Mohammad Dawood Bawer, Placid, E.D' Souza and Pradeep, B.S., 2012. Biocontrol of <i>Haematobia irritans</i> flies with entomopathogenic fungi ( <i>Beauveria bassiana</i> and <i>Metarhizium anisopliae</i> ). XXIII National Congress. <i>Vet. Parasitol.</i> , Dec., 12-14, 2012, Guwahati, O-IV.18, P 205.
3	Sreenivasamurthy, G.S. and Placid, E.D'Souza, 2012. Sandwich ELISA in the diagnosis of schistosoma spindale infection in bovines. XXIII National Congress. <i>Vet.Parasitol.</i> , Dec., 12-14, 2012, Guwahati, O-III.15, P 131.
4	Placid, E.D'Souza and Sanweer Khatoon, 2012. Case reports of eye infections in human patients with animal parasites. XXIII National Congress. <i>Vet. Parasitol.</i> , Dec., 12-14, 2012, Guwahati, O-II.14, P 83.
5	Placid, E.D'Souza, 2013. The problem of anthelmintic resistance in Karnataka state in combating parasitic gastroenteritis in ruminants. Compendium ASCAD Technical Seminar on Newer approaches in control and diagnosis of emerging and economically important diseases of livestock on 16.2.2013 at Bengaluru, Pp 21-33.
6	Kruthika, P.R., Veena, T., Narayanaswamy, M., Narayanaswamy, H.D., Honnappa, T.G. and Shridhar, N.B, 2012. Effect of pregnant cow's urine on reproductive status in female rats. XII Annual Conference of ISVPT, Veterinary College, Bengaluru.
7	Kruthika, P.R., Veena, T., Narayanaswamy, M., Shridhar, N.B., Honnappa, T.G., Narayanaswamy, H.D., Islbor, S., and Apsana, R, 2012. Effect of cow's urine on serum 17 $\beta$ Estradiol levels in female rats. XII Annual Conference of ISVPT, Veterinary College, Bengaluru.
8	Upendra, H.A., 2013. Hypothyroidism in a dog. IS VM, Jan, 9-11, 2013.
9	Upendra, H.A., 2013. Acute bloat in a sheep. ISVM, Jan, 9-11, 2013.
10	Upendra, H.A., 2013. Rational therapy for acute hemorrhagic septicemia in a buffalo calf. ISVM, Jan, 9-11, 2013.
11	Siddaramanna, Gideon Gloridoss, R., Chandrapal Singh, K., Krishnamoorthy, U., Bhaskaran, K., Nagaraja, C.S. and Prabhu, T.M., 2012. Nutritive evaluation and effect of surfactants and cellulolytic enzymes supplementation to urea treated paddy straw on energy content, <i>In vitro</i> gas and methane production. VIII Biennial Animal Nutrition Association Conference, Bikaner, Rajasthan, Nov., 28-30, 2012.
12	Siddaramanna, Gideon Gloridoss, R., Chandrapal Singh, K., Krishnamoorthy, U., Bhaskaran, K., Nagaraja, C.S. and Prabhu, T.M., 2012. Performance of growing crossbred cattle fed on diets with urea treated Rhodes hay with supplementation of surfactants and enzymes. VIII Biennial Animal Nutrition Association Conference, Bikaner, Rajasthan, Nov., 28-30, 2012.
13	Lohith, M.T., Prabhu, T.M., Chandrapal Singh, K., Gloridoss, R.G. and Rajeswari, Y.B., 2012. Comparative study on utilization of groundnut cake, soybean meal and castor bean meal as protein supplements in broiler rabbits. VIII Biennial Animal Nutrition Association Conference, Bikaner, Rajasthan, Nov., 28-30, 2012.

14	Sowjanya Lakshmi, K., Gideon Gloridoss, R., Chandrapal Singh, K., Bhaskaran, K., Narasimhamurthy, H.N. and Siddaramanna, 2012. Effect of inclusion of corn germ meal in colored broiler (Raja-II) diet on growth performance, metabolizability of nutrients and carcass characteristics. XXIX Annual Conference and National Symposium of IPSACON 2012. SVVU, Rajendranagar, Hyderabad, Dec., 5-7, 2012.
15	Chandre Gowda, Nadeem Fairoze, Girish, P.S., Shailesh Bagale and Renukaprasad, C., 2012. Authentication of chicken ( <i>Gallus gallus</i> ) meat by Forensically Important Nucleotide Sequencing (FINS). XXIX Annual Conference and National Symposium of IPSACON, SVVU, Rajendranagar, Hyderabad, Dec., 5-7, 2012.
16	Chandre Gowda, C.T., Nadeem Fairoze, Girish, P.S., Sen, A.R., Vaithiyanathan, S. and Shailesh Bagale, 2013. A rapid method for authentication of beef and pork by FINS and PCR-RFLP of mitochondrial cytochrome B gene. V Annual Conference and National Symposium of IMSACON-V, Feb., 7-9, 2013, NRC on Meat, Hyderabad.
17	Sunil Kumar, K., Chandre Gowda, C.T., Kiran, M., Muthukumar, M., Naveena, B.M. and Nadeem Fairoze, 2013. Carcass characteristics and meat quality attributes of desi chickens. V Annual Conference and National Symposium of IMSACON-V, Feb., 7-9, 2013, NRC on Meat, Hyderabad.
18	Chandre Gowda, C.T., Nadeem Fairoze, Girish, P.S., Muthukumar, M., Shailesh Bagale and Krishnamoorthy, U., 2013. Buffalo ( <i>B. bubalis</i> ) meat authentication forensically informative NUC Seq (FINS). V Annual Conference and National Symposium of IMSACON-V, Feb., 7-9, 2013, NRC on Meat, Hyderabad.
19	Rajeshwari, Y.B., 2013. A study on the factors affecting birth weight in pigs. In: National Seminar on New Paradigms in livestock production: From traditional to commercial farming and beyond and XX Annual Convention of ISAPM, NDRI, Karnal, Jan., 28-30, 2013.
20	Rajeshwari, Y.B., 2013. A study on the body measurements of broiler rabbits. In: National Seminar on New Paradigms in livestock production: From traditional to commercial farming and beyond and XX Annual Convention of Indian Society of Animal Production and Management, NDRI, Karnal, January 28-30, 2013.
21	Rajeshwari, Y.B., 2013. Early litter traits in swine and factors affecting them. In: National Seminar on New Paradigms in livestock production: From traditional to commercial farming and beyond and XX Annual Convention of ISAPM, NDRI, Karnal, Jan., 28-30, 2013.
22	Jagadeesh S.S., Jayakumar, K., Vinay, P.T., Shridhar, N.B., Chandrashekhar, G. and Rohit S.H., 2012. Sub chronic toxicity study of cod liver oil in rats. In: Compendium XII Annual Conference of ISVPT, Bengaluru from Dec., 12-14, 2012.
23	Jagadeesh, S.S., Jayakumar, K., Vinay P.T., Shridhar, N.B., Chandrashekhar, G. and Vijay Kumar, 2012. Subacute toxicity study of cod liver oil in rats. In: Compendium XII Annual Conference of ISVPT, Bengaluru from Dec., 12-14, 2012.
24	Shridhar, N.B., Jayashree Pattar, Mahesh Kadagi, Santhoshkumar, C.N., Suhasini, K. and Jayakumar, K., 2012. Antioxidant effect Pterocarpous marsupium and Coffee extract in hyperlipidemic rats. In: Compendium XII Annual Conference of ISVPT, Bengaluru from Dec., 12-14, 2012.

25	Jayashree Pattar, Shridhar, N.B., Jagadeesh S. Sanganal, Suhasini, K., Satyanarayana, M.L., Jayakumar, K., Shrikrishna Isloor, Santhoshkumar, C.N., Premkumar, G., Mahesh Kadagi, Manohara, C. and Basavarajendra, B., 2012. Phytochemical screening and acute toxicity studies of methanolic extract of <i>Ficus virens</i> . In: Compendium XII Annual Conference of ISVPT, Bengaluru from Dec., 12-14, 2012.
27	Jayashree Pattar, Shridhar, N.B., Jagadeesh, S.S., Suhasini, K., Satyanarayana, M.L., Mahesh Kadagi, Premkumar, G., Santhoshkumar, C.N. and Manohara, C., 2012. Effect of methanolic extract of <i>Ficus virens</i> leaves on antioxidant enzyme profile in rats. In: Compendium XII Annual Conference of ISVPT, Bengaluru from Dec., 12-14, 2012.
28	Santhoshkumar, C.N., Shridhar, N.B., Jayakumar, K., Satyanarayana, M.L. and Ansar Kamran, C., 2012. Phytochemical analysis and safety evaluation of <i>Sapindus laurifolius</i> leaf extract in rats. In: Compendium XII Annual Conference of ISVPT, Bengaluru from Dec., 12-14, 2012.
29	Santhoshkumar, C.N., Shridhar, N.B., Jayakumar, K., Mahesh Kadagi, Premkumar, G., Manohara, C., Jayashree Pattar and Suhasini, K., 2012. Acute toxicity study of <i>Sapindus laurifolius</i> fresh leaves in rats. In: Compendium XII Annual Conference of ISVPT, Bengaluru from Dec., 12-14, 2012.
30	Santhoshkumar, C.N., Shridhar, N.B., Jayakumar, K., Mahesh Kadagi, Premkumar, G., Manohara, C., Jayashree Pattar and Suhasini, K., 2012. Effects of <i>Sapindus laurifolius</i> methanolic leaf extract on biochemical parameters in rats. In: Compendium XII Annual Conference of ISVPT, Bengaluru from Dec., 12-14, 2012.
31	Manohara, C., Jayakumar, K., Shridhar, N.B., Jagadeesh, S.S., Premkumar, G., Mahesh Kadagi, Santhoshkumar, C.N., Jayashree Pattar, Suhasini, K. and Sushrutkumar, 2012. Experimental evaluation of toxic characteristic of a silk protein coated film in wistar albino rats. In: Compendium XII Annual Conference of ISVPT, Bengaluru from Dec., 12-14, 2012.
32	Nagaraja, R., Naveenkumar, S. and Sreesujatha, R.M., 2013. Influence of weaning age and weaning weight on post-weaning growth performance in Mandya lambs. ISAGB, Veterinary College, Panthnagar, Uttaranchal, Feb., 11, 2013.
33	Maltesh and Ramesh, P.T., 2013. Isolation and molecular identification of mycoplasma from chicken affected with respiratory diseases. XXXI ISVM Conference on Advancing veterinary medicine and its specialties for augmented productivity and health: Issues and strategies in farm and companion animals, Veterinary College, Mhow, MP, Jan., 9-11, 2013.
34	Maltesh and Ramesh, P.T., 2013. Retrospective studies on respiratory diseases in chicken in Bengaluru. XXXI ISVM Conference on Advancing veterinary medicine and its specialties for augmented productivity and health: Issues and strategies in farm and companion animals, Veterinary College, Mhow, MP, Jan., 9-11, 2013.
35	Maltesh and Ramesh, P.T., 2013. Isolation of bacteria from respiratory tract infections of chickens and their Antibiotogram pattern. XXXI ISVM Conference on Advancing veterinary medicine and its specialties for augmented productivity and health: Issues and strategies in farm and companion animals, Veterinary College, Mhow, MP, Jan., 9-11, 2013.
36	Abirami and Ramesh, P.T.. 2013. Antibiotogram pattern of pathogen in mastitic milk. XXXI ISVM Conference on Advancing veterinary medicine and its specialties for a ugmented productivity and health: Issues and strategies in farm and companion animals, Veterinary College, Mhow, MP, Jan., 9-11, 2013.

37	Chandrashekhar, N., Rathnamma, D., Veeresh, B.H., Yathiraj, S., Satyanarayana, M.L., Veeregowda, B.M., Suguna Rao, Abdul Rahman, S. and Islor, S., 2012. Application of reverse – Transcription polymerase chain reaction (RT-PCR) for diagnosis of rabies in animals and it's comparative evaluation with direct fluorescent antibody (DFA) testing and direct rapid immuno histochemistry test (DRIT). <i>XIV National Conference of APCRICON-2012 on towards a Sustainable Rabies Control Programme in India-A One Health initiative at Kolkata</i> , July, 6-8, 2012.
38	Ashok, M., Murthy, H.N.N., Murthy, T.N.K., Bindya, L.A. and Nataraju, R., 2012. Genetic parameters of a coloured broiler female parent line. XXIX Annual Conference and National Symposium of IPSACON-2012, Hyderabad.
39	Murthy, H.N.N., Sudhir Naik, Umakantha, B. and Islor, S., 2012. Evaluation of three way crosses for broiler traits and immune response to new castle disease vaccination. XXIX Annual Conference and National Symposium of IPSACON-2012, Hyderabad.
40	Sowjanya Lakshmi, K., Gideon Gloridoss, R., Chandrapal Singh, K., Bhaskaran, R., Murthy, H.N.N. and Siddaramanna, 2012. Effect of inclusion of corn meal in coloured broiler (Raja-II) diet on growth performance, metabolizability of nutrients and carcass characteristics. XXIX Annual Conference and National Symposium of IPSACON-2012, Hyderabad.
41	Satheesha, K.G., Murthy, H.N.N., Rajeshwara Rao and Jayanai, 2012. Effect of feed restriction and supplementation of enzyme or probiotic on the performance of broiler breeders. XXIX Annual Conference and National Symposium of IPSACON-2012, Hyderabad.
42	Satheesha, K.G. and Murthy, H.N.N., 2012. Effect of feed restriction on the performance of broiler breeders. XXIX Annual Conference and National Symposium of IPSACON-2012.
43	Gopinath, C.R., Murthy, H.N.N., Rajakumar Nagarhalli and Umakantha, B. and Nagaraja, C.S., 2012. Carcass traits in native chicken of Karnataka. XXIX Annual Conference and National Symposium of IPSACON-2012, Hyderabad.
44	Gopinath, C.R., Murthy, H.N.N., Rajakumar Nagarhalli and Umakantha, B. and Islor, S., 2012. Evaluation of native chicken for organo-leptic traits. XXIX Annual Conference and National Symposium of IPSACON-2012.
45	Rajakumar Nagarhalli, Murthy, H.N.N., Gopinath, C.R. and Veeregowda, B.M., 2012. Egg quality traits, fertility and hatchability performance of indigenous chicken reared under intensive system. XXIX Annual Conference and National Symposium of IPSACON-2012, Hyderabad.
46	Rajakumar Nagarhalli, Murthy, H.N.N., Gopinath, C.R. and Veeregowda, B.M., 2012. Egg quality traits of indigenous chicken reared under scavenging system. XXIX Annual Conference and National Symposium of IPSACON-2012, Hyderabad.
47	Murthy, H.N.N., Mahesh Patil and Islor, S., 2012. Application of multiplex polymerase chain reaction for sexing turkeys. XXIX Annual Conference and National Symposium of IPSACON-2012, Hyderabad.
48	Girish Kumar, V. and Nandi, S., 2013. Influence of high-end reproductive biotechniques on sustainable animal production. In: Proceedings of 100 <sup>th</sup> Indian Science Congress, Jan., 3-7, 2013, Kolkata.

49	Mamatha, N., Ramesh, H.S., Chennal, H.T. and Girish Kumar, V., 2012. Effect of sulphur and quality of cotton in a vertisol: In: V Annual State Level Conference of KSTAC-2012.
50	Mamatha, N., Ramesh, H.S., Chennal, H.T. and Girish Kumar, V., 2012. Effect of micronutrients (iron and zinc) on yield and quality of cotton in a vertisol. In: V Annual State Level Conference of KSTAC-2012.
51	Girish Kumar, V., 2012. Lead paper on Veterinary physiology education for practicing veterinary professional in the Physiology Education Workshop-2012, KVASU, Mannuthy on 10 <sup>th</sup> Aug, 2012.
52	Ranganath, L., 2012. Arthritis and its management in dogs (lead paper). National Congress on Canine Practice and Symposium on New horizons in companion animal health and management and X annual convention of ISACP, Feb., 6-8, 2013, Panaji, Goa.
53	Ranganath, L., Ramesh Rathod, Patil, A.S and Nagaraja, B.N., 2012. Surgical correction of urethral obstruction secondary to Os-penis fracture in a dog. National congress on canine practice and symposium on new horizons in companion animal health and management and X annual convention of ISACP, Feb., 6-8, 2013, Panaji, Goa.
54	Ramesh Rathod, Ranganath, L., Patil, A.S. Mahesh, V., Nagaraja, B.N., Shivaiah, H.C. and Rajendraprasad, H.S., 2012. Adnexial tumour In dogs: A report of five cases. XXXVI Annual Congress of ISVS, Anand, Gujarat, 2012.
55	Ranganath, L., Patil, A.S., Ramesh Rathod, Nagaraja, B.N., Rajendraprasad, H.S. and Ravikumar, S., 2012. Surgical management of femoral head fracture and hip dislocation by femoral head ostectomy in dogs. XXXVI Annual Congress of ISVS, Anand, Gujarat, 2012.
56	Ramesh Rathod, Mahesh, V., Nagaraja, B.N., Ranganath, L., Patil, A.S., Shivaiah, H.C. and Srinath, D.N., 2012. Surgical management of colon dilatation and torsion in a donkey - A case report. XXXVI Annual Congress of ISVS, Anand, Gujarat, 2012.
57	Ramesh Rathod, Patil, A.S., Ranganath, L., Srinivasa Murthy, K.M., Nagaraja, B.N. and Ravikumar, S., 2012. Surgical management of evisceration secondar to congenital failure of umbilicus closure in a newborn calf. XXXVI Annual Congress of ISVS Anand, Gujarat, 2012.
58	Ramesh Rathod, Ranganath, L., Patil, A.S., Nagaraja, B.N. and Angirus, S., 2012. Oesophageal obstructions in bovines: Five Year Review. ISVS, Anand, Gujarat, 2012.
59	Ranganath, L., Nagaraja, B.N., Ramesh Rathod, Patil, A.S. and Angirus, S., 2012. Gastro-Intestinal tract obstruction in dogs: Five Year Review. XXXVI Annual Congress of ISVS, Anand, Gujarat, 2012.
60	Ramesh Rathod, Patil, A.S. Mahesh, V., Ranganath, L., Nagaraja, B.N. and Rajapeer Badigera, 2012. Surgical management of caecal dilatation and torsion by typhlectomy and typhlotomy in bovines – Three case reports. XXXVI Annual Congress of ISVS, Anand, Gujarat, 2012.
61	Ramesh Rathod, Srinivasa Murthy, K.M., Ranganth, L., Patil, A.S. and Srinath, D.N., 2012. Ovariohysterectomy in a pet guinea pig – A case report. XXXVI Annual Congress of ISVS, Anand, Gujarat, 2012.
62	Nagaraja, B.N., Ranganath, L., Ramesh Rathod, Shivaiah, H.C.. Patil, A.S. and Rajpeep Badigere, 2012. Intestinal obstruction and its management in bovine – A case report. XXXVI Annual Congress of iSVS, Anand, Gujarat, 2012.

63	Nagaraja, B.N., Vani, T.K., Vasanth, M.S., Ramesh Rathod and Patil, A.S., 2012 .Modified segmental fixation for lumbosacral luxation in a neo-politan mastiff pup. XXXVI Annual Congress of ISVS, Anand, Gujarat, 2012.
64	Nagaraja, B.N., Shivaiah, H.C. Patil, A.S., Ramesh Rathod, Rajendraprasad, H.S. and Ranganath, L., 2012. Unusual oesophageal obstruction due to regurgitated ruminal foreign body in a cow. XXXVI Annual Congress of ISVS, Anand, Gujarat, 2012.
65	Nandeesh, B., Nagaraja, B.N., Vasanth, M.S., Ranganath, L., Honnappa, T.G. and Suguna Rao, 2012. Studies on stabilization of vertebral fractures using locking compression plate technique in dogs. ISVS, Anand, Gujarat, 2012.
66	Nagaraja, B.N., Patil, A.S., Ramesh Rathod, H.S., Rajendraprasad, Srinath, D.N. and Ranganath, L., 2012. Use of modified type II external fixation (PMMA / Wooden Planks as Connecting Bars) for long bone fracture repair in various domestic animals. XXXVI Annual Congress of ISVS, Anand, Gujarat, 2012.
67	Nagaraja, B.N., Patil, A.S., Ramesh Rathod, Vasanth, M.S., Nandeesh, B., Ravikumar, S. and Angirus, S., 2012. Surgical management of thoracic vertebral fracture in a dog by laminectomy, external skeletal fixation and wheel cart. XXXVI Annual Congress of ISVS, Anand, Gujarat, 2012.
68	Patil, A.S., Nagaraja, B.N., Ramesh Rathod, Rajapeer, B., Veerabhadraiah, H.V. and Ranganath, L., 2012. Studies on incidence and management of various neoplasms in cattle: A review of 107 cases in 5 Years. XXXVI Annual Congress of ISVS, Anand, Gujarat, 2012.
69	Nagaraja, B.N., Patil, A., Ramesh Rathod, Vasanth, M.S., Nandeesh, B. and Ravikumar, S., 2012. Successful surgical management of traumatic posterior paralysis in a cat by dorsal laminectomy. XXXVI Annual Congress of ISVS, Anand, Gujarat, 2012.
70	Nagaraja, B.N. Patil, A.S. Vasanth, M.S., Srinath, D.N., Ramesh Rathod and Angirus, S., 2012. Surgical management of thoracic vertebral (T-13) fracture in a dog by laminectomy and external skeletal fixation using PMMA block. ISVS, Anand, Gujarat, 2012.
71	Nagaraja, B.N., Patil, A.S, Ramesh Rathod, Vasanth, M.S., Nandeesh, B. and Rajapeer, B., 2012. Comparative evaluation of mid dorsal Vs. Dorsolateral epiaxial muscle splitting approach for lateral vertebral body plating for stabilization of lumbar fractures in dogs. XXXVI Annual Congress of ISVS, Anand, Gujarat, 2012.
72	Nagaraja, B.N. Patil, A.S, Ramesh Rathod, Rajapeer, B., Shivaiah, H.C. and Ranganath, L., 2012. Surgical management of supracondylar femur fracture using methyl methacrylate T-Plate in a dog – A case report. XXXVI Annual Congress of ISVS, Anand, Gujarat, 2012.
73	Murthy, C.N.A., Murthy, V.C., Krishnaswamy, A., Honnappa, T.G., and Nagaraja, B.N., 2013. Influence of different laparotomy techniques of ovariohysterectomy on clinical and haematological parameters in dogs. Compendium of proceedings of ISCAP, Punjim, Goa, Abstract No: 1:IV.
74	Murthy, C.N.A., Murthy, V.C., Krishnaswamy, A., Honnappa. T.G., and Nagaraja, B.N., 2013, Comparison of different laparotomy techniques of ovariohysterectomy and hole surgical complications in dogs. Compendium of proceedings of ISCAP, Punjim, Goa, Abstract No: 2: IV.

75	Babu, M., Krishnaswamy, A., Honnappa, T.G., and Murthy, V.C., 2013, Comparison of flank and ventral midline laparotomy for ovariohysterectomy in cats. Compendium of proceedings of ISCAP, Punjim, Goa, Abstract No, 3:IV.
76	Shwetha, K.S., Honnappa, T.G., Krishnaswamy, A., and Murthy, V.C., 2013. Studies on incidence, risk factors and clinical managements of fetal dystocia and dogs. Compendium of proceedings of ISCAP, Punjim, Goa, Abstract No: 5:IV.
77	Vibha Raghuram, K., Krishnaswamy, A., Honnappa, T.G., and Murthy, V.C., 2013. Medical management of primary uterine inertia in dogs. Compendium of proceedings of ISCAP, Punjim, Goa, Abstract No: 6:IV.
<b>VETERINARY COLLEGE, BIDAR</b>	
1	Shrikant Kulkarni, Kotresh A.M., Vivek, M.P., Sunilchandra, U. and Kartikesh, S.M., 2012. Studies on normal blood biochemical profile of Deoni cattle. XXI Annual Conference of Society of Animal Physiologists of India held at Navsari Agricultural University, Nov., 6-8, 2012.
2	Shrikant Kulkarni, Santosh, P.S., Ravindra, B.G., Vijaykumar, M. and Manjunath, M.G., 2012. A report on normal hematological profile of Deoni cattle. XXI Annual Conference of Society of Animal Physiologists of India held at Navsari Agricultural University, Nov., 6-8, 2012.
3	Santosh, P.S., Shrikant Kulkarni, Patil, N.A. and Vivek Kasaralikar, 2012. ECG pattern in different breeds and age groups of dogs with special reference to Mudhol breed of dog. XXI Annual Conference of Society of Animal Physiologists of India held at Navsari Agricultural University, Nov., 6-8, 2012.
4	Naik, D.T., Rajendra Kumar and Patil, N.A., 2012. Mixed infection of infectious bursal disease and coccidiosis in Emu birds. IAVP-2012 Conference, Nov., 5-7, 2012.
5	Sonphule A.M., Naik, D.T. and Rajendra Kumar, 2012. Cold shock in rabbits-necropsy report. IAVP-2012 Conference, Nov., 5-7, 2012, Hissar.
6	Sonphule A.M., Naik, D.T. and Rajendra Kumar, 2012. Ranikhet disease mortality in broiler birds-necropsy report. IAVP-2012 Conference, Nov., 5-7. 2012, Hissar.
7	Bhajantri Shankrappa, Nagraj, C.S. and Jayshankar, M.R., 2012. Study on genetic polymorphism MHC gene in Bandur and Hassan sheep ( <i>Ovis Aries</i> ) using PCR-RFLP analysis. ISAGB, Nov., 22-23, 2012, Hyderabad.
8	Bhajantri Shankrappa, Nagraj, C.S. and Jayshankar, M.R., 2012. Variabilities in OLA-DRB <sub>3</sub> gene in Bandur and Hassan breeds of sheep. ISAGB, Nov., 22-23, 2012, Hyderabad.
9	Sudarshan, S., Nadeem Fairoze and Renukaprasad, C., 2013. Effect of marinating chicken meat with garlic paste at room temperature on common food borne pathogens. V Annual Conference and National Symposium of Indian Meat Science Association. Feb.. 7-9. 2013, Hyderabad.

10	Vinay, P.T., Shridhar, N.B., Jayakumar, K., Jagadeesh, S., Narayanaswamy, H.D., Isloor, S., Chandrashekhar, S.C., Avinash Bhat and Indu Tripathi, 2012. Subchronic toxicity study of <i>rhizopus oryzae</i> culture filtrate isolated from groundnut hay in rats. XII Annual Conference of ISVPT, Bengaluru, Karnataka, India, Dec., 12-14, 2012. P 61.
11	Vinay, P.T., Shridhar, N.B., Jayakumar, K., Narayanaswamy, H.D., Jagadeesh, S.S., Isloor, S., Chandrashekhar, S.C., Avinash Bhat and Indu Tripathi, 2012. Subchronic toxicity study of <i>Fusarium semitectum</i> culture filtrate isolated from groundnut hay in rats. XII Annual Conference of ISVPT, Bengaluru, Karnataka, India, Dec., 12-14, 2012. P 96.
12	Vinay, P.T., Shridhar, N.B., Jayakumar, K., Jagadeesh, S., Narayanaswamy, H.D., Isloor, S., Chandrashekhar, S.C., Avinash Bhat and Indu Tripathi, 2012. Subchronic toxicity study of <i>Fusarium sporotrichoides</i> culture filtrate isolated from groundnut hay in rats. XII Annual Conference of ISVPT, Bengaluru, Karnataka, India, Dec., 12-14, 2012. P 126.
13	Santosh, C.R. and Jayakumar, K., 2012. Comparative pharmacokinetic disposition of two different doses 17 $\alpha$ OH progesterone caproate in prepubertal calves following single intramuscular injection. XII Annual Conference of ISVPT, Bengaluru, Karnataka, India, Dec., 12-14, 2012.
14	Santosh, C.R., Jayakumar, K. and Ravikumar, C., 2012. Pharmacokinetics of 17 $\alpha$ OH progesterone caproate in prepubertal goats following single intramuscular injection. XII Annual Conference of ISVPT, Bengaluru, Karnataka, India, Dec., 12-14, 2012.
15	Santosh, C.R., Jayakumar, K. and Ravikumar, C., 2012. Comparative pharmacokinetic disposition of two different dose 17 $\alpha$ OH progesterone caproate in prepubertal sheep following single intramuscular injection. XII Annual Conference of ISVPT, Bengaluru, Karnataka, India, Dec., 12-14, 2012.
16	Ravikumar, C., Santosh, C.R., Jayakumar, K. and Sunilchandra, 2012. Effect of long acting oxytetracycline administration at low and high dose on hematological and biochemical parameters in rats. XII Annual Conference of ISVPT, Bengaluru, Karnataka, India, Dec., 12-14, 2012.
17	Ravikumar, C., Santosh, C.R., Jayakumar, K. and Sunilchandra, 2012. Effect of long acting oxytetracycline administration at low and high dose on immune response in rats. XII Annual Conference of ISVPT, Bengaluru, Karnataka, India, Dec., 12-14, 2012.
18	Shridhar, N.B., Santosh Kumar, C.N. and Vinay, P.T., 2012. Therapeutic efficacy of lithium antimony thiomalate in treating mammititis of buffalo. International symposium on evolving role of veterinary students in the advancement of primary veterinary practice and tertiary clinical care & IV National Clinical Case Conference in Farm and Companion Animal Practice, Chennai, India, July 8-9, 2012 P 72.

19	Santosh Kumar, C.N., Shridhar, N.B. and Vinay, P.T., 2012. Rodenticide toxicity in dogs and its treatment. VIII Annual Kannada Vijnana Sammelana. Dharawad, India, Sept., 15–17, 2012, P 75.
20	Santosh Kumar, C.N., Shridhar, N.B. and Vinay, P.T., 2012. Conjunctivitis in sheep and its therapeutic measures. VIII Annual Kannada Vijnana Sammelana. Dharawad, India, Sept., 15–17, 2012, P 76.
21	Santosh Kumar, C.N., Shridhar, N.B. and Vinay, P. T., 2012. Necrotic mammilitis of buffaloes and its herapeutic measures. VIII Annual Kannada Vijnana Sammelana. Dharawad, India, Sept., 15–17, 2012, P 77.
22	Indu Tripathi, Shridhar, N.B., Vinay, P.T., Jayakumar, K., Seema, D.M. and Swamy, K.V., 2012. Antipyretic effect of methanol extract of <i>Asteracantha longifolia</i> in rats. XII Annual Conference of ISVPT, Bengaluru, Karnataka, India, Dec., 12-14, 2012. P 32.
23	Indu Tripathi, Shridhar, N.B., Vinay, P.T., Jayakumar, K. and Rekha, C., 2012. Methanol extract of <i>Asteracantha longifolia</i> upsurges immunomodulatory effects in rats. XII Annual Conference of ISVPT, Bengaluru, Karnataka, India, Dec., 12-14, 2012. P 8.
24	Anant Rao Desai, Vinay, P.T., Shridhar, N.B. and Jagadeesh, S., 2012. Rational therapy for actinobacillosis in buffalo. XII Annual Conference of ISVPT, Bengaluru, Karnataka, India, Dec., 12-14, 2012. 2012, P 15.
25	Vivek Kasaralikar, Bhoyar, R., Vishwanath, H., Kamran, C.A., Holagi, M.S. and Usturge, S.M., 2012. Vestibular disease with dilted cardio-myopathy in a German Shepherd dog. National Seminar on Emerging trends in canine cardio-vascular medicine, Sept., 2012 at Veterinary College, Tirupati.
26	Manjunatha, D.R., Nagappa, K., Banuvalli and Santhosh, K.M., 2012. Surgical management of aural hematoma in goat - A case report. XXXVI annual congress of ISVS and international symposium on ruminant surgery in polyclinics co-operative dairies and shelters: perspective 2020. Anand(Gujurat), Nov., 1-3, 2012.
27	Manjunatha, D.R., Nagappa, K., Banuvalli and Santhosh, K.M., 2012. Surgical removal of fractured piece of rib from bullock under field condition- a case report. XXXVI annual congress of ISVS and international symposium on ruminant surgery in polyclinics co-operative dairies and shelters: perspective 2020. Anand (Gujurat), Nov., 1-3, 2012.
28	Manjunatha, D.R., Santhosh, K.M. and Nagappa, K. and Banuvalli, 2012. Successful management of fractures in calves by external cooptation under field condition. XXXVI annual congress of ISVS and international symposium on ruminant surgery in polyclinics co-operative dairies and shelters: perspective 2020. Anand (Gujurat), Nov., 1-3, 2012.

29	Manjunatha, D.R., Nagappa, K., Banuvalli and Santhosh, K.M., 2012. Successful surgical removal of macerated fetus in boer goats under field condition-a case report. XXXVI annual congress of ISVS and international symposium on ruminant surgery in polyclinics co-operative dairies and shelters: perspective 2020. Anand (Gujurat), Nov., 1-3, 2012.
30	Manjunatha, D.R., Santhosh, K.M. and Nagappa, K., Banuvalli, 2012. Successful surgical treatment of crop injury in two pigeons under field condition. XXXVI annual congress of ISVS and international symposium on ruminant surgery in polyclinics co-operative dairies and shelters: perspective 2020. Anand (Gujurat), Nov., 1-3, 2012.
31	Manjunatha, D.R. Mahesh, V., Srinivasamurthy, K.M. and Ranganath, L., 2012. Surgical treatment of aural hematoma in russian grey gaint pet rabbit- a case report. XXXVI annual congress of ISVS and international symposium on ruminant surgery in polyclinics co-operative dairies and shelters: perspective 2020. Anand (Gujurat), Nov., 1-3, 2012.
32	Manjunatha, D.R. and Ranganath, L., 2012. Closed method of interlocking nailing in repair of femoral fracture in dogs under c-arm guidance. XXXVI annual congress of ISVS and international symposium on ruminant surgery in polyclinics co-operative dairies and shelters: perspective 2020. Anand (Gujurat), Nov., 1-3, 2012.
33	Sundereshan, S., HariBabu, Y., Isloore, S., Basavarj Awati and Nagendra R., Hegade, 2012. Detection and Molecular Charecterisation of rare Coagulase Negative Variants of <i>Staphylococcus aureus</i> in bovine milk samples. International seminar on feature Livestock Health, aparadigma Change to Maximise productivity for Economics Compendium.Chennai, 6 – 8, Sept., 2012.
34	Sundereshan, S., HariBabu, Y., Isloore, S., Basavarj Awati and Nagendra R. Hegade, 2012. Development of multiplex PCR for coagulase negative <i>Staphylococci</i> (CoNS)-The emerging mastitis pathogens in bovines in India and their antimicrobial resistance. International seminar on feature Livestock Health, paradigm Change to Maximize productivity for Economics Compendium. Chennai, 6 -8 Sept., 2012.
35	Rajeshwari, Y.B., Vivek, M. Patil, Balaji, K.H. and Basavaraj, 2012. Ethical issues in animal research and production. XVI National Training Programme on Biotechnological Applications in Veterinary Parasitology, Veterinary College, and Bengaluru, 19 Nov – 9 Dec., 2012.
36	Ashok Pawar, 2012. Use of various techniques in teaching veterinary anatomy. IAVA National Symposium, Veterinary College and Bengaluru.
37	Shivaprakash, B.V. and Usturge, S.M., 2012. Evaluation of fibre glass, plaster, PVC cast with or without transfixation or thomas splint for open or closed fractures in large ruminants: 130 cases.XXXVI Annual Congress of ISVS and international Symposium. Anand (Gujurat), Nov., 1-3, 2012.

38	Dilipkumar, D., Shivaprakash, B.V., Mallikarjun, Daron and Bhimappa, 2012. Successful surgical treatment of various Surgical conditions in ruminants. XXXVI Annual Congress of ISVS and international Symposium. Anand (Gujurat), Nov., 1-3, 2012.
39	Dilipkumar, D., Shivaprakash, B.V., Vijay and Rajesh, 2012. Successful 1 treatment of clinical cases of small animals. XXXVI Annual Congress of ISVS and international Symposium. Anand (Gujurat) , Nov., 1-3, 2012.
40	Ashish, M., Usturge, S.M., Dilipkumar, D. and Shivaprakash, B.V., 2012. Comparative evaluation of tramadol and pentazocine as pre emptive analgesics with propofol anaesthesia following ovariohysterectomy in female dogs. XXXVI Annual Congress of ISVS and international Symposium. Anand (Gujurat), Nov., 1-3, 2012.
41	Vijaykumar, M., Sunilchandra, U. and Siddalingswamy Hiremath, 2012. Influence of curcuminpretreatment on disposition kinetics of Pazufloxacin after oral administration in rabbits. XII Annual Conference of ISVPT, Bengaluru, Karnataka, India, Dec., 12-14, 2012.

#### VETERINARY COLLEGE, SHIVAMOGGA

1	Umashankar, B.C., Reddy, B.S.V., Nagabushan, V., Giridhar, K.S. and Murthy, T.N.K., 2012. Performance of layers fed different varieties of finger millet replacing maize. In:Proceedings of XXIX IPSACON, Dec., 5-7, 2012, Hyderabad, 145.
2	Veeranna Gowda, B.G., Satheesha, G.M., Umesh, B.U. and Umashankar, B.C., 2012. Influence of parental plumage patterns on progeny performance. In:Proceedings of XXIX IPSACON, Dec., 5-7, 2012, Hyderabad, 45.
3	Umashankar, B.C., Singh, K.C., Krishnamoorthy, U., Madhusudhan, H.S. and Suresh, B.N., 2012. Effect of slow release nitrogen product on performance of lactating dairy cows. In:Proceedings of XV AAAP Animal Science Congress, Nov., 26-30, 2012, Bangkok, Thailand.
4	Madhavaprasad, C.B. and Nagappa, S.K., 2013. Innovations in the rapid detection of meat borne pathogens of public health significance. V Annual Conference and National Symposium of IMSACON-V on Emerging technological changes to meet the demands of domestic and export meat sector, NRC on Meat, ICAR, Hyderabad, Feb., 7-9, 2013, Pp: 131-132.
5	Nagappa S., Singh, S.P., Deepak Kumar, Girish Patil, S. and Sunil, N. Shebannavar, 2013. Authentication of beef by mitochondrial D-loop based polymerase chain reaction assay. V Annual Conference and National Symposium of IMSACON-V on Emerging technological changes to meet the demands of domestic and export meat sector, NRC on Meat, ICAR, Hyderabad, Feb., 7-9, 2013, P: 377.
6	Veeranna, K.C., 2012. Case study on improving livelihoods of livestock farmers affected by Thane cyclone in Cuddalore. Workshop on Improving Livelihoods of Livestock farmers affected by Thane cyclone in Cuddalore, August 24-25, 2012, Pp 22-25.

7	Veeranna, K.C., 2013. Livelihood security through resource and entrepreneurship management in Bidar Dist. Annual Review Workshop on NAIP-3 Varanasi. March 14-18, 2013. Pp 33-39.
8	Dhoollappa, M., Prasad, R.V., Jamuna, K.V. and Ramkrishna, V., 2012. Histomorphologic features of laminae (Dermo-Epidermal Junction) in the bovine hoof. XXVII IAVA Symposium, KVASU, Kerala, Nov., 28-29, 2012. P 3.
9	Dhoollappa, M., Lakshmisree, K.T., Vinuthan, M.K. and Rajshailesha, 2012. <i>Dicephalus monstrosus</i> , A cause of dystocia in Holstein Freisian (Hf) cow- A case report. XXVII IAVA Symposium, KVASU, Kerala, Nov., 28-29, 2012. P 6.
10	Ananda, K.J., Chandrashekhar, S., Yashaswi Naravi, Ramesha, K. and Devaraj, M., 2012. Prevalence of gastrointestinal parasites of wild animals maintained under captive state. XXII National Congress of Veterinary Parasitology on Integrated Research Approaches in Veterinary Parasitology: From basic to molecular techniques, College of Veterinary Science and Animal Husbandry, DUVASU, Mathura, IAAVP, March 15-17, 2012, II-21, P-28.
11	Ananda, K.J., Muraleedharan, K., Ganesh Udupa, K. and Prakash, N., 2012. In vitro studies on the efficacy of retorsor on common ticks of domestic animals. XXII National Congress of Veterinary Parasitology on Integrated Research Approaches in Veterinary Parasitology: From basic to molecular techniques, College of Veterinary Science and Animal Husbandry, DUVASU, Mathura, IAAVP, March 15-17, 2012, II-21, P-28.
12	Ananda, K.J., Muraleedharan, K., Ganesh Udupa, K. and Prakash, N., 2012: In vitro studies on the efficacy of retorsor on common lice of domestic animals. XXII National Congress of Veterinary Parasitology on Integrated Research Approaches in Veterinary Parasitology: From basic to molecular techniques, College of Veterinary Science and Animal Husbandry, DUVASU, Mathura, IAAVP, March 15-17, 2012, II-21, P-28.
13	Ananda, K.J., Chandrika, L.B. and Devaraj, M., 2012: Immunodiagnosis of <i>Haemonchus contortus</i> infection in sheep by counter immunoelectrophoresis using somatic antigen. XXII National Congress of Veterinary Parasitology on Integrated Research Approaches in Veterinary Parasitology: From basic to molecular techniques, College of Veterinary Science and Animal Husbandry, DUVASU, Mathura, IAAVP, March 15-17, 2012, II-21, P-28.
14	Ananda, K.J., Chandrika, L. B. and Devaraj, M., 2012: Latex agglutination test: A rapid diagnostic technique for the detection of <i>Haemonchus contortus</i> infection in sheep. XXII National Congress of Veterinary Parasitology on Integrated Research Approaches in Veterinary Parasitology: From basic to molecular techniques, College of Veterinary Science and Animal Husbandry, DUVASU, Mathura, IAAVP, March 15-17, 2012, II-21, P-28.
15	Manjunatha, S.S., Naik, D.T. and Rao, D.G.K., 2012. Prevalence and pathological studies on respiratory infections in poultry broiler birds. IAVP Conference, Hissar, Nov., 5-7, 2012.

#### VETERINARY COLLEGE, HASSAN

1	Naveen Kumar, G.S., Nagaraja, C.S., Jayashankar, M.R., Nagaraja, R. and Shreesujatha, R.M., 2013. Influence of certain non genetic factors on cryptorchidism in sheep. X National Symposium on Integrated development of vast biodiversity of indigenous livestock for long term rural livelihood security, Panthnagar, Uttarakhand, Feb., 7-13, 2013.
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2	Jayaramu, G.M., Satyanarayana, M.L., Ravikumar, P., Jagadish, S., Phaniraj, K.L. and Suguna Rao, 2012. Effect of feeding Ochratoxin A and Citrinin toxins on certain biochemical parameters in broiler chicken. XXIX Annual Conference of IAVP-2012. Compendium and Souvenir-P188.
3	Jayaramu, G.M., Satyanarayana, M.L., Ravikumar, P. and Lakshman, 2012. Ultrastructural pathology of Ochratoxin A and Citrinin toxicosis in broiler chicken. XXIX Annual Conference of IAVP-2012. Compendium and Souvenir-P173.
4	Jayaramu, G.M., Satyanarayana, M.L., Ravikumar, P. and Narayanaswamy, H.D., 2012. Evaluation of the immune status of broiler chicken during Ochratoxin, Citrinin and their combined toxicity. XXIX Annual Conference of IAVP-2012. Compendium and Souvenir-Pp 174-175.
5	Jayaramu, G.M., Satyanarayana, M.L., Ravikumar, P., Shilpa, V.T. and Jagadish, S., 2012. Effect of Ochratoxin A and Citrinin toxins on certain mineral and electrolyte levels in broiler chicken. XXIX Annual Conference of IAVP-2012. Compendium and Souvenir-P187.
6	Shilpa, V.T., Chittiappa, B.C., Suguna Rao, Shivashankar, Giridhar, P., Nirupama, P., Jaisingh, Ravikumar, P. and Jayaramu, G.M., 2012. Haemangiosarcoma/Haemagioendothelioma in tiger. XXIX Annual Conference of IAVP-2012. Compendium and Souvenir-P106.
7	Shilpa, V.T., Shivashankar, Vasanth Shetty, Chittiappa, B.C., Giridhar, P., Sujay, C.S., Nirupama, P., Jaisingh, Ravikumar, P. and Jayaramu, G.M., 2012. Squamous cell carcinoma in eye of a white tiger. XXIX Annual Conference of IAVP-2012. Compendium and Souvenir-Pp 102-103.
8	Suresh, L., Ranganath, B.N., Vasanth, M.S., Ranganath, L., 2012. Clinical evaluation of triflupromazine HCL and diazepam premedication for Propofol anesthesia in clinical cases of dogs. XXXVI Annual Conference of ISVS and International Symposium on Ruminant Surgery in Polyclinics, Cooperative dairies and shelters. Anand (Gujarat), Nov., 1-3, 2012, P 237.
9	Suresh, L., Nair, S.S., Srinivasa Murthy, K.M. and Vasanth, M.S., 2012. Congenital prepucial stenosis in puppy and its surgical management. XXXVI Annual Conference of ISVS and International Symposium on Ruminant Surgery in Polyclinics, Cooperative dairies and shelters. Anand (Gujarat). Nov., 1-3, 2012, P 217.
10	Suresh, L., Nair, S.S., Srinivasa Murthy, K.M. and Vasanth, M.S., 2012. Surgical management of an abnormal rhabdoma on the dorso-lumbar region of a doberman dog: A case report. XXXVI Annual Conference of ISVS and International Symposium on Ruminant Surgery in Polyclinics, Cooperative dairies and shelters. Anand (Gujarat), Nov. 1-3, 2012, P 237.
11	Nair, S.S., Suresh, L., Srinivasa Murthy, K.M. and Vasanth, M.S., 2012. Extensive bovine ocular squamous cell carcinoma in a working bullock: A case report. XXXVI Annual Conference of ISVS and International Symposium on Ruminant Surgery in Polyclinics, Cooperative dairies and shelters. Anand (Gujarat), Nov. 1-3, 2012, P 136.

12	Nagaraju, N., Nair, S.S., Suresh, L. and Vasanth, M.S., 2013. Surgical management of proptosis with concurrent glaucoma and extensive corneal damage in a pug. X Annual Convention of ISCAP and National congress on canine practice and symposium on New Horizon in companion Animal Health and Management. Goa, Feb., 6-8, 2013, P 41.
13	Suresh, L., Nagaraju, N., Nair, S.S. and Vasanth, M.S., 2013. Canine sertoli cell tumor: A case report. X Annual Convention of ISCAP and National congress on canine practice and symposium on New Horizon in companion Animal Health and Management. Goa, Feb., 6-8, 2013, P 40.
14	Suresh, B.N., Reddy, B.S.V., Jaishankar, N. and Thirumalesh, T., 2012. Effect of qualitative feed restriction and certain dietary agents during starter phase on growth compensation of broiler chicken. XV AAPA Animal Science Congress, Bangkok, Nov., 26-28, 2012.
15	Umakanth, Indresh, H.C., Wilfred Ruban, S. and Shivakumar, M.C., 2012. In vitro evaluation of bentonite for its ability to adsorb aflatoxin in contaminated broiler chicken diets. In Proc. of Annual Conference and National Symposium of IPSACON 2012, Dec. 3-5, 2012, SVVU and PDP, Hyderabad. P 121.
16	Mahadevappa, D. Gouri, Krishnamoorthy, U., Ningaraju, K. and Chandrapal Singh, K., 2013. Impact of post-harvest sun drying duration on chemical composition, rumen in vitro gas production characteristics, metabolizable energy content of maize stover. In: Proc., of XX Annual Convention and National Conference of ISAPM, Jan., 28-30, 2013, NDRI, Karnal. P 190.
17	Mahadevappa, D. Gouri., Krishnamoorthy, U. and Ningaraju, K., 2013. Field trials with feeding of maize stover silage and maize stover dry to lactating cows on dry matter intake, milk yield and milk compositions. In: Proc. of XX Annual Convention and National Conference of ISAPM, Jan., 28-30, 2013, NDRI, Karnal P 16.
18	Nagappa Banuvalli, Mahadevappa, D. Gouri, Bhaskaran, R. and Sridhar, N.B., 2013. Effect of body condition score at parturition on postpartum reproductive performance in crossbred dairy cows. In: Proc. of XX Annual Convention and National Conference of ISAPM, Jan., 28-30, 2013, NDRI, Karnal P 84.
19	Prasanna, S.B., Shivakumar, M.C., Pradeep, M.C., Guruprasad, R., Indresh, H.C., Gouri, M.D. and Suresh, B.N., 2013. Prediction of body weight using length and girth measurement in pigs. In: Proc. of XX Annual Convention and National Conference of ISAPM, Jan., 28-30, 2013, NDRI, Karnal P 151.
20	Shivakumar, M.C., Indresh, H.C., Suresh, B.N., Guruprasad, R., Prasanna, S.B., Gouri, M.D. and Roopa, T.K., 2013. Performance of improved backyard Giriraja birds fed diets containing graded levels of chelated minerals. In: Proc. of XX Annual Convention and National Conference of ISAPM, Jan., 28-30, 2013, NDRI, Karnal P 151.
21	Shivakumar, M.C., Pradeep, M.C., Prasanna, S.B., Wilfred Ruban, Suresh, B.N. and Gouri, M.D., 2013. Influence of supplementing Azolla on sensory characteristics of meat of improved variety Raja-2 broiler birds. In: Proc. of XX Annual Convention and National Conference of ISAPM, Jan., 28-30, 2013, NDRI, Karnal P 152.

22	Dhabale, R.B., Venugopalnaidu, K. and Ashok Pawar, 2012. Effect of receiptal on biometry and histology of epididymis in Bidri bucks during post natal period. National Symposium on Addressing Animal Reproduction Stresses through biotechnological tools on XXVIII Annual Convention of ISSAR, College of Veterinary Science, Assam Agriculture University, Khanapara, Gauhati, Nov., 21-23, 2012. P 168.
23	Suchitra, B.R., Sahadev, A., Dhabale, R.B. and Renukaradhy, G.J., 2012. Clinical management of foetal dystokia due to hydrocephalus in a cross breed cow by caeserian section with partial fetotomy. National Symposium on Addressing Animal Reproduction Stresses through biotechnological tools on XXVIII Annual Convention of ISSAR, College of Veterinary Science, Assam Agriculture University, Khanapara, Gauhati, Nov., 21-23, 2012. P 341.
24	Priyanka, Dhabale, R.B. and Padalkar, R.D., 2013. Medical management of chronic otitis externa in a cow. XXXI Annual Convention of ISVM and National Symposium on AVM and its specialities for augmenting productivity and health, Mhow, MP, Jan., 9-11, 2013, P 85.
25	Priyanka, Dhanalakshmi, H., Dhabale, R.B. and Thimmareddy, P.M., 2013. Ehrlichiosis in a cow - A case report. XXXI Annual Convention of ISVM and National Symposium on AVM and its specialities for augmenting productivity and health, Mhow, MP, Jan., 9-11, 2013, P 84.

#### **DAIRY SCIENCE COLLEGE, BENGALURU**

1	Narasimha Murthy, 2012. Modifications of dairy foods to suit nutritional needs. RTFSNR-2012, Tumkur University and Maiyya Foundation, Oct., 30, 2012.
2	Narasimha Murthy, 2012. Influence of high melting milk fat fractions on physico-chemical and sensory attributes of Mysorepak. National Conference on functional foods in health and well-being. KSHEC and Tumkur University in Bengaluru, May 31, 2012.

#### **COLLEGE OF FISHERIES, MANGALORE**

1	Kumar Naik, A.S., Jitendra Kumar, Rao, A.P., Neeraj Pathak and Mahesh, V., 2013. Studies on ichthyofaunal diversity of Karanja reservoir, Karnataka, India. National Seminar on Emerging trends in Indian aquaculture, University of Kerala, Thiruvananthapuram, March 21-23, 2013, P 13.
2	Rao, A.P., Jitendra Kumar, Neeraj Pathak, Kumar Naik, A.S., Subodh Kant Setu, H., Archit Shukla and Mahesh, V., 2013. Studies on socio-economic status of fish farmers of Faizabad District (Uttar Pradesh), India. National Seminar on Emerging trends in Indian aquaculture, University of Kerala, Thiruvananthapuram, March 21-23, 2013, P 2.

#### **INSTITUTE OF ANIMAL HEALTH AND VETERINARY BIOLOGICALS, BENGALURU**

1	Amitha Reena Gomes, 2012. Comparison of vaccine strains of PPR viruses with respect to their growth and haemagglutination property. National Conference on Recent advances in health, agriculture and environmental biotechnology, MSRIT, Bengaluru, April 11-13, 2012.
2	Amitha Reena Gomes, 2012. Cell mediated immune response of sheep vaccinated with live attenuated sheep pox vaccine. XII Indian Veterinary Congress at College of Veterinary Sciences and Animal Husbandry, Mhow (M.P), April 20-21, 2012.



3	Chandranai, B.M., 2012. Cell culture in research. XVI National Training Programme on Biotechnological applications in veterinary parasitology, Veterinary College, Bengaluru, Nov., 19 to Dec. 9, 2012.
4	Raveendra Hegde, Amitha Gomes, Giridhar, P. and Renukaprasad, C., 2012. Retrospective study on the epidemiology of FMD in Karnataka (2000-2012). XXVI Annual Convention of IAVMI and International Seminar on Future livestock health: A paradigm chance to maximize production for economic gain, TANUVAS, Sep., 6-8, 2012.
5	Raveendra Hegde, Shrikanth Kowalli, Sudarshan, K.J., Mallinath, K.C., Sangana Gowda, K., Nagaraj, D., Nagaraj, C.V., Srikala, K., Anand, H., Shankar, B.P., Giridhar, P. and Renukaprasad, C., 2012. Seroprevalence of FMD in Karnataka. XXVI Annual Convention of IAVMI and International Seminar on Future livestock health: a paradigm chance to maximize production for economic gain, TANUVAS, Sep., 6-8, 2012.

#### **INSTITUTE OF WILDLIFE VETERINARY RESEARCH, KODAGU**

1	Madhukar, S.D., 2012. Mobile phone radiations produce severe toxic effects on wildlife-evidence from meta - Analysis of the worldwide findings. XII Annual Conference of ISVPT, Veterinary College, Bengaluru, Dec., 12-14, 2012, P 43.
2	Madhukar, S.D., 2012. Mobile phone radiations affect spermatozoa: A meta-analysis of Laboratory animal research and extension to human subjects, XII Annual Conference of ISVPT, Veterinary College, Bengaluru, Dec., 12-14, 2012, P 102.

#### **LIVESTOCK RESEARCH AND INFORMATION CENTER (DEONI), HALLIKHED**

1	Rudraswamy, M.S., Siddalingaswamy Hiremath and Sunilchandra, U., 2012. Evaluation of isobutyric acid (IBA) supplementation as a nutraceutical for rumen disorders and anorexia in Bannur sheep. XII Annual Conference of ISVPT, Dec., 12-14, 2012, P 7.
2	Rudraswamy, M.S., Arun, M.S., Siddalingaswamy Hiremath and Ravikumar, C., 2012. Efficacy of Milkplus ® as galactogogue in crossbred cows. XII Annual Conference of ISVPT, Dec., 12-14, P 7.

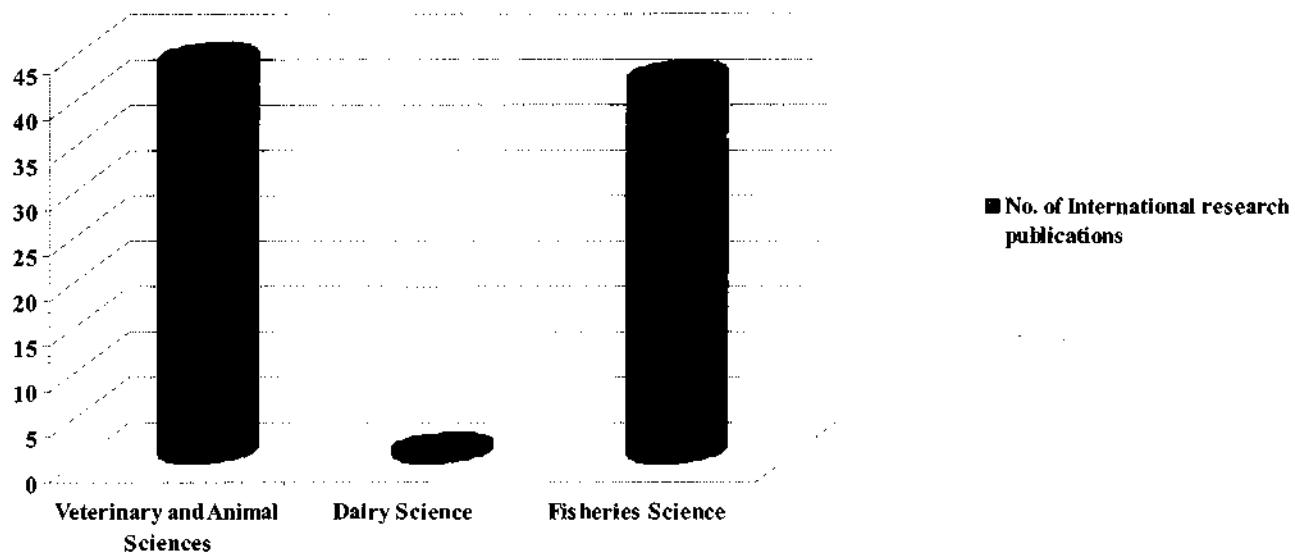
#### **LIVESTOCK RESEARCH AND INFORMATION CENTER (SHEEP), NAGAMANGALA**

1	Nagaraja, R., Naveen Kumar, S. and Sreesujatha, R. M., 2012. Influence of weaning age and weaning weight on post-weaning growth performance in Mandya lambs. National Symposium and XII Annual Conference of ISAGB, Nov., 22-23, 2012, P93.
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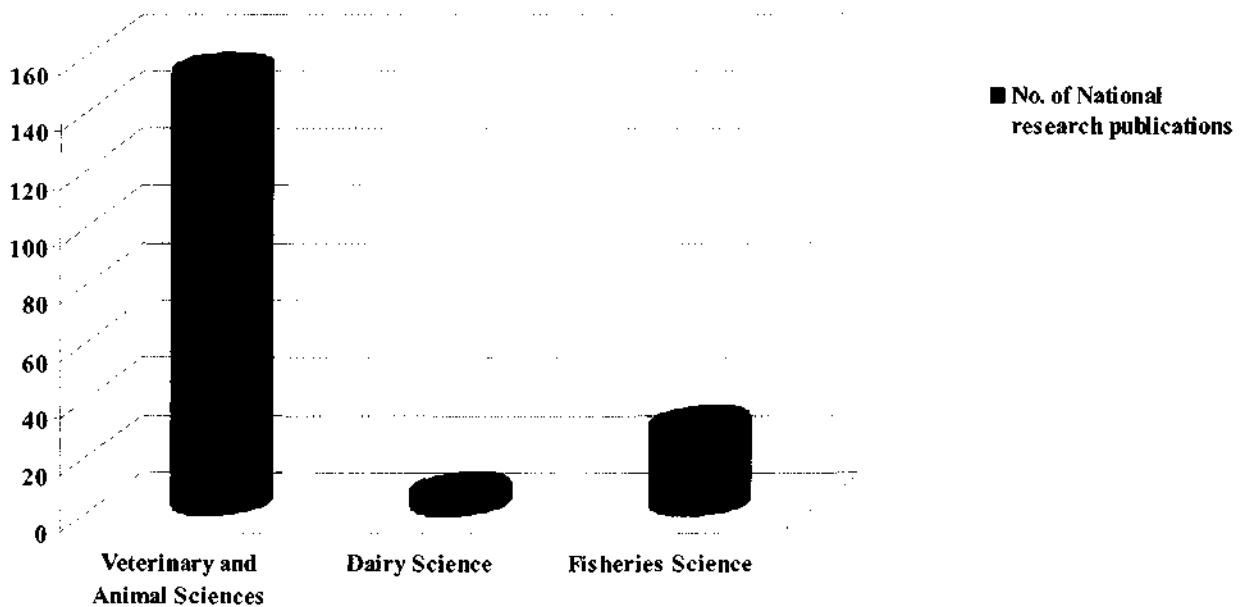
#### **Abstract of Research Publications**

Division	Journal		NAAS Rating		Conference/ Symposium/ Seminar/ Workshops	
	Int.	National	Int.	National	Int.	National
Veterinary and Animal Sciences	44	153	07	81	15	168
Dairy Science	01	07	0	04	01	02
Fisheries Science	42	30	27	23	15	02
Total	87	190	34	108	31	172

### No. of International research publications of KVAFSU, Faculty during 2012-13



### No. of National level research publications by KVAFSU, Faculty during 2012-13





**3. Extension Publications (Books, training manuals, popular articles, leaflets etc)**

**VETERINARY COLLEGE, BENGALURU**

**Books**

1. Shekhar Badhe and Md. Nadeem Fairoze., 2013. Spices act as a natural antimicrobial in chicken meat system: Evaluation of antibacterial efficacy of clove and cinnamon on common food borne pathogens in chicken meat system. Published by Lambert Academic Publishing.
2. Chandrashekharanmurthy, V., 2013. Pashuvijnana Paribhashika Padakosha (English-Kannada), published by Directorate of Extension, KVAFSU, Bidar.
3. Shridhar, N.B., Ganesh Hegde and Nagaraj, 2013. Hainu Honnu (Kannada Book), Sapna Book House, Bengaluru.
4. Ramesh, P.T. and Sarangmath, S. P., 2013. Internship Log book- 2013. Edited by: Yathiraj, S. and Ranganath, L.
5. Narayana Swamy, M. and Ramesh Sankranthi, 2012. Tene Mareya Kranthi: Ragi Lakshmanaiah-INDAF Ragi Taligala Kandu Hidida Vijnani. Aseema Akshara, Bengaluru.

**Book Chapters**

1. Jagadeeswary, V. and Satyanarayan, K., 2013. Ethnoveterinary Medicine: Significance in Animal Health. In: Agri-Business and Rural Management - Rais Ahmad.
2. Nataraja, O.R. and Prabhu, T.M., 2012. Samatholana aahara thayarisalu gamanisabekada amshagalu. In: Vaignanika Pashu Sangopane, KV, Hassan.

**Training Manuals and Compendia**

1. Yathiraj, S., Krishnamoorthy, U. and Satyanarayan, K., 2012. Training manual

on Livestock management & fodder production.

2. Placid E. D'Souza, 2012. Biotechnological applications in Veterinary Parasitology.
3. Placid E. D'Souza, 2012. Immunological and molecular techniques.
4. Placid E. D'Souza, 2012. General Veterinary Parasitology and Helminthology.
5. Placid E. D'Souza, 2012. Veterinary Entomology and Acarology.
6. Placid E. D'Souza, 2012. Veterinary Protozoology.
7. Placid E. D'Souza, 2012. Veterinary Clinical Parasitology and Parasitological techniques.
8. Placid E. D'Souza, 2012. Diagnosis of Parasitic diseases in domestic animals. In: RKVY

**Popular articles**

1. Chandrashekhar, N., Rathnamma, D., Isloor, S. and Sharada, R., 2013. Rabies-an important zoonotic disease. Pashusiri, December-January issue, 19-22.
2. Sharada, R., 2012. Pox in Livestock. Pashusiri, October-November issue, 13-15.
3. Veeregowda, B.M., 2012. Koligaligu beku jaivika samrakshane. Prajavani-Karnataka Darshan.
4. Veeregowda, B.M., 2012. Malegalada rogagalu-Joke. Prajavani-Karnataka Darshan, Aug., 2012.
5. Veeregowda, B.M., 2012. Ili jwara-Irali yecchara. Prajavani-Karnataka Darshan. Dec., 2012.
6. Veeregowda, B.M., 2012. Baragaladalli januvaru nirvahane. Prajavani-Karnataka Darshan.
7. Murthy, V.C., 2012. Besige kaladalli hainurasugala nirvahane. Pashusiri, March-April, 4:3-5.
8. Murthy, V.C., 2012. Shrimati Shivaleela Chandrashekara Ganegar-Yashogathe. Pashusiri, March-April, 4:16-18.

9. Murthy, V.C., 2012. Hainurasugalalli santhanothpathi- Bhaga-1. Pashusiri, March-April, 4:25-27.
10. Murthy, V.C., 2012. Hainurasugalalli santhanothpathi-Bhaga-2. Pashusiri, June-July, 5:25-27.
11. Murthy, V.C., 2012. Hainurasugalalli santhanothpathi-Bhaga-3. Pashusiri, August-Sept., 6:6-8.
12. Murthy, V.C., 2012. Elemarekai-Dr. Thimmappa Rai. Pashusiri, August-Sept., 6:11-12.
13. Murthy, V.C., 2012. Hainurasugalalli santhanothpathi-Bhaga-4 Gandu pranigala santhanothpatthi angagalu. Pashusiri, Oct-Nov, 1:9-12.
14. Murthy, V.C. and Ravindranath, B.M., 2012. Hainurasugalalli santhanothpathi- Bhaga-5. Hainurashugalalli kruthaka garbadarane. Pashusiri, Dec., 2:8-10.
15. Placid, E. D'Souza, 2012. Nasal Schistosomosis in cattle and buffaloes. E-magazine Pashubandha, 1(4).
16. Placid, E. D'Souza, 2012. Microfilariosis in bovines-An unnoticed disease problem. E-magazine Pashubandha, 1(6).
17. Placid, E. D'Souza, 2012. Parasitic gastroenteritis in ruminants, Part-I. E-magazine Pashubandha, 1(8).
18. Placid, E. D'Souza, 2012. The problem of anthelmintic resistance in Karnataka state, Part-II. E-magazine Pashubandha, 1(9).
19. Placid, E. D'Souza, 2012. Management of anthelmintic resistance in ruminants, Part-III. E-magazine Pashubandha, 1(10).
20. Puttalakshmamma, G.C., 2012. Tropical Theileriosis. E-magazine Pashubandha, 1(11).
21. Narayana Swamy, M., 2012. Neenaarigaadeyo ele maanava. Pashuvaidya Saahitya Loka, Oct-Dec., 12:7-8.
22. Siddaramanna, 2012. Hainurasugalige rasamevu. Pashusiri, 1(3):6-8
23. Siddaramanna, 2012. Halukareyuva rasugala ahara nirvahane. Pashusiri, 1(5):9-12.
24. Siddaramanna, 2012. Baragala mattu kadime male adaritha pradeshagalalli Halukareyuva rasugala ahara nirvahane, Pashusiri, 2(1):5.
25. Siddaramanna, 2012. Halinalli degree samasye, Pashubandha-e-Bulletin, 4:3.
26. Siddaramanna, 2012. Karugala ahara poshane, Pashubandha-e-Bulletin, 5:3.
27. Siddaramanna, 2012. Karugala ahara poshane,- Continued, Pashubandha-e-Bulletin, 6:3.
28. Siddaramanna, 2012. Garbhadarisidha mishrathali rasugala poshane, Pashubandha-e-Bulletin, 7:4.
29. Siddaramanna, 2012. Halukareyuva mishratali rasugala ahara poshane, Bhaga-I, Pashubandha-e-Bulletin, 8:4.
30. Siddaramanna, 2012. Halukareyuva mishratali rasugala ahara poshane, Bhaga-II, Pashubandha-e-Bulletin, 9:4.
31. Siddaramanna, 2012. Halukareyuva mishrathali rasugala ahara poshane, Bhaga-III, Pashubandha-e-Bulletin, 10:4.
32. Siddaramanna, 2012. Hainurasugalalli khanijamshagala mahatwa -Bhaga-I, Pashubandha-e-Bulletin, 11:4.
33. Siddaramanna, 2012. Hainurasugalalli khanijamshagala mahatwa -Bhaga-II, Pashubandha-e-Bulletin, 12:4.
34. Siddaramanna, 2012. Hainurasugalalli khanijamshagala mahatwa -Bhaga-III, Pashubandha-e-Bulletin, 13:6.
35. Nagaraja, B. N., 2012. Danagalannu dandisuva sidigalu. Pashusiri, June-July issue.
36. Nagaraja, B. N. and Patil, A. S., 2012. Traumatic reticulo-peritonitis in bovines. e-bulletin Pashubandha, 1(7).
37. Nagaraja, B. N. and Patil, A. S., 2012. Rectal prolapse in ruminants. e-bulletin; Pashubandha, 1(8).
38. Nagaraja, B.N. and Patil, A. S., 2012. Januvaru Kombina thondaregalu mattu nivarano payagal u. e-bulletin; Pashubandha, 1(9).

39. Nagaraja, B.N. and Patil, A. S., 2012. Ettugalige baadisuva hegalu bavu mattu prathamopachara. e-bulletin; Pashubandha 1(10).
40. Nagaraja, B.N. and Patil, A. S., 2012. Pseudo luxation of patella / Intermittent upward fixation of the patella in large ruminants and its surgical treatment. e-bulletin; Pashubandha 1(11).
41. Nagaraja, B.N. and Patil, A. S., 2012. Urolithiasis in ruminants. e-bulletin; Pashubandha, 1(12).
42. Nagaraja, B.N. and Patil, A. S., 2013. Bovine ocular squamous cell carcinoma. e-bulletin; Pashubandha, 2(1).
43. Rajeshwari, Y. B., 2012. Molagalli baruva Samanaya kailegale. Pashusiri, Oct-2012,
44. Rajeshwari, Y. B., 2012. Erehulu Gobbara Utpadane, March-2013, Pashubandha
45. Shridhar, N.B., 2012. Januvarugalli mathu kurigalalli ummathina gidada vishabade, Prajavani.
46. Shridhar, N.B., 2012. Kasaraka: Pranigalige vishavadeethu, yechhara, Prajavani.
47. Shridhar, N.B., 2102. Vayuvilanga: Januvaurgalige visha, Prajavani.
48. Shridhar, N.B., 2102. Padarasa: Januvarugalige visha. Prajavani.
49. Narayana Swamy, M., Upendra, H. A. and Jayakumar, K., 2012. Effect of probiotics on crop weight and crop amylolytic activity in broiler chickens. Bharatiya Krushi Anusandhana Patrika.

#### **Chapters in Training Manuals**

1. Placid, E. D'Souza, 2012. Diagnosis of Parasitic diseases in domestic animals. In- Compendium of RKVY Training programme on "Recent updates on diagnostic and therapeutic techniques in large animal practice". Published by Veterinary College, Bengaluru

#### **Leaflets/brochures**

1. Leena, G., 2012. (Total 11 leaflets) Anthrax, Zoonotic Diseases, Food borne zoonotic Diseases, Bio-terrorism, Tuberculosis, KFD, Occupational zoonotic Diseases, Brucellosis, Rabies, Listeriosis, Communicable diseases transmitted by Dogs to Humans.
2. Prakash Sannamani and Nadeem Fairoze. 2012. Brochure in Kannada on "Kuri Sakanikedarara Jeevana Mattu Sudharanaeyalli Utpadakate Mattu Marukattate Patra".
3. Prakash Sannamani and Nadeem Fairoze. 2012. Brochure in Kannada on "Meke Halu Mattu Adara Upayuktgalu".

#### **VETERINARY COLLEGE, BIDAR**

#### **Books**

1. Ramachandra, B. and Chandrapal Singh, K., 2012. Sorghum stover: Feeding frequency, Energy, Urea addition in calves. Lambert Academic Publishing GmbH & Co.KG, Germany.
2. Prakashkumar Rathod, Nikam, T.R. and Sariput Landge, 2012. Livestock Service Delivery by Dairy Cooperatives: A Study of Farmers' Perception in Western Maharashtra, India. Lambert Academic Publishing House, Germany.
3. Shivashankar Usturge, Suranagi, M.D., Prakashkumar Rathod and Siddalingaswamy Hiremath, 2013. ICAR-JRF Examination Question Book Bank for students of Veterinary College, Bidar.
4. Suranagi, M.D. and Prakashkumar Rathod, 2013. Computer Tutorial Class Notes for SC-ST students of Veterinary College, Bidar.

#### **Book Chapters**

1. Siddalingaswamy Hiremath. 2012. Mahishapuradalli ondu dina. In- Pashusangopane Adharita Kirunatakagala

- Sankalana, published by Directorate of Extension, KVAFSU, Bidar.
2. Shivaprakash, B.V., 2012. Pranigalalli sayami avali angavikalate sadhyave mattu shastrachiketse (Chapter). Book, Vignana Loka, Karnataka Science & Technology.

#### ***Training Manuals and Compendia***

1. Role of Livestock in Integrated Farming System for Extension Functionaries of Development Departments during 7-9<sup>th</sup> Nov., 2012.
2. Model Training Course Manual on Application of Information & Communication Technologies in Animal Husbandry. During 19-26<sup>th</sup> Nov., 2012, at Veterinary College, Bidar.

#### ***Popular articles***

1. Tandle, M.K., Deepak, A.V., Md. Zakiuddin, Basavaraj Hiremath, Akhil Joshi, Vijaylaksmi, G., Sonphule, A.M., Naik, D.T. and Bijurkar, R.G., 2012. Successful delivery of fetal ascites in non-descript buffalo. Pashudhan, 38(3):2.
2. Tandale, M.K., Deepak, A.V., Manjunath, S.P., Kirankumar, M.N., Vijaykumar, M., Naik, D.T., Sonwane, S.D. and Sonphule, A.M., 2012. Dystocia due to fetal ascites in a non-descript cow. Pashudhan, 38(4):8.
3. Naik, D.T. and Rajendra, T., 2012. Mixed infections of infectious bursal disease and coccidiosis in Emu birds. Pashudhan, Aug-2012.
4. Naik, D.T. and Rajendra, T., 2012. Clinical signs and lesions of important diseases. Pashudhan, Nov-2012.
5. Jadhav, N.V., Awarde, P.M. and Patil, V.M., 2012. Likely impacts of global warming on poultry. Poultry Punch, September 2012.
6. Murthy, V.C. and Vivek, M. Patil, 2012. Management of dairy animals during summer. Pashusiri, April 2012.
7. Vivek, M. Patil, Vijay Kumar, M., Jagannath Rao and Shrikant Kulkarni, 2012. Utility of milking machines in modern dairy farming. Livestock Line, May 2012.
8. Naveen Kumar, G.S., Vivek, M. Patil and Nagaraj, C.S., 2012. Hasu hagu raitha-ebbarigu priyavada kechalu enthaddu? Pashusiri, November, 2012.
9. Rajeshwari, Y.B., Vivek, M. Patil, Basavaraj and Balaji, K.H., 2012. Common diseases of rabbits. Pashusiri, November, 2012.
10. Siddalingaswamy Hiremath, 2012. Bharatiya Pashu chikitseya mula purusharu. Pashuvaidya Sahitya Loka. July-Sept., 2012.
11. Channappagauda, B., Basawraj Inamdar, Shrikant, M. Dodamani and Addeppa, J. M., 2012. Concept of organic livestock farming. Livestock Line, Oct, 2012, 6-8.
12. Shivaprakash, B.V., 2012. Vivida jeevigalalli cancer mattu ittichina samshodanegalu. Vignana Loka, Karnataka Science & Technology
13. Jagannatha Rao, Asram Kale, B. and Vijaykumar, M., 2013. Seasonings used in meat processing. Poultry line
14. Jadhav, N.V., Awarde, P.M., Padalkar, R.D. and Patil, V.M., 2012. Comparative efficacy of use of plain and acidified drinking water on performance, economy and coliform count in broilers. Poultry Punch, 28 (11)
15. Prakashkumar Rathod, 2012. Animal husbandry in Hyderabad-Karnataka Region. Yojana-Kannada, 25 (5): 66-69
16. Prakashkumar Rathod, Sariput Landge and Vaishali Bhantiya, 2013. Contract Farming in Livestock Sector: Status, Opportunities and Challenges. Livestock Line, 6 (10): 38-46.
17. Prakashkumar Rathod and Shivakumar Radder, 2013. Commercial dairy farming as a profitable enterprise. Kisan World, 40(3): 33-37.



### ***Chapters in Training Manuals***

1. Thirumalesh, T., 2012. Use of crop residues in animal feeding. In: Role of livestock in integrated farming system, SAMETI (North), UAS, Dharwad.
2. Thirumalesh, T., 2013. Nutritional status of farm animals. In: Model training course on Application of ICT in Animal Husbandry, sponsored by GOI, New Delhi.
3. Jadhav, N.V., 2013. Poultry farming - A profitable venture. In: Entrepreneurial opportunities in livestock sector, EEC, Bidar.
4. Vivek, M. Patil and Siddlingswamy Hiremath, 2012. Applications of information and communication technologies in livestock production & management. In: Model Training Course on Application of information & communication technologies in animal husbandry, Veterinary College, Bidar.
5. Vivek, M. Patil, 2012. Herd management software and its applications. In: Model Training Course on Application of information & communication technologies in animal husbandry, Veterinary College, Bidar.
6. Prakashkumar Rathod, 2012. Entrepreneurship development through integrated farming system. In: Role of livestock in integrated farming system, SAMETI (North), UAS, Dharwad.
7. Channappagouda Biradar, 2012. Mixed farming - A way towards rural food security. In: Role of livestock in integrated farming system, SAMETI (North), UAS, Dharwad.
8. Prakashkumar Rathod, 2013. Livestock entrepreneurship: An introduction. In: Entrepreneurial opportunities in livestock sector, EEC, Bidar.
9. Channappagouda Biradar, 2013. Entrepreneurial opportunities for youth in dairy sector. In: Entrepreneurial opportunities in livestock sector, EEC, Bidar.

### **VETERINARY COLLEGE, SHIVAMOGGA**

#### ***Book chapters***

1. Nagabhushana, V., 2013. A skit entitled "Undu Santhasadindiru" on importance of scientific feeding for profitable livestock production. In: Pashu palana adartha kiru natakagala sankalana, published by Directorate of Extension, KVAFSU, Bidar.
2. Santosh Sajjan and Nagappa, S.K., 2012. Quality and safety aspects of meat production in Indian scenario. In Model Training Course on 'Intensive and semi intensive sheep rearing as a source of rural employment and livelihood security.'

#### ***Chapters in training manuals***

1. Nagabhushana, V., 2012. Training manual entitled "Recent advances in sheep & goat farming under stall feeding system" published by EEC, Shimoga.
2. Madhavaprasad, C.B., 2012. Antimicrobial residues in meat and meat products: Animal and human health implications. In: Model Training Course on 'Intensive and semi-intensive sheep rearing as a source of rural employment and livelihood security.'
3. Veeranna, K.C. and Gopal, G.T., 2013. Intensive sheep and goat production: Points for reflection diagnosis and analysis. In: Model Training Course on 'Intensive and semi-intensive sheep rearing as a source of rural employment and livelihood security.'
4. Veeranna, K.C. and Gopal, G.T., 2013. Livelihood security of rural poor through sheep and goat rearing as a working model - Emerging options. In: Model Training Course on 'Intensive and semi-intensive sheep rearing as a source of rural employment and livelihood security.'
5. Veeranna, K.C. and Gopal, G.T., 2013. Case studies on Livelihood security through resource and entrepreneurship management by sheep and goat rearing. In: Model

- Training Course on 'Intensive and semi-intensive sheep rearing as a source of rural employment and livelihood security.'
6. Gopal, G.T. and Veeranna, K.C., 2013. Role of sheep in income and employment generation for rural poor. In: Model Training Course on 'Intensive and semi-intensive sheep rearing as a source of rural employment and livelihood security.'
  7. Gopal, G.T. and Veeranna, K.C., 2013. Marketing and economics in sheep production. In: Model Training Course on 'Intensive and semi-intensive sheep rearing as a source of rural employment and livelihood security.'
  8. Ananda, K.J., 2012. Common gastrointestinal parasitic problems and their control measures in sheep production. In: Model Training Course on 'Intensive and semi-intensive sheep rearing as a source of rural employment and livelihood security.'
- Folders**
1. Veeranna, K.C. and Vijayakumar, 2012. Azola Production.
- Popular articles**
1. Umashankar, B.C. and Umesh, B.U., 2012. Calf rearing systems, Pashusiri (Monthly) Dec., 2012-Jan., 2013.
  2. Madhavaprasad, C.B., Santosh Sajjan, Nagabhushana, V. and Ganesh Udupa, K., 2012. Bird flue (H5: N5) and its management. Krishi Mitra, Dec., 2012.
  3. Prakash, N., Lokesh, L.V. and Waghe Prashantkumar, 2013. Januvarugalli kaanuva saamanya vishabhadegalu haagu thadegattuva kramagalu. In: Souvenir on Jaanuvaru, Kukkuta & Matsya Mela on 1<sup>st</sup> March, 2013, Pp 55-60.
  4. Madhavaprasad, C.B., Santosh Sajjan, Nagabhushana, V. and Ganesh Udupa, K., 2012. Bird flue (H5N1) and its management. Krishi Mitra, 10(3): 13-16.
  5. Nagappa, S.K., Santosh Sajjan and Madhavaprasad, C.B., 2013. Consume A-2 milk for healthy life. Krishi Mitra, 10 (5): 40-42.
  6. Madhavaprasad, C.B., Santosh Sajjan, Nagabhushana, V. and Nagappa, S. K., 2013. Antibiotic residues in the foods of animal horizon and their ill effects on human health. Krishi Munnade. Accepted.
  7. Santosh Sajjan, Madhavaprasad, C.B. and Nagappa, S.K., 2013. Farmer's role in pure and safety milk production. In: Souvenir of Jaanuvaru, Kukkuta & Matsya Mela-2013.
  8. Nagappa, S.K., Girish Patil, S., Santosh Haunshi and Viswas, K.N., 2012. DNA based identification of animal species. 1<sup>st</sup> Edition, 2012. Hind Publications, Hyderabad, India.
  9. Ganesh Udupa, K. and Dhanalakshmi, S., 2013. Health management of calves. In: Souvenir on Jaanuvaru, Kukkuta & Matsya Mela-2013.
  10. Veeranna Gowda, B.G. and Umesh, B.U., 2012. Scientific rearing of broilers. Pashusiri.
  11. Krishna Murthy T.N., Veerannagowda, B.G., Satheesha, G.M., Biradar, U.S. and Chidanandiah, 2013. Profitable dairying. In: Souvenir on Jaanuvaru, Kukkuta & Matsya Mela.
  12. Veerannagowda, B.G., Umashankar, B.C., Umesh, B.U. and Krishna Murthy, T.N., 2013. Balanced cattle feed. 2013, In: Souvenir on Jaanuvaru, Kukkuta & Matsya Mela.
  13. Venkatesha, M.M., Umesh, B.U., Krishna Murthy, T.N. and Satheesha, G.M., 2013. Use of green fodder to improve the milk production. In: Souvenir on Jaanuvaru, Kukkuta & Matsya Mela.
  14. Umesh, B.U., Krishna Murthy, T.N., Veerannagowda, B.G. and Umashankar, B.C., 2013. Scientific poultry farming. In: Souvenir on Jaanuvaru, Kukkuta & Matsya Mela.
  15. Vijayakumar and Veeranna, K.C., 2012. Rear fish and earn money. Vijaya Karnataka on 25<sup>th</sup> July, 2012.
  16. Veeranna, K.C. and Vijayakumar, S., 2012. Stall feeding of goats. Vijaya Karnataka on Sept. 9<sup>th</sup>, 2012.

17. Vijayakumar and Veeranna, K.C., 2013. Parasitic infestations in fish and their control. *Krishi Munnade*, 26(2).
18. Manjunath, S.S., Anjan Kumar, K.R. and Chidanandaiah, 2013. Marana hondida jaanuvarugala vinyoga (in Kannada). In: Souvenir on Jaanuvaru, Kukkuta & Matsya Mela.
19. Dhoolappa, M., Vinuthan, M.K., Dhanalakshmi and Veeranna, K.C., 2013. Ooluva ettugala sudharita paalane. In: Souvenir on Jaanuvaru, Kukkuta & Matsya Mela.
20. Umashankar, B.C. and Umesh, B.U., 2012. Scientific rearing of calf, Pashu siri.
21. Shambulingappa and Sheela, P., 2013. Jaanuvaarugalalli sankramika rogagalu mattu hathoti. Jaanuvaru, Kukkuta & Matsya Mela.
22. Shambulingappa and Sheela, P., 2013. Svasahaya sangagalu mattu mahileyara paatra. Jaanuvaru, Kukkuta & Matsya Mela.
23. Ananda, K.J., Krishnamurthy, C.M. and Adeppa, J., 2013. Parasitic problems and their management in livestock. Jaanuvaru, Kukkuta & Matsya Mela.
24. Krishnamurthy, C.M. and Ananda, K.J., 2013. Fatal parasitic diseases in livestock and their control measures. Jaanuvaru, Kukkuta & Matsya Mela.
25. Devaraj, M., Murugeppa, A., Shankare Gowda, Narasimha Murthy and RaviKumar, B.P., 2013. Hainu raasugalalli satthe endhaaguva parinamagalu. Jaanuvaru, Kukkuta & Matsya Mela.
26. Vijayakumar, S., 2013. Integrated fish farming for sustainable rural economy. Jaanuvaru, Kukkuta & Matsya Mela.

## VETERINARY COLLEGE, HASSAN

### *Book chapters*

1. Manjunatha, L. and Satyanarayana, K., 2012. Bali pashu. In: *Pashupalane adharitha kirunatakagala sankalana*. Published by Directorate of Extension, KVAFSU, Bidar.
2. Ravikumar, P. and Shashikala, S.G., 2012. Bala belagiga kiru kamadhenu. In: *Pashupalane adharitha kirunatakagala sankalana*. Published by Directorate of Extension, KVAFSU, Bidar.

### *Training Manuals*

1. Prasanna, S.B., Shivakumar, M.C., Manjunath, L. and Guruprasad, R., 2012. *Scientific pig production*.
2. Indresh, H.C., Shivakumar, M.C., Prasanna, S.B., Suresh, B.N., Gouri, M.D. and Manjunath, L., 2012. *Improved poultry farming*.
3. Gouri, M.D., Shivakumar, M.C., Prasanna, S.B., Guruprasad, R., Roopa, T.K., Suresh, B.N. and Indresh, H.C., 2013. *Improved goat farming*.
4. Prasanna, S.B., Guruprasad, R., Suresh, B.N., Manjunath, L. and Shivakumar, M.C., 2013. *Stall fed sheep and goat rearing*.

### *Chapters in training manuals*

1. Manjunatha, L., 2012. Protein Park and similar model demonstration plots for augmenting fodder production. In: Middle level extension functionaries of development departments on Forage production, Conservation and Utilization conducted by SAMETI, UAS Dharwad. 22-31.
2. Manjunatha, L., 2013. Backyard poultry farming. In: Farmers training on scientific poultry production, conducted jointly by EEC and Dept. of ILFC, Veterinary College, Hassan. 18-20.

3. Sushanth Handage and Roopa, K.T., 2013. Record keeping and economics in backyard poultry farming. In: Scientific poultry production' conducted jointly by EEC & Dept. of ILFC, Veterinary College, Hassan. 15-16.
4. Manjunatha, L. and Prasanna, S.B., 2013. Sheep and goat rearing (in Kannada). In: Trainees manual published by KVK on Entrepreneurial methods, Hassan.
5. Manjunatha, L., 2013. Protein park-model fodder demonstration park (in Kannada). In: Forage production and its effective utilization, conducted jointly by EEC & Dept. of ILFC, Veterinary Co'lege, Hassan, 35-38.

***Popular articles***

1. Lakshmisree, K.T. and Veena, M.P., 2012. Plastic balake januvarugala savu. Janatha Madyama, 16.06.12, P:3
2. Veena, M.P. and Lakshmisree, K.T., 2012. Januvarugalalli kannina thondaregalu. Annadatha, February issue P: 54.
3. Veena, M.P. and Lakshmisree, K.T., 2012. Pashugalannu rogalinda rakshisi. Annadata, June issue Pp: 36-38.
4. Madhusudhan, H.S., 2012. Januvaru aaraikege bara beda. Prajavani, 11.09.12.
5. Naveen Kumar, G.S., 2012. Booyar meke beke yaake? Pashusiri, June-July 2012, Pp 23-24.
6. Naveen Kumar, G.S., 2012. Hasu haagu raitha ibbarigu priyavaada kecchalu yanthadu?. Pashusiri, October-November, Pp 3-4.
7. Manjunatha, L., 2012. Nirvahane hainagisida hainu raitha. Adike Patrike, September issue, Pp8-11.

**DAIRY SCIENCE COLLEGE,  
BENGALURU**

***Popular articles***

Ramachandra Rao, H.G. and Rashmi, K.G., 2012. Designer milk. I. Dairyman, 64(1):66.

***Leaflet***

1. Ramachandra Rao, H.G. and Arun Kumar, H., 2012. Preparation of value added dairy products.

**FISHERIES COLLEGE, MANGALORE**

***Books***

1. Ganapathi Naik, M., 2013. Meteorology and geography, published by Narendra Publicaitons, New Delhi.
2. Ganapathi Naik, M., 2013. Aquarium keeping (In Kannada), self published.
3. Munireddy, R., 2012. Economic analysis of fisheries development programmes in Karnataka. Lambert Academic.

***Brochure***

1. Ganapathi Naik, M., 2012. Eco-friendly biofuels.

***Book chapter***

1. Karunasagar, I., Kumar, K. and Nair, G.B., 2012. Epidemiology and genetics of the p a n d e m i c c l o n e s o f V i b r i o parahaemolyticus (Chapter-8). In: Food borne and water borne bacterial pathogen: Epidemiology and molecular biology. Horizon press.
2. Karunasagar, I., Bhowmick, P. P. and Deekshit, V.K. 2012. Molecular aspects of pathogenesis and drug resistance of *Salmonella* spp. In: Foodborne and waterborne bacterial pathogen: Epidemiology and molecular biology. Horizon press.

**INSTITUTE OF WILDLIFE  
VETERINARY RESEARCH, KODAGU**

***Compendium***

1. Bhat, M.N., Satyanarayana, M.L. and Madhukar, S.D., 2013. Post-mortem and forensic aspects in wild animals.

***Publications***

1. Madhukar, S.D., 2013. Fostering public support for vulture protection. Science, 22;339 (6126):1383.

**FISHERIES RESEARCH AND  
INFORMATION CENTER, HEBBAL**

***Leaflets/Folders***

1. Basavaraju, Y. and Rajanna, K.B., 2012. Mannu hagu nirina rasayanika guna visheshagalu mattu meenu sakanikeyalli avugala pramukyatthe.
2. Basavaraju, Y. and Rajanna, K.B., 2012. Alankarika meenu sakanike.
3. Basavaraju, Y. and Rajanna, K.B., 2012. Sihi niru sigadi palane.
4. Basavaraju, Y. and Rajanna, K.B., 2012. Samagra meenu sakane.
5. Basavaraju, Y. and Rajanna, K.B., 2012. Kere kolagalalli mishra meenu krushi.

**FISHERIES RESEARCH AND  
INFORMATION CENTER, ANKOLA**

***Training Manuals***

1. Mansing Naik and Basavakumar, K.V., 2013. Fisheries sciences practical manual.

***Popular articles***

1. Manjappa, N. and Chandrakant Lingadhal, 2012. Fish culture in agriculture ponds. Krushimitra, 9(12).

**FISHERIES RESEARCH AND  
INFORMATION CENTER, BHUTNAL,  
BIJAPUR**

***Popular article***

1. Shivaprakash, S.M., 2013. Raitara apta mitra-meenu mari kendra. Prajavani, 14-1-2013.

**LIVESTOCK RESEARCH AND  
INFORMATION CENTER, KONEHALLY,  
TIPTUR**

***Training manual***

1. Modern pig rearing.

**LIVESTOCK RESEARCH AND  
INFORMATION CENTER,  
NAGAMANGALA**

***Books***

1. Roopadevi, Y.S., Nagaraj, R. and Manju, G.U., 2012. Mandya kuri sakanike-sankchipta mahithi. LRIC, Nagamangala.
2. Manju, G.U., Roopadevi, Y.S. and Nagaraj, R., 2012. Labadayaka kuri sakanikege anusarisabekada ahara paddathi. LRIC, Nagamangala.

***Popular Articles***

1. Suresh, B.N., Indresh, H.C., Manju, G.U. and Umashankar, 2012. Pasu poshaneyalli adunika thanthrikathegau. Pashusiri.

**LIVESTOCK RESEARCH AND  
INFORMATION CENTER, HALLIKHED**

***Popular articles***

1. Rudraswamy, M.S., Sunilchandra, U. and Santhosh, C.R., 2012. Bara / kshamadalli jaanuvaaru nirvahane. Krishi Mitra, 10(1): 6-9.

2. Rudraswamy, M.S., Santhosh, C.R. and Manjunath, D.R., 2012. Jaanuvaaragalli kantakavaaguva baahya paravalambi jeevigalu. Krishi Mitra, 10(2): 30-32.
3. Rudraswamy, M.S., Santhosh, C.R., and Shashidhar Ballary, 2013. Krishiayalli rasayanikagala balake: Jaanuvaaragala melaaguva dusparinaama, tadegattivike haagu anusarisabekaada chikitsa kramagalu. Krishi Mithra, 12-16
4. Rudra Swamy, M.S., Santhosh, C.R., Suma Hiremath and Manjunath, D.R., 2012. Ectoparasitic control in domestic animals. Krishi Mitra, 2012.
5. Rudra Swamy, M.S., 2012. Hittala koli-Giriraja koli sakaniye ayavyaygalu. Krishi Mithra, 30-33.

### **KRISHI VIGYAN KENDRA, DAKSHINA KANNADA**

#### **Books**

1. Harish Shenoy and Hanumanthappa, H., 2012. Mechanised paddy cultivation. Published by ATMA, Dakshina Kannada.
2. Shashikanth Kattimani, Hanumanthappa, H., Lakshman, Harish Shenoy and Shweta, K., 2012. Jack fruit cultivation practices. KVKA, Dakshina Kannada.

#### **Training Manuals**

1. Hanumanthappa, H., Honnanavar, Annappaswamy, T.S. and Shashikanth Kattimani, 2012. Polyculture of fish for food and nutritional security. ATMA SAMETHI North.
2. Shashikanth Kattimani, Ashok Bennur, Hanumanthappa, H., Shweta, K., Harish Shenoy and Annappaswamy, T.S., 2012. Advance technologies in agriculture and horticulture crops. Published by KVKA, Dakshina Kannada.
3. Shashikanth Kattimani, Muruli, R., Hanumanthappa, H., Somashekhar,

- Bhagyashri and Harish Shenoy, 2013. Integrated crop management in coconut. Published by Coconut Development Board.
4. Shashikanth Kattimani, Muruli, R., Hanumanthappa, H., Shweta, K., Somashekhar and Ramesh Babu, S., 2013. Plant protection and value addition in coconut. Published by Coconut Development Board.

#### **Folders**

1. Shashikanth Kattimani, Harish Shenoy, Punitha and Prabhakar, A., 2013. Udupi mallige.

#### **Popular Articles**

1. Shashikanth Kattimani, H. Hanumanthappa, 2012. Dry land Horticulture. Gramina Samachar published by VRDF, June-issue.
2. Shweta, K. and Hanumanthappa, H., 2012. Importance and uses of Ragi. Gramina Samachar published by VRDF, May/June-issue.
3. Shweta, K. and Hanumanthappa, H., 2012. Value addition to Agriculture and Horticulture crops. Gramina Samachar published by VRDF, July/August-issue.
4. Harish shenoy, Punitha and Hanumanthappa, H., 2012. Pre Kharif activities and land preparation. Gramina Samachar published by VRDF, July-issue.

### **EXTENSION EDUCATION CENTER, BIDAR**

#### **Training Manual**

1. Prakash Rathod and Channappagouda Biradar, 2013. Entrepreneurial opportunities in livestock sector.



## **EXTENSION EDUCATION CENTER, BENGALURU**

### ***Training Manual***

1. Chitra, M.K., 2012. Preparation of traditional dairy products.
2. Suresh, T., 2012. Ornamental fish culture.
3. Suresh, T., 2012. Inland aquaculture.

## **EXTENSION EDUCATION CENTER, SHIVAMOGGA**

### ***Training Manual***

1. Veeranna, K.C. and Gopal, G.T., 2013. Intensive and semi intensive sheep rearing as source of rural employment and livelihood security”.
2. Veeranna, K.C. and Gopal, G.T., 2013. Kottige paddathiyalli kuri mattu meke sakanike.

## **EXTENSION EDUCATION CENTER, HASSAN**

### ***Manuals***

1. Vasanth, M.S., Manjunatha, L., Shivkumar, M.C. and Sushanth Handage, 2013. Backyard poultry rearing.
2. Vasanth, M.S., Manjunatha, L., Shivkumar, M.C. and Sushanth Handage, 2013. Fodder production and its effective utilization.
3. Vasanth, M.S., Manjunatha, L., Shivkumar, M.C. and Sushanth Handage, 2013. Stall fed sheep and goat rearing.

## **ANIMAL HUSBANDRY POLYTECHNIC, KONEHALLY, TIPTUR**

### ***Popular articles***

1. Lathamani, V.S., Siddalingamurthy, H.K. and Shinvakumar, R., 2013. Januvarugalaannu kaduva kalu bhayi jwara mattu niyanthrana. Pashusiri, December-January issue.

2. Lathamani, V.S., 2013. Desi gho thaligala pramukyathe. Pashusiri, February-March issue.

### ***Practical manuals***

1. Lathamani V.S., 2012. Pranigallali prathama chikisthe.
2. Manjunath, L., 2012. Pashupalana vistharaneya mula bhutha amshagalu.
3. Modern pig rearing

## **ANIMAL HUSBANDRY POLYTECHNIC, SHIGGAON, HAVERI**

1. Shivakumar Radde, Chethan, K.P. and Girish, B.C., 2012. Verghese kurien, Architect of White revolution. Pashusiri, Oct-Nov, issue.
2. Girish, B.C., Shivakumar Radde, and Chethan, K.P., 2013. Januvarugalannu karidisuvaga vahisbekada munjagrutha kramaglu. Pashusiri, Feb-Mar, issue.

## **DIRECTORATE OF EXTENSION, KVAFSU, BIDAR**

### ***Books***

1. Prabhudeva, K.N., Dilipkumar, D. and Mohan, H.V., 2013. Bidar jilleya hainugarika yashogathegalu. P:64.
2. Manjunath, L., Satyanaraya, K., Veeranna, K.C. and Prabhudeva, K.N., 2013. Pashupalana adharita kirunatakagala sankalana. P:199.

### ***Books Edited***

1. Prabhudeva, K.N., Mohan, H.V., Yathish, H.M. and Dilipkumar, D., 2013. English-Kannada Animal Science Dictionary. P: 248.

### ***Annual Reports***

1. Annual Report for the year 2011-12, in Kannada.
2. Annual Report for the year 2011-12, in English.

### ***KVAFSU, News letters***

1. KVAFSU News Letter (July, 2010 to June, 2012) (4 issues).

### ***Other Publications***

1. University Calendar for the year 2013.
2. Monthly Planner for the year 2013-14.

### ***Book Chapters***

1. Contributed 7 chapters on Animal Husbandry and Fisheries to handbook on 'Guide to Integrated Agriculture' published by Dept. of Agriculture, GOK and UAS,Dharwad.

### **Abstract of Extension Publications for the year 2012-13**

<i>Division</i>	<i>Books</i>	<i>Book Chapters</i>	<i>Training Manuals</i>	<i>Popular articles</i>	<i>Chapter in Training Manuals</i>	<i>Leaflets/Brochure</i>	<i>Folders</i>	<i>Annual Report s/New sletter/Calen daver/Planner</i>
Veterinary & Animal Sciences	12	08	16	106	24	13	01	-
Dairy Science	-	-	-	01	-	01	-	-
Fisheries Science	03	02	01	03	-	06	-	-
Directorate of Extension (Also includes KVK& EEC's)	05	07	16	08	-	-	01	08
<b>Total</b>	<b>20</b>	<b>17</b>	<b>33</b>	<b>118</b>	<b>24</b>	<b>20</b>	<b>02</b>	<b>08</b>

## VI. FINANCE AND BUDGET

RECEIPTS AND PAYMENTS FOR THE YEAR 2012-13 (ACCOUNTS)			
#	Head of A/C	Receipts (Rs. in lakhs)	Expenditure (Rs. in lakhs)
<b>A. GENERAL FUNDS</b>			
<b>1(a)</b>	<b>Non-Plan Grants</b>	2600.00	3838.70
(b)	<b>Internal Resources</b>		
i	Income from Fees	240.34	
ii	Income University Property	142.99	
iii	Other Miscellaneous Income	826.17	
	<b>Total 1(b)</b>	<b>1209.50</b>	<b>0.00</b>
	<b>Total -1</b>	<b>3809.50</b>	<b>3838.70</b>
<b>2</b>	<b>Plan - Revenue grants</b>		
(a)	Salary & other Recurring Charges	1008.00	778.46
(c)	SCP /TSP	372.00	402.84
	<b>Total - 2</b>	<b>1380.00</b>	<b>1181.30</b>
<b>3</b>	<b>Plan - Capital grants</b>		
(a)	Creation of Infrastructure	0.00	113.05
(b)	Special Development Plan -SDP	200.00	303.82
(c)	Special Component Plan -SCP	150.00	62.86
(d)	AH Polytechnic- Central Assistances	0.00	51.71
(e)	Malenada Gidda Research Centre (VC Shimoga)	0.00	30.68
	<b>Total - 3</b>	<b>350.00</b>	<b>562.12</b>
<b>4</b>	<b>New Colleges (Capital Outlay)</b>		
(a)	Veterinary College, Shimoga	1650.00	1591.27
(b)	Veterinary College, Hassan	3292.25	3632.93
(c)	Veterinary College, Gadag	250.00	309.21
(d)	Veterinary College, Athani	250.00	136.01
(e)	Veterinary College, Puttur	375.00	0.00
	<b>Total-4</b>	<b>5817.25</b>	<b>5669.42</b>
<b>5</b>	<b>GOK Projects</b>		
(a)	State Adhoc Projects	121.33	59.44
(b)	Development of Amrithmahal Kaval Land	0.00	109.96
(c)	RKVY Projects	598.00	5.21
	<b>Total-5</b>	<b>719.33</b>	<b>174.61</b>
<b>6</b>	<b>Govt. of India Projects</b>	<b>Total-6</b>	<b>161.89</b>
<b>7</b>	<b>ICAR Project</b>		
i	Strengthening of SAU's	365.16	389.77

ii	ICAR Co-ordinated Project 75%	88.29	73.50
iii	ICAR Co-ordinated Adhoc Projects 100%	267.91	100.84
iv	NAIP Projects	59.15	73.82
v	KVK	33.71	50.47
	<b>Total 7</b>	<b>814.22</b>	<b>688.40</b>
<b>8</b>	<b>Other Agencies</b>	<b>80.56</b>	<b>94.27</b>
	<b>Total- A General Funds - (1 to 8)</b>	<b>13132.75</b>	<b>12342.86</b>
<b>9</b>	<b>C Debt &amp; Suspense A/c</b>		
i	Debt & Suspense A/c (General)	5415.59	2919.55
ii	Debt & Suspense A/c (Salary & Other Bills)	957.51	957.12
	<b>Total- 9</b>	<b>6373.10</b>	<b>3876.67</b>
	<b>Total (1 to 9)</b>	<b>19505.85</b>	<b>16219.53</b>
	<b>Opening Balance</b>	<b>802.61</b>	<b>-</b>
	<b>Closing Balance</b>	<b>-</b>	<b>4088.93</b>
	<b>Grand Total</b>	<b>20308.46</b>	<b>20308.46</b>



## VII. GENERAL ADMINISTRATION

### 1) Appointments

#### a) Recruitment of Teaching Staff

**List of Director Recruitment of Assistant Professors under  
vide order No. R/KVAFSU(B)/Rectt.Asst.Prof-T/12- Dt. 12-7-2012**

#	Name	Discipline	Place of Posting
1	Girisha, S.K.	Fish Microbiology	College of Fisheries, Mangalore
2	Ravikumar, P.	Veterinary Pathology	Veterinary College, Hassan
3	Mamatha, G.S.	Veterinary Parasitology	Veterinary College, Hassan
4	Ravindra Gowda Patil	Fisheries	FRIC, Bhutnal, Bijapur
5	Arun, S.J.	Veterinary Microbiology	Veterinary College, Bidar
6	Chandrakanth Lingdhal	Fisheries	FRIC, Ankola
7	Renukaradhy, G.J.	TVCC (Gynaecology)	Veterinary College, Hassan
8	Rudraswamy, M.S.	ILFC (Animal Nutrition)	Director of Research, KVAFSU, Bidar
9	Dhanalakshmi, H.	Veterinary Parasitology	Veterinary College, Hassan
10	Suresh, B.N.	ILFC (Animal Nutrition)	Veterinary College, Hassan
11	Sheela, P.	Veterinary Microbiology	Veterinary College, Shivamogga
12	Suma, N.	Animal Nutrition	Veterinary College, Hassan
13	Shilpa, V.T.	Veterinary Pathology	Veterinary College, Hassan
14	Dhanalakshmi, S.	TVCC (Surgery)	Veterinary College, Shivamogga
15	Pushpa, B.P.	Dairy Chemistry	Dairy Science College, Gulbarga
16	Priyanka	TVCC (Medicine)	Veterinary College, Hassan
17	Jaya Nagappa Lakkundi	Veterinary Parasitology	Veterinary College, Bidar
18	Suchitra, B.R.	VGO	Veterinary College, Hassan
19	Latamani, V.S.	TVCC (Medicine)	Animal Husbandry Polytech, Konehally
20	Roopa Devi, Y.S.	Veterinary Pathology	LRIC, Nagamangala
21	Pavithra, B.H.	VPT	Veterinary College, Shivamogga
22	Sunitha Choudhary,	TVCC(Medicine)	Veterinary College, Shivamogga
23	Sudheesh Nair	VSR	Veterinary College, Hassan
24	Adeppa	Veterinary Parasitology	Veterinary College, Shivamogga
25	Nagappa Karabasanavar	Veterinary Public Health	Veterinary College, Shivamogga

26	Madhusudhan, H.S.	Animal Nutrition	Veterinary College, Hassan
27	Gopala, G.T.	V&AHE	Veterinary College, Shivamogga
28	Yathish, H.M.	AGB	Director of Research, KVAFSU, Bidar
29	Girish, B.C.	Veterinary Pathology	Animal Husbandry Polytechnic, Haveri
30	Ramesh, H.S.	VPB	Veterinary College, Shivamogga
31	Dhoolappa Melinamani	Veterinary Anatomy	Veterinary College, Shivamogga
32	Shashidhara Bellary	Veterinary Pathology	Veterinary College, Bidar
33	Indresh, H.C.	LPM	Veterinary College, Hassan
34	Manjunatha, D.R.	TVCC (Surgery)	Veterinary College, Bidar
35	Mahadevappa Gouri	ILFC (LPM)	Veterinary College, Hassan
36	Manjunath, S.S.	Veterinary Pathology	Veterinary College, Shivamogga
37	Girish, M.H.	Veterinary Anatomy	Veterinary College, Bidar
38	Madhukar	VPT	IWVRI, Kudige
39	Subraya Prabhu, S.	Physical Education	Veterinary College, Hassan
40	Mahesh, V.	VSR	Veterinary College, Shivamogga
41	Chandranaiik, B.M.	Veterinary Microbiology	Veterinary College, Bidar
42	Anjankumar, K.R.	Veterinary Pathology	Veterinary College, Shivamogga
43	Bhagavantappa, B.	VSR	Veterinary College, Bidar
44	Vishwanath, S.	Agronomy	Veterinary College, Shivamogga
45	Arun Kharate	Veterinary Public Health	Veterinary College, Bidar
46	Roopa, T.K.	Agronomy	Veterinary College, Hassan
47	Vinuthan, M.K.	VPB	Veterinary College, Shivamogga
48	Vinay Tikare	VPT	Veterinary College, Bidar
49	Manoj Kumar	Physical Education	College of Fisheries, Mangalore
50	Vijay Athnur	Fishery Technology	LRIC, Deoni, Bidar
51	Santosh, C.R.	VPT	Veterinary College, Bidar
52	Mohan, H.V.	Veterinary Public Health	Directorate of Extension, KVAFSU, Bidar
53	K.B. Vedamurthy	DEBM	Dairy Science College, Gulbarga
54	Chetan, K.P.	Animal Nutrition	Animal Husbandry Polytechnic, Haveri
55	Srinivas Reddy Bellur	VPB	Veterinary College, Bidar
56	Krishnamurthy, T.N.	LPM	Veterinary College, Shivamogga
57	Siddaling Swamy Hiremath,	ILFC (AGB)	Veterinary College, Bidar
58	Umesh, B.U.	ILFC (Poultry Science)	Veterinary College, Shivamogga
59	Mahantesh M. Nekar	Agronomy	Veterinary College, Bidar



60	Harish Shenoy	Agronomy	LRIC, Deoni, Bidar
61	Channappagouda Biradar	V&AHE	Veterinary College, Bidar
62	Satheesha, G.M.	ILFC (AGB)	Veterinary College, Shivamogga
63	Veerana Gowda, B.G.	LPM	Veterinary College, Shivamogga
64	Nagaraju, N.	VSR	Veterinary College, Hassan
65	Umashankar, B.C.	Animal Nutrition	Veterinary College, Shivamogga
66	Chetankumar, G.K.	Veterinary Medicine	Veterinary College, Hassan
67	Sudarshan, S.	LPT	Veterinary College, Bidar
68	Satheesha, S.P.	Veterinary Public Health	Veterinary College, Bidar
69	Hemanna Gowda, K.	VPB	Veterinary College, Hassan
70	Manju, G.U.	Animal Nutrition	CRIC, Mudhol
71	Shankare Gowda, A.J.	Animal Reproduction	Veterinary College, Shivamogga
72	Santosh Arvind Sajjan	Veterinary Public Health	Veterinary College, Shivamogga
73	Veena, M.	Veterinary Parasitology	Veterinary College, Bidar
74	Ramesh, D.	VPB	Veterinary College, Hassan
75	Pradeep, B.S.	Veterinary Parasitology	Veterinary College, Bidar
76	Doddamani Jahangir Basha	VSR	Veterinary College, Bidar
77	Shivakumar, V.	TVCC (Medicine)	Veterinary College, Bidar
78	Venkana gouda Doddagoudar	VGO	CRIC, Mudhol
79	Kavitha, K.	Veterinary Medicine	Veterinary College, Hassan
80	Sushant Handage	V&AHE	Veterinary College, Hassan
81	Kumar Wodeyar, D.S.	VPB	Veterinary College, Bidar
82	Satisha, K.B.	VPB	Veterinary College, Bidar
83	Balappanavar	VSR	Veterinary College, Hassan

a) Recruitment of Service Personnel

#	Name	Designation	Place
1	Mr. Subbanna Sharma	Assistant Registrar	Registrar Office, KVAFSU, Bidar
2	Mr. Devender	Assistant Registrar	Registrar Office, KVAFSU, Bidar
3	Mr. V.S. Navalgund	Asst. Adm. Officer	Veterinary College, Shivamogga
4	Mr. Bhagavant Phule	Assistant Comptroller	Comptroller Office, KVAFSU, Bidar

5	Smt. Sheelaratna	Personal Secretary	Vice-Chancellor Office, Bidar
6	Mr. Rahul Doddì	Asst. Engineer (Civil)	Estate Branch, KVAFSU, Bidar
7	Miss. Bagyashree, K.	Jr. Engineer (Civil)	Veterinary College, Shivamogga
8	Mr. Arun	Jr. Engineer (Civil)	College of Fisheries, Mangalore
9	Miss. Vidyashree, N.	Jr. Engineer (Elec.)	Veterinary College, Bengaluru
10	Miss. Nandana, G.S.,	Jr. Engineer (Elec.)	Veterinary College, Hassan
11	Miss. Prafulla Kumari	Library Assistant	College of Fisheries, Mangalore
12	Mr. Hemant Kumar, G.H.	Library Assistant	Veterinary College, Hassan
13	Miss. Seema A. Alur	Library Assistant	Veterinary College, Bidar
14	Mr. Babu, B.M.	Library Assistant	Veterinary College, Hassan
15	Mr. Devaraj	Library Assistant	Veterinary College, Shivamogga
16	Miss. Vijayalakshmi Sungar	Library Assistant	Regional Library, Bengaluru
17	Miss. Vijayalakshmi	Library Assistant	Regional Library, Bengaluru
18	Mr. Prabhakar, S.V.	Telephone Operator	Veterinary College, Bengaluru
19	Smt. Asha S. Marad	Telephone Operator	Veterinary College, Hassan
20	Smt. Prabavathi, M.H.	Telephone Operator	Veterinary College, Shivamogga
21	Mr. Shivaraj	Telephone Operator	Veterinary College, Bidar
22	Miss. Kiran Shirley Desouza	Assistant	College of Fisheries, Mangalore
23	Smt. Kanakalakshmi, H.T.	Assistant	Veterinary College, Hassan
24	Smt. Rajeshwari B. Badanur	Assistant	Registrar Office, KVAFSU, Bidar
25	Miss. Soumya, D.K.	Assistant	College of Fisheries, Mangalore
26	Miss. Shilpa, K.V.	Assistant	Veterinary College, Bengaluru
27	Smt. Veena, S.	Assistant	Registrar Office, KVAFSU, Bidar
28	Ms. Savitha, V.	Assistant	Comptroller Office, Bidar
29	Mr. Shivanand Walikar	Assistant	Registrar Office, KVAFSU, Bidar
30	Mr. Ramesh H. Badiger	Assistant	Veterinary College, Bidar
31	Mr. Dayananda Swamy, M.A.	Assistant	Veterinary College, Shivamogga
32	Mr. Mrutunjay	Assistant	Comptroller Office, Bidar
33	Smt. Gayatri	Assistant	Comptroller Office, Bidar
34	Miss. Latha Bai, K.	Assistant	Veterinary College, Bengaluru
35	Miss. Manjula	Assistant	DI (PGS), KVAFSU, Bidar
36	Mr. Shivashanta Veer Diwakar	Assistant	Director of Extension, Bidar
37	Mr. Sharnappa	Assistant	Veterinary College, Hassan
38	Mr. Vaidya Raj	Assistant	Registrar Office, KVAFSU, Bidar

39	Mr. Bheemappa Badiger	Assistant	Registrar Office, KVAFSU, Bidar
40	Miss. Renuka Shivanagi	Assistant	Veterinary College, Shivamogga
41	Mr. Krishnaiah, A.S.	Assistant	Veterinary College, Hassan
42	Mr. Gururaj	Assistant	Registrar Office, KVAFSU, Bidar
43	Mr. Md. Kashif Zubair	Assistant	Veterinary College, Bidar
44	Mr. Kumara Raghavendra, R.K.	Assistant	Veterinary College, Shivamogga
45	Smt. Mahadivi Guddappa	Assistant	Director of Research, Bidar
46	Mr. Vitoba	Lab Technician	Dairy Science College, Bengaluru
47	Smt. Madhavi, K.	Lab Technician	Veterinary College, Bidar
48	Mr. Siddeswaraiah, K. P.	Lab Technician	Veterinary College, Shivamogga
49	Mr. Md. Kaiser, H.	Lab Technician	Veterinary College, Bidar
50	Miss. H.M. Shilpa	Lab Technician	Veterinary College, Shivamogga
51	Mr. Mahesh, L.M.	Lab Technician	Veterinary College, Shivamogga
52	Mr. Sathish Kumar	Lab Technician	Veterinary College, Hassan
53	Mr. Raju	Lab Technician	Dairy Science Colege, Gulbarga
54	Mr. Shekharapaa, B.J.	Lab Technician	Veterinary College, Bidar
55	Miss. Tabsum Begam	Lab Technician	Veterinary College, Shivamogga
56	Miss. Roopa, N.S.	Lab Technician	College of Fisheries, Mangalore
57	Miss. Geetha, P.	Lab Technician	Veterinary College, Hassan
58	Miss. Sujatha, S.	Lab Technician	College of Fisheries, Mangalore
59	Miss. Rekha, J.K.	Lab Technician	Veterinary College, Hassan
60	Miss. Sulochana	Lab Technician	Veterinary College, Bidar
61	Miss. Mujassim Khanum	Lab Technician	Dairy Science Colege, Bengaluru
62	Mr. Harish, D.M.	Lab Technician	Veterinary College, Hassan
63	Mr. Mallinath	Lab Technician	Director of Research, Bidar
64	Mr. Manohara Prasad	Lab Technician	College of Fisheries, Mangalore
65	Mr. Girish H Halliker	Lab Technician	Dairy Science Colege, Bengaluru
66	Mr. Santhosh	Lab Technician	Veterinary College, Bidar
67	Mr. H. Bhojaraj	Lab Technician	Veterinary College, Bengaluru
68	Smt. Sheela	Lab Technician	Veterinary College, Bengaluru
69	Mr. Vijayakumar	Lab Technician	Veterinary College, Bidar
70	Mr. Sathish B. Rajput	Lab Technician	Veterinary College, Hassan



71	Miss. Kousar Begam	Lab Technician	Dairy Science College, Gulbarga
72	Mr. Dinish, M.D.	Lab Technician	Veterinary College, Bengaluru
73	Prashanth, N.T.	Lab Technician	DIWRI, Kudagi
74	Mr. Harishkumar, M.R.	Lab Technician	Veterinary College, Hassan
75	Mr. Sathish	Lab Technician	DSW, KVAFSU, Bidar
76	Mr. Kiran Kumar	Pharmacist/Compounder	Veterinary College, Shivamogga
77	Smt. Girija Bai, S.B.	Pharmacist/Compounder	Veterinary College, Hassan
78	Mr. Sanga Reddy	Pharmacist/Compounder	Veterinary College, Bengaluru
79	Mr. Dhanraj	Pharmacist/Compounder	Veterinary College, Shivamogga
80	Mr. Suresh Kumar	Field Assistant	CRIC, Timmapur
81	Mr. Amarjeet	Field Assistant	Dairy Science College, Gulbarga
82	Mr. Kamalakar	Field Assistant	Veterinary College, Bidar
83	Mr. Somanna Gouda I. Patil	Field Assistant	LRIC, Konehalli
84	Mr. Santhosh S. Talwar	Field Assistant	LRIC, Nagamangala
85	Miss. H.M. Shilpa	Laboratory Assistant	Dairy Science College, Gulbarga
86	Mr. Nagendra	Laboratory Assistant	Veterinary College, Bidar
87	Mr. Mahesha, L.M.	Laboratory Assistant	Veterinary College, Shivamogga
88	Mr. Prashanth, K.	Laboratory Assistant	Veterinary College, Bengaluru
89	Mr. Sangameshwara	Laboratory Assistant	Veterinary College, Bidar
90	Miss. Rashmi Bellary	Laboratory Assistant	Veterinary College, Bidar
91	Miss. Sujatha, S.	Laboratory Assistant	FRIC, Hebbal, Bengaluru
92	Miss. Jyothi	Laboratory Assistant	Veterinary College, Bidar
93	Mr. Harish, D.M.	Laboratory Assistant	Veterinary College, Hassan
94	Mr. Devidas	Laboratory Assistant	Veterinary College, Hassan
95	Mr. Kumar Swamy, M.E.	Laboratory Assistant	Veterinary College, Hassan
96	Mr. Raju	Laboratory Assistant	College of Fisheries, Mangalore
97	Smt. Sheela	Laboratory Assistant	Dairy Science College, Bengaluru
98	Mr. Vijayakumar	Laboratory Assistant	Veterinary College, Shivamogga
99	Mr. Devaraj Ashok Panchal	Laboratory Assistant	Veterinary College, Shivamogga
100	Miss. Rekha, J.K.	Laboratory Assistant	Veterinary College, Shivamogga
101	Miss. Mamata J	Laboratory Assistant	Veterinary College, Bidar
102	Smt. Jagadevi	Care Taker	Veterinary College, Bidar

103	Mr. Krishnaiah, A.S.	Care Taker	Veterinary College, Shivamogga
104	Mr. Arun Doddamani	Care Taker	Veterinary College, Hassan
105	Mr. Ganesh	Cook	Veterinary College, Hassan
106	Mr. Prakash	Cook	University Guest House, Bidar
107	Mr. Vithal	Asst. Cook-Cum-Care-Taker	Veterinary College, Shivamogga
108	Mr. Lokesh, R.	Asst. Cook-Cum-Care-Taker	Veterinary College, Hassan
109	Mr. Sanjay	Electrical Wireman	Estate Branch, KVAFSU, Bidar
110	Mr. Dinesh	Electrical Wireman	Veterinary College, Bidar
111	Mr. Nagendra, C.	Electrical Wireman	Veterinary College, Hassan
112	Mr. Dasarath	Electrical Wireman	Veterinary College, Shivamogga
113	Mr. Rajeshakar	Plumber	Veterinary College, Bidar
114	Mr. Jayanna, K.P.	Plumber	Veterinary College, Shivamogga
115	Mr. Nagaraju, G.C.	Care-Taker	Dairy Science College, Bengaluru
116	Mr. Mallesh, D.B.	Messenger	College of Fisheries, Mangalore
117	Mr. Puttalinge gowda	Messenger	Dairy Science College, Bengaluru
118	Mr. Somappa	Messenger	Dairy Science College, Bengaluru
119	Mr. Chandrappa	Messenger	Dairy Science College, Bengaluru
120	Mr. Muniraju	Messenger	Dairy Science College, Bengaluru
121	Smt. Latha	Messenger	Veterinary College, Hassan
122	Mr. Gopal, H.N.	Messenger	Veterinary College, Bidar
123	Mr. Gopal	Helper	College of Fisheries, Mangalore
124	Mr. GanarajV. Patil	Libratory Assistant	Veterinary College, Bidar
125	Mr. Gouri Shetti	Libratory Assistant	Veterinary College, Bidar
126	Mr. Charlis	Tractor Driver	Veterinary College, Bidar
127	Mr. Ashok Biradar	Driver (LV)	Veterinary College, Bidar
128	Mr. Siddaram	Pump Attender	Veterinary College, Bidar

## 2) Superannuation

**List of Superannuated Employees of KVAFSU, Bidar during 2012-13  
vide Order No. R/PS/2011-12 dt: 03-01-2013 and No.R/PS/2012-13 dt: 02-03-2013**

#	<i>Name of the Employees</i>	<i>Designation</i>	<i>College/ Institution</i>	<i>Retirement Date</i>
<b>TEACHING</b>				
1	Dr. R. Krishna	Professor	DSCH	30.04.2012
2	Dr. S. Mallikarjunappa	Professor	VCH	30.09.2012
3	Dr. A.H. Shoiyab	Assoc. Professor	VCH	31.10.2012
4	Dr. C.H. Krishna Bhat	Assoc. Professor	FCM	28.02.2013
<b>SERVICE PERSONNEL</b>				
5	Sri B. Siddarajayya	Sr. Lab Asst.	Vet. Hospital, Yalahanka	30.04.2012
6	Sri Abdul Saradar	Mechanic	FCM	30.04.2012
7	Sri D.R.Ramachandraraddi	Sr. Lab Asst. G-I	VCH	30.04.2012
8	Sri T. Gaviya	Sr. Poultry Attender	VCH	30.04.2012
9	Sri Vittala Kalappa Badiger	Sr Field Asst. G-I	CRIC, Mudhol	31.04.2012
10	Sri Hanamantappa Alalageri	Sr. Farm Labour	VCB	31.05.2012
11	Sri K.V. Vijayadevaraj Aras	Sr. Lab Asst.	DSCH	30.06.2012
12	Smt. J.B. Vijaya	Superintendent	DSCH	31.07.2012
13	Sri Iqbal	Sr. Lab Asst. G-I	VCB	31.07.2012
14	Sri M.D. Nanjundaraj	Sr. Lab Asst.	VCH	31.08.2012
15	Smt. H. Saraswati	Senior Assistant	VCH	31.09.2012
16	Sri Shrinivas	Sr. Poult. Attender G-I	VCH	30.09.2012
17	Sri B. Venkatesh	Senior Compositor	DSCH	31.10.2012
18	Smt. S.F. Myagi Roselin	Personal Secretary	VCH	31.10.2012
19	Sri G. Mudduramayya	Sr. Farm Labour	VCH	30.11.2012
20	Sri Jayanna	Sr. Assistant	VCH	28.02.2013



## VIII. INFRASTRUCTURE DEVELOPMENT

**Details of progress of works under taken by KVAFSU during the year 2012-13**

#	Name of the work	Amount (Rs. in Lakhs)	Remarks
<b>Veterinary College, Bidar</b>			
1	Construction of Basket Ball Court	9.00	Work has been completed
<b>VETERINARY COLLEGE/ DAIRY SCIENCE COLLEGE, BENGALURU</b>			
1	Renovation and modernization of PG laboratory at Dept. of Animal Genetics and Breeding at Veterinary College, Bengaluru	15.00	Work has been completed
2	Renovation and modernization of Toilet and bath rooms at Ladies Hostel Veterinary College, Bengaluru	20.00	Work is under progress
3	Renovation and Modernization of UG and PG laboratory at Dairy Science College, Hebbal Campus, Bengaluru	10.00	Work has been completed
4	Renovation and Modernization of Food Technology laboratory at Dairy Science College, Hebbal Campus, Bengaluru	10.00	Work has been completed
5	Renovation and Upgradation of service section at Dairy Science College, Hebbal Campus, Bengaluru	10.00	Work has been completed
6	Upgradation of Sensory Evaluation Laboratory at Dairy Science College, Hebbal Campus, Bengaluru	05.00	Work has been completed
7	Renovation of Quality Control Laboratory at Dairy Science College, Hebbal Campus, Bengaluru	06.00	Work has been completed
8	Establishment of Food Rheology Laboratory at Dairy Science College, Hebbal Campus, Bengaluru	09.00	Work has been completed
9	Renovation and modernization of KVAFSU ALLTECH Research Alliance Laboratory at Dept. of LPM at Animal Science Block, Hebbal, Bengaluru	7.40	Work has been completed
<b>COLLEGE OF FISHERIES, MANGALORE</b>			
1	Construction of cemented nursery ponds (5.00x2.00m and 3x1.5m size 6 nos each) at College of Fisheries, Mangalore	10.08	Work has been completed



2	Construction of laboratory building at Fish farm at College of Fisheries, Mangalore	15.00	Work is under progress
3	Water supply works for fish farm at College of Fisheries, Mangalore	10.35	Work has been completed
4	Repair of grow out ponds at fish farm at College of Fisheries, Mangalore	7.22	Work has been completed
5	Providing HDPE sheet lining for the grow out ponds at College of Fisheries, Mangalore	3.73	Work has been completed
6	Repair of earthen rearing ponds and drain at College of Fisheries, Mangalore	8.72	Work has been completed
7	Providing HDPE sheet lining for the earthen rearing ponds at College of Fisheries, Mangalore	3.28	Work has been completed

#### **VETERINARY COLLEGE, SHIVAMOGGA**

1	The KPWD Shivamogga has handed over the ground floor (first phase) of the Main College building to the University	2300.00	
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#### **DAIRY SCIENCE COLLEGE, GULBARGA**

1	Erecting 250 KVA HT transformer and drawing electrical line in the Dairy Science College Campus, Mahagaon Cross, Gulbarga	17.00	Work has been completed
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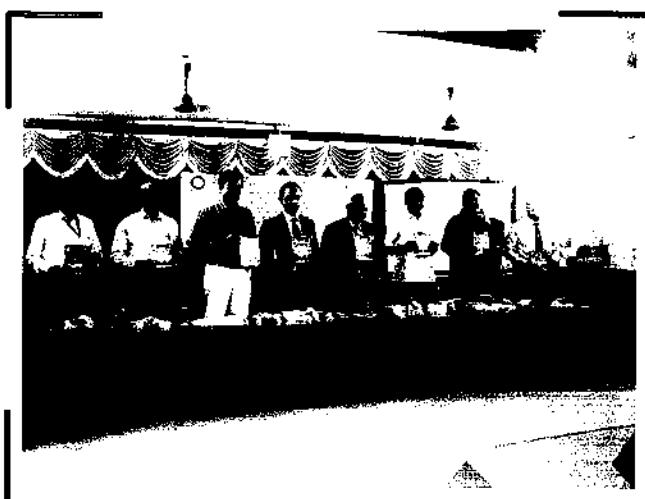
#### **FRIC, BHUTNAL, BIJAPUR**

1	Shifting of HT line crossing over the land belonging to FRIC(I), Bhutnal, Bijapur	2.30	Work has been completed
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## PHOTO GALLERY



Hon'ble Vice-Chancellor, KVAFSU, Bidar inaugurating the 'Janmaatnari, Kukkutu, Matsya & Krishi Mela-2013' at Veterinary College, Shiramogga



Book containing 17 sucess stories of dairy entrepreneurship in Bidar district was released during Bidar Adoption Programme



Dr. S.A.Patil, Chiarmen, Karnataka Krishi Mission inaugurated Bidar Adoption Programme at KVAFSU, Bidar on 17-01-2013



Dr. Aravindkumar, DDG (Edu), ICAR, New Delhi and Dr. P.C. Jaffar, Deputy Commissioner, Bidar district holding the Sports Torch with host institution team



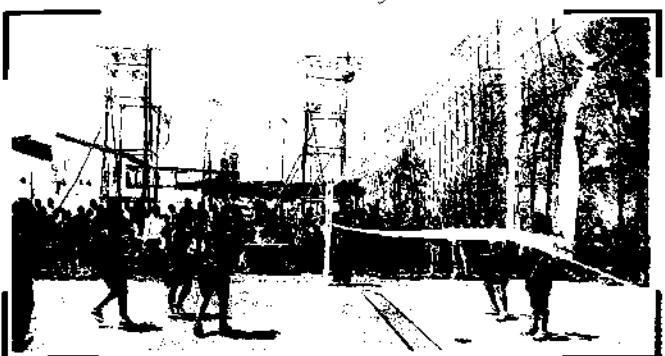
Dr. C. Remukaprasad, Vice-Chancellor sharing the happy moment with Dr. Aravindkumar, DDG (Edu), ICAR during XIV All India Inter Agricultural Universities Sports & Games Meet-2013.



The Host Institution (KVAESU) Team during March Past in the XIV All India Inter Agricultural Universities Sports & Games Meet-2013



KVAESU Men Team playing Basket Ball during XIV All India Inter Agricultural Universities Sports & Games Meet-2013



KVAESU Women Team playing Volley Ball during XIV All India Inter Agricultural Universities Sports & Games Meet-2013



Sri. Rahim Khan, Honble MLA, Bidar inaugurating the 'Krishi, Totagarika & Jaanuvaaru Mela-2012' jointly organized by UAS, Raichur; KVAESU, Bidar and UHS, Bagalkot at KVK, Jannada



Sri. Prabhu Chawhan, Honble MLA, Aurad inaugurating the KVAESU Stall during 'Krishi, Totagarika & Jaanuvaaru Mela-2012' at KVK, Jannada



KVK, Jannada scientist receiving Director of Extension, KVAESU during 'Krishi, Totagarika & Jaanuvaaru Mela-2012' at KVK, Jannada



Director of Extension honouring farmer during 'Krishi, Totagarika & Jaanuvaaru Mela-2012' at KVK, Janwada



Dignitaries and farmers during 'Krishi, Totagarika & Jaanuvaaru Mela-2012' at KVK, Janwada



Participants in Wet Lab on dRIT-Rabies Diagnosis by Dr. Lilian, CDC, Atlanta, USA



Training Programme on Fodder Production at Veterinary College, Hebbal, Bangalore



Honble Vice-Chancellor, KVAFSU, Bidar releasing manual of Model Training Course at Veterinary College, Bidar



Dr. S.M. Usturge, Dean, Veterinary College, Bidar planting sapling on the occasion of Vanamahotsava



Dr. K.N. Prabhudetta, DE, KVAFSU, Bidar released the Model Training Course Compendium at Veterinary College, Shivamogga



View of visitors watching the animal breeds during 'Jaanuvaaru, Kukkuta, Matsya & Krishi Mela-2013' at Veterinary College, Shivamogga



Hon'ble Vice-Chancellor Dr. C. Renukappa Reddy, inaugurating the Januvaru Mela 2013



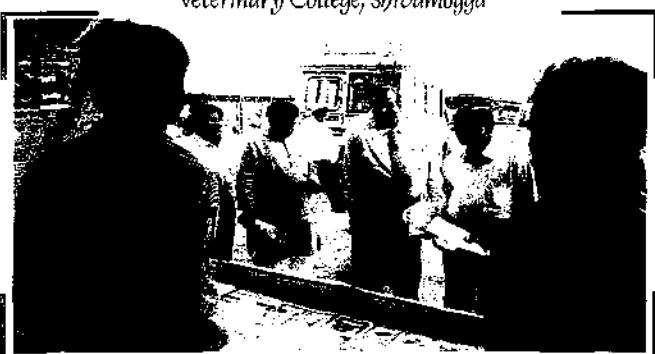
View of visitors watching different breeds of animals exhibited during 'Januvaru, Kukkuta, Matsya & Krishi Mela-2013' at Veterinary College, Shiramogga



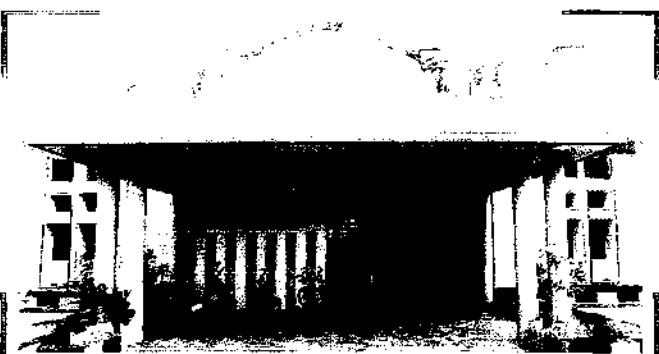
View of visitors watching different breeds of animals exhibited during 'Januvaru, Kukkuta, Matsya & Krishi Mela-2013' at Veterinary College, Shiramogga



Hassan Veterinary College students interacting with dairy farmer



Visit of Dr. B. V. Patil, Hon'ble Vice-Chancellor, UAS, Raichur to KVAFSU stall at Krishi Mela held at UAS, Raichur



Newly inaugurated Boys Hostel at Dairy Science College, Gulbarga



Sri. Revu Naik Belamagi, Hon'ble Minister for Animal Husbandry & POK, inaugurating the Boys Hostel and other facilities at Dairy Science College, Gulbarga



Mangalore Fisheries College students watering the plant sapling



Mangalore Fisheries College students cleaning the beach



Avian influenza investigation at CPDO



FMD outbreak investigation



Interaction with farmers



Inauguration of training programme by Dr. R. V. Prasad.



Exposure visit to trainees on Elephants



Nucleus Heard of Yorkshire pigs at LRIC, Konehalli



Cactus fodder cultivation at AHP, Konehalli



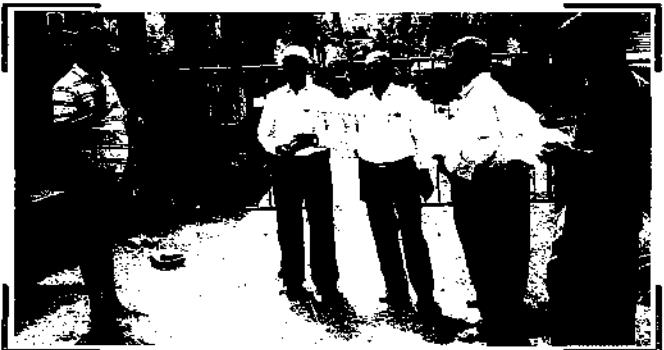
Students learning Rabbit Rearing at AHP, Konehalli



Sri. Basavaraj Bommai, Hon'ble Minister for Major Irrigation,  
GOK, inaugurating AHP at Shiggaon



Sri. Basavaraj Bommai, Hon'ble Minister for Major Irrigation,  
GOK, inaugurating AHP at Shiggaon



Director of Extension and Dr. Chandre Gowda, Principal Scientist,  
ZPD, Bengaluru interacting with Sri. Vidyadhar Hegde,  
Progressive Dairy Farmer, Muchur, Mangalore on 29-01-2013



Director of Extension and Principal Scientist, ZPD, Bengaluru  
reviewing Paddy demonstration of KVK, DK



Director of Extension and Principal Scientist, ZPD, Bengaluru  
reviewing field demonstrations of KVK, DK



Cicerchi tree climbing training at KVK, Dakshina Kannada



Hon'ble Vice-Chancellor, Director of Extension and others visited  
Soil Testing Lab at KVK, Dakshina Kannada



LRICS - Distribution of Breeding Rams under MSSP-MS



Dr. H.R.V. Reddy, DR, KVAFSU and Dr. K.N. Prabhudeva, DE, KVAFSU examining sheep at LRIC, Nagamangala



Training on sheep husbandry under MSSP-MS at LRIC, Nagamangala



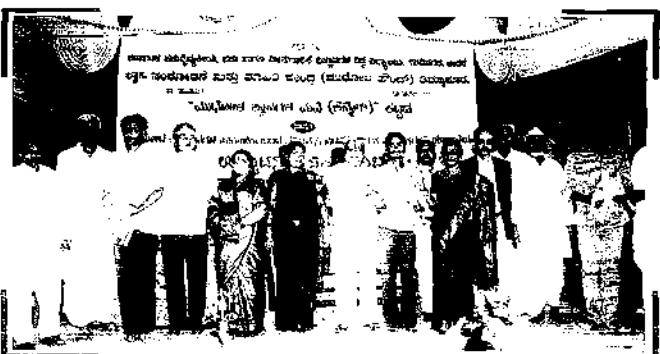
Fodder conservation at LRIC(A), Konehalli



Distributing piglets to the Farmers at LRIC, Konehalli



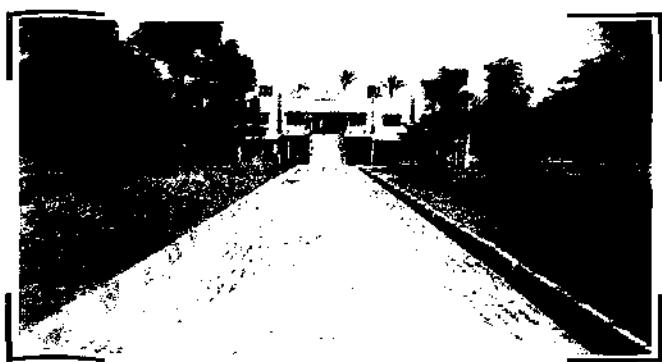
Animal Husbandry Diploma students involved in sowing activity at LRIC, Konehalli



Sri. Govind, M. Karjol, Hon'ble Minister, GOK, inaugurating Kennel at CRIC, Mudhol



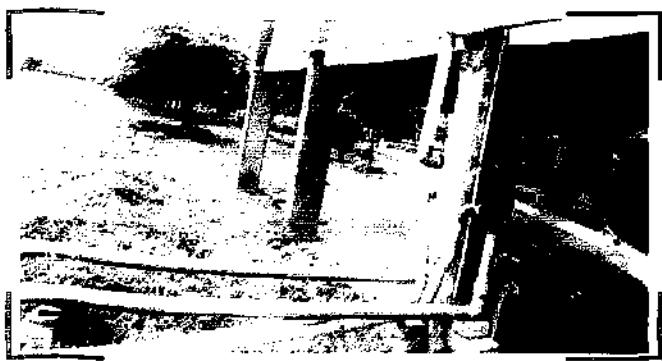
CRIC scientists teaching management of Mudhol Hound pups



New road at FRIC, Hebbal



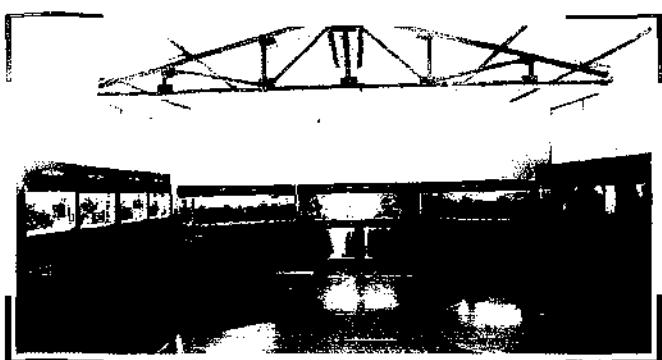
New water supply created at FRIC, Hebbal



Rain water harvesting facilities at FRIC, Hebbal



Renovation of fish ponds at FRIC, Hesaraghatta



New aquarium facility at FRIC, Hesaraghatta



ATMA training programme at KV, Raichur by FRIC, Bhutnai, Bijapur inaugurated by Dr. S.N. Hanchinal, ADE, UAS, Raichur



Dr. Dilip Kumar, D. Associate Director of Extension Explaining about participation of animals in Krishi Totagarike & Jaanuvaaru Mela 2012 At KVJ Janwada to the Chandana Channel person



Fish seed distribution at FRIC, Bhutnai, Bijapur



Dr R.N. Prabhu, I

Interacting with scientists at  
workshop



Mr

... Venkateswaran, Honble Vice-Chancellor  
of ERIC, Ankola



Partnership training

STAVA at ERIC, Hallikar



Annual Veterinary Diploma students of AHP, Shiggaon



Wife

for overall integrated dairy development in the

annual KVVPSU Foundation day



Sri Jagadeesh Shettar, Hon'ble Chief Minister, Govt. of Karnataka inaugurated the Ground Floor of Veterinary College, Shimoga on 10.02.2013.  
Sri K.S. Eshwarappa, Hon'ble Deputy Chief Minister, Govt. of Karnataka graced the occasion. Dr. C. Remukaprasad, Hon'ble Vice Chancellor,  
KVAFSU, Bidar and Dr. M. Devaraj, Dean, Veterinary College, Shivamogga were witnessed the programme.