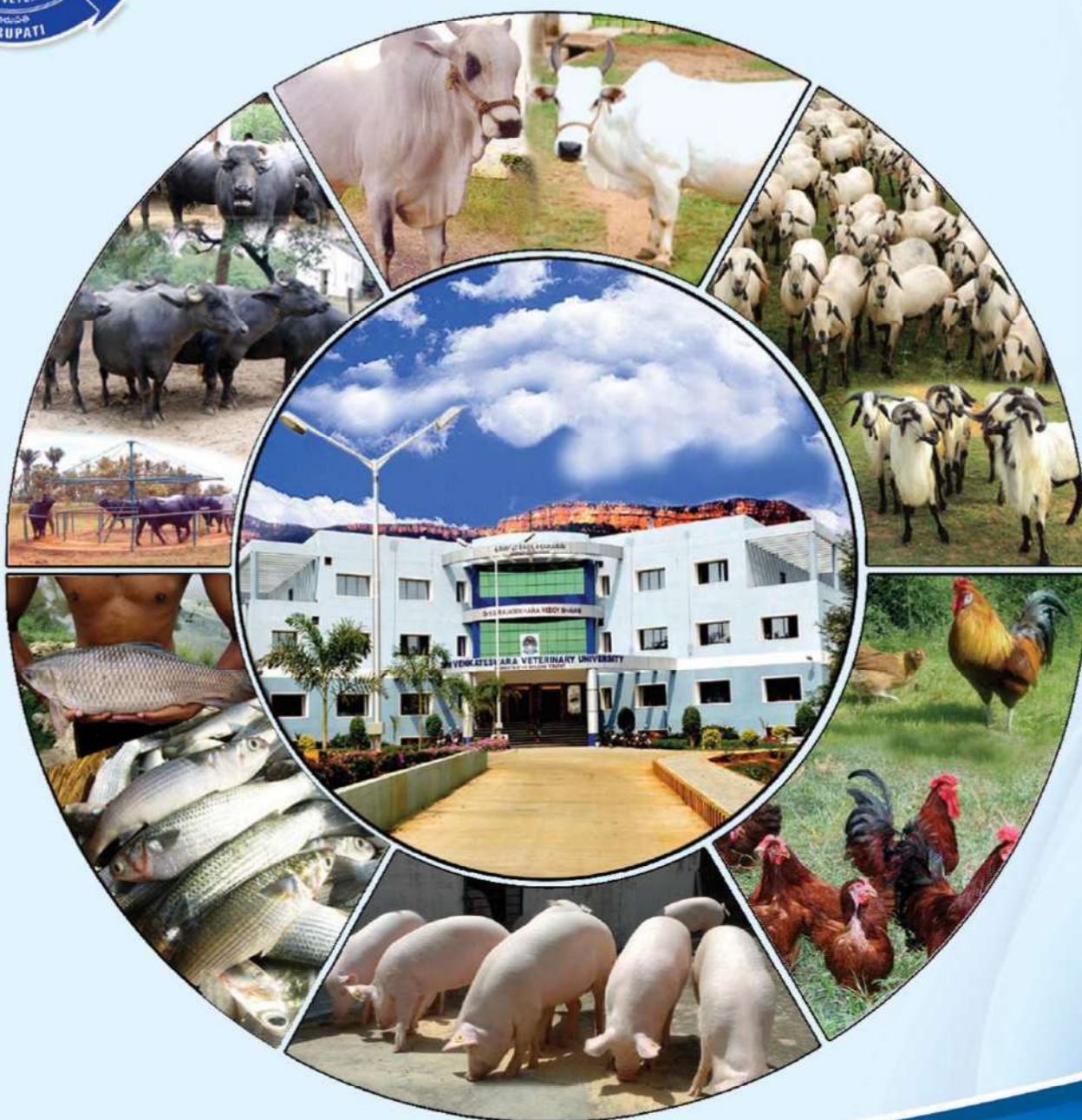




ANNUAL REPORT

2012-2013



SRI VENKATESWARA VETERINARY UNIVERSITY

Admn. Office : Dr.Y.S.R. Bhavan, TIRUPATI - 517 502, A.P.



Sri Venkateswara Veterinary University

Admn. Office : Dr. Y.S.R. Bhavan, Tirupati - 517 502

Annual Report

2012 – 2013

(Official Publication of SVVU)

(Website: www.svvu.edu.in)

Published by
Dr.Manmohansingh, IAS
Vice – Chancellor i/c

Editors
Dr.K.Venugopal Naidu
Director of Extension I/C

Dr.A.Ravi
Professor of Animal Nutrition
&
Technical Officer to Vice-Chancellor

Dr.G.Triveni
Assistant Professor of Veterinary & A.H Extension
&
Technical Officer to Director of Extension

Printed at
CN Printers, Tirupati



FOREWORD



Sri Venkateswara Veterinary University is progressing satisfactorily since its inception in 2005 to evolve as one of the best Veterinarary Universities in the country. The University is striving hard to serve the farming community of the state through a network of 37 institutions that carry out its mandate in education, research and extension in Veterinary, Dairy and Fishery sectors. SVVU's growth and development efforts continue to be good and the University is committed to provide the best facilities and ambience for modern education, research and extension.

During the year, the Dairy Technology Programme at Kamareddy, was elevated to a fullfledged college and a new KVK has started functioning at Lam farm, Guntur. The University has spent more than ₹150.0 crores for creation of infrastructure as per VCI norms in the Veterinary Colleges at Proddatur and Kortutla that were established during 2008. A high security P3 level disease diagnostic laboratory, international hostel and education museum cum communication centre at Tirupati were inaugurated by the Hon'ble Minister for AH, DD & F, Govt. of AP. The 4th consecutive Convocation was held on 28th February, 2013.

The faculty have worked with renewed interests to provide quality education and timely solutions / technological inputs for the overall development of livestock sector in the state. The supply of superior germplasm and improved fodder varieties, disease diagnosis, backyard poultry, best management practices in aquaculture, identification of alternate species in aquaculture and standardization of their culture were some of the areas of focus during the year. The University's efforts for Conservation of Ongole and Punganur breeds of cattle, development of vaccine for foot rot disease of sheep, research on Blue tongue incidence and control, complete feed technology, area specific mineral mixture, encapsulation of enzymes and probiotics etc will definitely be helpful to the farming community of the State.

Under RKVY 7 research projects are in progress for which an amount of ₹. 138.0 lakhs were released by the Government. Besides, 27 research projects funded by different agencies are in progress.

The University is gradually augmenting its capability in outreach activities through two KVKs, information centres in all constituent colleges, TV/Radio programmes, publications in vernacular language, village adoption programmes, training programmes etc. 35 modules on cattle, swine and fish production and dairy technology were developed and made available to the public.

The University continues to have collaborative agreement with institutions of repute within and outside the country for collaborative research and education.

I admire the leadership of Dr.V.Prabhakar Rao, the Vice-Chancellor and his team of University Officers during the period under report and compliment them for all the achievements of the University.

I profoundly thank the State Government, ICAR, VCI, DBT and other Central and State Government agencies for their support and guidance in our endeavour.

(MANMOHAN SINGH)

Vice-Chancellor



CONTENTS

Topic	Page No.
EXECUTIVE SUMMARY	1
ABOUT THE UNIVERSITY	8
Mandate	10
University Organization	10
Authorities of the University	11
Board of Management	11
Meetings of the BOM	11
Meetings of the Academic Council	11
State Level Technical Programme Meeting	12
Officers of the University	12
Constituent units of the University	13
EDUCATION	15
Student strength	15
Amenities provided	15
Health Services	16
Internet Facilities	16
Stipend	16
Extra and co-curricular activities	17
Student counselling and placement cell	18
NCC Activities	19
NSS activities	22
Library	23
Scholarships	23
Student outturn	24
Student and Staff Achievements	25
RESEARCH	29
Research Highlights	34
Animal Biotechnology	34
Animal Health	35
Animal Production	37
Basic and Applied Research	44

Work done in Research stations	44
AICRP on Poultry Breeding, Rajendranagar	44
AICRP on Pigs, Tirupati	46
Network Project on Buffalo Improvement, Anthergaon	48
Buffalo Research Station, Venkataramannagudem	50
Livestock Research Station, Lam Farm, Guntur	53
Livestock Research Station, Mamnoor	55
Livestock Research Station, Garividi	57
Livestock Research Station, Mahabubnagar	58
Livestock Research Station, Palamaner	61
Livestock Research Station, Siddarampuram (V), Anantapur District	64
Livestock Research Station, Mamnoor	66
Fisheries Research Station, Kakinada	69
Fisheries Research Station, Palair, Khammam	72
Fisheries Research Station, Undi	76
EXTENSION	79
Training Programmes organized for Farmers	80
Programs on Mass Media	83
Extension Publications (popular articles, pamphlets, etc.)	87
Technologies Assesed/Transferred/Patented/Commercialized	90
Extension cum Mass contact programmes	91
HONORS AND AWARDS	93
HUMAN RESOURCE DEVELOPMENT	95
Publications	112
Services rendered	124
FINANCE	139
ANNEXURE – I (Members of Board of Management)	140
ANNEXURE – II (Academic Council Members)	141
Annexure – III (Members of Faculty Board)	145
Annexure – IV (Category wise students on rolls)	147

EXECUTIVE SUMMARY

Sri Venkateswara Veterinary University (SVVU), Tirupati was established vide Act No.18 of 2005 to strengthen education, research and extension activities in Veterinary, Dairy and Fishery Science in the state of Andhra Pradesh. The University is the 7th of its kind in the country with three faculties i.e. Veterinary Science, Dairy Science and Fishery Science and started functioning from 15-7-2005 from ANGRAU campus and independently at Tirupati from 1-4-2006.

A total of 37 institutions comprising of 5 Colleges of Veterinary Science, 2 Colleges of Dairy Technology, 1 College of Fishery Science, 10 Animal Husbandry Polytechnics, 1 Fisheries Polytechnic, 2 AICRPs i.e. on pigs and poultry, 9 Livestock Research Stations, 3 Fisheries Research Stations, 2 Krishi Vigyan Kendras and 2 Veterinary Hospitals spread all over the state are the constituent institutions of the University. During the current year, the Government of Andhra Pradesh have upgraded the Dairy Technology Programme, Kamareddy, offering B.Tech (DT) to full-fledged college status. The KVK at Lam farm, Guntur started functioning from 13-2-2012.

A brief account of the activities of the University during 2012-13 is presented hereunder.

ACADEMIC PROGRAMMES

The University offers UG & PG degree programmes in the three faculties while Ph.D programmes are offered only in Veterinary Sciences. The Veterinary Council of India prescribed curriculum for B.V.Sc & AH course was adopted in the year 1994 and has been updated as per 2008 VCI regulations. The updated regulations are being implemented from the Academic Year 2008-09 onwards. For B.F.Sc and B.Tech (Dairy Technology) programmes, the UG Curriculum and Regulations prescribed by the IV Deans' Committee of ICAR are being implemented from the Academic year 2008-09 onwards. The University also offers a two year Diploma programme in Animal Husbandry and also in Fishery Science for rural youth who have completed 10th class (senior secondary certificate) to cater to the requirements of Para veterinary and Para fishery staff of the state.



Besides, the University also offers M.V.Sc in 19 disciplines of Veterinary Science, two disciplines of Fishery Science i.e. M.F.Sc in Aquaculture and in Fish Processing Technology, two disciplines of Dairy Science,

i.e M.Tech (Dairy Technology), M.Sc (Dairy Microbiology) and Ph.D in 16 disciplines of Veterinary Science. The Common Academic Regulations, Course Curricula and Syllabi as prescribed by ICAR, New Delhi for postgraduate (Master's and Doctoral) Education in Agriculture and Allied sciences are being implemented from the Academic year 2010-11 onwards after approval in the 7th Academic Council Meeting. The University Grants Commission has accorded recognition to the University. Recently, the Accreditation Board of ICAR has given accreditation to the University, CFSc., Muthukur and three Veterinary Colleges at Tirupati, Rajenranagar and Gannavaram. These three Veterinary colleges are also recognized by the VCI, New Delhi.

The University has taken up development of infrastructure, well equipped lab facilities, livestock farms, clinical facilities at Veterinary colleges of Proddatur and Korutla by providing about ₹150 crores to each college so as to obtain VCI recognition for these two colleges. A three member inspection team of Veterinary Council of India, New Delhi inspected the College of Veterinary Science, Korutla during 17-19th December, 2012 while another team inspected the College of Veterinary Science, Proddatur during 27-29th December, 2012. The teams have appreciated the efforts of the University.

Activities like modernization of class rooms, internet connectivity for students and staff, improving student amenities, strengthening of library etc., were taken up with ₹1.75 crores released by ICAR, New Delhi under ICAR Development Grants.



The University is encouraging entrepreneurship development in sheep and goat production, swine production, dairy cattle production, feed production, mineral mixture production, dairy products development, value added fish products, livestock products development by sanctioning revolving fund of minimum of ₹1.0 lakh for each college / programme.

Developed e-course content for all courses of B.Tech (Dairy Technology) under NAIP and faculty have also participated in development of e-content for courses in B.V.Sc. & AH and B.F.Sc.

ENDOWMENTS

A total of 27 endowments including 1 during the reporting period have been instituted by various donors to reward the best performing students in the disciplines of Veterinary, Dairy and Fishery science.

STUDENTS AMENITIES

Scholarship

The State Government provides scholarship of ₹ 962/- per month to the BC and ₹1200/- to the SC, ST students besides reimbursing tuition and special fee to all eligible students including Economically Backward and Minority students.

National Talent Scholarship of ₹1000/- per month provided by ICAR, New Delhi was sanctioned to 47 students of other states admitted under all India quota of VCI/ICAR and the amount sanctioned was ₹ 5.64 Lakhs

The State Government was kind enough to sanction stipend of ₹7000 and ₹ 8000/- per month for all P.G. and PhD students respectively, through out their study period. The UG students are also paid ₹ 5000/- per month during their internship/in plant training while the Diploma students are paid ₹720/- per month during the field work experience programme.

In all, about 1194 students availed scholarships to the tune of ₹.188.21 lakhs during the year. Under NAIP, as a participating institution, e-course content was developed for B.Tech (Dairy Technology) Courses.

Library

The libraries in the constituent colleges of the university have good collection of about 40514 books, 513 journals/periodicals, 14798 back volumes and 150 video lessons. In addition, facilities such as internet access, CD-ROM search services (Database services), reprography services, literature search using EBSCOHOST and Science Direct were created.

The **CERA** (Consortium for Electronic Resources of Agriculture) is available at Tirupati and Rajendranagar colleges.

Computer Center and Placement cell

The computer centres and placement cells in each of the constituent colleges were strengthened to provide internet access to the students, faculty and non teaching staff. In addition, each teaching department is provided with a computer and required accessories.

Hostels

The amenities in the hostels such as dining tables and chairs for the mess, utensils, cots, ceiling fans, tables etc., were augmented to improve the living conditions of the students. Accommodation was also provided to the parents, friends and visiting teachers.

STUDENT ACTIVITIES

The University encourages students participation in NCC, NSS, study tours, inter



collegiate games, sports and cultural meet, All India Agricultural University Youth Festivals etc. Important occasions such as College days, Hostel days, World Zoonoses day, World Environment day and other

important events are celebrated to foster unity and friendship among students.

FACULTY DEVELOPMENT

The University has a policy of improving faculty competence by deputing teachers for higher studies within and outside the University. The faculty is also permitted to attend workshops, seminars, summer/winter schools and other HRD programmes to update their knowledge and skills. A total of 130 faculty members were deputed to various summer schools, workshops, symposia, seminars, annual conventions conducted by professional organizations during the year under report.

RESEARCH ACTIVITIES

The research activities are taken up either as a part of PG/Ph.D research in teaching departments or as situation specific, farmer oriented research activities taken up at the Livestock and Fishery Research Stations of the University. During the period under report 27 research projects with a financial outlay of ₹ 144 .0 lakhs were taken up with funds from outside agencies. Under RKVY, 7 research projects are under different stages of implementation for which an amount of Rs. 138.0 lakhs was released by the Government.

SALIENT RESEARCH ACHIEVEMENTS

- Effect of aloe vera to ameliorate fluoride toxicity was studied.
- Prepared a bi-valent vaccine against Footrot disease of sheep under NAIP project.
- Developed and evaluated a thermostable Newcastle disease vaccine.
- A sub project entitled “Monitoring and intervention strategies for Bluetongue virus epidemics in rural India” sanctioned with funding from UK with the aim of detailed studies on vectors involved in BT transmission in India and the disease modeling and control strategies in rural areas is under progress.
- Pentavalent inactivated Bluetongue vaccine with serotypes 1, 2, 10, 18 and 23 was standardized and the technology was transferred to the industry by ICAR.
- Dietary Zinc supplementation of 140 ppm was found to reduce stress in calves and for higher immune responses in buffalo calves
- *The research work on in vitro embryo production from preantral follicles of goats is in progress.*

- The processed swim bladder collected from offal of fish was found to be biocompatible and can be used for reconstruction of esophagus, Urinary bladder and abdominal wall, post surgery.

OUTREACH ACTIVITIES

The important outreach activities include, training Veterinary Assistant Surgeons in newer techniques of disease diagnosis and treatment, infertility management and semen handling under Continuing Veterinary Education programs of the VCI, New Delhi.

Information on latest technologies and management of livestock, product



development, preservation and marketing was provided to the farmers, unemployed youth and entrepreneurs through mass media both in printed form as well as in Broadcast form through Radio talks and Phone-in-live programmes on All India Radio; Recorded and Phone-in-live programmes through

telecast on Doordharsan, ETV, etc.

Information center is functioning in each college to furnish relevant information useful to farmers on different aspects of livestock, Dairy Technology and fishery production.

The faculty and students are involved in Special NSS camps, Health camps, NCC activities, conferences and workshops etc as part of the curriculum besides participating in Government programmes like Rythu Sadassulu, Rytu Chitanya yatras etc.

The Hon'ble Minister for Animal Husbandry, Dairy Development, Fisheries and SVVU, Shri.P.Viswarup inaugurated the Education Museum and Communication Centre and also the Livestock Products Sales Counter at Tirupati 10th December, 2012.

The University has entered into an MOU with Society for Elimination of Rural Poverty (SERP) for implementation of a project entitled “Induction of backyard poultry units in PoP families in Dairy and CMSA Mandals by SERP” with technical support from the University. An amount of Rs.60.00 lakhs was released by SERP to the University for supply of 5.00 lakh day old chicks. Under the project so far 1.30 lakh birds were distributed.

AWARDS AND RECOGNITIONS

The faculty have received wide recognition and appreciation for their efforts in teaching, research and extension activities in Veterinary, Dairy Technology and Fishery Sciences 16 faculty members were conferred with honors that included State Best Teacher award, Best Research Scientist award, best article and best poster awards in different conferences, symposia, workshops etc.

PUBLICATIONS

74 research articles and 17 popular articles were published.

CONVOCATION

The 4th Convocation of the University was held on 28th February, 2013 with Dr.K.M.L.Pathak, Deputy Director General (A.S), ICAR, New Delhi as the Chief Guest. The Hon'ble Vice-Chancellor, Dr.V.Prabhakar Rao presented a brief report in the significant achievements and activities of the University for the period 01.01.2012 to 31.12.2012. A total of 293 candidates (214 in person and 79 in absentia) from UG, PG and Ph.D Programmes were admitted to the Convocation. 21 Gold Medals and 1 silver medal were awarded to UG & PG students for their academic excellence.



ABOUT THE UNIVERSITY

I. ABOUT THE UNIVERSITY

Sri Venkateswara Veterinary University, Tirupati was established vide Act No. 18, 2005 of the Government of Andhra Pradesh.

Mandate

The objectives of the university among others is to impart education in different branches of Veterinary, Dairy and Fishery Sciences; to promote research in production and post harvest technologies including processing and marketing in Veterinary, Dairy and Fishery Sciences and to undertake the extension of such scientific knowledge to the rural clientele of the State of Andhra Pradesh.

The University is striving to do justice to its mandate through well integrated and coordinated programmes of teaching, research and extension under the able guidance of the Board of Management.

University Organization

As per the Sri Venkateswara Veterinary University Act, 2005 (Act No.18 of 2005) the following shall be the Officers of the University, namely:

1. The Chancellor
2. The Vice-Chancellor
3. The Registrar
4. The Comptroller
5. The Dean of Student Affairs
6. The Deans of the various Faculties
7. The Director of Research
8. The Director of Extension
9. The Controller of Examinations
10. The Estate Officer and
11. Such other persons in the service of the university as may be prescribed

Authorities of the University

1. The Board of Management
2. The Academic Council
3. The Boards of faculties
4. Finance Committee
5. Planning Board and
6. Such other bodies as may be prescribed

Board of Management (BOM)**Members of BOM**

The BOM of previous year continued during the period under report also (Annexure –I for details).

Meetings of the BOM

Sl. No	No. of the Meeting	Date	Place
1	38 th	23.06.2012	Mini Conference Hall, Administrative Office, SVVU, Tirupati.
2	39 th	20.10.2012	Room No.424, 'D' Block, III Floor, Committee Room, Public Enterprises Department, A.P. Secretariat, Hyderabad.
3	40 th	31.01.2013	-Do-
4	41 st	23.03.2013	-Do-

Meetings of the Academic Council

Sl.No	Date	Venue
1.	11-05-2012	Conference Hall, Administrative Office, SVVU, Tirupati (11 th Acad. Council)
2.	08-01-2013	Conference Hall, Administrative Office, SVVU, Tirupati (12 th Acad. Council)

State Level Technical Programme Meeting

The State Level Technical Programme Meeting was held during 10 - 11th July 2012 in which all Heads of Research Stations, Principal Investigators of externally funded research projects, University Heads of all the Departments, University Officers and the Honourable Vice-Chancellor participated to review the progress of work done during the preceding year and to finalize the technical programme for the current year.

Officers of the University

Sl. No.	Name	Designation	Period	
			From	To
1.	Dr.V.Prabhakar Rao	Vice-Chancellor	27.10.2010	Continuing
2.	Dr.P.Sudhakar Reddy	Registrar	01.04.2012	Continuing
3.	Dr.T.S.Chandrasekhar Rao	Dean of Veterinary Science	01.04.2012	Continuing
4	Dr.P.R.S.Moorthy	Dean of Student Affairs	01.04.2012	Continuing
5.	Dr.M.Ranganadham	Dean of Dairy Science	01.04.2012	31.03.2013
6.	Dr.T.V.Ramana	Dean of Fishery Science	01.04.2012	Continuing
7.	Dr.D.S.Tirumala Rao	Director of Research	01.04.2012	Continuing
8.	Dr.K.Venugopal Naidu	Controller of Examinations	01.04.2012	Continuing
9.	Dr.K.Prabhakar	Director of Extension	01.04.2012	Continuing
10.	Sri P.Srinivasulu Naik	Comptroller	01.04.2012	Continuing
11.	Sri.G. Ramanjaneyulu	Estate Officer	01.04.2012	Continuing

Constituent units of the University**(A) Colleges****Established**

- | | |
|---|------|
| 1) College of Veterinary Science, Rajendranagar, Hyderabad | 1946 |
| 2) College of Veterinary Science, Tirupati | 1955 |
| 3) NTR College of Veterinary Science, Gannavaram | 1998 |
| 4) College of Fishery Science, Muthukur, Nellore Dist. | 1992 |
| 5) College of Veterinary Science, Proddatur, Kadapa Dist | 2008 |
| 6) College of Veterinary Science, Korutla, Karimnagar Dist | 2008 |
| 7) College of Dairy Technology, Tirupati, Chittoor Dist | 2009 |
| (Started as DT programme in 1983 & elevated to college status from 2-7-09) | |
| 8) College of Dairy Technology , Kamareddy, Nizamabad Dt. | 2012 |
| (Transferred from OU to SVVU in 2009 and elevated to college status w.e.f 21-12-2012) | |

(B) Animal Husbandry Polytechnics**Established**

- | | |
|---|------|
| 1. Palamaner, Chittoor Dist. | 1999 |
| 2. SKPP AH Polytechnic, Ramachandrapuram, East Godavari Dist. | 2003 |
| 3. SNK AH Polytechnic, Madakasira, Anantapur Dist. | 2005 |
| 4. Mahabubnagar, Mahabubnagar Dist. | 2005 |
| 5. Venkataramannagudem, West Godavari Dist. | 2005 |
| 6. Garividi, Vizianagaram Dist. | 2005 |
| 7. Karimnagar, Karimnagar Dist. | 2005 |
| 8. Siddipet, Medak Dist. | 2007 |
| 9. Rapur, Nellore Dist. | 2007 |
| 10. Mamnoor, Warangal Dist. | 2009 |

(C) Fisheries Polytechnic

- | | |
|--|------|
| 1. MVKR Fisheries Polytechnic, Bhavadevarapalli, Avanigadda, Krishna Dt. | 2007 |
|--|------|

(D) Research Stations**(i) All India Co-ordinated Research (AICRP) Projects**

- | | |
|---|------|
| 1. AICRP on Pigs, Tirupati. | 1971 |
| 2. AICRP on Poultry Breeding, Rajendranagar, Hyderabad. | 1971 |

(ii) Livestock Research Stations

- | | | |
|----|--|------|
| 1 | Livestock Research Station, Palamaner, Chittoor Dt. | 1954 |
| 2 | Livestock Research Station, Guntur, Guntur Dt. | 1964 |
| 3 | Livestock Research Station, Garividi, Vizianagaram Dt. | 1989 |
| 4 | Livestock Research Station, Mahaboobnagar, M'nagar Dt. | 1993 |
| 5 | Livestock Research Station, Mahanandi, Kurnool Dist. | 1992 |
| 6 | Buffalo Research Station, Venkataramannagudem, W.G.Dist | 1999 |
| 7 | Livestock Research Institute, Hyderabad. | 2001 |
| 8 | Net work project on Buffalo improvement, Anthargaon
Karimnagar Dist. | 2008 |
| 9 | Livestock Research Station, Siddarampuram, Anantapur Dist
(Transferred to University from A.H Department) | 2009 |
| 10 | Livestock Research Station, Mamnoor, Warangal Dist
(Transferred to University from AH Department) | 2009 |

(iii) Fisheries Research Stations

- | | | |
|----|---|------|
| 1. | Fisheries Research Station, Palair, Khammam Dt. | 1977 |
| 2. | Fisheries Research Station, Kakinada, East Godavari Dt. | 1980 |
| 3. | Fisheries Research Station, Undi, West Godavari Dt. | 2001 |

IV. Veterinary Hospitals (Transferred to University from AH Department)

- | | | |
|----|------------------------------------|------|
| 1. | Warangal, Warangal Dist. | 2009 |
| 2. | Visakhapatnam, Visakhapatnam Dist. | 2009 |

V. Krishi Vigyan Kendra

- | | | |
|----|-----------------------------------|------------|
| 1. | Lam, Guntur, Guntur Dist | 13-2-2012 |
| 2. | Mamnoor, Warangal, Warangal Dist. | 29-12-2012 |

EDUCATION**STUDENT STRENGTH**

Course	Admission strength	Admitted during the year			Total Strength during the year		
		Boys	Girls	Total	Boys	Girls	Total
B.V.Sc & AH	297	154	126	280	836	569	1405
B.F.Sc	35	14	14	28	65	38	103
B.Tech(Dairy Tech)	58	40	12	52	149	45	194
M.V.Sc	117	74	43	117	102	59	161
M.V.Sc (Biotechnology)	1	0	0	0	0	0	0
M.F.Sc.	6	3	3	6	2	5	7
Ph.D (Veterinary Science)	20	14	6	20	24	13	37
Diploma in Animal Husbandry	205	94	107	201	198	200	398
Diploma in Fisheries	30	21	9	30	36	22	58
Total	717	414	320	734	1412	951	2363

Students Amenities and Activities

Amenities provided: All colleges are co-educational institutions with separate accommodation for boys and girls.

Accommodation in Hostels

S.No	Name of the College/Institution	No. of Hostels	Accommodation available		
			Boys	Girls	Total
1	College of Veterinary Science, Tirupati	3	225	196	421
2	College of Veterinary Science, Rajendranagar	3	200	139	339
3	NTR College of Veterinary Science, Gannavaram	2	168	106	274
4	College of vety.Science, Korutla	2	83	52	135
5	College of Vety.Science, Proddatur	2	77	58	135
6	College of Fishery Science, Muthukur	2	70	45	115
7	College of Dairy Technology, Tirupati	1	68	-	68
8	Dairy Technology programme, Kamareddy	Under construction	64	16	80
9	Animal Husbandry Polytechnics at	1 Boys & 1 Girls	160	175	335

	Madakasira, Venkataramannagudem, Karimnagar, Siddipeta, Rapur & Mammnoor.	Hostels in each institution			
10	Animal Husbandry Polytechnics at Garividi, Ramachandrapuram, Palamaner, Mahaboobnagar.	Construction of Hostels (Boys & Girls) is in progress	-	-	-
11	Fisheries Polytechnic	1 Boys & 1 Girls Hostels	40	18	58

Health Services

Student health is taken care by qualified Physicians in all the constituent colleges of the University including polytechnics. Regular/Part-time doctors are appointed for this purpose.

Internet Facilities

- Internet is available in the departments, library and in placement cell in all colleges for use by students and staff.
- Local Area Network (LAN) is available connecting all the Departments at NTR CVSc., Gannavaram. The same is connected to 4 mbps leased line internet connectivity.
- The University is linked with all State Agricultural Universities of the country through National Knowledge Network (NKN) to facilitate easy exchange of knowledge among Universities through internet.
- CERA is available at College of Veterinary Science, Tirupati and Rajendranagar.

Stipend

Stipend is paid to PG & Ph.D students @ ₹7000/- and ₹ 8000/- PM, respectively during their study period. The B.VSc & AH students during internship, B.Tech (DT) students during in-plant training programme and B.F.Sc students during Fisheries work experience programme are paid ₹5000/- per month as stipend while the Diploma students are paid ₹720/- per month during the Field work experience programme.

Co-curricular and Extra Curricular activities

“Impact programme on personality development and soft skills” was organized



from 7 to 8th September 2012 for students, in collaboration with S.V.University at Srinivasa Auditorium, Tirupati. A total of 3,500 students from different colleges attended the programme.

Dr.B.V.Pattabhiram, Sri Yandamuri

Veerendranath, Sri Gampa Nageswara Rao, Sri Venu Bhagavan, Sri Ravi Kumar, Prof.Viswanatham, who are internationally renowned, delivered the talks. Hon'ble Vice-Chancellors of S.V.V.U. and S.V.University graced the inaugural function.

National Education Day in commemoration of birth anniversary of Moulana Abdul Kalam was celebrated on 11th November, 2012.

“**Telugu mahasabhalu**” the World Telugu Conference was organized at College of Veterinary Science, Tirupati from 27-29th December, 2012. His Excellency, The President of India, Sri Pranab Mukharjee inaugurated the function. The Hon'ble Chief Minister of Andhra Pradesh, Sri Kiran Kumar Reddy and other five cabinet ministers were present on the occasion. The Hon'ble Governor of Tamil Nadu attended for valedictory function on 29th December, 2012.



Youth Club, “Amity” was started at college of Veterinary Science, Tirupati by the students on 18th February, 2013. A free eye camp was organized with the help of Vasan Eye Care Centre, Tirupati for the benefit of the students and the staff.

College day **Vihaan 2013** was celebrated on 4.1.2013 with Pomp & Glory at College



of Veterinary Science, Rajendranagar. Distinguished Veterinarian turned bureaucrat, Dr. Manmohan Singh, IAS, Principal Secretary to Govt., AHD, DD & Fisheries Dept, Govt of A.P. was the Chief Guest and released the College Magazine.

A National Symposium on “Improvement of Livestock Productivity through Conventional Breeding and Emerging Technologies in Changing Global Scenario – Challenges, Prospects and Retrospects” and XII Annual Conference of the ISAGB. Was organized at College of Veterinary Science, Rajendranagar during 22-23rd November 2012.



Student Counseling and Placement cell

The placement cell in all the constituent colleges are catering to the needs and job aspirations of the students. The cells are equipped with the student data both past and present batches, their latest addresses and place of work. Information regarding various self employment sources and opportunities is provided to the students and they are encouraged towards entrepreneurship. Several books on general knowledge and books for various competitive exams were purchased for the welfare of the students. Information received from various organizations like National Meat & Poultry Proceeding Board, New Delhi; GVC India, Hyderabad; Project Directorate on Poultry, Hyderabad; Sabarmati Ashram Gaushala, Ahmedabad; kshayakalpa Initiatives, Tiptur, Karnataka; VINS Bio-products Limited, Hyderabad has been communicated to U.G and P.G students through their respective placement cell's. In addition, information on opportunities for higher education within and outside the country was provided to the final year and P.G students. On 18th & 19th July'2012, 9 firms conducted campus selections at Sri M.V.K.R. Fisheries Polytechnic, Bhavadevarapalli and students achieved 100% placement.

NSS ACTIVITIES

24 NSS units are allotted to the University and the details of the activities are furnished here under

NSS units allotted	25
Volunteers enrolled	2479
Villages/slums adopted	25
Special camps	25
Saplings planted	2203
Blood donation camps	16
Units of blood collected	154
Mega work/Animal health camps	109
Pulse polio immunisation programme	4
HIV/AIDS awareness programmes	25

College of Veterinary Science, Rajendranagar

- Organized **National Youth Day** on 12.1.2013 on the eve of birth anniversary of Swami Vivekananda.
- Organized **World Veterinary Day** on 24.4.2012.
- **World Zoonoses Day** was celebrated on 6.7.2012. Dr. G.S.S. Reddy, Chief General Manager, Indian Immunologicals, Hyderabad delivered a lecture on Rabies
- Conducted **7 day special NSS camp** at Siddipet from 2-8 October, 2012
- **Vanamahotsavam** was organized on 15th and 24th July and 15th August, 2012
- **One day special NSS camp** was organized at Nandigama and Bhanuru villages of Patancheru mandal, Medak Dt. On 15.12.2012
- **Eye testing camp** was conducted on 4.1.2013
- **One day special NSS camp** was conducted on 2.3.2013 at Gandipet Goshala.
- **Parthenium Eradication week** was conducted during third week of August, 2012.

College of Veterinary Science, Tirupati

- **World Veterinary Day celebrations** were held conducted on 28th April, 2012 jointly with Department of Animal Husbandry, Chittoor at College of Veterinary Science, Tirupati. Dr.Sundar Naidu, leading poultry industrialist inaugurated games and sports meet on this occasion. Essay writing competition was conducted on the theme “Antimicrobial resistance”. INTAS

Pharmaceuticals participated in the occasion and distributed the cash prizes for the winners.

- **World Zoonoses Day** was celebrated at TVCC, Tirupati and Department of Veterinary Medicine on 6th July, 2012. Sri T.Prasada Rao, Commissioner of Tirupati Municipality inaugurated the function. A total 820 dogs were vaccinated against rabies. The Pfizer and Indian Immunologicals participated in the programme by donating 400 and 120 doses of rabies vaccine, respectively.
- **Special NSS Camp** was conducted from 01-10-2012 to 07-10-2012 in Palamaneru and Madanapalli divisions covering 22 villages. Special surgical and gynaecological camps were conducted during the period. A total of 10,777 cases were treated apart from deticking and deworming programmes.
- **International Day of Non-Violence** was organized on 02-10-2012 and 20 students donated the blood on the occasion.
- **Selected C.Ramapuram for adoption** and carried out health camp on 26-02-2013.
- NSS volunteers were actively involved in maintaining the campus clean during Saturdays regularly.

College of Veterinary Science, proddatur

- **B.R.Ambedkar's Birthday** was celebrated on 14-04-2012 and an awareness programme was organized on “ DR.B.R.Ambedkar's Teachings for democratic India”.
- **World Veterinary Day** programme was celebrated on 28-04-2012.
- **Teachers' day celebrations** were organised on 05-09-2012.
- On 24-9-2012 NSS day was celebrated where in awareness programme was conducted on Health and Public sanitation.
- **International day of Non-violence** On 02-10-2012, on the occasion of Gandhi Jayanthi, “International Day of Non-Violence” was observed.

- On 11th November 2012, **Moulana Abul Kalam Azad Birth day** celebrations were conducted.
- **Quami Ekta week (National Integration Week)** on 23-11-2012 an awareness programme was conducted on National Integration in view of Quami Ekta week.
- To commemorate the 150th birth anniversary celebrations of Swami Vivekananda, a **blood donation camp** was organised by the NSS volunteers and staff of the college on 8th February, 2013.
- **AIDS Awareness Programme** was organised on 23-3-2013 at Nanganur palli village by NSS volunteers.
- As part of NSS Programme, Animal health camp was organized on 18-07-2012 at Regunta village by involving 3rd year students.
- **Vanamahotsavam** was organized by involving all the students, teaching and non teaching staff and about 500 saplings were planted in the premises of the new college building which is under construction.

College of Dairy Technology, Tirupati

Apart from regular NSS activities, special camp was conducted at Kupuchandrapeta and Durgasamudram, Tirupati rural mandal, Chittoor district for seven days from 19-01-2013 to 25-01-2013.



Animal Husbandry Polytechnic, Venkataramannagudem

- Celebrated World Health Day on 7-04-2012, Anti Terrorism Day on 21-05-2012, World No Tobacco Day on 31-05-2012, National Integration day on 19-11-2012 and Vana Mahostava Week during 1-07-12 to 07-07-2012
- Animal health camps were conducted as part of NSS programme and 388 general, 252 gynaec and 1070 dewormings were done.

Animal Husbandry Polytechnic, Rapur

Treated 502 general and 86 gynaecological cases. 406 Calves and 696 Sheep were dewormed. 1170 R.D vaccinations were done and urea treatment of paddy straw was demonstrated in 8 villages.

Animal Husbandry Polytechnic, Siddipet

NSS special camp was conducted from 22.01.2013 to 28.01.2013 at selected



villages of Siddipet, Nangunoor and Chinnakodur mandal's under Siddipet division. The total camps conducted were 7 in 7 villages in which 5000 sheep, 450 large animals and

450 calves were dewormed and conducted awareness rally on 28.01.2013 at Chandalpoor village.

Fisheries Polytechnic, Bhavadevarpalli

- Celebrated World Health Day on April 7th 2012 and Anti terrorism on 21st May 2012, International peace day on 15th September and N.S.S day on 24th September.
- Students participated in the health camp and blood donation camp was organized by the Gandhikeshtram and Rotary Club.

NCC ACTIVITIES CVSc., Tirupati

- ✨ The R&V unit was established in College of Veterinary Science, Tirupati during 2002. 47 students for 'B' certificate and 63 students for 'C' certificate appeared and cleared the examinations.

A NCC camp for 10 days from 15-02-2013 to 25-02-2013 was held. The NCC cadets have given guard of Honor to the Chief Guest of 4th Annual Convocation of SVVU, Tirupati held on 28-02-2013.

- ✨ The NTR College of Veterinary Science, Gannavaram has 3 (Andhra) Remount & Veterinary Regiment functioning since 2003-04 with 80 cadet strength in an academic year. The cadet strength has been enhanced to 160 from the year

2012-13 onwards. The unit has 4 horses. A permanent stable for 20 horses is available.

- The cadets of the college of Veterinary Science, Proddatur attended National & State Level trekking camps held at Tirupati from 04th to 13th May, 2012 and 11th to 18th May, 2012 respectively. A total of 21 cadets participated in both the camps and attained the eligibility to appear for 'C' certificate examination.

LIBRARY

Particulars	No.
Total number of Books	40514
Periodical and Monthly Journals	513
Journals with online access	34
e-books subscribed	538
Students benefited	36959
Staff benefited	1952
Outsiders benefited	5954
Total back volumes	14798
Video Lessons	125

SCHOLARSHIPS

Name of the Scholarship	No. of Students	Amount (₹ in lakhs)
BC, SC& ST students availed scholarship @962/-BC student & 1200/-SC&ST student for 10 months	653	67.86
National talent scholarship @ ₹ 1000 PM per student for 10 months	22	2.20
Stipend during internship/plant training/ work experience programme for UG @ ₹ . 5000/- PM per student for 6 months	230	69.00
Stipend during work experience programme for diploma students @ ₹ . 720/- PM per student for 5 months	232	8.35
Stipend for PG studies @ ₹ . 7000/- PM per student for 10 months	48	33.60
Stipend for PhD studies @ ₹ . 8000/- PM per student for 10 months	9	7.20
Total	1194	188.21

STUDENT OUTTURN

S.No	Name of the College	Course	Boys	Girls	Total
1.	C.V.Sc, Rnagar	BVSc &A.H	47	23	70
2.	C.V.Sc, Tirupati	BVSc &A.H	26	28	54
3.	N.T.R.,C.V.Sc, Gannavaram	BVSc &A.H	44	14	58
4.	C.V.Sc, Proddatur	BVSc &A.H	---	---	---
5.	C.V.Sc, Korutla	BVSc &A.H	---	---	---
		Total	117	65	182
6.	C.F.SC, Muthukur	BFSc	13	06	19
7.	College of Dairy Technology, Tirupati	B.Tech (DT)	11	4	15
8.	Dairy Technology College, Kamareddy	B.Tech (DT)	10	4	14
	B.Tech (DT)	Total	21	8	29

S.No	Name of the College	Course	Boys	Girls	Total
1.	C.V.Sc, Rnagar	MVSc	10	08	18
2.	C.V.Sc, Tirupati	MVSc	11	6	17
3.	N.T.R., C.V.Sc, Gannavaram	MVSc	10	3	13
		Total	31	17	48
4.	CFSC, Muthukur	MFSc	3	---	3

S.No	Name of the College	Course	Boys	Girls	Total
1.	C.V.Sc, Rnagar	Ph.D	3	---	3
2.	C.V.Sc, Tirupati	Ph D	2	---	2
	Total		5	---	5

S.No	Name of the College	Boys	Girls	Total
1.	A.H.P, Palamaner	07	17	24
2.	A.H.P, Venkataramannagudem	05	14	19
3.	A.H.P, Garividi	10	11	21
4.	A.H.P, Mahaboobnagar	16	08	24
5.	A.H.P, Madakasira	10	10	20
6.	A.H.P, Ramachandrapuram	07	12	19
7.	A.H.P, Karimnagar	05	14	19
8.	A.H.P, Rapur	09	11	20
9.	A.H.P, Siddipet	15	04	19
10.	A.H.P, Mamnoor	07	12	19
11.	Fisheries polytechnic, Bhavadevarapalli	24	04	28
	Total	115	117	232

STUDENT AND STAFF ACHIEVEMENTS

- ◆ Dr.V. Padmanabha Reddy, Associate Dean, College of Dairy technology, Tirupati was appointed as Member of Research Advisory Committee of National Dairy Research Institute, Karnal for a period of three years from 01.01.2013 to 31.012.2015 by Indian Council of Agricultural Research, New Delhi.
- ◆ Staff of NTR C.V.Sc, Gannavaram have attended the XXIX Annual Conference & National Symposium of Indian Poultry Science Association (IPSACON, 2012) and delivered both oral and poster presentations.
- ◆ Dr.P.V.S.Kishore, Professor, College of Veterinary Science, Korutla was awarded Fellow, Indian Association of Veterinary Anatomists by Indian Association of Veterinary Anatomists.
- ◆ Dr.N.Rajanna, Associate Professor, College of Veterinary Science, Korutla was awarded 1st Prize for poster presentation at Indian Society of Animal Production & Management and 2nd Prize (Poster) by Indian Society of Animal Genetics & Breeding.
- ◆ M.Naveen and M.Ajay Kumar of 5th year B.V.Sc., & A.H have participated in the National Level Veterinary Physiology quiz competition held at NAINP, Bangalore on 29.09.2012.
- ◆ Mr. K.A. Chakradhar, from College of Dairy Technology, Tirupati, secured 1st position in extempore speech and 2nd position in debate in English in the All India Agricultural Universities Youth Festival (AGRIUNIFEST-2013) in which 36 Universities from across the country participated.
- ◆ B.Ramya, Ph.D. student of Dept. of Pathology, CVSc., Rajendranagar was awarded INSPIRE (AORC) fellowship for pursuing Ph.D. studies.
- ◆ Dr.Binny, P.G student of Department of Veterinary Medicine, CVSc., Rajendranagar was awarded 2nd prize for best clinical article presentation at Madras Veterinary College, Chennai.

- ◆ The staff of College of Fishery Science, Muthukur have attended short course on Multimedia & digital content Development from August 22-31, 2012 at NAARM – Rajendranagar, Hyderabad.
- ◆ The Staff also underwent training conducted for newly recruited faculty members for 21 days from April 02nd to 23rd, 2013 at CVSc, Rajendranagar, Hyderabad.
- ◆ The staff of College of Fishery Science, Muthukur have participated in a 4 day workshop on “Scientific Report Writing and Presentation” from March 4th to 7th, 2013 at NAARM, Hyderabad. The Staff also attended 4 day Training Priogramme on “Supply Chain Management in Agriculture” from March 11th to 14th, 2013 at MANAGE, Rajendranagar, Hyderabad.

SPORTS AND GAMES

The 6th SVVU Intercollegiate sports, games and cultural meet was held during 24th -28th November, 2012 at NTR CVSC., Gannavaram. The students from all the 8 colleges participated in the event.

13th All India inter Agricultural University Youth Festival was held at JNLUV, Jabalpur from February 24th to



28th, 2013. The team was led by Dr.R.V.Suresh Kumar, Professor & Head, Department of Veterinary Surgery & Radiology, assisted by Dr.M.Alpha Raj, Assistant Professor, Pharmacology and Officer In-charge Student Activities. The Team was represented by students from CVSc, Hyderabad, Gannavaram, Tirupati and Proddatur, Dairy Technology College and Fishery Colleges. Our University team has won 2 first prizes in literary events and second prize in arts.

Students have also participated in the XIV All India Agricultural Universities Sports and Games meet held at Bidar from 6-10th March, 2013.



The Inter Polytechnic Sports, Games and Cultural Meet for diploma students was held at Animal Husbandry Polytechnic, Palamaner from 8-09-2012 to 10-09-2012

Students have participated in Zonal level games and sports competitions held at NIANP, Bengaluru during September, 2012.

RESEARCH

II. RESEARCH

Research activities in the University are taken up as part of P.G and Ph.D degree requirements of the students besides the research activities of the research stations. The faculty also obtained eleven research projects from various external funding agencies and five research projects are being implemented under Rashtriya Krishi Vikas Yojana.

The implementation of the technical programme and work done by research stations as well as the implementation of the externally funded research schemes was evaluated at the annual State Level Technical Programme (SLTP) meeting. The SLTP meeting was held on 27th and 28th June, 2012 to review the work done during 2011-12 and to approve the technical programme for the year 2012-13.

The Research and Extension Advisory Council (REAC) is a statutory body of the University to identify researchable problems and issues facing farmers and livestock owners in the state for prioritization of research. Progressive farmers and officials from allied line departments are members of the RAEC and give inputs for formulating research programme of the University.

EXTERNALLY FUNDED RESEARCH PROJECTS

Sl. No.	Title of the Project	Name of the PI / Co-PI	Funding Agency	Funds released during the current year Rs.
1	Improvement of feed resources and nutrient utilization for raising animal production	Dr. D. Nagalakshmi / Dr. M.Nalini Kumari, Dept. of Animal Nutrition, CVSc, R'nagar	NIANP, Aduogodi, Bangalore	5,06,586
2	A value chain for clean meat production from sheep	Dr. M. Venkateswarlu Dept. of Animal Nutrition, CVSc, R'nagar	NAIP	5,19,750
3	Value chain model for bio-ethanol production from Sweet sorghum in rainfed areas through collective action and partnership	Dr. M. Nalini Kumari, Professor, Dept. of Animal Nutrition, CVSc, R'nagar	NAIP	2,09,685
4	Outreach programme on Livestock Related Environmental Pollutants, Contaminants & Toxicants (Monitoring of Drug Residues and Environmental Pollutants) in XI Five Year Plan with effect from	Dr. G.Srinivasa Rao, Professor and Head, Department of Veterinary Pharmacology, NTR CVSc, Gannavaram	ICAR, New Delhi	16,10,000
5	In vitro Embryo Production from Preantral Follicles in Goats (<i>Capra hircus</i>)	Dr.G.Aruna Kumari, Asst. Professor, Department of ARGO, TVCC, CVSc, R'nagar	DBT	7,82,000
6	Effect of Fructo-Oligosaccharide (FOS) coated probiotics on fetal immune programming and other health benefits	Dr.K.Kondal Reddy, Professor, Department of LPT, CVSc, R'nagar	DBT	8,20,805
7	Development of encapsulation process for animal feed enzymes to improve heat and storage stability	Dr.K.Kondal Reddy, Professor, Department of LPT, CVSc, R'nagar	DBT	6,25,396
8	Development and assessment of bio-absorbable implants for fracture healing	Dr. V. Devi Prasad, Asst. Professor, Dept. Of VSR, TVCC, NTR CVSc, G'Varam	DBT	2,87,000
9	Isolation and characterization of lytic bacteriophages with special reference to therapeutic application in buffalo	Dr.K.Lakshmi Kavitha, Assistant Professor, Dept. of Vety. Epidemiology & Preventive Medicine, NTR CVSc, Gannavaram	DBT	2,55,000

10	Mitigating the nutritional deficiencies of livestock reared by weaker sections through strategic	Dr.B.Deva Sena, Assistant Professor, Dept. Animal Nutrition, CVSc., Tirupati	APCOST	87,500
11	Detection of Jaagslekte Sheep Retrovirus (JSRV) in sheep by immunohistochemical and molecular techniques	Dr. V. Ramamdevi, Dept. of Veterinary Pathology NTR CVSc, Gannavaram	DST	22,41,000
12.	A milk value chain for the unorganized sector	Dr. V. Padmanabha Reddy, College of Dairy Technology, Tirupati	NAIP	1,30,620
13	Development of e- Couse for B-tech(Dairy Technology) Degree Programme	V. Padmanabha Reddy, CC-PI NAIP Project, CDT, Tirupati	NAIP	325,815
14	A Value Chain in the production and utilization of Indian Major Carps and Prawn from Aquaculture System	Dr.P.Hari Babu, PI, CFSc, Muthukur	NAIP	1,045,212
15	Monitoring and intervention strategies for BT Virus epidemics in Rural India, Hyderabad	Dr.Y.Narasimha Reddy, PI, CVSc, R'nagar, Hyd	ICAR	660,582
16	AINP on Bluetongue Disease, Dept. of Microbiology at CVSc, R'nagar	Dr.Y.Narasimha Reddy, PI, CVSc, R'nagar, Hyd	ICAR	1,090,000
17	Promotion of Backyard poultry production using " RAJASRI" Variety for sustainable livelihood and nutritional security of tribal population in Warangal district of Andhra Pradesh.	Dr S.T. Viroji Rao, PI, CVSc, R'nagar, Hyd	ICAR	5,000,000
18	Methicillin resistant staphylococcus aureus (MRSA) as zoonotic pathogen : Epidemiological survey and molecular characterization (GOI)	Dr.T.Srinivasa Rao, NTR CVSc, Gannavaram	GOI	1,983,300
19	Restiction Enzyme Mediated Integration (REMI) as a strategy for generating stable transformants theileria annulata	Dr.L.Jeyabal, PI, NTR CVSc, Ganavaram	DBT	1,900,000

20	Development of captive Brood stock Bank of giant Freshwater Prawn, Macrobrachium rosenbergii (Scampi) NFDB	Dr.O.Sudhakar, PI, CFSc, Muthukur	NFDB	51,73,910
21	Evaluation of herbal residues and nutraceuticals as alternatives to antibiotics for improving the performance of pigs	Dr.M.V.A.N.Suryanarayana, PI, Garividi, Vijayanagaram	DBT	5,90,219
22	Development of Eco-friendly composting technology for poultry and slaughter house waste (Workshop) (GOI)	Dr.B.Eswara Rao, PI, CVSc, Tpt	APCOST	75,000
23	Fellowship grant for Post graduate research at NTRCVSc, Gannavaram	Dr. D. Srinivasa Rao, NTR CVSc., Gannavaram	Bristol - Myers Squabble company	8,57,000
24	Exploration of antibacterial, immunomodulatory and anti-inflammatory activity of certain polyphenolic compounds and role of NSAIDs activity of antibiotics in Bubaline Mastitis	Dr. P. Anand Kumar Assoc. Prof., Dept of Vety. Microbiology, NTRCVSc., Gannavaram	DBT	10,04,200
25	Conducting paid trial to study the efficacy of their anticoccidial herbal products "Cocciban" at Dept of Poultry Science, CVSc, Rajendranagar	Prof. & Univ. Head, Dept. of Poultry Science, CVSc., R'nagar, Hyderabad.	Indian Herbs	138,648
26	DBT - Research trial on Determination of Buparvaquone residues in bovine milk at LPM, CVSc, Tpt.	Dr. Y. Ravindra Reddy, Asso. Prof & Head, Dept. of LPM, CVSc., Tirupati.	Pfizer	1,440,720
27	Conduct of Trail on determination of piroxicam milk residues in bovine milk cows at Department of LPM, CVSc., Tirupati	Dr. Y. Ravindra Reddy, Asso. Prof & Head, Dept. of LPM, CVSc., Tirupati.	Pfizer	1,60,860
Total				1,44,20,959

RKVY Projects

S. No.	Name of the component
1	Supply of superior germplasm of Ongole
2	Supply of superior germplasm of LWY piglets
3	Supply of superior germplasm of sheep
4	Supply of superior germplasm of Sahiwal cattle
5	Genetic improvement in buffaloes using open nucleus breeding system in collaboration with progressive buffalo farmers
6	Promotion of backyard poultry by using “Rajasri” variety as livelihood and nutritional security options among BPL families
7	Maintenance of gas operated cold storages for preservation of animal and fish products

ANIMAL BIOTECHNOLOGY

- ✳ Research work on expression of VP7 protein of bluetongue virus and its characterization is being carried out at Department of Veterinary Microbiology, CVSc., Rajendranagar.
- ✳ The Department of Veterinary Physiology, C.V.Sc, Tirupati standardized methods for in vitro maturation and fertilization of the oocytes from cultured preantral follicles. 13 commonly used reference genes were studied through real time PCR for their expression stability. Data are being analysed to identify the most suitable reference genes for use in cultured preantral follicles.
- ✳ Development and assessment of bio-absorbable implants for fracture healing funded by Department of Biotechnology, New Delhi.
- ✳ Two biodegradable materials Poly Methyl Methacrylate and hydroxyl apatite were evaluated.
- ✳ The technique of preparation of an implant has been standardized, using a special dice designed for this purpose. The efficacy of these two materials with respect to immobilization/osteo inductive property has been studied.

- ✶ Initiated research activities on nano technology in the Department of Biotechnology, Tirupati. Studied the effect of herbal mediated nano silver on wound healing and mastitis and obtained encouraging results.
- ✶ Microsatellites have been used for molecular characterization of Nellore sheep in the Department of Genetics and Breeding.

A project entitled “Restriction enzyme mediated integration (REMI) as a strategy for generating stable transformants of *Theileria annulata*” got approved for pilot study for the duration of 18 months at NTR CVSc, Gannavaram. A HPLC method was standardized for detecting sulphamethoxazole-trimethoprim residue concentrations in fish samples

ANIMAL HEALTH

Seroprevalence of Bluetongue in AP: cELISA

A total of 702 serum samples (Sheep 423; Cattle 279) were collected from different districts of Andhra Pradesh. Out of these samples 257 samples (Sheep 165; Cattle 92) were screened by cELISA kit. Of these, 116 sheep and 71 cattle sera were positive for BT antibody giving a positive percentage of 70.3% and 77.1% respectively (Table 1, 2 & 3).

Seroprevalence of BT in sheep

District	Number of serum samples		
	Collected	Tested	Positive
Warangal	49	17	13
Medak	40	15	4
Nizamabad	41	15	9
Karimnagar	43	20	14
Adilabad	49	10	7
Mahaboobnagar	101	25	24
Nalgonda	65	43	22
Khammam	35	20	23
Total	423	165	116

Seroprevalence BT in cattle

District	Number of serum samples		
	Collected	Tested	Positive
Warangal	78	30	30
Adilabad	40	20	20
Khammam	119	26	11
Nizamabad	42	16	10
Total	279	92	71

Work on DST (SERB) funded Research Project entitled “Detection of Jaagsiekte Sheep Retrovirus (JSRV) in sheep by immuno histo chemical and molecular techniques was started in the Department of Pathology, NTR C.V.Sc, Gannavaram.

Super ovulatory response in Sahiwal x Jersey crossed bred cows with different doses of FSH was studied by the Department of Gynaecology.

Fluoride toxicity and its amelioration with aloevera, Cytopathological studies on different tumors of different sps of animals, Immunohistochemistry for cancer diagnosis and incidence of Lymphosarcoma in pigs was studied in Department of Veterinary Pathology.

Animal Production

ILFC, Rajendranagar

Conservation of Deoni Cattle

The average body weight of male and female Deoni calves was 21.11 ± 0.99 and 21.5 ± 1.16 kg at birth; 30.0 ± 1.67 and 32.00 ± 2.79 kg at 3 months age and 42.8 ± 2.55 and 41.00 ± 4.37 kg at six months age, respectively.

The average lactation yield was 826.83 ± 77.52 kg and average lactation period was 269.50 ± 31.83 days.

Improvement of performance of Deccani Sheep

Average weight at birth, 3, 6, 9 and 12 months age was 2.81 ± 0.13 , 9.82 ± 0.02 , 16.58 ± 0.05 , 24.28 ± 0.34 and 28.55 ± 0.49 kg in males and 2.50 ± 0.04 , 8.85 ± 0.07 , 14.53 ± 0.18 , 21.52 ± 0.21 and 25.22 ± 0.31 kg in females, respectively.

The average age at puberty, age at first lambing, lambing interval and lambing percentage recorded in Deccani flock were 401 ± 3.55 , 558 ± 1.01 , 342 ± 7.51 days and 79.23%, respectively.

A study on the fertility and hatchability of Emu eggs

Emu egg production started from October, 2012 (7.10.2012) and continued up to April, 2013. Twelve pairs of emus produced 223 eggs during the year under report. The egg weight ranged from 452 to 632 gm with an average of 546 gm. The total egg production, percentage of fertility, hatching percentage on total eggs set and fertile eggs set, percentage of dead germs and dead in shell were 223, 64.29, 55.61 and 86.11, 2.69 and 5.83, respectively.

Research Project entitled “Determination of piroxicam Residues in Bovine milk from cows following Administration of injectable Zolidone containing piroxicam (20 mg/ ml) @ 1ml /40kg body weight” is being carried out at ILFC, Tirupati.

Another Project entitled ‘Promotion of backyard poultry by using Rajasri variety as livelihood and nutritional security - options among BPL farmers’ is also under progress and 1560 eight week old rajasri chicken were distributed under the project so far.

All India Network Programme on Bluetongue disease

The vaccine developed by Network project and supplied by Chennai centre was tested in farms of Andhra Pradesh. A total of 500 doses were given in farms of Rajendranagar, Mahaboobnagar, Hayatnagar and Pragnapur. The vaccinated sheep did not show any local or systemic reactions. Seroconversion was 84.62 percent on 28th day post vaccination in the tested animals. There was a 92.3 percent seroconversion on 90th day post vaccination in the tested animals at LRI, Rajendranagar.

INDO-UK sub project under All India Network Programme on Bluetongue: Monitoring and Intervention strategies for BT virus epidemics in rural India

The technical programme for the centre at Rajendranagar includes collection of culicoides midges from 10 different places in the state based on the geographical and climatic factors. Ten places have been identified with the help of project scientists located at Institute of Animal Health (IAH), Pirbright, UK. One insect trap has been set up at each of the stations for one day collection in a week for the scheme period. The centers are located at Sheep Farms of Colleges of Vety. Science at Hyderabad, Tirupati, Gannavaram and Korutla; Livestock Research Stations at Mahabubnagar, Palamner, Mamnoor, Garividi, Guntur and Mahanandi.

NAIP- ICRISAT project: Value Chain Model for Bio- ethanol Production from Sweet Sorghum in Rain Areas through Collective Action and partnership (Animal Nutrition)

The nutritional quality of Sweet sorghum bagasse in ruminants was superior to sorghum stover. Sweet sorghum bagasse can be included up to 60% level in complete rations of growing ram lambs for economic meat production. Processing of SSB based complete rations into expander extruded pellets was economical for milk and meat production from buffaloes.

NAIP- NRCM project: A value chain for clean meat production from sheep

Crop residues could be efficiently utilized at 50% level in the complete ration in mash form for obtaining optimum growth and meat characteristics in growing native ram lambs. Results revealed that significant difference was found between the animals fed experimental complete rations and control animals which were reared only by traditional grazing. It was also concluded that comparable difference was observed in growth rate in animals fed three crop residues (Sorghum, Sweet sorghum and Maize straws) based complete rations when fed intensively on-farm basis.

AICRP on Improvement of feed resources and nutrient utilization for raising animal production

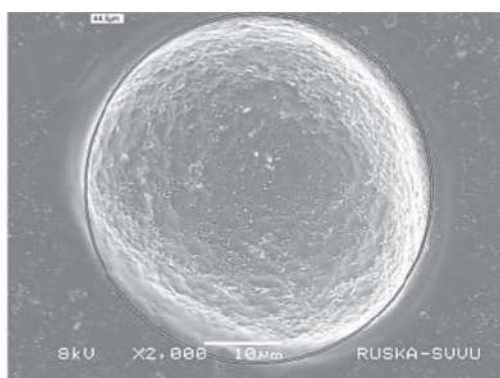
Studied the effect of feeding concentrate mixtures with different RDP: UDP ratios (I-70:30; II- 60:40 and III-50:50) in graded Murrah buffaloes on milk production and cost economics. There was no significant difference in milk yield among different groups of buffaloes. There was 8.8 and 15.31 % improvement in milk yield observed due to high UDP level in concentrate II and III. There was no significant difference in fat% and SNF% among the treatments. The feed cost per kg FCM was 8 and 12 % lower for buffaloes fed concentrate II and III, respectively than control. Thus, increasing the UDP level in concentrate mixture maintained a consistently higher milk production in buffaloes.

DBT project: Dietary modulation of Zn in buffaloes: Effect on growth, immune response and ovarian follicular dynamics

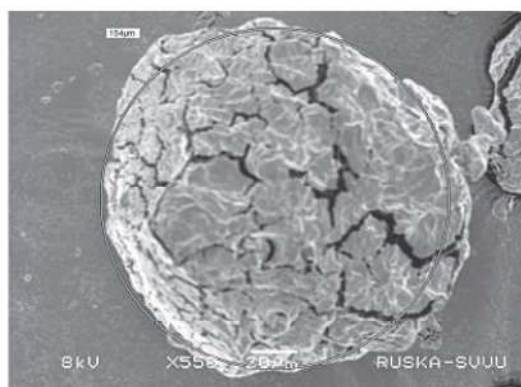
Replacement of inorganic source of Zn (Zn carbonate) with Zn carbonate at 75% improved antioxidant status, immunity and reproductive efficiency compared to other inorganic-organic combinations and 100% supplementation from inorganic Zn. Dietary Zn concentration of 29.72 ppm was sufficient for buffalo calves growing with an average gain of 500 g, while Zn supplementation of 140 ppm was required to reduce stress in calves and for obtaining higher immune responses in buffalo calves.

DBT Project on Development of encapsulation process for animal feed enzymes to improve heat and storage stability

In vitro evaluation of the 2% alginate encapsulated phytase and protease showed significantly ($P < 0.05$) higher activity than the non-encapsulated enzyme at different pelleting temperatures and storage periods, suggesting the protective action of the encapsulation process for enzyme activity. *In vitro* analysis of encapsulated amylase with alginate-xanthan, alginate-carboxymethyl cellulose and xylanase with alginate-carboxymethyl starch also proved to have protective effect on the enzymes activity over a storage period of 90 days.



SEM photograph of encapsulated amylase with alginate Carboxymethyl cellulose



SEM photograph of cracked encapsulated amylase in acidic medium

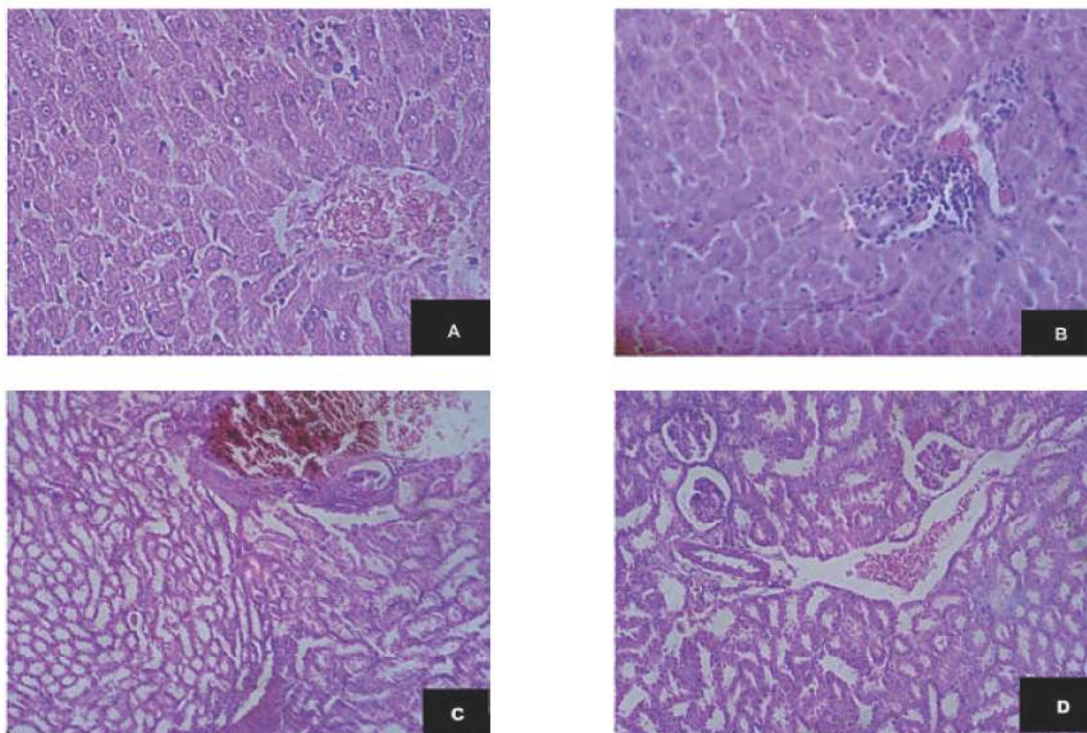
Purification of vegf and evaluation of its role as prognostic tissue biomarker in dmh induced colorectal cancer rats fed with coated and uncoated pre and probiotics.

Vascular Endothelial Growth Factor (VEGF) or Vascular Permeability Factor (VPF) is an angiogenic cytokine expressed by many human and animal tumors. The study was aimed to analyze the role of VEGF as a prognostic tissue biomarker in 1, 2 dimethyl hydrazine (DMH) induced CRC in female Sprague Dawley (SD) rats treated with coated and uncoated symbiotic. Four treatment groups were used (sham, CRC control, CRC fed with coated and uncoated synbiotic).

Two prominent protein bands having molecular weights of 37kDa and 34 kDa were identified in CRC samples but not in control. They were assumed to be VEGF isoforms based on elution characteristics on HSCC and high expression in CRC. The expression level of these two proteins was assessed based on the relative staining intensity on SDS PAGE gels stainability decreased slightly in CRC treated with uncoated symbiotic while there was significant reduction in their expression level in CRC treated with coated synbiotic. The two purified proteins in the present study are hypothesized to be VEGF isoforms which may be used as good prognostic tissue biomarkers in monitoring CRCprophylaxis and therapy.

Antioxidant activity of coated probiotic *Lactobacilli casei* on chromium (VI) induced oxidative stress in rats.

Experimental study was conducted to evaluate the antioxidant potential of sodium alginate coated probiotic *Lactobacilli casei* against chromium (VI)-induced oxidative stress in albino rats. Administration of chromium (Cr) VI significantly ($p < 0.05$) increased the peroxidation markers such as malondialdehyde and protein carbonyls along with significant ($p < 0.05$) decrease in antioxidant markers such as super oxide dismutase (SOD) and reduced glutathione (GSH) in liver and kidney homogenates. Prominent pathological changes observed in liver were vascular congestion, degenerative changes, dilatation of sinusoids and mononuclear cell infiltration, while the kidney showed degeneration of tubular epithelial cells, cystic dilatation of tubules and hyaline casts. Co-administration of coated probiotic *Lactobacilli casei* strain 17 reversed the Cr-induced changes.



Light microscopic study of (A) chromium treated group rat liver showing vascular congestion, degenerative changes and dilatation of sinusoids, (B) chromium treated group rat liver showing mononuclear cell infiltration, (C) chromium treated group rat kidney showing degeneration of tubular epithelial cells, cystic dilatation of tubules and hyaline casts, (D) chromium treated group rat kidney showing dilation and congestion of blood vessels, degenerative changes, dilatation of bowmans space.

Evaluation of viability of co-encapsulated pre- and certain probiotics in ice cream during frozen storage.

A study was conducted to investigate the effect of supplementation of co-encapsulated probiotic organisms (*Lactobacillus helveticus* 194 and *Bifidobacterium bifidum* 231) along with prebiotics (3% FOS) using 2% sodium alginate as encapsulating material in ice cream on viability of probiotics, certain physicochemical properties and sensory evaluation of ice cream on initial, 15th, 30th, 45th, 60th, 75th and 90th day of frozen storage. Five categories of ice cream mixes of 2.5 Kg each were formulated as per standard method. Control ice cream was made without supplementing probiotics in the ice cream mix, treatment I was supplemented with encapsulated *Lactobacillus helveticus* 194 (@ 8.77 log₁₀ cfu/g), treatment II was supplemented with non encapsulated *Lactobacillus helveticus* 194 (@ 8.60 log₁₀ cfu/g), treatment III was supplemented with encapsulated *Bifidobacterium bifidum* 231 (@ 8.90 log₁₀ cfu/g) and treatment IV was supplemented with non encapsulated *Bifidobacterium bifidum* 231 (@ 8.85 log₁₀

cfu/g). The addition of probiotic cultures either in encapsulated and non encapsulated states did not significantly affect the colour and appearance, flavour, body and texture and overall acceptability of ice cream over a storage period of 90 days at -20°C. The microencapsulation with prebiotics appears to enhance the survival abilities of probiotic bacteria in ice cream during freezing and frozen storage.

DBT Project on In Vitro embryo production from pre-antral follicles in goats

Optimized microdissection method for isolation of viable pre antral follicles (PF). The in vitro culture of goat PFs by both microdrop and agar methods equally supported the follicular development. To save time and energy microdrop method was used. In general, the morphological and ultra structure of caprine fetal preantral follicles were similar to that of other mammalian species with some species specific characteristics. The optimum concentrations for proportion of PFs exhibiting growth, increased in diameter and antrum formation were highest when the PFs were cultured at T4:1 µg/ml, FSH:2 µg/ml, GH:1 mIU/ml, EGF:25 ng/ml or IGF-I:10 ng/ml. The optimum concentrations of Growth hormone, IGF and EGF were 2mIU/ml, 20ng/ml and 25ng/ml respectively for in vitro development of PFs isolated from adult ovaries.

COLLEGE OF DAIRY TECHNOLOGY, TIRUPATI

Under the project on “Development of Gas operated cold storages for preservation of animal and fish products”, a Cold storage operated by Gas based generator was inaugurated at Fish Landing Centre at Mypadu beach on 20th March, 2013.

Trial run for the cold storage at FRS, Palair was conducted in the year 2012-13 and is ready for handing over to the Fishermen societies at Palair.

COLLEGE OF FISHERY SCIENCE, MUTHUKUR

A NAIP project on A value chain in production and utilization of Indian Major Carps and prawn from Aquaculture systems is under operation from 2008-09 onwards and continued during fifth year 2012-13. It is being operated both in the

departments of Fish Processing Technology and DAAH. SVVU is one of the consortium partners with KVAFSU, Bidar as the lead centre.

A National Surveillance Programme for Aquatic Animal Diseases was proposed during the year with Department of Aquatic Animal Health, C.F.Sc, Muthukur and FRS, Undi as SVVU partners. The project is for five years 2012-13 to 2017-18. The National Fisheries Development Board, Hyderabad funded the project and is being implemented by the National Bureau of Fish Genetic Resources, ICAR, Lucknow with 24 consortium partners.

BASIC AND APPLIED RESEARCH

Transfer of Technology Centre and Demonstration Unit”, was **established at Administrative Office, SVVU, Tirupati**. Under the project Short film on University was shot, AH Panchangam was prepared and Procured audio visual equipments for ToT Centre and training hall. Developed 35 multimedia modules in toto, comprising 20 on cattle production, 5 on pig production and 5 on dairy technology by the Department of Veterinary & AH Extension, Tirupati.

College of Dairy Technology, Tirupati -Under NAIP project on e-Courses in collaboration with National Dairy Research Institute, Karnal and Anand Agricultural University, Anand, 49 courses for B. Tech (dairy Technology) degree program were digitalized and made available for off-line delivery in form of CDs and also the e-content was hosted on ICAR website at <http://www.icar.org.in> for the benefit of students and faculty of Colleges of Dairy Technology across the country.

SALIENT FEATURES OF RESEARCH WORK DONE IN DIFFERENT RESEARCH STATIONS OF THE UNIVERSITY

All India Coordinated Research Project On Poultry Breeding, Rajendranagar, Hyderabad

- During the period under report stock belonging to S₃₀ generation in IWD and S₂₉ generation in IWF were produced.
- A total of 7,266 chicks were produced comprising of 3,798 chicks from IWD (S₃₀) strain, 3,214 chicks from IWF (S₂₉) strain and 254 chicks from control population. All the chicks were produced in six hatches.

- The overall percentage of mortality on total base population was 8.13%, 7.56% and 4.33% in chick stage; 17.10%, 20.06% and 9.82% in grower stage and 21.73%, 20.88% and 6.39% in laying stage.
- Mortality during growing and early laying stage was high mainly due to upper respiratory tract infection and coccidiosis.
- Production was recorded on birds belonging to 5 hatches upto 40 weeks of age.
- Egg production in IWD, IWF and Control population was 103 ± 0.61 , 109 ± 0.34 and 95.2 ± 0.28 at 40 weeks (not based on entire flock as 6th hatch birds have not reached 40 weeks of age).
- Frequency distribution for egg production in both IWD and IWF strains, indicate that maximum birds fall in the class of 91-100 (25.44%) in IWD and 100-110 (27.35%) in IWF.
- Body weight (g) in IWD and IWF strains was 1180 ± 4.68 and 1210 ± 6.81 at 16 weeks; 1280 ± 4.16 and 1237 ± 7.04 at 40 weeks, respectively which was not significantly different from previous generation means.
- The age at first egg was 150 ± 1.81 and 148 ± 0.14 days in IWD and IWF strains. The average age at first egg was comparable with previous generations.
- The average egg weight was 46.6 ± 0.10 and 47.9 ± 0.11 g at 28 weeks and 50.26 ± 0.26 and 51.1 ± 0.14 g at 40 weeks age in IWD(S₃₀) and IWF(S₂₉) strains respectively and egg weights remained static.

STOCK POSITION

Particulars	Opening Balance			Additions during the year			Deletions during the year			Closing balance		
	M	F	T	M	F	T	M	F	T	M	F	T
IWD	65	303	368	736	3062	3798	345	1222	1567	456	2143	2599
IWF	75	326	401	752	2462	3214	259	1224	1483	568	1564	2132

Mortality (%)

8.13%, 7.56% and 4.33% in chick stage
17.10%, 20.06% and 9.82% in grower stage and
21.73, 20.88 and 6.39 in laying stage

Targets and achievements

Targets : Production not less than 305 eggs and egg weight of 52g.

Achievement : The egg production was 283 upto 72 weeks while the egg weight was 55g and 55.2g in IWD and IWF strains, respectively.

All India Coordinated Research Project On Pigs, Tirupati

WORK DONE DURING THE YEAR

The mandate of the centre is to improve the growth and reproductive performance of 75 % crossbred (LWY X Desi) cross bred pigs

Technical programme

- To study the performance of crossbred pigs.
- The centre will continue the studies on one genetic group of crossbred pigs having 75% LWY inheritance by interse mating. Breeding stock size containing 45 females bred to 15 boars to generate two crops of piglets (15 boars in each crop; each mated to 3 females). It is also targeted to ensure a minimum of 30 normal farrowings in each crop.
- **20th generation I Crop:** A total of 30 farrowings was recorded in the year 2012-13 in which 241 piglets (123 Males + 118 Females) were born. During the preweaning period, the mortality percentage was 4.15 . The post weaning mortality percentage was 9.09.
- Further 45 gilts as well as 15 young boars were selected as future breeding stock from the 1st crop of 20th generation as per the procedures prescribed.
- A total of 343 piglets were sold to the beneficiaries and a total of Rs. 10,00,776/- (Rupees Ten lakhs seven hundred and seventy six only) has been realized in the form of receipts by selling live piglets, culled animals and pork.

Details of Livestock

Particulars	Opening balance			Additions during the year			Deletions during the year			Closing balance		
	M	F	T	M	F	T	M	F	T	M	F	T
75% LWY	161	223	384	148	131	279	201	205	406	108	149	257

Targets and achievements:

Being started to conduct research on indigenous breeds during VI five year plan, the AICRP on Pigs, Tirupati is presently maintaining genetic group of crossbreds of 75% (LWY x Desi) by interse mating vide directions issued by NRC on pig during the Scientist meet held on 28- 29 June, 2007 at Kerala Veterinary College, Mannuthy, Thrissur.

Performance of pigs (19th generation II crop & 20th generation I crop)

Trait	Generation	Male	Female	Total
Litter size at birth (no.)	19 th	4.08±0.32 (n=36)	4.13±0.31 (n=36)	8.22±0.32 (n=36)
	20 th	4.10±0.42 (n=30)	3.93±0.40 (n=30)	8.03±0.33 (n=30)
Litter size at weaning (no.)	19 th	4.05±2.16 (n=36)	4.11±1.80 (n=36)	8.16±2.11 (n=36)
	20 th	3.90±0.41 (n=30)	3.80±0.37 (n=30)	7.70±0.37 (n=30)
Avg. individual weight at birth (kg)	19 th	1.36±0.01 (n=147)	1.21±0.01 (n=149)	1.28±0.01 (n=296)
	20 th	1.26±0.01 (n=123)	1.21±0.15 (n=118)	1.23±0.01 (n=241)
Avg. individual weight at weaning (kg) (42 days)	19 th	7.50±0.01 (n=146)	7.37±0.01 (n=148)	7.41±0.01 (n=294)
	20 th	7.50±0.03 (n=117)	7.53±0.03 (n=114)	7.52±0.02 (n=231)
Pre weaning growth rate (gm/d)	19 th	146.42±0.36 (n=146)	144.81±0.36 (n=148)	145.45±0.41 (n=294)
	20 th	148.55±0.82 (n=117)	150.60±0.85 (n=114)	149.56±0.59 (n=231)
Pre weaning mortality rate (%)	19 th	0.68% (n=147)	0.67% (n=149)	0.67% (n=296)
	20 th	4.87 % (n=123)	3.39 % (n=118)	4.15 % (n=241)
Post weaning	19 th	6.16% (n=146)	3.38% (n=148)	4.76% (n=294)

mortality rate (%)	20 th	11.11% (n=117)	7.01% (n=114)	9.09% (n=231)
Age at slaughter (d)	19 th	267.75±20.21 (n=12)	310.00 ± 21.69 (n=4)	278.31±16.45 (n=16)
Weight at slaughter (kg)	19 th	80.33±6.88 (n=12)	90.25±9.98 (n=4)	82.81±5.681 (n=16)
Dressing Percentage (%)	19 th	56.06±1.15 (n=12)	58.91±2.76 (n=4)	56.77±1.10 (n=16)
Carcass Length (cm)	19 th	74.54±3.23 (n=12)	76.20±5.34 (n=4)	74.9±2.68 (n=16)
Back Fat Thickness (mm)	19 th	15.0±0.12 (n=12)	14.3±0.08 (n=4)	14.5±0.10 (n=16)

DBT Project: A research project entitled *Evaluation of herbal residues and nutraceuticals as alternatives to antibiotics for improving the performance of pigs* was sanctioned by Department of Biotechnology, Ministry of Science & Technology, New Delhi with a financial out lay of Rs. 35.71 lakhs for a period of 3 years. The project is working in collaboration with NIANP, Bangalore whose financial component includes Rs. 17.44 lakhs.

NETWORK PROJECT ON BUFFALO IMPROVEMENT, ANTHERGAON

Objectives

- To establish an elite herd of pure Murrah buffaloes
- To undertake progeny testing of Murrah bulls under selection using she buffaloes of the farm and field centres

Technical Programme

- Recording production & reproductive performance of Buffaloes
- Establishment of semen laboratory & supply of frozen semen for field use
- Progeny testing and up gradation
 - Selection of field centers, Registration of ND buffaloes, Semen distribution
 - Field data recording, Registration of calves born
 - Management of selected males & females born in field centers
 - Incentives for calf rearing

Details of Livestock

Particulars	Opening Balance			Additions during the year			Deletions during the year			Closing Balance		
	M	F	T	M	F	T	M	F	T	M	F	T
Murrah She Buffaloes		32	32					01	01		31	31
Heifers below 3 years age		06	06		01	01		01	01		06	06
Female calves below 1 year age		01	01		08	08		04	04		05	05
Young bulls above 1 year age	07		07							07		07
Male calves below 1 year age	01		01	14		14	03		03	12		12
Grand Total	08	39	47	14	09	23	03	06	09	19	42	61

Average Lactation Yield of Buffaloes (3rd lactation, n=5)

Yield (kg)	Lactation length (d)	305- day milk yield (kg)	Av. peak yield	Peak Yield (d)	Fat %
1560.00	285.00	1560.00	9.50	28.00	7.56 ±
± 12.20	± 4.50	± 12.20	± 2.20	± 3.20	0.07

Reproduction performance

Traits	Parity	1	2	3	4	Overall
Average Service Period (d)	n	1	1	6	1	9
	Mean	180.0	160.0	176.0±25.0	175.0	172.0
Average Dry Period (d)	n	-	3	3		6
	Mean		135.0±19.0	241.0±31.0		188.0±25.0
Average Calving Interval (d)	n		9	10	3	22
	Mean		460.0±16.0	457.0±19.0	477.0±34.0	464.0±18.0

Targets and Achievements

Sl. No.	Trait	Target	Achieved in 2012-13
1.	Av. Age at first service (m)	24 months (300 kg. B. wt.)	-
2.	Av. Age at first calving	40 months	-
3.	Av. Age for initiating of bulls (m)	18 months (350 kg. B. wt.)	-
4.	Av. Age at first collection	30 months (400 kg. B. wt.)	-
5.	Av. Service period	130 days	172 days
6.	Calf mortality (0-3 m)	Less than 8%	13.67
7.	Wet average	More than 7.5 kg.	4.70
8.	Herd average	More than 4.5 kg.	2.80

BUFFALO RESEARCH STATION, VENKATARAMANNAGUDEM,**Objectives**

To undertake progeny testing for improvement of Murrah Buffaloes

Work done

- A semen freezing laboratory was established with all facilities and equipments for semen freezing under hygienic conditions. The first set bulls were introduced in the field in December 2004 and continued up to June 2006.
- Distribution of semen from first set of four test buffalo bulls was completed in six selected villages to carryout field progeny testing programme.
- The daughters born from first set bulls were registered and incentives (subsidized calf second set bulls were selected initially based on the dam's milk records and out of which seven bulls were selected based on their mounting ability and semen quality).
- The total number of calves born during the year was 38 out of which 19 were males and 19 females. About 1750 tonnes of green fodder was produced at this

station. Regular vaccination (against FMD, HS and BQ) and de-worming were carried out on the buffaloes of this station.

- The wet average (kg) and herd average (kg) recorded during the year were 7.12 kg and 4.88 kg, respectively. The average lactation yield of buffaloes completing their lactation during the period was 1956 kg.

DETAILS OF LIVESTOCK

Opening Balance			Additions during the year			Deletions during the year			Closing Balance		
M	F	T	M	F	T	M	F	T	M	F	T
30	102	132	19	19	38	6	4	10	43	117	160

Mortality: 4.38%

Targets and achievements

Sl.No	Trait	Target	Achieved 2012-2013
1	Av. Age at first Service (Months)	24	27
2	Av. Age at first Calving (Months)	40	38
3	Av. Age for initiating training for bulls (Months)	18	27
4	Av. Age at first Collection (Months)	30	40
5	Av. Service Period (Days)	130	132
6	Calf mortality (0-3 Months)	Less than 8%	7.8 %
7	Wet Average	≥ 7.5	7.12
8	Herd Average	≥ 4.5	4.88

Semen freezing from third set five test bulls was initiated last year. However after the IXth Scientist meet held at CIRB, Hisar it was decided to utilize the superior bull semen of Network Project available at Hisar and 956 semen doses were obtained from Hisar and distributed in the field units.

Achievements under RKVY

Objective: Genetic improvement in buffaloes using Open Nucleus Breeding System in collaboration with Progressive Buffalo Farmers.

No. of farmers covered : 300

AI Done : 62

Impact : There was an improvement in the breeding efficiency in the farmers' herds and 8 calves were born in the farmers' herds.



The Director of Research, Dr.D.S.Tirumala and the Senior Scientist, Dr.Ananda Rap participating in a farmer training programme

Name of the training programme	No. of participants	Duration	Address Of The Students
Exposure Visit to Buffalo research station. (Sponsored)	400 farmers.	1 day	West.Godavari Dist
Buffalo Management practices	35 progressive farmers	1 day	Guntur District
Buffalo rearing and identification of fodder	25 farm women	1 day	Guntur District
Buffalo Husbandry	15 farmers	1 day	Guntur District
Routine buffalo management practices including machine milking practices	20 farmers	1 day	Guntur District
Identification of fodder grasses and clean milk production	20 farmers	1 day	West.Godavari Dist
Buffalo Husbandry	29 farmers	1 day	West.Godavari Dist

Buffalo Production and management (Internship training for B.V.Sc & A.H, Students)	58 students	9 days	NTR College of Veterinary science, Gannavaram
Buffalo Production and management (Internship training for B.V.Sc & A.H, Students)	4 students	20 days	College of Veterinary science, Tirupati
Buffalo management practices.	8 students	26 days	Animal husbandry Polytechnic, Venkataramannagudem.

3 training programmes of one day duration were conducted under RKVY in which 50 progressive farmers participated in each training programme.

Supply of superior germplasm, fodder slips etc

Fodder slips of Hybrid Napier (APBN-1) and Guinea grass (Tanzania and Mumbasa) are supplied from this station to the farmers from various parts of the state of Andhra Pradesh. About 7, 59,650 fodder slips have been supplied to 134 farmers during the year 2012-13.

LIVESTOCK RESEARCH STATION LAM FARM, GUNTUR (NETWORK PROJECT ON GENETIC IMPROVEMENT THROUGH ASSOCIATE HERD TESTING OF ONGOLE BREED - GERM PLASM CENTER)

Objectives

- To study the Genetic, Phenotypic variances in milk; covariance among milk, draught and associated economic characteristics such as growth, reproduction and survival with a view to develop suitable selection criteria for improving draught/ draught and milk production.
- To undertake testing and selection of bulls for bringing genetic improvement in population involved.
- To provide superior germplasm for utilization in development programme for improving draught/draught and milk production.

Work done

During the period under report a total of 73 Artificial inseminations were conducted, out of which 47 animals became pregnant with an overall conception rate of 64.38%.

The calving rate in the herd was 71% based on the breedable females available in the herd. A total of 53 calves (28 males and 25 females) were born with a sex ratio of 53:47

All the bulls have tested negative for Brucellosis, Tuberculosis, J.D. 2,29,185 semen doses were available at Germplasm Unit .

The overall mortality in the herd was 1.32%.

The wet average varied from 3.40 to 4.53 kg and the herd average from 1.47 to 1.90 kg per day respectively. The ratio of milch and dry cows in the herd was 43:57. The fat% varied from 4.09 to 4.710% and the SNF value ranged from 8.60 to 8.95

The average body weight at birth for male & female calves were 26.5 ± 0.13 and 24.95 ± 0.22 Kg respectively.

The average body height, heart girth and body length at birth for males were 64.21 ± 0.65 , 65.32 ± 0.3 and 60.32 ± 0.38 cms. and for the females 61.03 ± 0.45 , 60.51 ± 0.62 and 62.35 ± 0.46 cms. Respectively

Performace of Ongole cows during the current reporting period

Lactation	Lactation yield(Kg)			Lactation length (days)			Milk yield 300 days (Kg)			Dry period (Days)			Peak Yield (K.G.)		
	N	Mean	SE	N	Mean	SE	N	Mean	SE	N	Mean	SE	N	Mean	SE
1															
2	2	1175.65	137.15	2	256	10	2	1175.65	137.15	1	167	0	2	7.4	0.6
3	4	1047.12	67.56	4	214.25	6.45	4	1047.12	67.56	4	237.43	41.25	4	7.325	0.4
4	5	1265.84	34.51	5	246.2	9.85	5	1265.84	34.51	13	189.65	32.65	5	7.56	0.23
5&above	41	1174.83	33.97	41	237.34	6.98	41	1174.83	33.97	38	222.57	14.38	41	7.47	0.144
Over all	52	1173.79	16.71	52	237.13	5.26	52	1173.79	16.71	56	215.00	11.11	52	7.46	0.11

WORK DONE AT THE ASSOCIATE HERD TESTING -DATA RECORDING LIVESTOCK RESEARCH STATION, LAM FARM GUNTUR

Total herd strength at the end of the year was 327 of which 297 were females and 30 were males. During the year 117 calves were born out of which 64 were female and 53 were males calves.

During the period under report a total of 218 A.I. were done, out of which 146 became pregnant with an overall conception rate of 66.979%. The calving rate in the herd was 59% based on the breedable females available in the herd.

The overall mortality in the herd was 1.18%. The wet average varied from 1.40 to 2.70 kg per day and the herd average from 0.70 to 1.00 kg per day. The ratio of milch and dry cows in the herd was 42:58. The fat percentage varied from 3.80 to 4.50 and SNF value ranged from 8.55 to 8.90.

The average body weight at birth for male and female calves was 26.16 ± 0.20 and 25.69 ± 0.64 , respectively. The average body height, heart girth and body length of males were 64.35 ± 0.32 cms, 70.12 ± 0.42 cms and $60.33 \pm 0.0.21$ cms and in females 62.35 ± 0.21 , 68.16 ± 0.31 and 61.23 ± 0.31 , respectively.

Lactation wise frequency distribution of 300 day milk yield showed that 1 animal gave 500 kg, 11 animals gave 501-750kg, 67 animals gave 751-1000 kg and 14 animals gave 1001-1500 kg of milk.

LIVESTOCK RESEARCH STATION, MAHANANDI, KURNOOL OBJECTIVE

Network Projecton ON Genetic Improvement through Associate Herd Testing and Data recording.

TECHNICAL PROGRAMME

- To study the genetic and Phenotypic variances in milk and covariances among milk and draught and associated economic characteristics such as growth, reproduction

and survival with a view to develop suitable selection criteria for improving draught and milk.

- To undertake testing and selection of bulls for bringing genetic improvement in population involved.
- To provide superior germplasm for utilization in development programme for improving draught and milk production.

Work done

- The technical programme was implemented as per the guidelines by recording the data on growth, production and reproduction parameters. The herd strength at the beginning of the year was 216 comprising 184 females and 32 males. During the year 40 females and 40 males were born, 04 female and 02 male were died. 06 young bulls were transferred on book value basis to AP Biodiversity, Hyderabad. 19 females and 19 males were sold in open public auction. The herd strength as on 31.12.2013 was 246 comprising of 203 females and 43 males.
- The average birth weight, height, length and heart girth of female calves born during this year were 23.65 ± 0.43 kg, 72.05 ± 0.49 cm, 59.14 ± 1.10 cm and 65.81 ± 1.20 cm, respectively while those for male calves were 25.55 ± 0.34 kg, 71.40 ± 0.87 cm, 60.23 ± 0.92 cm and 66.98 ± 0.65 cm, respectively.
- The lactation yield, lactation length, milk yield in 300 days, dry period and peak milk yield were 983.48 ± 44.26 kg, 299.04 ± 08.81 days, 948.13 ± 40.35 kg, 128.90 ± 12.20 days, 3.82 ± 0.16 kg, respectively.
- The service period, inter calving period and age at first calving were 126.95 ± 12.77 days, 410.72 ± 12.86 days and 49.78 ± 1.89 months, respectively.
- During this year 118 artificial inseminations were done and 74 animals conceived with a conception rate of 62.71%.

LIVE STOCK RESEARCH STATION, GARIVIDI, VIZAINAGARAM

DETAILS OF LIVESTOCK

Stock as on 1-04-12	Additions				Deletions					Total as on 31-03-13
L.R.S (198)	Born	Purchased	Others	Total	Died	Sold	Slaughtered	Others	Total	
	49	-	-	49	25	-	-	1	26	221
R.K.V.Y (205)	109	123	05	237	21	-	-	28	49	393
Grand Total	158	123	05	286	46	-	-	29	75	614
II. CATTLE										
Cattle (08)	02	-	-	02	-	-	-	-	-	10

Technical Programme for the Current Year

- Periodical body weights at birth, weaning , 6 months, 1 year and adult body weight were recorded based on single trait selection.
- 200 breedable ewes were selected for designated mating. These breedable ewes have come to breeding in between June to August.
- Apronized ram for detection of heat and kept the particular ewe for designated mating with selected elite ram.
- Lambings took place from October onwards to end of the January. Lambing percentage was recorded as 79.0 for the current year.
- Regularly recorded the birth weight and fortnight body weight up to weaning age (3 months) for new born lambs.

Targets and achievements

A total of 183 ewes have come to heat (91.5%) out of 200 used for the technical programme and a total of 158 lambings (89%) were recorded

Achievements under RKVY

- A total of 4 training programmes were organized under RKVY in which 160 farmers were benefitted. 36 breeding rams and 85 breedable ewes were purchased from the farmers' field.
- In total, 64 breeding rams were distributed to the selected farmers in a way to promote out breeding and to decrease the inbreeding depression. Total feed of 19 tons and medicines were distributed as free inputs to the breeding ram supplied farmers.

Impact of the farm

- The farm is catering to the needs of shepherds in the three districts of north coastal regions in making them aware about the managerial practices of their flocks.
- In an attempt to promote out breeding the farm is supplying superior breeding rams purchased from the shepherds flocks to progressive farmers who are being benefitted by the birth of healthy lambs and recording higher body weights.
- Improved fodder varieties like Co-1, Co-2, Co-3, Co-4, Hybrid napier, APBN-1 etc are being supplied on cost basis to the farmers and this has become a root cause for establishing dairy enterprise sheep farm.
- Need based local press statements are being given periodically to the shepherds flocks is evincing keen interest in them about the farm and sometimes it has become a constraint if many people ask for the supply of breeding rams.

LIVESTOCK RESEARCH STATION, MAHABOBNAGAR

Objectives

- To study and evaluate the performance characteristics of Deccani sheep breed in their native breeding track under farm conditions and in Shepherds flocks.
- To supply genetically superior germplasm to the shepherds for genetic improvement of shepherds flocks to get maximum gains.

- To study and improve the reproductive and productive performance are Goats which thrive under hot and harsh climatic conditions where the vegetations is sparse and poor.
- To develop and establish mixed farming techniques like Silvi-Pasture System, Silvi-Horti Pasture System and Horti-Pasture Systems for optimizing sheep production to get maximum output from limited area of land and to serve as demonstration units to the farmers and business entrepreneurs.
- To develop improved packages of practices in sheep husbandry for adoption by shepherds, small and marginal farmers and business entrepreneurs.
- To conduct on farm and off farm training programmes to small and marginal farmers, shepherds in sheep husbandry activities. To give trainings for veterinary & Para veterinary staffs engaged in sheep developmental activities by refreshing their knowledge.

Details of Livestock

Particulars	Opening Balance	Additions during the year	Deletions during the year	Closing balance
Sheep	242	50	132	160
Goats	53	12	23	42
RKVY	179	43	78	144

Growth performance of Deccani Sheep

S.No.	Item	Ram Lambs	Ewe Lambs
1	Birth weight	2.90 ± 0.18	2.50 ± 0.15
2	Weaning weight	11.00 ± 0.30	9.50 ± 0.19
3	6 months Body weight	17.00 ± 0.21	15.00 ± 0.12
4	1 year body weight	24.50 ± 0.26	22.50 ± 0.15
The lambing percentage was 80%.			

Growth performance of Local Mahabubnagar Goats

S.No.	Item	Male Kids	Female Kids
1	Birth weight	3.25 ± 0.10	2.80 ± 0.26

2	Weaning weight	14.50 ± 0.13	11.00 ± 0.10
3	6 months Body weight	20.00 ± 0.23	17.20 ± 0.11
4	1 year body weight	29.20 ± 0.16	24.20 ± 0.18

The Kidding percentage was 50% with 20% Twinning.

Technical Programme for Development Of Deccani Sheep Breed

- The selection is based on body weight at weaning and six months body weight. (Single trait multistage selection).
- Designated mating shall be followed in the selected flock.
- Data recording for birth weight, Body weight at fortnightly interval up to weaning and monthly up to 6 months & Adult body weight at monthly interval will be recorded.
- All lambs born will be retained up to 6 months age and data recording will be done. Selected top 10% ram lambs based on 6 months body weight are retained.
- Selected top 30% ewe lambs at 6 months age are kept as replacement stock.

Local Mahabubnagar Goats:

Technical programme for development of Local Mahabubnagar Goats

- Selective breeding of Mahabubnagar Goats under semi intensive system of rearing.
- To study the phenotypic characters like body weights at birth, weaning, 6 and 12 months.
- To study the Reproductive performance.

Performance characteristics in local Mahabubnagar goats

- The Mahabubnagar local goats are known for high prolificacy, able to produce twins, Triplets and thrive under adverse conditions.

- Selective Breeding programme was conducted by undertaking designated matings at farm level to study the performance and reproductive characters. The animals were reared under semi intensive system with 8 hours grazing along with green fodder, tree top feeds and concentrate feed after grazing.
- The results show the improvement in birth weight, weaning weight and body weights at six months and 1 year significantly. The average birth weight in male kids was 3.25 ± 0.10 kgs. while at weaning was 14.50 ± 0.13 kgs. at 6 months age was 20.00 ± 0.23 kgs. and 1 year body weight was 29.20 ± 0.16 kgs.
- The average birth weight in female kids was 2.80 ± 0.26 kgs. while at weaning was 11.00 ± 0.10 kgs. at 6 months age was 17.20 ± 0.11 kgs. and 1 year body weight was 24.20 ± 0.18 kgs. The kidding percentage recorded was 50% and Twinning was 20%.

Achievements under RKVY

- 110 farmers were identified and selected and MOU was arrived for using their flocks as breeding flocks.
- 60 Deccani Breeding Rams were purchased from Lathur and Nanded Districts of Maharashtra, 20 Deccani Breeding Rams from Narasapur Division, Medak-District which is part of the original native breeding tract of Deccani and 30 elite Deccani Breeding Rams were supplied from LRS, Mahabubnagar.
- A total of 110 Deccani Breeding Rams were supplied so far and inducted in to the elite flocks as Breeding Rams after removing the shepherds own Breeding Rams.

LIVESTOCK RESEARCH STATION, PALAMANER

Under ICAR- Plan, Network Project on Sheep (Nellore) Improvement for Mutton & under Non- Plan, Conservation of Punganur breed of Cattle schemes are being implemented. Apart from this, “In-situ Conservation of Punganur Cattle” is in operation under non-plan scheme with main objective of conservation of the World’s smallest breed of cattle.

Details of livestock (species wise)

Particulars	Opening balance			Additions during the year			Deletions during the year			Closing balance		
	M	F	T	M	F	T	M	F	T	M	F	T
Nellore Jodipi Sheep	186	48	673	128	150	27	393	414	80	183	49	68
Punganur cattle	59	75	134	13	11	24	2	2	4	73	81	154

Technical Programme During the Year**Non Plan**

All breedable Punganur Cows & Heifers were bred to Punganur bulls available at this station and avoided close mating to the extent possible by natural service to enable

- ◆ To study the breed characteristics of Punganur cattle
- ◆ To study the productive and reproductive performances of Punganur Cattle.
- ◆ To conserve the Punganur breed of cattle.

Plan

- ◆ As per the initial technical programme, a flock of 250 breedable ewes (Nellore Jodipi) have to be maintained. In the 2008-09 Scientist's meet it was recommended to increase the Breedable Ewes from 250 to 500.
- ◆ In the scientist's meet held at Livestock Research Station, Kattupakam, during November 2001, it was recommended to go for sequential selection instead of index selection, as body weight traits are highly heritable.



- ◆ Male lambs will be selected for breeding by sequential selection based on body weight at weaning and six months of age and will be bred with available ewes at about 1.5 years of age.

Targets and Achievements

- ◆ A total of 24 Punganur calves (13 males and 11 females) were born during the period with an average birth weight of 10.80 ± 0.43 Kg.
- ◆ The mean height at withers, chest girth, body length, pin bones width, paunch girth, poll length, tail length, and ear length were 48.00 ± 1.26 , 47.60 ± 0.93 , 43.70 ± 0.81 , 7.90 ± 0.48 , 46.70 ± 0.95 , 19.00 ± 0.68 , 29.00 ± 1.23 , 8.90 ± 0.43 cm, respectively.
- ◆ Majority of the calves were born with black hoof (95.84%), muzzle (95.84%) and tail switch (75%). The average body weights of male calves at 2, 4, 6 and 8 months age were 17.5, 24.3, 32.1 and 42.5 kg respectively, while in female calves the corresponding weights were 16.5, 23.6, 30.0 and 38.5 kg.
- ◆ During the report period 10 Punganur animals were completed the lactation period (Table 3). The average lactation milk yield was 279.8 ± 51.18 litres with a lactation length of 95.3 ± 21.47 days. The daily average milk yield and peak yield during the report period were 2.4 ± 0.33 and 2.60 ± 0.34 litres, respectively.
- ◆ The average age at first calving, service period, gestation period, calving Interval were 1540 ± 243 (5) days, 129.13 ± 17.37 days (15), 276.9 ± 0.79 days (25), 554.8 ± 41.93 days (18), respectively.



Biometrical Measurements of Punganur Calves

S.No	Parameter	Overall Means (24)	Males (Mean \pm SE)	Females (Mean \pm SE)
1	Birth weight(kg)	10.8 \pm 0.43	10.8 \pm 0.48(13)	10.8 \pm 0.79(11)
2	Height(cm)	48.0 \pm 1.26	46.4 \pm 1.04(13)	50.0 \pm 2.40(11)
3	Length(cm)	43.7 \pm 0.82	43.8 \pm 1.12(13)	43.5 \pm 1.26(11)
4	Girth(cm)	47.6 \pm 0.93	47.3 \pm 1.26(13)	47.9 \pm 1.44(11)
5	Pauth Girth(cm)	46.7 \pm 0.95	45.7 \pm 1.40(13)	47.9 \pm 1.22(11)
6	Pole length(cm)	19.0 \pm 0.68	18.4 \pm 0.93(13)	19.8 \pm 1.00(11)
7	Pin bone length(cm)	7.9 \pm 0.49	7.7 \pm 0.68(13)	8.0 \pm 0.72(11)
8	Tail length(cm)	29.0 \pm 1.24	27.8 \pm 1.58(13)	30.3 \pm 1.95(11)
9	Ear length(cm)	8.9 \pm 0.44	8.6 \pm 0.68(13)	9.2 \pm 0.52(11)
10	Muzzle colour	95.84 %	Black	
		4.16 %	Pink	
11	Switch colour	75.00 %	Black	
		25.0 %	White	
12	Hoof colour	95.84 %	Black	
		4.16 %	Brown	

LIVESTOCK RESEARCH STATION, SIDDARAMPURAM**OBJECTIVES**

- To produce Nellore Brown Breeding Rams and to distribute among the Breeders for up gradation of local sheep.
- To maintain breeding stock of best Genotype and produce breeding rams for supply to the weaker section of society in and outside of the Anantpur District for up gradation of the local sheep through sheep breeders Co-operative societies and more remunerative price for the produce.
- To serve as demonstration unit to the shepherds in breeding, management and health coverage to get more returns.

TECHNICAL PROGRAMME

- ◆ Distributed superior breeding rams of 41 numbers (Nellore brown) to local farmers for genetic improvement of local sheep during 2012-2013.

- ◆ Supplied 2.00 lakhs of APBN-1 and Red Napier, fodder slips to the needy farmers in Anantapur district.
- ◆ Recorded birth weights from the day of birth up to six month body weight of farm born lambs and average weights calculated accordingly.

WORK DONE DURING CURRENT YEAR

- Fodder plots of guinea grass, Red Naiper, Co-4, and Stylo hamata, plots established for demonstration to the farmers and supply to the farmers on cost basis (0.20 paise/slip) and supplied 2.37 lakhs of slips to the farmer during this year.
- Training programmes on various aspects of sheep husbandary will be organized. Conducted trainings to about 160 farmers on various fodder varieties and sheep farm management to the farmers.
- Supply of superior breeding rams to the farmers on the cost basis will be continued for genetic improvement of local sheep and supplied 41 breeding rams from 01-04-2012- to 31-03-2013.
- Supplied 20 superior breeding Rams as 2nd breeding Ram after settlement of claims due to the death of 1st Ram supplied to the sheperds, during Feb-2013.

TARGETS AND ACHIEVEMENTS DURING THE CURRENT YEAR

S.No	Item of work	Targets for 2012-13	Achievement up to 31-03-2013
1	Carrying capacity of the farm	600	722
2	Lambing percentage	70%	60%
3	Age at 1 st lambing(months)	18	20
4	Breeding stock to be supplied	--	41 Breeding Rams
5	Mortality percentage	10 %	5 %
	a) Young stock	5 %	4 %
	b) Adults		
6	Culling percentage	5 %	5%
	a) Young stock	20 %	20%
	b) Adults		
7	Green fodder product (Metric tons)	400	450 Mts
8	Dry fodder production(Mts)	30	20
9	Silage made	---	2 Pits
10	Fodder slips to be supplied	1 lakhs	2.31 lakhs

11	No. of demonstrations to be conducted	10	8
12	No. of farmers trained	60	180
13	Stylo Hameta, pasture land with trees are developed in	---	100 acres

LIVESTOCK RESEARCH STATION, MAMNOOR

Objectives

- * Production of the **Elite Murrah Young bulls** for supply to APLDA for artificial insemination and to farmers where A.I. facilities are not available.
- * Production of **Nellore Brown Breeding Rams** for supply to the shepherds for up-gradation of the local stock.
- * Supply of **high yielding fodder slips like APBN -1, Co-1, NB – 21 and Improved Para grass** to the farmers at free of cost to improve the nutritional status of the livestock for better and optimum production.

Technical Programme

Sheep Unit

- * Selection based on body weight at weaning and six months body weight. (Single trait multistage selection).
- * Designated mating followed in the selected flock.
- * Data on following traits recorded.
- * Birth weight
- * Body weight at fortnightly interval up to weaning and monthly up to 6 months.
- * Adult body weight at monthly interval.

Dairy Unit

- * Open Nucleus Breeding System
- * Selection based on Lactation Milk Yield

Details of Livestock

Particulars	Opening Balance			Additions during the year			Deletions during the year			Closing Balance		
	M	F	T	M	F	T	M	F	T	M	F	T
MURRAH BUFFALOES												
Murrah She Buffaloes		36	36		09	09		14	14		31	31
Heifers below 3 years age		37	37		07	07		15	15		29	29
Female calves below 1 year age		09	09		09	09		11	11		07	07
Young bulls above 1 year age	19		19	12		12	08		08	23		23
Male calves below 1 year age	13		13	15		15	17		17	11		11
Work cattle	04		04	-		-	-		-	04		04
Breeding Bulls	02		02	-		-	-		-	02		02
Total GMB	38	82	120	27	25	52	25	40	65	40	67	107
NELLORE BROWN SHEEP												
Breeding Rams	04		04	07		07	06		06	05		05
Adult Ewes		232	232		43	43		105	105		170	170
Ram Lambs	75		75	68		68	75		75	68		68
Ewe Lambs		123	123		88	88		123	123		88	88
Total SHEEP	79	355	434	75	131	206	81	228	309	73	258	331
GUINEA FOWLS	-	-	-	2	2	4	-	-	-	2	2	4

WORK DONE DURING THE CURRENT YEAR UNDER SHEEP UNIT

Nellore brown sheep breed Body weights were recorded. **Average weight** at birth, 3 and 6 m age for males and birth, 3, 6, 9 and 12 m for females were 3.20 ± 0.42 kg (n=72), 10.60 ± 1.22 kg (n=68) and 21.20 ± 2.10 kg and 3.10 ± 0.60 kg (n=90), 10.02 ± 1.62 kg (n=88), 20.40 ± 2.26 kg (n=88), 24.32 ± 1.24 kg (n=120) and 26.42 ± 1.20 kg (n=120), respectively.

Reproductive traits recorded in sheep are Age at Puberty = 336 ± 2.10 days (n=118), Age at first lambing = 484 ± 6.22 days (n=43), Lambing interval = 310 ± 2.20 days (n=126) and Lambing percentage = 79.11 % (n= 164).

WORK DONE DURING THE CURRENT YEAR UNDER DAIRY UNIT

- Open Nucleus Breeding System
- Selection based on Lactation Milk Yield

Average Lactation Yield of Buffaloes (Production performance)

S. No.	Lactation No.	No. of Observations	Avg. Lactation Yield(kg)	Avg. Lactation length(d)	305- day MY(kg)	Avg. Peak Yield	Attainment of Peak Yield (d)	Mean Fat %
	1 st	4	1207.00 ± 0.12	290.00 ± 0.06	1207.00 ± 0.21	7.50 ± 0.07	27.00 ± 0.08	7.41 \pm 0.10
	2 nd	6	1788.00 ± 0.11	284.00 ± 0.08	1788.00 ± 0.23	10.55 ± 0.12	24.00 ± 0.06	
	4 th	1	1765.00	245.00	1765.00	7.20	24.00	
	5 th	1	1800.00	259.00	1800.00	8.50	29.00	
	7 th and above	9	1401.00 ± 0.14	245.00 ± 0.10	1401.00 ± 0.08	10.50 ± 0.06	23.00 ± 0.04	

Achievements

- Supplied elite Murrah buffaloes to A.P. Livestock Development Agency for collection of semen and preparation of A.I. Straws for use in A.I. in the field.
- Upgrading the local sheep for the last 45 years, which transformed the local sheep stock in to upgraded Nellore brown breed, which helped in more body weight at the marketing age of (9) months.
- The local rams at the age of (9) months weigh only (16) kg and the upgraded weighed (27) kg, the difference is (11) Kg. if the rate is Rs. 180 per Kg on live weight, the extra income generated on each ram is Rs. 1980/-
- Last year 21.50 lakh of slips were supplied, which helped in development of 325 Acres of fodder fields. This is sufficient to feed 3250 buffaloes.

FISHERIES RESEARCH STATION, KAKINADA

PROJECTS ENTITLED

- ◆ Poly culture studies of brackish water fin fish *chanos chanos* and shell fish *P. monodon*
- ◆ Studies on pond culture and fattening of marine Green crab '*Scylla tranquibarica*'
- ◆ Studies on captive breeding and seed Production of Clown fish, *Amphiprion sebae*

Details of Live Stock (species wise)

Particulars	Opening balance			Additions during the year			* Deletions during the year			Closing balance		
	M	F	T	M	F	T	M	F	T	M	F	T
<i>Mugil cephalus</i>			Nil			2000			900			1600
<i>Chanos chanos</i>			Nil			3300			6000			4300
<i>Penaeus monodon</i>			Nil			2800			1200			300
<i>Scylla tranquibarica</i>			Nil			150			1200			300

1. Poly culture studies of brackish water fin fish *chanos chanos* and shell fish *P. monodon*

OBJECTIVES

- To observe growth rates and survival rates
- To study health conditions
- To record production levels

As per the work plan, the experiment was conducted for 120 days to observe length and weight gain and growth rate of *P. monodon* and *C. chanos*. The experimental seed was purchased / collected from natural resources of mangrove areas located near the farm area using hand nets and push nets. The seed was reared in cement cisterns at brackish water fish farm after acclimatization in order to adapt the seed to farm conditions. Starter feeds were used during initial rearing. After rearing for 20 days period, the uniform size fingerlings of *P. monodon* and *C. chanos* were stocked in pond No. 1. The size of the pond is 0.18 ha. Data on length and weight on the day of stocking was obtained and recorded. The stocking density of *C. chanos* is 0.01 per square meter and *P. monodon* is 0.1 per square meter.

Growth performance (weight in gms):

	Initial	1 month	45 days	60 days	90 days	120 days	150 days
Milkfish	2.5 (±6.4)	4.3 (±7.6)	7.8 (±5.9)	10.3 (±12.8)	25.3 (±15.3)	45.8 (±11.8)	70.9 (±18.0)
Shrimp	0.5 (±1.4)	2.2 (±2.6)	5.2 (±4.4)	10.3 (±8.6)			

Chanos chanos: *Chanos chanos* has reached on average size of 70.9 gm (±17.98) in 120 days.

2. Studies on pond culture of marine Green crab *Scylla tranquibarica*

Objectives

1. To record growth pattern and weight gain
2. To observe moulting process in culture ponds
3. To standardize use of wet/ dry feeds.
4. To record survival rates.
5. To estimate production levels

Pond culture of crabs

Preparation of the pond which includes draining of water, application of bleaching and liming. The pond size is 0.02 ha and water depth is 1.5 m. The fencing is done round the pond dyke by using bamboo sticks and knotless nets, as crabs are capable of climbing over the bunds it is to be prevented by fixing fences. Juvenile crabs collected from wild are released into the pond. The crab shades are kept inside the pond as the crabs are highly cannibalistic especially on moulted animals. Crabs are fed with trash fish daily @ 5-10 % of body weight.

Fattening the crabs

The experiment was conducted using wooden cage possessing 9 cells in each cage of uniform size. The cage is placed in the main feeder canal of the farm to utilize the feeder canal area to enhance the profitability. Crabs are obtained from the local market.

On day one crabs are weighed and initial weight was recorded. Crabs are stocked in the individual cells of cages. Crabs are fed using the fresh trash fish like Tilapia. Regular sampling is done. After two months the cages were submerged due to heavy rains and all the crabs died. However, further studies will be conducted.

Weight (g)	T1 (Fed Tilapia)	T2 (Fed Trash Fish)	T3 (Feed Floating Fish Feed)
Initial	100	95	98
15 days	120	128	105
30 days	146	159	115
45 days	165	175	122

3. Studies on captive breeding and seed Production of Clown fish, *Amphiprion sebae*

Objectives

- To estimate fecundity
- To ensure maturity stages
- To evaluate spawning & hatching rates and percentages
- To find out survival rates & percentages

Tropical marine aquarium fishes have demand in the International market. Clown fish has great demand in marine aquarium fish market. Studies on brood stock maintenance and larval rearing were initiated in the recent past. For the first time in India, successful breeding and larval rearing of tropical clown fish *Amphiprion sebae* was accomplished at Regional Center Of Central Marine Fisheries Research Institute, Mandapam Camp. However the studies are limited and provide great scope for future Research.

FISHERIES RESEARCH STATION, PALAIR

Project I: Studies on All Male Culture of the Exotic Carp (*Cyprinus carpio*)

1. Matured female and male common carps weighing more than 300 grams were stocked in breeding hapas in the ratio of 1:2. High fecundity and hatchlings were observed within 48 hours.
2. Three day old hatchlings (600 numbers) were categorized in to 2 groups (Group I: experimental and Group II: control) and stocked in experimental ponds.
3. In the experimental tank, the spawn (Group I) was fed with rice bran and ground net cake administered with 17-alpha- methyl testosterone @ 300ppm/day and the control spawn (Group II) were fed with rice bran and ground net cake only.
4. After 30 days of experimental period, 17- alpha-methyl testosterone was excluded in the diet of spawn (Group I) grown in the experimental tank. During the subsequent rearing period, rice bran and ground net cake formed the diet for both groups.
5. During the above period, the growth rate in both experimental spawn (Group I) and control spawn (Group II) remained same (0.18gm weight & 1cm in length).
6. At the end of 90 days, the average growth rate in experimental spawn was 2.66 gms & 5cms with the survivability of 27.7 % and 4.5 gms & 6 cms with the survivability of 67% in control.
7. After 180 days, the average growth rate in experimental samples (Group I) was 10.5 cm & 18.86 gm with the survivability of 27.7 % and 12.5cm & 21.01gm with the survivability of 67% in control samples (Group II).
8. Based on the external morphology, 32 male and 18 female fish of experimental group (Group I) and 66 females and 96 males from control (Group II) were separated and observed for sterile characteristics.

9. All the male and female common carps reared (180 days) separately in rearing tanks remained as males and females only. We could not generate sterile common carp.
10. The results indicate that incorporation of 17- alpha-methyl testosterone (@ 300ppm/ day) in the diet of common carp has no much influence on the Sterility.

Juvenile harvesting



Harvesting



Marketing stage



Project II: *Channa striatus* culture with Tilapia as Live Feed.

1. *Channa striatus* (murrel) seed was produced through Induced breeding with high fecundity.
2. Male and female tilapia fish from natural waters were collected and stocked in nursery tank for breeding. High quantity of tilapia hatchlings was observed in 72 hours.
3. After one month, tilapia seed were separated and stocked in rearing tank and fed with cheaply available food.
4. 30 (Thirty) numbers of 30 day old murrel seed weighing 1.17 to 1.18 grams were separately stocked in 2 (two) experimental ponds (Group I: 30 numbers and Group II: 30 numbers).
5. The murrels seed stocked in experimental pond (Group I) were fed with live tilapia fish feed for culture, while the seed available in the other pond (Group II) were fed with trash fish.
6. The growth particulars of murrels fed with tilapia and with trash fish is given below:

Days	Group I (Tilapia fed Murrels)		Group II (Trash fish fed Murrels)		Feeding Rate (% of Body Weight)
	Length (cms)	Weight (gms)	Length (cms)	Weight (gms)	
(Initial)					
30 days	2.00	1.17	2.00	1.18	7.0
60 days	7.30	4.35	3.50	3.25	6.0
90 days	12.20	18.67	10.40	15.16	5.0
120 days	18.60	30.42	15.30	25.34	5.0

7. The results indicate that murrels fed with live tilapia have shown better growth than those fed with trash fish.
8. The experiment is being continued during the year 2013-14.



Project III: Studies on all male culture of fresh water prawn with different stocking density.

1. Nursery tanks were prepared for seed stocking.
2. Fresh Water Prawn (*Macrobrachium rosenbergii*) Seed (Size PL 20) were stocked in cement tanks (tank size: 200 sq. meters; Stocking density: 25 Nos. per Sq. Meter).
3. The prawn were fed daily twice with commercial feed at 2% of the stocking density for the first 60 days.
4. Prawn weighing more than 5-10 grams were segregated separately for rearing in rearing tanks.
5. Water quality parameters in nursery ponds were analyzed regularly.
6. Due to mass mortality, the results were not encouraging. Collection and transportation of seed from natural water bodies situated at very far distances and the prevailing environmental factors could be one of the reasons for poor result.

FISHERIES RESEARCH STATION, UNDI

work done particulars

“Evaluation of the relative efficiency of mash- and pelleted supplementary feed for pond cultured Indian major carps – with Catla and Rohu”.

Four ponds were stocked with carp fish Rohu and Catla @ 5500 no's/ha and 550 no's/ha respectively. Stocking size 100-200 g. Catla fed with mash feed i.e. rice bran and oil cake daily in two ponds and sinking pelleted feed daily in two ponds. The protein content in both feeds are 18% mode of feeding i.e. bag feeding. Periodical trail netting was conducted to asses' growth and health of fishes. The production for 210 days culture period were in mash feeding experiments Catla gained 850-900 g. Rohu 690-720 g. production 2420-2500 kg/ha/210 days (4148-4285 kg/ha/yr) with survival 79-80 percent and FCR 1.22 to 1.26

In sinking pellet feeding experiments the growth of fishes observed were Catla 720-750 g. Rohu 525-600 g. production 2320-2350 kgs/ha/210 days (i.e. 3977-4028 kg/ha/yr) with 75-81% survival with FCR 1.21 to 1.28. The important water quality parameters for the above experiments ponds were collected for every 15 days interval.

Sl. No	Pond No.	Area Ha	Species Stocked	No/ Ha	No./ Ha	Initial Size g	Feed, Feeding schedule	Average Size g (final)	Production/kg			Survival (%)	FCR
									Per pond	Ha/ 7 m	Ha/ yr		
1.	1	0.1	Catla Rohu	55 550	550 5500	200 150	Mash (daily)	900 720	242	2420	4148	79	1.22
2.	2	0.1	Catla Rohu	55 550	550 5500	200 150	Mash (daily)	850 690	250	2500	4285	80	1.26
3.	8	0.1	Catla Rohu	55 550	550 5500	200 150	Sinking pellets (daily)	750 525	235	2350	4028	81	1.21
4.	9	0.1	Catla Rohu	55 550	550 5500	200 150	Sinking pellets (daily)	720 600	232	2320	3977	75	1.28



FRS, Undi harvested fish - catla



FRS, Undi harvested fish - pangus



FRS, Undi harvested fish - rohu



FRS, Undi harvested fish - roopchand

“Evaluation of mixed feeding schedules for striped catfish *Pangasianodon hypophthalmus* in grow-out phase”

Two experimental ponds for the above were taken with striped cat fish *Pangasianodon hypophthalmus* stocked @ 10000/ha and stocked average weight of 20-100 g. fish. One pond feeding schedule is daily ration with floating pelleted feed with 24% protein content and another pond same feed but alternate days @ 10% fish body weight; the feed – floating pellets distribution was open distribution on pond surface. The grown out period was 210 days.

The average weight of Pangus fish in daily feed pond was 600 g. production 4384 kgs/ha/210 days i.e. 7515 kg/ha/yr. with 76% survival, where as in alternate feeding schedule experiment is the growth, was 200g. production 1380/kg/ha/210days i.e. 2315 kg/ha/yr. with 69% survival and FCR was 0.81 and 0.78 respectively.

S. No	Pond No.	Area ha	Species Stocked	No/Ha	No./Ha	Initial Size g	Feed, Feeding schedule	Average Size g (final)	Production/kg			Survival (%)	FCR
									Per pond	Ha/7 m	Ha/yr		
1.	10	0.1	Pangus	1000	10000	20	Floating Pellets (alternate days)	200	138	1380	2315	69	0.78
2.	11	0.13	Pangus	1250	10000	100	Floating Pellets (daily)	600	570	4384	7515	76	0.81

Evaluation of growth patterns of alternate fish sps. *Pyractus brachypomus* (Roopchand/Paku) with pelleted feed in grow out ponds”

The experiment was conducted in two ponds stocked with roopchand @ 10000/ha with size range of 20 g. The feeding was only with floating feed @ 10%. Periodical trail netting was conducted to assess the fish growth and health the culture period was 210 days. The average growth of roopchand 270 g. and 350 g. respectively. Production was 1900 kg/ha/210 days i.e. 3257 kg/ha/yr with 70% survival and 2640 kg/ha/210 days i.e. 4525 kg/ha/yr. And FCR was 0.80 and 0.78 respectively.

Sl. No	Pond No.	Area ha	Species Stocked	No/Ha	No./Ha	Initial Size g	Feed, Feeding Schedule	Average Size g (final)	Production/kg			Survival (%)	FCR
									Per pond	Ha/7 m	Ha/yr		
1.	3	0.05	Roop-Chand	500	10000	20	Floating Pellets (daily)	270	95	1900	3257	70	0.80
2.	4	0.05	Roop-Chand	500	10000	20	Floating Pellets (daily)	350	132	2640	4525	75	0.78

EXTENSION

EXTENSION

The teachers of various clinical, para clinical and production Departments of the Colleges and the scientists in the research stations actively participated in the Rythu Chaitanya Yatras, Adarsa Rythu training programmes and Rythu sadassus organized by the Govt. of Andhra Pradesh. Besides they are serving as subject matter specialists/Resource persons for national institutes viz., MANAGE, NIRD, CRIDA etc.



A brief account of the extension activities during the current year is presented below.

DETAILS OF THE TRAINING PROGRAMS FOR THE FARMERS

A two day training programme on *Veterinary Journalism and Public Relations* was conducted by the Dept. of Extension, CVSc, Rajendranagar for three batches of Veterinarians (VAS, AD and DDs) working in Regional, District and State Animal Health Training Centres to develop journalistic skills Viz. writing for News papers, Journals and Periodicals. Emphasis was given on writing Radio script and Video script effectively for livestock farmers.



Training Programme on Veterinary Journalism and Public Relations Six training programmes were organized by the Department of Nutrition, CVSc, Rajendranagar for farmers under RKVY Project on complete feed technology and inclusion of agricultural by-products for least cost ration formulation for milch and growing animals.

A Certificate Course on *Rearing of Emu birds* was conducted by the Department of poultry, CVSc, Rajendranagar during August and December, 2012.

Training programme on “Diagnostic and prognostic use of clinical, imaging, immune-histochemical methods and biomarkers for cancer in animals” was organized by the Department of Veterinary Surgery and Radiology, CVSc, Tirupati from 15-05-2012 to 28-05-2012.

The Department of Animal Genetics Breeding, CVSc, Tirupati demonstrated Karyotyping to the students of S.V. Medical College, Tirupati for two days.

The Department of Veterinary and A.H.Extension Education, CVSc, Tirupati Demonstrated the “Preparation of milk products” and narrated the importance of pig farming to the farmers of C.Ramapuram, the adopted village. Conducted participatory Rural Appraisal also at adopted village to involve the farmers in the discussion process (transact walk).

The Department of Veterinary and A.H.Extension Education developed 35 modules comprising 20 on cattle production, five on dairy technology, five on pig production and five on fish production and the same were released by the Hon’ble Minister, Animal Husbandry, Dairy Development, Fisheries and SVVU on 10-12-2012.

The Teaching staff of the college actively participated in Rythusadassulu and Rythu Chaitanya Yatras.

Newly promoted/selected Lab Technicians were trained in different departments at College of Veterinary Science, Tirupati.

Two training programmes were organized for the benefit of farmers on complete feed preparation at NTR College of Veterinary Science, Gannavaram.

4 training programmes were conducted on profitable rearing of Rajasri birds. One training programme was conducted on profitable rearing of swine.



A technical meeting to create awareness on the new and emerging disease on “Vannamei” (shrimp) culture” was conducted for the benefit of Gangapatnam Villagers on 12.03.2013 by the college of fishery sciences, Muthukur. The programme was sponsored by the Marine Exports Development Authority, GOI, Regional office, Vijayawada. A total of 100 farmers attended the meeting.

A two day training programme to the fisherman on “Stocking Fisherman Co-operative tanks with fish fingerlings” was held on 20 and 21 March, 2013.

PROGRAMMES ON MASS MEDIA, POPULAR ARTICLES, MASS CONTACT PROGRAMMES.

Programmes on Mass media (Radio, T.V)

College of Veterinary Science, Rajendranagr

Sl.No	Title of the programme	AIR/TV	Name of the Scientist/Teacher	Date of Broadcast/Telecast
1	Sheep management	AIR	Dr. T. Raghunandan	30-01-2012
	Pashuutpattulalo krimisamharaka mandulu	AIR		
2	and roganirodaka residues-prajarogyampi prabhavam		Dr. T. Madhava Rao	26-3-2012
3	Vyapara ranga emu kola pempakam	AIR	Dr.A.Rajashekher Reddy	18.05.2012
4	Silage – Gorrela pempakam – Interview	AIR	Dr.M.Venkateswarlu	01.09.2012
5	Vyavasaya Pathasala – padi parishramaku kavalasina vanarulu.	AIR	Dr.T. Raghunandan	26-11-2012
6	Kundella pempakam lo melakuvalu	AIR	Dr.P. Amareswari	07.02.2013
7	Kouzula pempakam	AIR	Dr.P. Amareswari	05.03.2013
8	Vesavilo pashuposhana	AIR	Dr. N. Nalini Kumari	09.03.2013
9	Vesavilo Padilo Kalige Arthika Nastalu – Nivarana	AIR	Dr. Ch. Satyanarayana	----
10	Management of breeding rams	TV	Dr. T. Raghunandan	27.02.2012
11	Planning for production of green fodder round the year	TV	Dr.T. Raghunandan	27-02-2012
12	Vesavilo gedelu yedaku ravadam labhadyakam.	TV	Dr.T. Raghunandan	11-04-2012
13	Nirdantara pashugrasala utapattiki pranalikanu roopondinchuta.	TV	Dr. T. Raghunandan	11-04-2012

14	Vesavilo paadi pasuvula poshana	TV	Dr.M.Venkateswarlu	10.05.2012
15	Gorrelu mekala pempakam. (Live in)	TV	Dr. T. Raghunandan	10.05.2012
16	Gorrelu pempakamlo aadaya vyayalu	TV	Dr. T. Raghunandan	08-08-2012
17	Gorrelalo aarogya parirakshana	TV	Dr. T. Raghunandan	06-02-2013
18	Palallo kaltini ela kanugonuta	TV	Dr.N. Krishnaiah	07-02-2013
19	Sheep management	TV	Dr. T. Raghunandan	12.2.2013
20	Vesavilo pasuvula, gorrela poshana (live phone-in)	TV	Dr.M.Venkateswarlu	15-02-2013
21	Gorrela pempakam	TV	Dr. T. Raghunandan	04.03.2013
22	Pandula pempakam	TV	Dr. T. Raghunandan	10-03-2013
23	Takkuva kharchuto daana tayaruchesukovadam (live phone – in)	TV	Dr.M.Venkateswarlu	18-03-2013
24	Summer Management of Buffaloes	TV	Dr. T. Raghunandan	28.03.2013
25	Pasuvulalo bahya paraanna jeevula valana kalige rogalu-nivarana	TV	Dr. Ch. Satyanarayana	-
26	Melujathi padipasuvula empikaku suchanalu	TV	Dr.B.Punyakumari	November 2012
27	Pasuvulalo Sasthra Chikithsalu	TV	Dr.N.Dhanalakshmi	May 2012
28	Pasuvulalo prathama chikithsa TVCC Paadi pasuvulalo	TV	Dr.N.Dhanalakshmi	May 2012
29	balintha jabbulu – Nivarana Gynaecology	AIR	Dr N. Lakshmi Rani	11-01-2013
30	Padipasuvulalo kattunilavakapovadam karanalu – chikitsa	AIR Live	Dr. K.Veerabramhaiah	21-06-012

NTR College of Veterinary Science, Gannavaram

31	Maga gede doodala pempakam- aavasyakata	AIR	B.Subrahmanyeswari	30.01.13
32	Azolla pempakam – melakuvalu	AIR	B.Subrahmanyeswari	08.06.13
33	Semdriya pasu poshana- melakuvalu	TV	B.Subrahmanyeswari	25.03.13
34	Summer management on Poultry	AIR	Dr K.Naga Raja Kumari	28.02.2013
35	Turkey birds management	AIR	Dr K.Naga Raja Kumari	12.03.2013
36	Perati kola pempakum	AIR	Dr K.Naga Raja Kumari	18.03.2013
37	Pasu Daana Ku Prathyamnayamga Azolla	AIR	Dr D. Srinivas Kumar	26.09.2012
38	Sampoorna sameekrutha aahaaram thayari	TV	Dr D. Srinivas Kumar	1-12-2013
40	Laabha saati pandulapempakam	TV	Dr. P. Ashalatha	19-3-2013
41	Paadi pasuvula yajamanyam	AIR	Dr. P. Ashalatha	31-12-2013

College of Veterinary Science, Proddatur

42	Goat Rearing (Mekala Pempakam)	TV	Dr.S.Jagadeeswara Rao	29-03-2013
43	Oxytocin misuse in animals and its side effects in humans	AIR	Dr.L.S.S.Vara Prasad Reddy	28-08-2012
44	Importance of fodder crops – Cultivation practices	AIR	Dr.A.Anitha	07-09-2012
45	Padi pasuvula poshanalo pasu grasam	AIR	Dr.B.Deva Sena	08-11-2012
46	Vaccination in poultry Gorrela pempakam lo	AIR	Dr. P. Anand Reddy Dr.B.Deva Sena	27-11-2012
47	yajamanya paddathulu	AIR		31-01-2013

College of Veterinary Science, Korutla

48	Karuvu paristhithulalo pasuposhana	AIR	Dr.N.Rajanna	14-04-2012
49	Vesavilo palalo venna satham taggakunda undadaniki soochanalu	AIR	Dr .M.Kishan kumar	29-04-2012
50	Turkey Kolla pempakamulu Suchanalu	TV	Dr. V.Ravinder Reddy,	31-01-2013

College of Fishery Science, Muthukur

51.	Status of Shrimp culture in Nellore district	TV	Dr.Suguna	02.07.2012
-----	---	----	-----------	------------

RESEARCH STATIONS

Importance of Nellore Brown Breeding rams in up gradation of local stock and importance of number of Ewes per Ram	DD, Hyd	Dr. Ch. Harikrishna	
Summer management in Buffaloes	DD, Hyd	Dr. Ch. Harikrishna	
Azolla Propagation	AIR	Dr.K.Jalajakshi	27.02.2013
Samudra Chepala pempakam	AIR Visakhapatnam	Dr.B.Chamundeswarai Devi	
Panjaralalo chepala pempakam	AIR Visakhapatnam	Dr.B.Chamundeswarai Devi	
Vannamei sagulo melakuvalu	AIR Visakhapatnam	Dr.B.Chamundeswarai Devi	
Pacha peetala pempakam lo yajamanya paddathulu	AIR Visakhapatnam	Dr.B.Chamundeswarai Devi	
Samudra nacho mukkala ardhika pramukhyata	AIR Visakhapatnam	Dr.A.Chandrasekhara Rao	
mariyu sagu Vidhanalu			
Vannamei sagu chese rythulaku CAA suchanalu	AIR Visakhapatnam	Dr.A.Chandrasekhara Rao	
Uppuneeti cheruvullo Vannamei saguku suchannalu (Phone-in- live)	Doordarshan Hyderabad	Dr.B.Chamundeswarai Devi	

Peethala pempakam (Phone-in-live)	Doordarshan Hyderabad	Dr.B.Chamundeswarai Devi	
Uppuneeti lo pala chepala pempakam	Doordarshan Hyderabad	Dr.A.Chandrasekhara Rao	
Gorrelu, Mekala yajamanyamulo	Jai kisan Programme in	Dr.D.Anil Pavan Kumar	26-03-2013 & 28-03- 2013
melakuvalu – A training programme under RKVY	E TV2		

© EXTENSION PUBLICATIONS (POPULAR ARTICLES, PAMPHLETS etc)

S. No	Title	Authors	Publication details
1	Pashuutpattulalo krimisamharaka mandulu and roganirodaka residues- prajarogyampi prabhavam	Dr.T.Madhava Rao	Vyavasaya Panchangam ANGRAU (2012-13)
2	Gorrelu & Mekala Pempakam	Dr.T.Raghunandan	Vyavasaya Panchangam ANGRAU (2012-13)
3	Vesavilo Padi pashuvulalo Thisukovalasina Jagrathalu	M.Kishan kumar	Rythu Vignanam April 12-14
4	Deoni jati pashuvula pramukhyatha	M.Kishan kumar	Rythu Vignanam, May 14-17
5	Varshakalamlo Pashuvula Arogya Samrakshana	M.Kishan kumar	Vyavasayam June 19&20
6	Varshakalamlo Gedela Pempakam	M.Kishan kumar	Rythu Vignanam July 7-9
7	Kolla dhana thayarilo melakuvalu	Dr. Daida Krishna	Agriculture Today, June
8	Kolla methalo aflotoxin samasya –nivaranaopayalu	Dr. Daida Krishna	Poultry Today, August
9	Chalikalamlo Kola pempakam	Dr. Daida Krishna	Annadatha, November
10	Paalu, pala padarthalalo / avasheshalu - Pasuvula aarayam pi vati prabhavam	Dr.D.Suresh Babu	Pasunetstam, November

11	Vyarthalani sadhviniyogam chesukundam	Dr.D.Suresh Babu	Pasunetstam, January
12	Aavupaala vishistatha – oka vivarana	Dr.D.Suresh Babu	Annadatha, January
13	Health benefits of fish oil	B. Koteswar, Dr. T.Suguna and C. Prabhanjan Kumar Reddy	Aquatech, Vijayawada
14	Polyphenol uses in seafood conservation	K. Veeranjneyulu, B. Koteswar and C. Prabhanjan Kumar Reddy	Aquatech, Vijayawada
15	Melujathi pandula empika-ravaanalo theesukovalsina jaagrathalu	Ch. Harikrishna & P. Santhosh kumar	Annadhaata
16	Gorrepillalu, meka pillala posanalo yajamanya padhathulu	Ch. Harikrishna, T. Raghunandan & M. Jyothi	Vyavasaayam
17	Pragathi Pathamlo LRS, Siddarampuram	Dr. K. Jalajakshi	Pasunestham
18	Shubhramaina Paala Vuthpathi-Melakuvalu	Dr. Ch. Hari Krishna &	Pamphlets
19	Paadipasuvllo punaruthpathi yajamaanyam	Dr. M. V. Dharma Rao	
20	Vesavilo kolla yajamanyam	J. Narasimha S.T. Viroji Rao	Popular Article in Vyavasayam
	Rajasrikolla pempakamulo melakvalu	S.T. Viroji Rao J. Narasimha	Popular Article in Pasunestham
	Rajasrikolla pempakamulo melakvalu	S.T. Viroji Rao J. Narasimha V.Chinni Pretam D. Thammiraju D.krishna	Booklet

7 Popular articles on Sheep dairy cattle and fodders	B.Ekambaram and M.Kalyana Chakravarthy	Pashunestam, Annadata, Raithunestham etc.,
Gorrela, Mekara faaralu pettalanukuntunnara	LRS, Palamaner	Pamphlet
Gorrela Manda Abhivruddhi ki Pottelu pathra	LRS, Palamaner	Pamphlet
Laabhasaatiga thotallo pottelu pillala pempakam	Dr. Ch. Hari Krishna & Dr. M. V. Dharma Rao	Pamphlet
Jeevalanu aashinche Paraanna jeevulu- nivarana		
Jeevaalanu poshinchadamlo melakuvalu		
Distribution of Breeding Rams under RKVY.	Dr. K.Jalajakshi,	Vartha News papper
Management of Ram Lambs	Dr. K. Jalajakshi	Sakshi NewsPapper
'Pragathi Pathamlo' LRS, Siddarampuram	Dr. K. Jalajakshi	Pasunestham
Uppuneeti cheruvullo vannamei royyala saguku suchanalu	Dr.Chamundeswari Devi	Pasunestham, Nov. 2012
Uppuneeti cheruvullo labhakaramaina vannamei royyala sagu Part I	Dr.Chamundeswari Devi	Pasunestham, 21-22 Feb. 2013
Uppuneeti cheruvullo labhakaramaina vannamei royyala sagu Part.II	Dr.Chamundeswari Devi	Pasunestham, 31-32 March, 2013

Technologies assessed/transfered/patented/commercialised:

Microencapsulation of enzymes using compressed air spray was developed.

Microencapsulation of amylase, phytase, cellulose, hemicellulase, xylanase, pectinase and protease with alginate and other polymer combinations as encapsulating material was developed by the Department of Livestock products Technology, C.V.Sc, Rajendranagar.

Department of Extension Education has provided technology transfer and advisory services to livestock farmers and entrepreneurs on various activities of livestock farming on their visit to the campus during the year under report.

Department of Microbiology, C.V.Sc, Tirupati, developed a bivalent vaccine against footrot and conducted the experimental trials and small scale field trials in Chittoor district. Now it is planning to produce large quantities of vaccine for field use.

BMPs developed for control of Argulus (the fish louse) by periodical cleaning / burning of the feed bags and feed poles, trimming the marginal grass so that the parasite population recruitment is effective. This management technique is potential enough to delay the parasite population recruitment and thereby help the fish farmers to reduce the frequency of use of either pesticides or parasitic drugs. It has been accepted by the farmers and being implemented at farm level. This management strategy was developed as a part of RKVY project by College of Fishery Science, Muthukur.

EXTENSION CUM MASS CONTACT PROGRAMMES

ANIMAL HUSBANDRY POLYTECHNIC, VENKATARAMANNAGUDEM

4 guest lectures were organized by inviting the guest speakers :

Dr.D.M.Naik, Asst Director(A.H),Pentapadu delivered a guest lecture on Animal Health on 15.02.2013.

Dr.K.Kotilingaraju, Asst Director, V.H , Eluru delivered a guest lecture on Animal welfare programmes undertaken by the Animal Husbandry Department, on, Dt.27.02.2013.

Dr.D.Subhakar Rao, Asst Director(A.H)CSCC,Pentapadu delivered a guest lecture on Infectious Diseases of livestock occurring in West Godavari District on Dt.07.03.2013.

Dr.K.Ravichand, Vety. Asst Surgeon, V.D, pattempalem delivered a guest lecture on the topic- Gynaecological inventions in large animal practice: A practical approach on Dt.12.03.2013.

Livestock Research station, Palamner

Date	Name of the programme	No of farmers /participants/SHGs	Organised/ sponsored by
12-05-12	Exposure visit to Sheep farm for farmers from Chowdepalli mandal	30	ATMA, Chowdepalli BTT
25-6-12	Exposure visit to Sheep and Dairy Farm for farmers from Nellore District	50	FIAC-BTT ATMA,Palamaner
13-9-12	Exposure visit to Sheep and Dairy Farm for Self-Help Group women of Chittoor district under CLEW(communitiy managed livestock extension worker)	29	Deputy Director, VPC,Chittoor (DAHTC)
27-9-12	Exposure visit to Sheep and Dairy Farm for Self-Help Group women of Chittoor district under CLEW(communitiy managed livestock extension worker)	30	Deputy Director, VPC,Chittoor (DAHTC)
19-10-12	Exposure visit to Sheep and Dairy Farm for Self-Help Group women of Chittoor district under CLEW(communitiy managed livestock extension worker)	35	Deputy Director, VPC,Chittoor (DAHTC)

20-11-12	Exposure visit to Sheep and Dairy Farm for VAS, Agricultural officers, Horticultural officers, Sericulture officers, farmers from Gulbarga district, Karnataka	35	FIAC-BTT ATMA,Palamaner
03-2-13	Exposure visit to Sheep and Dairy Farm for Self-Help Group women of Chittoor district under CLEW(community managed livestock extension worker	36	Deputy Director, VPC,Chittoor (DAHTC)
10-2-13	Exposure visit to Sheep and Dairy Farm for Self-Help Group women of Chittoor district under CLEW(community managed livestock extension worker	24	Deputy Director, VPC,Chittoor (DAHTC)
27-02-13	One day training programme on sheep rearing	60	LRS,Palamaner, under RKVY project
28-02-13	One day training programme on sheep rearing and Dairying	23	VAS,V.D Palamaner, Gangavaram
7-03-13	One day training programme on Sheep rearing conducted at Kalikiri.	30	LRS,Palamaner, under RKVY project
8-03-13	Exposure visit to Sheep farm and Dairy farm for farmers from Kalikiri Mandal.	40	K.V.K, Kalikiri

LRS Mahanandi

12-02-2013, 14-02-2013, 19-02-2013 & 20-02-2013	Awareness regarding profitable Ongole cattle rearing	80	LRS, Mahanandi
--	--	----	----------------

Honors and awards

Sl.No	Name of the Teacher	Award	Organization	Achievement
1.	Dr.K. Kondal Reddy Professor & Head Department of LPT CVSc., Rajendranagar	State Level University Best Teacher Award	Govt. of Andhra Pradesh	Academic achievements and contributions
2.	Dr. A. Gopala Reddy Professor & Univ. Head Department of Pharmacology and Toxicology, CVSc., Rajendranagar			
3.	Dr. Y. Kotilinga Reddy Professor College of Dairy Technology Tirupati			
4	Dr.G.R.K.Sharma Assoc. Professor & Head Department of Vety. AH Extension CVSc., Tirupati	University Meritorious Teacher for the year 2012	SVVU, Tirupati	For outstanding contributions in the fields of teaching, research and extension
5	Dr. D. Rani Prameela Assoc. Professor & Head Department of Vety. AH Extension CVSc., Tirupati	University Meritorious Teacher Award	SVVU, Tirupati	Teaching, Research & Extension activities
6	Dr.M.V.A.N.Suryanarayana, Senior Scientist & Head LRS, Garividi	University Meritorious Research Scientist Award	SVVU, Tirupati	Research
7	Dr G. Vani, Asst Professor	Young Surgeon Award	Indian Society of Veterinary Surgery	Best paper presentation
8	Dr.J.V.Ramana, Prof.& Head C.V.Sc., Tiruapti.	Fellow of Society for Applied Biotechnology	Society for Applied Biotechnology, Dharwad	For the services rendered to the field of Animal Biotechnology
9	Dr. K. Lakshmi Kavitha	SVVU Young Scientist Award 2012	Sri Venkateswara Veterinary University	Research

10	V.Devi Prasad, Assistant Professor and Head Department of Veterinary Surgery & Radiology	Avian Surgery Session Award	Indian Society for Veterinary Surgery	For oral presentation of paper entitled surgical emergencies in birds
11	K. Rajesh, P. Rosser Binny, K. Suresh and N. Lakshmi Rani	Third rank for Clinical case Presentation	TANUVAS-VMRCVM International symposium	For Best Clinical case presentation Award in Companion Animal Medicine
12	Dr. V. Vaikunta Rao	P.K. das Gold medal for Small animal Medicine	ISVM	Outstanding contribution in small animal Medicine
13	Dr D Thammi Raju	Padmasri IV Subba Rao Rythunestham award 2012	Rythunestahm	Best Veterinary Scientits
14	Dr. M.Alpha Raj	INTASYoung Scientist award	ISVPT, Bangalore	Best oral presentation in the field of Pharmacokinetics
15	Dr.P.V.S.Kishore	Fellow Indian Association of Veterinary Anatomists	Indian Association of Veterinary Anatomists	Contribution to Veterinary Anatomy
16	Dr.N.Rajanna	2 nd Prize	Indian Society of Animal Genetics & Breeding	Best Poster
17	Dr.N.Rajanna	1 st Prize	Indian Society of Animal Production & Management	Best poster
18	Dr.Suresh Rathod	Hyderabad Race club Gold medal	S.V.V.U, Tirupati	Highest OGPA in Ph.D
19	Dr.B.Ekambara	Best Poster along with cash prize of ₹ 2000/- for the poster entitled conservation of Punganur cattle	National Symposium on Integrated development of Vast Biodiversity of indigenous livestock for long term rural livelihood security	Govind Ballabh Pant university of agriculture and technology, Pantnagar, Uttarakhand

Human Resources Development

Details of seminars/ Workshops/Summer School/ Training programmes attended:

College of Veterinary Science, Rajendranagar

	Name and Designation	Title	Duration	Place
1	Dr. D. Nagalakshmi, Assoc. Prof. of Animal Nutrition	Development of curriculum and self learning material for veterinary courses	15-17 May, 2012	APOSS, Hyderabad
2	Dr. K. Ram Chandra Reddy Asst. Prof. of Gynecology	VII Intl. Symposium on Canine and Feline reproduction	26-29 July, 2012	Whostler, British Columbia, Canada
3	Dr. Y. Narsimha Reddy Prof. of Microbiology	IAVMI conference	6-8 th Sept. 2012	Chennai
4	Dr. K.Kondal Reddy Professor of LPT	Intl. workshop on Effect of Climate on Ruminant Production Systems	21-28 Mar, 2013	Reunion Island, France
5	Dr. Ch. Satyanarayana Asst. Prof. of Extension	National Seminar on ICT and Future of Distance Education- Opportunities and Challenges	2 days	BRAOU, Hyderabad
6	Dr. M. Lakshman Dr. Jeevan Latha Asst. Profs. of Pathology	Workshop on Stress Management – Medical angle	12-14 Feb, 2013 3 days	NAARM, Hyderabad
7	Dr. P. Amareswari Asst. Prof. ILFC			
8	Dr. D. Ashok Kumar Asst. Prof. of Biochemistry			

9	Dr. T. Madhava Rao Professor of VPHE College of Veterinary Science, R'nagar.	National Symposium on "Improvement of Livestock Productivity through conventional breeding and emerging technologies in changing global scenario" of ISAGB.	2 Days (22-11- 2012 to 23-11- 2012)	SVVU
10	Dr. T. Madhava Rao Professor of VPHE College of Veterinary Science, R'nagar.	Regional Work shop on Livestock Breeding Policy in Andhra Pradesh organized by APLDA and Dept. of AH, Govt. of AP Kazipet, Warangal	18-02- 2013	SVVU
College of Veterinary Science, Tirupati				
11	Dr.K.Nalini Kumari Prof. & Univ. Head Dept. of Vety. Medicine	National seminar on emerging trends in canine cardio vascular medicine challenges and strategies organized on the eve of world heart day	29-09-12 to 30-09-12	CVSc., Tirupati
12	Dr.B.Shobhamani, Professor Dept. of Vety. Medicine	National workshop on viral vaccines and diagnostics	25-02-13 to 26-02-13	Dept. of Virology, CVSc, Tirupati
13	Dr.P.Eswara Prasad Prof. & Univ. Head Dept. of Vety. Biochemistry	Diagnostic and prognostic use of clinical, Imaging Immunohistochemical methods and biomarkers for cancer in animals	15-05-12 to 28-05-12	Dept. of Surgery & Radiology, C.V.Sc., Tirupati
14	Dr.K.Padmaja Associate Professor Dept. of Vety. Biochemistry	Emerging threats and chalenges to biodegrading policy frame work for sustainable management.	02-03-12 to 04-03-12	Dept. of Botany, S.V.University, Tirupati

		DNA bar-coding	09-08-12	Dept. of Sericulture, S.P.M.U, Tirupati
		International conference on Eco-technology sustainability science	29-02-12 to 02-03-12	S.V.Vedic University, Tirupati
15	Dr.Ch. Srilatha Prof. & Univ. Head Dept. of Pathology	Reproductive Stress management.	21-11-12 to 23-11-12	26 th Annual Convention & National Symposium of ISSAR , Assam
16	Dr.Ch.Srilatha, Prof. & Head and Dr.N. Sailaja Assistant Professor Dept. of Pathology	Training programme on Molecular approaches to animal disease diagnosis	Feb. 28 th to March 3 rd 2012	State level diagnostic Laboratory, Dept. of Microbiology, C.V.Sc., Tirupati
17	Dr.K.Sujatha Asst. Professor and Dr.N. Sailaja Asst.Professor Dept. of Pathology	National seminar on emerging trends in canine cardiovascular medicine- Challenges and strategies.	29-09-12 to 30-09-12	TVCC, C.V.Sc., Tirupati
18	Dr.Ch.Srilatha, Prof & Head and Dr.N. Sailaja Assistant Professor Dept. of Pathology	Diagnostic and prognostic use of clinical imaging, immuno histochemical methods and biomarkers for cancer in animals.	15-05-12 to 28-05-12	DBT sponsored short-term training course & Dept of Vety Surgery & Radiology, C.V.Sc., Tirupati
19	Dr.N.K.B.Raju Assistant Professor Dept. of Veterinary Anatomy & Histology	5 th International Conference on Laboratory Animal Medicine and Management	07-02-13 to 09-02-13	Hyderabad
20	Dr.G.R.K.Sharma Professor & Head Dept. of Extension	National workshop on Improving livelihoods of livestock farmers affected by Thane cyclone in Cuddalore District.	24-08-12 to 25-08-12	TANUVAS, Chennai
		Training programmes on Training methods for trainers of extension institutes of Agriculture and allied departments	27-08-12 to 31-08-12	MANAGE, Hyderabad

21	Dr.K. Kasturi Devi Asst.Professor Dept. of Pharmacology	National Seminar on Perspectives of Phytomedicine and medicinal plants conservation	22-03-13 to 23-03-13	Sri Venkateswara University, Tirupati
22	Dr. Umap Swati Ashok Rao Part time Teacher	National Seminar on Perspectives of Phytomedicine and medicinal plants conservation	22-03-13 to 23-03-13	Sri Venkateswara University, Tirupati
23	Dr. Afroz Jahan Part time Teacher	National Seminar on Perspectives of Phytomedicine and medicinal plants conservation	22-03-13 to 23-03-13	Sri Venkateswara University, Tirupati
24	Dr. Umap Swati Ashok Rao Part time Teacher	Indian Society for Veterinary Pharmacology and Toxicology	12-12-12 to 14-12-12	Bangalore
25	Dr. Afroz Jahan Part time Teacher	Indian Society for Veterinary Pharmacology and Toxicology	12-12-12 to 14-12-12	Bangalore
26	Dr M. Srinivas, Assoc. Prof.& Head TVCC	National Symposium on Addressing Animal Reproductive Stresses Through Biotechnological Tools and XXVIII Annual Convention of The Indian Society for Study of Animal Reproduction	21-11-12 to 23-11-12	CVSc, Assam Agri. Univ, Khanapara, Guwahati
27	Dr N. Lakshmi Rani, Assoc Professor TVCC	National symposium on Advancing Veterinary Medicine and its specialties for augmented productivity and health: Issues and strategies in farm and companion animals	09-01-13 to 12-01-13	CVSc, Mhow, MP
28	Dr G. Vani, Asst Professor, TVCC	Animal Birth control programme	02-01-13 to 04-01-13	Madras Veterinary College, Chennai
	Dr G. Vani, Asst Professor, TVCC	Principles & Practices in Imaging & Endoscopy in Farm and Pet animal practice	01-02-13 to 21-02-13	Madras Veterinary College, Chennai

		International conference on thrust areas in Veterinary research, education, regulatory reforms & governance for quality services to farmers	16-04-13 to 17-04-13	College of Veterinary Science, Hebbal, Bangalore
29	Dr. D. Rani Prameela Asst. Professor & Head Dept. of Microbiology	National seminar on Problems in Leptospirosis	3 days	New Delhi
30	Dr.N. Vinod Kumar Asst. Professor & Head Dept. of Microbiology	National lecture workshop on viral vaccines and diagnostics	2 days	S.V. University Tirupati

NTR college of veterinary science, Gannavaram

31	Dr.G.Venkat Naidu Dept of ARGO	Augmentation of Fertility in buffaloes under field conditions	3 days	Andhra Pradesh Veterinary Council, Hyderabad
32	Dr.B.Subrahmanyeswari Department of Veterinary & A.H.Extension	Workshop on Organic Animal Husbandry to the field veterinarians of Krishna District of Andhra Pradesh	One day (16th November 2011)	SVVU, Tirupati
	Dr.B.Subrahmanyeswari Department of Veterinary & A.H.Extension	Educational technology and Instructional Methodology	Four days	Faculty Improvement programme by NAARM, Hyd,
33	Dr.Y.Nagamalleswari Associate Professor Dept of Anomaty	XXVII Annual convention of IAVA and National symposium	28 th -30 th Nov.2012	C.V.sc. Mannuthy Kerala
	Dr.Y.Nagamalleswari Associate Professor Dept of Anomaty	48th Annual Veterinary Medical Symposium	March 20th-23rd, 2013	CVMNAH, Tuskegee University, Tuskegee, Alabama, USA
34	Dr. P. Anand Kumar, Assoc Professor	Training on Real time PCR	28-11-2012 to 30-11-2012	Invitrogen Bioservices India Ltd, Bengaluru
	Dr. P. Anand Kumar, Assoc Professor	Seminar & Training on Rabies diagnosis	27-01-13 to 30-01-13	CVSc, Hebbal, Bengaluru
35	Dr. R.N. Ramani Pushpa, Assistant Professor	XXVI Annual convention of LAVMI and International seminar on Future of	06-09-2012 to 08-09-2012	Madras Veterinary College, Chennai

		Livestock Health: A Paradigm Change to Maximize Productivity for Economic Gains” For presenting oral presentation on Control of Colibacillosis in quails.		
36	Dr. M. Muralidhar, Assistant Professor	Annual conference of Indian Society for Animal genetics and Breeding	22.11.2012-23.11.2012	Hyderabad
	Dr. M. Muralidhar, Assistant Professor	Research-extension-farmer interface meeting on cattle breeding policy for East Godavari District	05.01.2013	Rajahmundry, East Godavari Dist
	Dr. M. Muralidhar, Assistant Professor	Workshop on “Multi-stakeholders consultancy”	18.01.2013-19.01.2013	Hyderabad
	Dr. M. Muralidhar, Assistant Professor	Regional Workshop on “Breeding Policy”	23.01.2013	Payakarao peta, Vishakapatnam District
	Dr. M. Muralidhar, Assistant Professor	National workshop on Foresight and future pathways of agricultural research through youth in India.	01.03.2013-02.03.2013	New Delhi
37	Dr.K.Naga Raja Kumari Assistant Professor	XXIX Annual Conference & National Symposium of Indian Poultry Science Association(IPSACON ,2012)	3 days	Rajendranagar, Hyderabad
38	Dr. Ch. Jyothi Sree, Assistant Professor	XVI National Training Programme on Biotechnological Applications in Veterinary Parasitology.	19-11-12 to 09-12-12 (21 days) training programme	Bangalore Veterinary College, Hebbal
39	Dr.E.Naga Mallika Assistant Professor	Summer school on “Opportunities in Value addition and challenges in quality control of meat	4-07-2012 to 24-07-2012	Department of Meat Science and Technology, VCRI, Namakkal

		products including slaughter house by products'		
40	Dr.E.Naga Mallika Asst Prof	XXIX Annual conference and National symposium of Indian Poultry science Association	5 th to 7 th December 2012	PDP, R' Nagar, Hyderabad
	Dr.E.Naga Mallika Asst Prof	V th Annual conference and National Symposium of Indian Meat Science Association	7 th to 9 th February 2013	NRC, Hyderabad
41	Dr. Ramesh.P, Assistant Professor	PRINCIPLES AND PRACTICES IN IMAGING AND ENDOSCOPY IN FARM AND PET ANIMAL PRACTICE"	01.02.2013 to 21.02.2013 (21 days)	CAFT. Department of Veterinary Clinical Medicine, Ethics and Jurisprudence, Madras Veterinary College, Chennai".
	Dr. Ramesh.P, Assistant Professor	National Symposium on "Advancing Veterinary Medicine and its Specialities for Augmented Productivity and Health: Issues and strategies in farm and companion animals "	January 9-11, 2013	College of Veterinary Science and Animal Husbandry, Mhow, Madhya Pradesh.
	Dr. Ramesh.P, Assistant Professor	An Overview on Imaging techniques in Veterinary Practice	02.03.13	Model class room, T.V.C.C, N.T.R.C.V.Sc, GANNAVARAM.
42	Dr. V. Vaikunta Rao	Advancing Veterinary Medicine and its specialities augmented productivity and animal Health: Issues and strategies in farm and companion animal	9-01-13 to 11-01-13	Mhow, Madhya Pradesh

43	Dr. P. Annapurna Assistant Professor	ICAR Short training course on Multipronged approaches for Surveillance and Diagnosis of Brucellosis	19 to 28 th February 2013	PD - ADMAS, Bangalore
44	Dr. Dsrinivasa Kumar Assist Prof	Survey design and Data analysis using SAS in Social Sciences	10 days	NAARM, Hyderabad
		8 th Biennial ANA conference, 2012 on Animal Nutrition Research Strategies for Food Security	8 days	Rajasthan University of Veterinary & Animal sciences, Bikaner
45	Dr. K. Raja Kishore Assist Prof	Clinical Nutrition Approaches for Health and Productivity of Farm Animals	21 days	IVRI, Izatnagar
	Dr. K. Raja Kishore Assist Prof	8 th Biennial ANA conference, 2012 on Animal Nutrition Research Strategies for Food Security	3 days	Rajasthan University of Veterinary & Animal sciences, Bikaner
College of Veterinary Science, Proddatur				
46	Dr. K.Adilaxmamma Professor & Head	International Conference on Environmental impact on human health and therapeutic challenges	20-12-12 to 22-12-12	SVU, Tirupati
	Dr. K.Adilaxmamma Professor & Head	National Conference on Perspectives of Phytomedicine and medicinal plants conservation	22-03-13 to 23-03-13	SVU, Tirupati
47	Dr. D. Thammi Raju Professor & Head	Improving Livelihoods of Livestock farmers affected by THANE cyclone in Cuddalore District	Two days	Cuddalore
48	Dr.Y.Ravindra Reddy Professor & Head	International conference on biodiversity and sustainable energy development	Two days	International Convention Centre, Hyderabad

49	Dr.R.V.Suresh Kumar Professor & Head	36 th Annual congress of ISVS and International symposium on ruminant surgery in poly clinics co-operative dairies and shelters perspective-2020	3 days 01-11-2012 to 03-11-2012	Anand Agricultural University, Gujarat
50	Dr. A. Anand Kumar Professor & Head	LASA Symposium as invitee and co-chaired scientific session	08-02-13 to 09-02-13	Hyderabad
51	Dr. V. Chengalva Rayulu Professor & Head	XVI National training programme on biotechnological applications in veterinary parasitology	19-11-12 to 09-12-12	Veterinary College, Bangalore
	Dr. V. Chengalva Rayulu Professor & Head	XXIII National congress of Veterinary Parasitology “Parasitology Today: from environmental and social impact to the application of Geoinformatics and modern biotechnology”	12-12-12 to 14-12-12	Guwahati, Assam
52	Dr. L. Venkateswara Rao Professor & Head	5 th Annual conference & national symposium of Indian Meat Science Association	07-02-13 to 09-02-13	Hyderabad
53	Dr. P. Jagapathi Ramaiah Professor & Head	27 th Annual convention and national symposium of IAVA	28-11-12 to 30-11-12	Mannuthy, Kerala
54	Dr. B. Sreedevi Professor & Head	XXIX Annual conference & national symposium of Indian Poultry Science Association	05-12-12 to 07-12-12	Rajendranagar Hyderabad
	Dr. B. Sreedevi Professor & Head	17 th Asian regional meeting & conference on strengthening of rabies diagnosis in Asia	28-01-13 to 30-01-13	Veterinary College, Bangalore
55	Dr.B.Eswara Rao, Associate Professor & Head	Commercial and rural poultry production: Novel concepts and strategies to meet	5 th - 7 th December, 2012	Project Directorate on Poultry, Rajendranagar,

		growing demand and changing consumer needs		Hyderabad
56	Dr.B.Eswara Rao, Associate Professor & Head	Emerging technological changes to meet the demands of domestic and export meat sector	7 th - 9 th February, 2013	National Research Centre on Meat, Hyderabad
57	Dr.B.Deva Sena, Associate Professor & Head	International Conference on Environmental impact on human health and therapeutic challenges	20-12-12 to 22-12-12	SVU, Tirupati
	Dr.B.Deva Sena, Associate Professor & Head	National Work shop on Viral vixens and diagnostics	25-02-13 to 26-02-13	SVU, Tirupati
	Dr.B.Deva Sena, Associate Professor & Head	National Conference on Perspectives of Phytomedicine and medicinal plants conservation	22-03-13 to 23-03-13	SVU, Tirupati
58	Dr. A. Jagadeesh Babu Associate Professor	5 th Annual conference & national symposium of Indian Meat Science Association	07-02-13 to 09-02-13	Hyderabad
59	Dr. D. Rani Prameela Associate Professor	International Conference on Environmental impact on human health and therapeutic challenges	20-12-12 to 22-12-12	SVU, Tirupati
	Dr. D. Rani Prameela Associate Professor	Multipronged approaches for the diagnosis and Surveillance of Brucellosis	19-02-13 to 28-02-13	PDADMAS, Bangalore
60	Dr. K. Sujatha Associate Professor	Anthropogenic impact on environment and bio-remediation, ICAIEB-2012	3days 26-11-12 to 28-11-12	SVU, Tirupati
61	Dr. R. Veena Associate Professor	Principles and practices in imaging and endoscopy in farm and pet animal practice	21 days 01-02-13 to 21-02-13	MVC, Chennai
62	Dr. S. Bharathi Associate Professor	Principles and practices in imaging and endoscopy in farm and pet animal practice	21 days 01-02-13 to 21-02-13	MVC, Chennai

63	Dr. B.Rambabu Naik Associate Professor	Augmentation of live stock production through upstream reproductive technologies	21 days 24-01-13 to 13-02-13	IVRI, UP
	Dr. B.Rambabu Naik Associate Professor	Emerging trends in canine cardiovascular medicine, challenges and strategies organize on the eve of world heart day	2 days 29-09-12 to 30-09-12	Tirupati
	Dr. B.Rambabu Naik Associate Professor	Physiological research in changing environmental scenario for sustainable live stock and poultry production	3 days 06-11-12 to 08-11-12	Gujarath
	Dr. B.Rambabu Naik Associate Professor	Anthropogenic impact on environment and bio-remediation, ICAIEB-2012	3days 26-11-12 to 28-11-12	Tirupati
	Dr. B.Rambabu Naik Associate Professor	Female urology live operative workshop	1 day 30-12-12	SVIMS, Tirupati
	Dr. B.Rambabu Naik Associate Professor	Effective communication	03-09-12 to 06-09-12	MANAGE Hyderabad
	Dr. B.Rambabu Naik Associate Professor	Diagnostic and prognostic use of clinical, imaging, immune histochemical methods and biomarkers for cancer in animals	15-05-12 to 28-05-12	SVVU, Tirupati
64	Dr.M.Alpha Raj, Assistant Professor	12 th annual conference of ISVPT	12-12-12 to 14-12-12	Veterinary College, Bangalore
65	Dr.C.Pavan Kumar, Assistant Professor	31 st Annual convention of IVSM “Advancing Veterinary Medicine and it’s specialties for augmented productivity and health: Issues and strategies in farm and companion animals	09-01-13 to 11-01-13	MHOW, Madhya Pradesh

66	Dr.G.Vijaya Bhaskar Reddy, Assistant Professor	Emerging technological changes to meet the demands of domestic and export meat sector	7 th - 9 th February, 2013	National Research Centre on Meat, Hyderabad
67	Dr. Amaravathi Assistant professor	Anthropogenic impact on environment and bio-remediation, ICAIEB-2012	3days 26-11-12 to 28-11-12	Tirupati
68	Dr. L.Sivasudharsan Assistant professor	International work shop on cutaneous reconstructive surgery in small animals	2days	MVC, Chennai
69	Dr.R.Sai Dilip Gupta, Assistant Professor	Emerging technological changes to meet the demands of domestic and export meat sector	7 th - 9 th February, 2013	National Research Centre on Meat, Hyderabad
College of Veterinary Science, Korutla				
70	Dr.P.V.S.Kishore	IAVA Convention & National conference	28 th -30 th Nov 12	Thrissur ,Kerala
	Dr.P.V.S.Kishore	Lab. Animal scientists Association of India	7 th - 9 th Feb 2013	Hyderabad
71	Dr.N.Rajanna	ISAGB-National symposium	22 nd -23 rd Nov 2012	Tirupati
	Dr.N.Rajanna	National seminar on ISAPM	28 th – 30 th Jan 2013	NDRI,,Karnal
	Dr.N.Rajanna	Training programme on Managerial skills for Extension personnel	3 rd -6 th Mar 2013	MANAGE.,Hyderabad
	Dr.N.Rajanna	Training programme "Supply chain Management in Agriculture	11-14 th Mar 2013	MANAGE, Hyderabad
72	Dr.D.Nagalkashmi	1 st Qrt.-AICRP meeting of South zone of AICRP project on Improvement of feed resource utilization for raising animal production of Hyderabad centre	16-17 th Nov 2012	Mannuthy ,Kerala
	Dr.D.Nagalkashmi	1 st Task force meeting of Biotechnology of DBT for 2 nd year Annual report of the DBT Project "Dietary modulation of zinc in buffaloes :Effect on	4 th Dec 2012	SKUAST,Jammu

		growth ,immune response and ovarian follicular dynamics		
73	Dr.D.Nagalkashmi	XXIX Annual conference and national symposium of Indian Poultry science Association IPSACON 2012 on Commercial and Rural poultry production :Novel concepts and strategies to meet growing demand and changing consumer needs	5-7 th Dec, 2012	PDP, Hyderabad
74	Dr. V. Ravinder Reddy	XXIX Annual conference and national symposium of Indian Poultry science Association IPSACON 2012 on Commercial and Rural poultry production :Novel concepts and strategies to meet growing demand and changing consumer needs	5-7 th Dec,2012	PDP, Hyderabad
75	Dr.G.Alexander	Winter school on Advances in functional genomic concepts and techniques for quality ruminant and poultry production	26 th Sep-16 th Oct 2012	National Institute of Animal Nutrition and Physiology ,Bangalore
76	Dr.M.Kishan kumar	Work shop at NAARM on Technology Management for Researchers	7 days	NAARM ,Hyderabad
77	Dr.Suresh Rathod	New Paradigm in Livestock production: From traditional to commercial farming and beyond xx th annula Convention of ISAPM	3 days	NDRI, Kranal

78	Dr.K.V.Subrahman yam	Approaches for the diagnosis and surveillance of Brucellosis	19 th - 28 th Feb 2013	ADMAS,Hebbal , Bangalore
79	Dr.D.Sakaram	Recent development in epigenetics, structural and functional genomics for animal genetic resources conservation augmentation of productivity in poultry and livestock sps	17 th to 26 th Nov 2012	PDP, Hyderabad
	Dr.D.Sakaram	Bioinformatics for conservation and improvement of animal genetic resources	18 th to 28 th Feb 2013	NBAGR, Karnal
80	Dr. B. Sridevi	Attended training 21 days ISAGB national symposium	5 th to 25 th Oct 22 nd and 23 rd Nov	IASRI, Delhi Hyderabad
81	Dr. J. Saiprasanna	ISAGB national symposium	22 nd and 23 rd Nov	Hyderabad
College of Dairy Technology, Tirupati				
82	Dr. V. Padmanabha Reddy Associate Dean	National workshop on Revamping Dairy Education and Research in Dairy Processing to meet global challenges	27 th and 28 th Sep, 2012	Dairy Science College, Mannuthy, Kearala
83	Mr. B.M.Manjunth Assistant Professor	Scientific Report writing & Presentation	20 th to 23 rd Nov, 2012	NAARM Hyderabad
84	Ms. G.S.Spoorthy Assistant Professor	Dairy Entrepreneurship Development	26 th Nov to 3 rd Dec, 2012	Dairy Science College, Hebbal, Bangalore
Dairy Technology Programme, Kamareddy				
85	Smt. V. Vijaya Geetha Asst. prof.	Innovative approach to E- learning	Sep11 to 20 2012	NAARM
86	Dr. K. Ranga Rao, Officer in-charge	Intellectual property Rights and Biotechnology	21.09.2012 to 25.09.2012	NAARM, Hyderabad
	Dr. K. Ranga Rao, Officer in-charge	Interactive workshop on Development of e-courses for B. Tech (Dairy Technology) on E material .	31.01.2013	NDRI , Karnal

87	Dr. K. Ranga Rao, Officer in-charge	Supply chain in Agriculture in marketing	11.03.2013 to 14.03.2012	Manage Hyderabad
88	Sri. Sripad Asst. Professor	Attended Coordinators meeting of NISAGENET	23.03.2013	Tirupati
College of Fishery Science, Muthukur				
89	Dr.T.Suguna	Aqua Aquaria India	8-10 th feb 2013	Vijayawada
90	Dr.HariBabu	Aquatic Animal Diseases	17-18 April, 2012	National Bureau of Fish Genetic Resources ICAR, Luknow, UP.
91	Dr.T.Suguna	Network on Fish Health	08.08.2012	Central Institute of Brackish water Aquaculture (CIBA), ICAR, Chennai
Research Stations				
92	Dr. S.T.Viroji Rao Dr. J. Narasimha	XXIX Annual Conference and National Symposium of Indian Poultry Science Association (IPSACON 2011112) on Commercial and rural poultry production :Novel concepts and strategies to meet growing demand and changing consumer needs,	22-23 rd November, 2012	Hyderabad
93	Dr. J. Narasimha	Nutritional and Management strategies to exploit genetic potential of hybrid poultry	22.08.2012 to 11.09.2012	VC & RI Namakal
94	Dr. Ch. Harikrishna	Improvement of Livestock Productivity through conventional breeding and emerging technolgies in changing global scenario	22-11-2012 to 23-11-2012	Hyderabad
		Regional Work shop on Livestock Breeding Policy in Andhra	18-02-2013	Warangal

		Pradesh organized by APLDA and Dept. of AH, Govt. of		
95	Dr. M.V.A.N.Suryanarayana	1 st International Conference on Animal Nutrition and Environment (ANINUE-2012)	14 th -15 th September, 2012	Khonkaen, Thailand
96	Dr.B.Ekambaram, Principal Scientist	National Symposium on Improvement of Livestock Productivity through conventional breeding and emerging technologies in changing global Scenario- Challenges, prospects and retrospects	22-23 November, 2012	College of Veterinary Science, Hyderabad.
97	Dr.B.Ekambaram, Principal Investigator	Midterm review meeting on Network Project on Sheep Improvement	02-01-2013 and 03-01-2013	Central Sheep and Wool Research Institute guest house, Jaipur, Rajasthan.
98	Dr.B.Ekambaram, Principle Scientist	National Symposium on Integrated development of Vast Biodiversity of indigenous livestock for long term rural livelihood security	7 to 8 th February, 2013	Govind Ballabh Pant university of agriculture and technology, Pantnagar, Uttarakhand

Details of seminars/ Workshops/Summer School/Training programmes organised:

Sl. No.	Title of the Programme	Place	Duration (d)	Sponsoring agency	No. of participants
1	National Symposium on "Improvement of Livestock Productivity through Conventional Breeding and Emerging Technologies in changing Global Scenario – Challenges, Prospects and Retrospects" and XII Annual Conference of the ISAGB	C.V.Sc., Rajendranagar	22-23 Nov, 2012 (2 days)	ISAGB and SVVU	300

2	Veterinary Journalism and Public Relations	Dept. of Extension C.V.Sc., Rajendranagar	2	APVC	45
3	Preparation, Propagation and supply of low cost feed by using crop residues and agricultural by products	Six programs in different districts	1 day each	RKVY	314 in all the six programs
4	XXIX Annual Conference and National Symposium of IPSA (IPSACON 2012) on “Commercial and rural poultry production: Novel concepts and strategies to meet growing demand and changing consumer needs	Hyderabad	5 th to 7 th Decem-ber, 2012	PDP, SVVU, IPSA	
5	Food Safety and Livestock products”	Department of Veterinary Public Health	Two days (25-26 April; 4-5 and 8-9 May, 2012	A.P.Ve-terina-ry Council, Hyder-abad	36 in all the three batch-es
6.	Awareness about zoonotic diseases - Need of the hour	Dept. of Veterinary Medicine CVSc,Tirupati	One day 6th July 2012	SVVU Tirupa-ti	90
7.	National training programme on “Diagnostic and prognostic use of clinical, imaging, immunohistochemical methods and biomarkers for cancer in animals” by the Dept. of Surgery & Radiology	C.V.Sc, Tirupati	15-05-12 to 28-05-12	DBT	45
8	Model training course on “Integrated Livestock Farming System for Sustainable Rural Livelihoods” by the Dept. of LPM	C.V.Sc, Tirupati	21-08-12 to 28-08-12		24
9.	Awareness and interaction programme on footrot Dept. of Microbiology	C.V.Sc, Tirupati	31-01-13	RKVY	22
10	Educational Technology & Instructional Methology	NTR CVSc, Gannavaram	6-5-2013 to 9-5-2013	ICAR	25

11	Management, feeding, diet control practices in rajasri birds rearing	College of Veterinary Science, Proddatur.	1 day July, 2012	RKVY project	150
12	Management, feeding, diet control practices in rajasri birds rearing	College of Veterinary Science, Proddatur.	1 day November, 2012	RKVY project	134
13	7th Convention of Indian Dairy Engineers Association and National Seminar on “Automation in Dairy and Food Industry”	College of Dairy Technology, Tirupati	24 th and 25 th Sep, 2012	SV Veterinary University and Indian Dairy Engineers Association	95
14	“Assessment of Training Needs and Possible Academic Partnerships”	College of Fishery Science, Muthukur	16.11.2013	SVVU & (CIF E), ICAR, Mumbai	100
15	2 nd year Polytechnic students	Sheep farm management	15 days	Madakasira	20
16	Farmers of Rural.	Disease Management in sheep.	--	Anantapur	80
17	Field supervisors	Fodder Varieties & Lamb Management.	--		80
18	Training to Gopala Mitras.	Goat farm management & Fodder Varieties.	--	A.P.L.D.A	45

PUBLICATIONS (Including abstracts of conferences and Research papers)

Sl. No.	Title of the paper	Authors	Conference / Journal	Year
1.	Rajasree birds – A contributing factor to increase the rural women economic growth	Krishna. Daida, Ramarao. S.V. Prakash. B. Chinni Preetam.V ,	Abstract accepted in the Indian Poultry Science Association XXVII Annual	2011

			Conference and International Symposium on Rural Employment Generation and Nutritional Security through Poultry Production	
2.	Effect of Graded Levels of inorganic chromium on the performance and immune competence in Rajasree birds	Daida. Krishna, Ramarao S.V, Rajashekher Reddy. A. Manoj Kumar. V.	First Annual Conference of Association of Avian Health Professionals Organized by Project Directorate on Poultry, Rajendranagar,	2012
3.	<i>Socio economic profile and flock management practices of sheep farming in Telangana region of A.P.</i>	Rajanna N, Mahender, M and Thammi Raju D	<i>Indian Veterinary Journal</i> Accepted for publication	
4.	<i>Constraints in management of buffaloes in Khammam district of Andhra Pradesh Farmer's perception</i>	Kishore, K., Mahender, M., Thammi Raju, D and Harikrishna, Ch	<i>Current Advances in Agricultural Sciences</i> Vo;3 (2) pp 151-153	
5.	<i>Capacity Building of Women Self Help Groups (WSHG) in Dairying – An analysis</i>	Thammi Raju D and Deepa M	<i>Journal of Rural Development</i> Vol. 30(1) pp 91-100	
6.	Surgical Treatment of a macrostomia in a buffalo calf	Dr. K. Ram Chandra Reddy, Dr. K.C.S. Reddy and Dr. K. Murali Mohan	Ind. J. Vet. Surg. 32 (1): 70 June, 2011	2011
7.	Dystocia due to dicephalus monstomus monster in a crossbred cow	Dr. K. Sadasivarao	Ind.J. Anim. Reprod. 32: 75 2011	2011

8.	Therapeutic efficacy of Mifepristone, Cabergoline and Cloprostenol for Termination of pregnancy in bitches.	Dr. K. Ram Chandra Reddy	Ind. J. Anim. Reprod. 31 (2): 19-22, 2011	2011
9.	Treatment of hydrometra in does by using cloprostenol	Dr. K. Ram Chandra Reddy	XXVII Annual Convention of ISSAR held on Sept. 27-29, 2011 at Dept.of ARGO, CVSc&AH, Aizwal, Mizoram. Page No. 36, Abst.No ICM – 22	2011
10	Dystocia in a Jamnapari goat due to accumulation of fluid in intestines of fetus	Dr. G. Aruna Kumari et al. (2011)	XXVII Annual Convention of ISSAR held on Sept. 27-29, 2011 at Dept.of ARGO, CVSc&AH, Aizwal, Mizoram. Page No. 116, Abst.No PPC – 3	2011
11	Dystocia in a bitch	Dr. G. Aruna Kumari et al. (2011)	XXVII Annual Convention of ISSAR held on Sept. 27-29, 2011 at Dept.of ARGO, CVSc&AH, Aizwal, Mizoram. Page No. 117, Abst.No PPC – 6	2011
12	Conjunction of antibiotics prevalent in milk with BSA and production of antibodies against them	Dr.Sampath Kumar Dr.A.Mohan Rao Dr.Vasili Ashok	80 th Annual Meeting of the society of Buological chemists of Inida, At Central Institute of Medicinal Aromatic Plants, Lucknow November-2011	2011

13	Use of plant extracts of <i>Leucas aspera</i> and <i>annona squamosa</i> as pesticides	Dr.Sampath Kumar Dr.A.Mohan Rao Dr.Vasili Ashok	80 th Annual Meeting of the society of Buological chemists of Inida, At Central Institute of Medicinal Aromatic Plants, Lucknow November-2011	2011
14	Production of biogas from urban waste by abundant micro organisms of soil under shade	3 rd year B.V.Sc., & A.H students Dr.Sampath Kumar Dr.A.Mohan Rao Dr.Vasili Ashok	80 th Annual Meeting of the society of Buological chemists of Inida, At Central Institute of Medicinal Aromatic Plants, Lucknow November-2011	2011
15	Performance of Nellore Sheep (jodipi) under farm conditions	B.Ekambaram, M Kalyana Chakravarthy, G.Alexander	Indian Vet. Journal	2012-13
16	Performance of Punganur cattle	B.Ekambaram, M Kalyana Chakravarthy, G.Alexander	Indian Vet. Journal	2012-13
17	Multi trait selection indices for improvement of growth traits in Japanese quails	K. Sakunthala Devi, B. Ramesh Gupta, M. Gnana Prakash, S. Qudratullah an A Rajasekhar Reddy	Tamilnadu J. Vety & Animal Sciences	2011
18	Genetic parameters of feed efficiency in Japanese quails	K. Sakunthala Devi, B. Ramesh Gupta, M. Gnana Prakash, S. Qudratullah an A Rajasekhar Reddy	Tamilnadu J. Vety & Animal Sciences	2011
19	Sequences of Genes Encoding Type-Specific and Group-Specific Antigens of an Indian Isolate of	Gollapalli SR, Mallavarapu S, Uma M, Rao PP, Susmitha B, Prasad PU, Chaitanya P,Prasad G, Hegde NR, Reddy YN	Transboundary and Emerging Diseases. 2011 DOI: 10.1111/j.1865-1682.2011.01266.	2011

	Bluetongue Virus Serotype 10 (BTV-10) and Implications for their Origin			
20	Evidence of bluetongue virus serotype 21 (BTV-21) divergence	B Susmitha, D. Sudheer, Panduranga Pavuluri Rao, Madala Uma, Nagendra R Hegde, Narasimha Y Reddy	Virus Genes 2012 44: 466-469	2012
21	Genetic characterization of bluetongue virus serotype 9 isolates from India	Rao PP, Reddy YV, Meena K, Karunasree N, Susmitha B, Uma M, Prasad PU, Chaitanya P, Reddy YN, Hegde NR	Virus Genes. 2012 44: 286-294	2012
22	Effect of feeding straw based complete diet supplemented with thermotolerant probiotic yeast on rumen fermentation pattern in Nellore rams	Ch. Harikrishna, M. Mahender, Y. R.Reddy, M. G. Prakash, D. B. V. Ramana, N. Rajanna and Nalini Kumari N.	Indian Journal of Animal Nutrition. 28(4): 112-114	2011
23	Effect of dietary supplementation of certain enzymes on growth performance and feed conversion efficiency in Yorkshire piglets	K. Kondal Reddy, P. V. M. Reddy, Ch. Harikrishna, D. Naga Lakshmi and T. Raghunandan	Indian Journal of Animal Sciences. 81 (12): 1259-1261	2011
24	Constraints in management of buffaloes in Khammam district of Andhra Pradesh: farmer's perception	K. Kiskore, M. Mahender, D. Thammiraju and Ch. Harikrishna	Current Advances in Agricultural Sciences. 3(2): 151-153	2011
25	Genetic Improvement in sheep and goats.	Ch. Harikrishna and P. Amareswari	Raksha Technical Review. 1 (2): 33-40	2011
26	Selection Of Breeding Stock In Small Ruminants	Ch. Harikrishna and P. Amareswari	Raksha Technical Review. 1 (3): 38-43	2011

27.	Effect of dietary inclusion of yeast culture (Saccharomyces cerevisiae of Grade Murrah buffalo bull calves.)	Srinivas Kumar. D, J. Rama Prasad, E. Raghava Rao	Buffalo Bulletin 30(1): 63 – 66	
28	Effect of supplementation of yeast culture in the diet on milk yield and composition in Grade Murrah buffaloes.	Srinivas Kumar. D., J. Rama Prasad & E. Raghava Rao.	Buffalo Bulletin 30(1): 100 - 104.	
29	Temperament of Murrah buffaloes in different lactations and its effect on the milk yield.	R.M.V. Prasad, P.Jaya Laxmi and D.S.Kumar	Indian Journal of Animal Research 45 (3): 219 – 222	
30	Influence of diet supplementation with Saccharomyces cerevisiae on intake and nutrient utilization in Graded Murrah buffaloes.	Srinivas Kumar. D., J. Rama Prasad & E. Raghava Rao.	Veterinary world. 4: 22 – 24.	
31	Effect of MilQx – a commercial rumen specific probiotic on milk yield and milk composition in Holstein Friesian cows under tropical condition.	Srinivas Kumar. D., E. Raghava Rao, R. Sowjanya & V. Karuna Sri.	Animal Science Reporter. 5: 54 – 58.	
32	Rumen fermentation pattern in graded Murrah buffalo bulls fed on Levucell SC -20 yeast (Saccharomyces cerevisiae CNCM – 1077) culture.	Srinivas Kumar. D., J. Rama Prasad & E. Raghava Rao.	Animal Science Reporter. 5: 43 – 49.	

33	Effect of Cottonseed Meal Inclusion in Diets of Catla catla (Hamilton,1822)	B.PavanKumar,B. Chamundeswari Devi, D.R.K. Reddy and A. Balasubramanian		Continental J. Fisheries and Aquatic Science 5(3): 14 – 18, 2011
34	Use of Cottonseed meal to the feeding of fish - Aqua International.	By B. Pavan Kumar, B. Chamundeswari Devi, D.R.K. Reddy and A. Balasubramanian	Aqua International	
35	Incidence of postpartum indigestion (PP1) associated with hepatic disorders and production of diseases in buffaloes	K.Padmaja & DST Rao	International Jr. of Livestock Research	
36	Haemato-biochemical stuides of camels infested with Trypanosomiasis	K.Padmaja	Veterinary World	
37	Biochemical and therapeutic studies of postpartum indigestion (PP1) associated with hepatic insufficiency with production diseases in buffaloes	K.Padmaja & DST Rao	Inventi Impact Biomedical Analysis	
38	Adverse drug reaction to Metaclopramide in a pup	K.Padmaja & DST Rao	Internal Jr. of Pharma & Biosciences	
39	Joint III in Kids and its Therapeutic Management	K.Padmaja	Indian Vety. Jr.	
40	Clinical biochemical and therapeutic responses of Laurabolin and Ketonex to postparturient	K.Padmaja, K.Lakshmi & G.Kavitha	Intas Polivest	

	indigestion (PP1) related subclinical ketosis in buffalo		
41	Summer mastitis in crossbred cow	K.Padmaja & DST Rao	Animal Science Reporter
42	Therapeutic management of Trypanosomiasis in a buffalo	K.Padmaja, K.Lakshmi & N.Krishnaiah	The Blue Cross Book
43	Juvenile performance of Rajasri a synthetic backyard variety under intensive system of management	V.Chinni Preetam J. Narasimha	Journal of Research, ANGRAU
44	Variations in immuno competence traits of certain synthetic rural poultry birds	K.Shakunthala devi S.T. Viroji Rao V.Chinni Pretam J. Narasimha	Inventi Rapid Infection
45	<i>Rajasri</i> designer fowl introgressed with genes from native birds evolved for backyard production system.	S.T. Viroji Rao V.Chinni Pretam K.Shakunthala devi J. Narasimha	Indian Journal of Poultry Science
46	Effect of Cooking on Physical, Biochemical, and Bacteriological Characteristics and Fatty acid profile of Tilapia (<i>Oreochromis mossambicus</i>) Fish Steaks.	Dhanapal, K., Vidya Sagar Reddy, G., Nayak, B.B., Venkateshwarlu, G., Reddy, A.D.& Basu, S.	Archives Applied Science Research (USA)
47	Evaluation of reuse of shrimp farm effluent after chemical and biological treatments.	Vijayasri, K., Balasubramanian, A., Dhanapal, K., Vidya Sagar Reddy, G & Francis, T.	Indian Journal of Fisheries (Cochin)
48	Quality Evaluation of rohu (<i>Labeo rohita</i>) during frozen storage.	Sravani, K., Dhanapal, K., Balaubramanian, A., Vanaitha, M & Reddy, G.V.S.	Ecology, Environment and Conservation

49	Changes in instrumental and sensory characteristics of tilapia fish steaks during cold blanching and cooking treatments.	Dhanapal, K., Vidya Sagar Reddy, G., Nayak, B.B., Venkateshwarlu, G., Reddy, A.D., Balasubramanian, A., Devivaraprasad Reddy, A & Basu, S.,	The Bioscan – An International Quarterly Journal of Life Sciences
50	Utilization of wastes from Fish Processing.	N.Bhaskar and G.Vidya Sagar Reddy	A monograph – M/s.Woodhead Publishing India
51	A Text oBook Aquatic Functional Ingredients. Characteristicsand Applications	N.Bhaskar, V.Bhaskaran, G.Vidya Sagar Reddy & K. Miyashita (Editors)	M/s.Woodhead Publishing India
52	Medicinal values of mangroves and its antimicrobial properties	Shelar, P S Vijaya Kumar Reddy, S.Shelar, Vidya Sagar Reddy G.	A Review – Continental Journal of Fisheries and Aquatic Sciences, Nigeria, Vol.6,26-37
53	College and Gelatin from Fish Processing Wastes	Jakhar, J.K., Devi varaprasad Reddy. A, Sunitha Maharia, Vijay A.R, Manjunath Reddy, A., Bairwa M.K., Venkateswarlu G & Vidya Sagar Reddy G.,	A Review – Environment & Ecology, Vol.30, 699-703
54	Effect of dietary protein with fish meal or amino acids on the growth performance of pigs.	Suryanarayana, MVAN., Ananda Rao, K and Srinivasa Rao, D	Indian Veterinary Journal. 86: 705-707.
55	Effect of phytase supplementation to maize-soybean diets on nutrient digestibility, nitrogen, calcium and phosphorus retention and excretion in finisher pigs	Suryanarayana, MVAN and Gnanaprakash, M	Indian Journal of Animal Nutrition
56.	Effect of dietary supplementation of sodium formate on growth performance, nutrient	Suryanarayana, MVAN., Ravi, A and Suresh, J	Indian Journal of Animal Nutrition

	utilization, nitrogen balance and carcass characteristics in cross-bred pigs		
57.	Effect of early weaning on behavioural patterns in piglets	Suryanarayana, MVAN and Suresh, J	Tamilnadu Journal of Veterinary and Animal Sciences. 7(3): 133-136.
58.	Prediction of in vivo organic matter digestibility based on invitro studies.	Suryanarayana, MVAN and Suresh, J	Tamilnadu Journal of Veterinary and Animal Sciences. 7(5): 224-228.
59.	A comparative study on the effect of antibiotic, probiotic and herbal residue on the performance, nutrient utilization in growing cross-breds pigs.	Suryanarayana, MVAN and Suresh, J	Indian Journal of Animal Nutrition
60.	Influence of phased restriction of energy – protein on growth performance, nutrient utilization in cross-bred pigs	J. Suresh and MVAN. Suryanarayana	Indian Journal of Animal Nutrition
61 .	A study on the associated effect of probiotic and citric acid on the performance of pre-weaned piglets	MVAN. Suryanarayana, J. Suresh and M.V. Rajasekhar	Tamilnadu Journal of Veterinary and Animal Sciences.
62.	Effect of dietary supplementation of fructo-oligosaccharides either alone or in combination with probiotic on performance, nutrient utilization and faecal microbiota	MVAN. Suryanarayana, J. Suresh, A. Jagdish Babu, S. Sridhar and B. Maheswar Reddy	Animal Science journal

	population in growth pigs		
63	Evaluation of <i>in vitro</i> gas production and nutrient digestibility of complete diets supplemented with different levels of thermotolerant yeast in Nellore rams	Harikrishna Ch., Mahender M, Ramana Reddy Y, Gnana Prakash M, Sudhakar K and Pavani M	Veterinary World 5(8): 477-485
64	Effect of Feeding Bt. Cotton Plants on Lipid and Protein Profile in Deccani Sheep	B Anilkumar, A Gopala Reddy, B Kalakumar and Ch Harikrishna	Inventi Rapid: Planta Activa 2012(4):1-3
65	Evaluation of Certain Dietary Enzymes and Probiotics in Yorkshire Piglets	P.V.M. Reddy, K. Kondal Reddy, Ch. Harikrishna and R. Prasanna Kumar	Indian Journal of Animal Nutrition 29 (3) : 302-306
66	Impact of DAATT Centre trainings on knowledge and attitude of shepherds on scientific sheep rearing	Ch. Harikrishna, A. Sarat Chandra and M. Mahender	Indian Journal of Animal Production and Management 28 (3-4): 175 – 177
67	Effect of feeding Poultry slaughter waste based Dog diet biscuits on Intake, Palatability and Nutrient utilization in Labrador dogs	M. Mahender, K. Sudhakar and Ch. Harikrishna	Indian Journal of Animal Research 47 (1): 79 – 82
68	Effect of feeding maize silage supplemented with concentrate and legume hay on growth in Nellore ram lambs	Venkateswarlu M, Ramana Reddy Y, Nagalakshmi D Mahender M, Hari Krishna Ch., Rajasekhara Reddy A and Gnana Prakash M	Veterinary World 6(4):209-213
69	Supplementation effect of thermotolerant yeast on nutrient	Harikrishna Ch, Mahender M, Ramana Reddy Y, Gnana Prakash M, Sudhakar K	<i>Livestock Research for Rural Development.</i> Volume 25, Article #90

	utilization and rumen fermentation in Nellore lambs.	and Pavani M	
70	Effect of Season on Kidding and Birth Weight in Osmanabadi Goats Reared in an Organized Farm	Ch. Harikrishna, T. Raghunandan and M. Gnana Prakash	International Journal of Livestock Research Vol 3(2) : 83 – 85
71	Influence of protein restriction, citric acid and probiotic on early weaning in cross-bred pigs	MVAN.Suryanarayana, and J.Suresh	Indian Veterinary Journal vol.90 no.3 (March,2013)
72	Organic acids in swine feeding- A review	MVAN. Suryanarayana, J. Suresh and M V Rajasekhar	Agricultural Science Research Journal Vol. 2(9), pp 523-533 (International Research Journal)
73	Influence of phased restriction of energy- protein on growth performance, nutrient utilization in cross-bred pigs	J.Suresh and MVAN.Suryanarayana	Accepted for publication in Indian Journal of Animal Research
74	A study on the associated effect of probiotic and citric acid on the performance of preweaned piglets	MVAN. Suryanarayana, J. Suresh and M V Rajasekhar	Accepted for publication in Tamilnadu Journal of Veterinary and Animal Sciences
75	Effect of dietary supplementation of fructo oligosaccharides either alone or in combination with probiotic on performance, nutrient utilization and faecal microbiota population in growing pigs	MVAN. Suryanarayana, A.Jagdish Babu, J. Suresh Maheswar Reddy and S.Sridhar	Accepted for publication in Animal Science Reporter
76	Performance and total tract	M V A N Suryanarayana	Journal of Agriculture and Sustainability Vol(2) No. 1, 86-

	digestibility responses of Probiotic, Xylanase and Phytase in the diets of grower pigs		97
77	Incidences of Bacterial and parasitic diseases of culture fishes	K. Varaprasada Rao, M. Shyam prasad, & P.S. Suresh kumar	Recent trends on Aquaculture
78	Effect of cotton seed meal inclusion in the feeds of <i>L. rohita</i>	B. Pavan Kumar, Y. Satyanarayana, B. Chamundeswari Devi, D.R.K. Reddy and A. Balasubramanian	Indian Journal of Animal Nutrition 2012

SERVICES RENDERED

(A) No of superior germplasm/ semen doses/embryos/fodder slips/fodder seeds etc supplied.

AIRCP on Poultry

1. Under AIRCP 12,280 chicks are supplied
2. Under SERP Project 1.62 lakhs chicks are supplied
3. Under Revolving Fund project 10,046 Fertile eggs, 61,548 Day old chicks and 5,354 growers are supplied
4. Under RKVY Project 4,000 growers are supplied

College of Veterinary Science, Rajendranagar

- About 71,000 APBN-1 fodder slips were supplied to the farmers .
- Sheep, Goats and Large white York Shire Pigs were sold to the farmers for improvement of their flocks. Several farmers started piggery units at Warangal, Khammam, Mahaboobnagar, Nalgonda and Rangareddy districts with our suggestions and germplasm provided by this station. The units are running successfully and farmers are getting benefited.

Livestock sold to the farmers.

1. Emu Chicks	:	124
2. Quail Chicks & adults	:	1,06,438

3. Turkey poult & adults	:	968
4. Ducks & Ducklings	:	167
5. Other poultry breeds	:	254
6. Guinea Fowls	:	60

NTR College of Veterinary Science, Gannavaram

No. of camps:	7
No. of cases treated species wise in camps	2487
No. of cases treated species wise:	

Medicine	Surgery	Gynaecology	Total
1570	38	879	2,487

No. of Vaccinations conducted species wise: A mass campaign on prophylaxis against rabies vaccination was under taken on 06.07.2012 World Zoonosis day at the premises of Teaching Veterinary Clinical Complex and 256 dogs were vaccinated against Rabies

No. of dewormings done	:	12,022
No. of laboratory test performed	:	767.
No. of Surgeries performed	:	736

Ambulatory Services provided:

No. of cases treated as per the species wise:

Medicine	Surgery	Gynaecology	Total
565	78	492	1,135

B) Other Services: Teaching Veterinary Clinical Complex (TVCC)

(i) College of Veterinary Science, Rajendranagar

No. of bovine, feline, equine, caprine, ovine, avian, other cases treated

S.No.	Species	Number of cases treated at			
		Ambulatory Clinic Mylardev Pally	Veterinary Hospital Bhoiguda	Campus Hospital Rajendranagar	Total
1	Bovine	948	330	650	1928
2	Equine	235	26	6	267
3	Caprine	9273	5160	7216	23649

4	Ovine	785	979	2100	3864
5	Avian	2163	1664	994	4821
6	Canine	3119	29920	8683	41722
7	Feline	97	460	76	633
8	Rabbits	-	386	54	440
	Total	16620	38925	19779	75,324
User charges collected (Rs)		42,930	6,27,035	1,23,750	7,93,715

Diseases diagnosed species wise and number of cases treated for each disease:

S.No.	Disease	No. of cases treated			Total
		Large animals	Pet animals	Sheep & Goat	
1	Anestrus	90	220	569	879
2	Endometritis	140	NIL	NIL	140
3	Metritis	180	190	292	662
4	Pyometra	20	420	272	712
5	R.O.P.	95	NIL	1206	1301
6	Uterine Prolapse	20	NIL	92	112
7	Vaginal Prolapse	45	20	175	240
8	Dystocia	52	150	1102	1304
9	Repeat Breeding	212	NIL	116	328
10	Cystic ovarian degeneration	15	NIL	NIL	15
11	PCL	52	NIL	NIL	52
12	Pseudopregnancy	NIL	212	NIL	212
13	Cystic endometrial hyperplasia	NIL	75	NIL	75
14	Misalliance	NIL	259	NIL	259
15	Tumors	NIL	125	NIL	125
16	Pregnancy Toxaemia	NIL	NIL	142	142
17	Hermphroditism	NIL	NIL	49	49
18	Miscellaneous	50	NIL	NIL	50
	Total	971	1671	4015	6657

Examination of samples: (parasitology)

Kind of Animal	Nature of sample			
	Feces	Blood	Skin scrapings	Total
Sheep & Goat	256	85	27	368
Cattle	250	79	10	339
Dog	123	76	54	253
Poultry	83	28	1	112
Total	1112	268	92	1072

Post mortems

Species	Number
Poultry	4016
Lab animals	509
Small animals	50
Large animals	10

Surgical cases attended in IP / OP / AC / Referred cases

Category	No. of animals treated
General surgical cases	897
Major surgeries – small animal	393
Minor surgeries – small animal	71
Major surgeries – large animal	1
Minor surgeries – large animal	19
Ultra sound	13
X ray	171

(ii) College of Veterinary Science, Tirupati

No. of bovine, feline, equine, caprine, ovine / avian / other cases treated at TVCC

Cases	Bovine	Canine	Others	Total
New	1267	4760	795	6822
Old	666	2536	515	3717
Total	1933	7296	1310	10539

No. of bovine, feline, equine, caprine, ovine / avian / other cases treated at Ambulatory Clinic Thondawada

Cases	Bovine	Canine	Others	Total
New	984	3	26	1013
Old	237	0	19	256
Total	1221	3	45	1269

Cases Discipline Wise

Discipline wise cases	Bovine	Canine	Others	Total
Medicine	910	4464	762	6136
Surgery and radiology	18	244	25	287
Gynaecology & obstetrics	339	52	8	399
Total	1267	4760	795	6822

- ii) Diseases diagnosed species wise and number of cases treated for each disease
Analysis of medicine cases system wise

System affected	Bovine	Canine	Others	Total
Digestive system	462	1153	318	1933
Respiratory system	37	593	49	679
Cardiovascular system	3	109	-	112
Musculoskeletal system	33	193	55	281
Nervous system	29	789	63	881
Skin	78	1099	61	1238
Udder and teat	113	9	-	122
Parasitic diseases	35	423	59	517
Metabolic diseases	108	21	43	172
Deficiency disease	9	34	19	62
Toxic diseases	3	33	29	65
Other diseases	-	8	66	74
Total	910	4464	762	6136

A mass vaccination campaign for prophylaxis against rabies vaccination was under taken up on 06.07.2012 on the occasion of World Zoonoses Day 2012 at the premises of Teaching Veterinary Clinical Complex and a total of 609 dogs were protected against this dangerous disease.

Surgical Cases

	Bovine	Canine	Others	TOTAL
Major Surgeries	6	61	4	71
Minor Surgeries	12	183	21	216
Total	18	244	25	287

Referral diagnostic techniques

	Radiography	Diagnostic ultrasound	Endoscopy	Laparoscopy
No.of animals	12	42	2	--

Gynaecological cases

S.No	Name of the disease	Bovine	Canine	Others	Total
1	In heat (inseminated)	228	0	0	228
2	Anoestrus	15	4	0	19
3	Silent heat	0	0	0	0
4	Endometritis/Pyometra	19	23	0	42
5	Repeat breeders	31	0	0	31
6	Pregnancy diagnosis	42	12	3	57
7	Dystocia	0	2	2	4
8	Prolapse of genitalia	2	0	0	2
9	Retained Placenta	2	0	1	3
10	Abortions	0	0	2	2
11	Mismating	0	11	0	12
Total		339	52	8	399

Details of inseminations done

Breed	No of animals inseminated at TVCC	No of animals inseminated at Ambulatory Clinic, Thondawada	Amounted Remitted (Rs.)
Murrah	133	31	4920.00
JB	95	71	4980.00
Total	228	102	9900.00

Details of income generation

Item	Amount collected (Rs.)	Remarks
Artificial insemination charges	9900.00	Remitted to the CD account of CEO, APLDA towards the cost of semen and liquid nitrogen.
Income generated	1,03,920.00	

iii) Vaccinations

Name of Vaccine	No. of Vaccinations
Rabies (post bite)	63
Rabies (Prophylactic)	938
Polyvalent canine vaccine	1109
Total	2110

iv) Details of modern diagnostic facilities available

- Electrocardiography
- Gastroscopy
- Bronchoscopy
- Colonoscopy
- Laparoscopy
- Abdominal Ultrasonography
- X-ray unit
- Bionet vital signs monitor
- Ophthalmoscope
- Large animal Electrocardiography
- Large animal Echocardiography
- Rumenexamination kit
- Danish Aqua-lift and cow cradle (lifting device)
- Diagnostic Ultrasound and
- Endoscopy

(e) Postmortem:

Department of Veterinary Pathology

Species	Number	Significant findings
Bovine	20	Jaundice, Suppurative pneumonia, Aflatoxicosis, Alimentary lymphosarcoma.
Ovine	6	ET, PPR, Parasitic enteritis, Copper toxicity, Pasteurellosis.
Caprine	3	Pneumonia
Canine	2	Leptospirosis, Haemangiosarcoma.
Porcine	101	Suppurative pneumonia, Pasteurellosis, Lymphosarcoma, pyometra, MMA, Mulberry heart disease, Ascariasis, Trichurial infection.
Rabbit	9	Pasteurellosis, Liposarcoma, Heat stroke
Poultry	165	RD, Aspergillosis in Emu, Aflatoxicosis in Emu, E.coli infection, Fowl cholera, MD, LL, Myeloblastosis, Pneumonia, Intestinal coccidiosis, Infectious stunting syndrome, Fowl typhoid, Ovarian adenocarcinoma, Cholangiocellular adenocarcinoma, Lymphosarcoma, Round worm and tape worm infection.
Zoo animals	4	Haemangiosarcoma in Lioness ,Snake bite, Intussusception in bear.

a) Details of modern diagnostic facilities available at College of Veterinary Science, Tirupati

1. State level diagnostic laboratory
2. P3 facility to deal with virulent and pathogenic organisms.
3. Anaerobic laboratory
4. Molecular diagnostic laboratory

(iii) NTR College of Veterinary Science, Gannavaram

I No. of bovine, feline, equine, caprine, ovine, avian, other cases treated

II Diseases diagnosed species wise and number of cases treated for each disease:-

	WHITE	BLACK	SHEEP & GOAT	POUTLRY	DOGS & PETS	OTHERS	TOTAL
NEW	525	3171	484	1262	1904	55	7401
OLD	163	1514	166	321	774	07	2945
TOTAL	688	4685	650	1583	2678	62	10,346

CASES TREATED DISCIPLINE WISE

DISCIPLINE	NO. OF CASES
CLINICAL MEDICINE	4176
SURGERY AND RADIOLOGY	1421
GYNAECOLOGY & OBSTETRICS	1804
TOTAL	7401

ANALYSIS OF CASES

System affected	Wc	Bc	Sg	Poultry	Dogs	Others	Total
Digestive system	51	586	115	800	600	22	2174
Respiratory system	07	91	82	208	101	-	489
Cardiovascular system	-	2	-	-	40	-	42
Musculoskeletal system	-	67	24	18	40	-	149
Skin	15	90	08	-	259	-	372
Udder and teat	35	140	45	-	-	-	220
Parasitic diseases	17	157	70	2	120	12	378
Metabolic diseases	13	40	07	-	-	-	60
Deficiency disease	4	48	08	20	7	-	87
Toxic diseases	4	24	6	2	18	-	54
Other diseases	20	40	25	18	32	6	141
Total	166	1285	400	1068	1217	40	4176

A mass anti Rabies vaccination campaign was held on 06.07.2012 on the eve of World Zoonosis Day and a total of 256 dogs were protected against dreadful Rabies

SURGERY WARD

S.No	Name of the operation	No. of animals operated	Remarks
1	Ovariohysterectomy	32	As a birth control measure and for pyometra.
2	Cystotomy & cystorrhaphy	14	
3	Castration	44	
4	Intestinal anastomosis	04	
5	Herniorrhaphy	06	Perineal, inguinal, ventral and umbilical
6	Excision of tumors	152	SQCC, Fibroma, mixed mammary tumor
7	Caesarean section	80	
8	Oesophagotomy	02	
9	Evisceration of orbit	4	
10	Gastrotomy	4	For gastric f/b
11	Intramedullary pinning	38	For femur and tibia
12	Amputation of limb	6	Both fore & hind limbs
13	Plaster of paris application	132	
14	External coaptation splints	2	Thomas splintage
15	Dynamic compression plating	1	
16	Circlage and hemicirclage wiring	14	For Mandibular and rib fractures.
17	Ingluviotomy	8	
18	Others	05	
	Total	548	

Large animals

S.No	Name of the operation	No. of animals operated	Remarks
1	Amputation of horn	43	Including one ram
2	Caesarean section	27	Includes sheep and goat
3	Evisceration of orbit	2	For rupture of eye ball
4	Amputation of tail	29	
5	Oesophagotomy	6	Ingestion of palm kernels

6	Scrotal ablation	3	For treating complication of castration
7	Castration	18	By closed method
8	Patellar desmotomy	15	
9	Rumenotomy	06	
10	Cystotomy & urethrotomy	09	In 50% cases cystorrhoeis and uremia were observed.
11	Repair of hernias	8	Ventral, lateral and umbilical
12	Excision of tumors	19	Fibroma and Lipoma
13	Others	3	
Total		188	

REFERRAL DIAGNOSTIC TECHNIQUES

Modality No of animals	Radiography	Diagnostic ultrasound	Endoscopy	Laparoscopy
	207	97	13	1

Laboratory Diagnosis

Sl. No	Species	Hb	TEC	TL C	DL C	Blood Smears	Fecal Samples	Nasal smear	others	Grand Total
1	Bovines	9	7	5	58	31	8	1	19	138
2	Canines	12	8	9	22	8	1	0	16	76
	Total	21	15	14	80	39	9	1	35	214

Veterinary Gynaecology and Obstetrics

S.No	Name of the disease	Cattle	Sheep and goat	Dogs
1	AI	1093		
2	Anoestrus	191		
3	Silent heat	-		
4	Endometritis	66		
5	Repeat breeders	89		
6	Pregnancy diagnosis	252		4

7	Positive for pregnancy	170		
8	Negative for pregnancy	82		
9	Dystocia	46	28	
10	Prolapse of genitalia	6		
11	Cervico vaginal Prolapse	1		
12	Uterine prolapse	5		
13	Abortions	19	3	
14	Mismating	-		6
TOTAL		1763	31	10

Details of insemination

Breed	No of animals inseminated
Murrah	943
Ongole	102
HF	48
Total	1093

Vaccinations

Name of Vaccine	No. of Vaccinations
Rabies (post bite)	155
Polyvalent canine vaccine	257

iv Postmortems conducted

Species	Number	Significant findings
Sheep	2	Pulmonary edema, Congestion
Pig	3	Broncho Pneumonia and verminous Broncho Pneumonia
Buffalo	1	Icterus
Goat	5	Cirrhosis, Pneumonia
Poultry	99	Pasterellosis, Coccidiosis
Dog	1	Pulmonary Congestion, and nephrosis

V Details of modern diagnostic facilities available

1	Facilities for PCR, Real Time PCR, Nucleic acid extraction, Gel documentation, RFLP, Electrophoresis(Horizontal, Vertical and submarine), dark field and phase contrast microscopy, ELISA are available.
2	Diagnostic Ultrasound
3	500 mA X-ray machine
4	Endoscopy, cystoscopy, colonoscopy, bronchoscope
5	Ophthalmoscopy,
6	Otoscopy
7	Laparoscopy
8	Ultra sound scanner is yet to installed to its full functional from
9	Bright field and phase contrast microscope is yet to installed to its full functional from
10	Liquid nitrogen containers were purchased

(IV) College of Veterinary Science, Proddatur

No. of cases treated:

Name of the Hospital	Bovine	Feline	Caprine	Ovine	Avian	Canine	Equine	Others	Total
TVCC	101	9	31	40	25	329	0	8	543
Ambulatory clinic	591	0	237	65	49	28	1	0	971
Veterinary Hospital	198	37	335	355	211	838	4	12	1990
Total	890	46	603	460	285	1195	5	20	3504

Diseases diagnosed species wise and number of cases treated for each disease

Name of the Hospital	Medicine	Surgery	Gynaecology	Total
TVCC	334	178	31	543
Ambulatory clinic	534	133	304	971
Veterinary Hospital	1266	580	144	1990
Total	2134	891	479	2961

Vaccinations :

Name of vaccine	No: of vaccinations			
	Name of the hospital			
	TVCC	Ambulatory clinic	Veterinary Hospital	Total
Pet vaccines	4	0	0	4
HS	0	1887	2592	4479
FMD	0	1254	4485	5739
PPR	0	2750	4206	6956
ET	0	1464	8447	9911
Sheep Pox	0	2000	4153	6153
Anthrax	0	582	672	1254
Others	0	722	538	1260
Poultry	0	2899	793	3692
Total	4	13558	25886	39448

Details of modern diagnostic facilities available

Serum analyzer is available in TVCC, Blood analyzer is available in Department of Bio-chemistry & Department of Veterinary Medicine

Surgical cases attended in IP/OP/AC referred cases

Species	No:of animals treated	Number of surgeries	
		Major	Minor
Large animals (bovine, caprine and ovine)	571	25	546
Canine and feline	320	19	301
Total	891	44	847

Postmortem

Species	Number	Significant findings
Poultry	116	Fowl Cholera, RD, IBD, Heat stroke, Coccidiosis, Aflatoxicosis, Worm infections
Rabbitt	8	Pneumonia, Torsion, Asphyxia
Sheep & Goats	6	Pneumonia, Asphyxia
Bovines	1	Pneumonia

Blood Samples: 62, Cytology : 4, Histopathology: 10

(V) College of Veterinary Science, Korutla

The number of cases treated at TVCC were Canine-116, Bovine-240, Sheep & Goat – 92, Poultry -418, Total - 866

Vaccinations

Name of the Vaccine	No. of Vaccinations
RABIVAC	10
RAKSHA FMD	102

Details of modern diagnostic facilities procured during the year : Spectrophotometer-ELISA & Dark Field Microscopy.

Postmortem: Postmortem was conducted on 4 sheep and 28 poultry.

Species	No. of animals treated	Name of the major / minor surgery
Canine	23	Mammary tumor, bone pinning and Cesarean section

FINANCE

Statement showing the particulars of Receipts and Expenditure for the year 2012-13 of SVVU

Sl.No.	Particulars	(Rupees in crores)	
		Receipts	Expenditure
(1)	State Funds		
	(i) Salaries	85.00	58.42
	(ii) Contingencies	52.50	79.01
(2)	ICAR		
	(i) Developmental Grants	2.47	2.85
	(ii) Network Projects	2.13	3.11
	(iii) Research Projects	2.16	2.42
(3)	RKVY (GOI)	1.43	6.15
(4)	Research Projects funded by External Agencies	1.61	1.83
(5)	Direct Receipts Realized	7.85	2.59
	Total	155.15	156.38

Annexure – I**Members of Board of Management**

1.	Dr.V.Prabhakar Rao, Vice-Chancellor, SVVU, Tirupati.	Chairman
2.	Sri Sripad Bhalerao, IAS, Special Chief Secretary to Government, Hyderabad.	Member
3.	Sri K.Praveen Kumar, IAS, Commissioner of Fisheries, Hyderabad	Member
4.	Dr.M.V.Reddy, Director of Animal Husbandry, Hyderabad.	Member
5.	Sri M.Subrahmanyam, Joint Secretary to Government, Hyderabad	Member
6.	Dr.A.G.Ponniah, Member, ICAR, Chennai (express his inability to attend the meeting).	Member
7.	Sri V.Nagi Reddy, Vice-Chancellor i/c, ANGRAU, Hyderabad.	Member
8.	Sri L.V.Subrahmanyam, IAS, Executive Officer, TTD, Tirupati.	Member
9.	Dr.I.Venkateswara Rao, Vice-Chancellor, NTR Health University, Vijayawada.	Member
10.	Dr.T.Harikrishna, Member, AP State Veterinary Council, Hyderabad.	Member
11.	Dr. P.Sudhakar Reddy, Registrar, SVVU, Tirupati.	Secretary

Annexure – II

Academic Council Members

1	Dr. V.Prabhakar Rao, Vice-Chancellor, SVVU, Tirupati - 517 502.	Chairman
2	Dr. P.Sudhakar Reddy, Registrar, SVVU, Tirupati - 517 502.	Secretary
3	Dr.I.V.Rao, Vice Chancellor, NTR University of Health Sciences, Vijayawada.	Member
4	Dr.V.Nagi Reddy, Vice – Chancellor, ANGRAU, R'ngar, Hyderabad.	Member
5	Dr.M.V.Reddy, Director of Animal Husbandry, Government of Andhra Pradesh, Shanthi Nagar, Hyderabad.	Member
6	Dr.K.Praveen Kumar, Commissioner of Fisheries, Government of A.P, Mutsya Bhavan, Hyderabad.	Member
7	Sri .L.V Subramanyam, IAS, Executive Officer, TTD, Tirupati.	Member
8	Dr.A.G.Ponnaiah, Director, Central Institute of Brackishwater Aquaculture, 75, Santhome, High Road, Raja Annamalaipuram, Chennai – 600 028.	Member
9	Dr.T.Harikrishna, Member, AP State Veterinary Council, D.No.16-2-751/A/39/2, Karanbagh, Saidabad, Hyderabad.	Member
10	Prof. V. Jayarama Krishna, Former Dean of Veterinary Science, ANGRAU, H.No.16-2-751/A/25 (692), Karanbagh, Hyderabad.	Member
11	Dr.A.Obi Reddy, Principal Scientist, LPM Southern Region Station, National Dairy Research Institute, Adugodi, Bengaluru	Member
12	Dr.K.M.Reddy, Principal Scientist, National Academy of Agricultural Research Management, R'nagar, Hyderabad.	Member
13	Dr. S.V.N Rao, Professor & Head, Dept. of Vety. & AH. Extension, Rajiv Gandhi CVSc, Puduchery.	Member
14	Dr.T.S.Chandrasekhara Rao, Dean of Veterinary Science, SVVU, Tirupati - 517 502.	Member
15	Dr. P.R. Srinivasa Murthy Dean of Student Affairs, SVVU, Tirupati - 517 502.	Member
16	Dr. M.Ranganadham, Dean of Dairy Science, SVVU, Tirupati	Member
17	Dr.T.V.Ramana, Dean of Fishery Science, SVVU, Tirupati	Member

18	Dr.K.Venugopal Naidu, Controller of Examinations, SVVU, Tirupati - 517 502.	Member
19	Dr. D.S.Tirumala Rao, Director of Research, SVVU, Tirupati	Member
20	Dr.K.Prabhakar Director of Extension, SVVU, Tirupati - 517 502.	Member
21	D.Srinivasulu, Associate Dean, CVSc, Tirupati - 517 502.	Member
22	Dr.K.Sudhakar Reddy, Associate Dean, CVSc, R'nagar, Hyderabad.	Member
23	Dr. E.Ragava Rao, Associate Dean, NTR CVSc, Gannavaram	Member
24	Dr.G.Vidya Sagar Reddy, Associate Dean i/c & Associate Professor & University Head, Dept. of Fish Processing Technology, CFSc, Muthukur - 524 344.	Member
25	Dr.K.Sarjan Rao, Associate Dean, CVSc, Milk Products Factory Premises, Proddatur – 516 360.	Member
26	Dr.V.Ravinder Reddy Associate Dean, CVSc, Old Engineering Premises, Korutla.	Member
27	Dr. Dr.V.Padmanabha Reddy, Associate Dean, College of Dairy Technology, Veterinary College Campus, Tirupati - 517 502.	Member
28	Sri. K.Ranga Rao, Officer-in-charge & University Head, Dept. of Business Management, Dairy Technology Programme, Kamareddy.	Member
29	Dr. S.Umamaheswara Rao, Professor & University Head, Dept. of Veterinary Public Health, CVSc, Tirupati - 517 502.	Member
30	Dr. P. Ameer Hamza, Professor & University Head, Dept. of Vety. Epidemiology and Preventive Medicine, CVSc, R'nagar, Hyderabad.	Member
31	Dr.K.Sadasiva Rao, Professor & University Head, Dept. of Animal Reproduction, Gynaecology & Obstetrics, CVSc, R'nagar, Hyderabad.	Member
32	Dr.K. Nalini Kumari, Professor & University Head, Dept. of Clinical Veterinary Medicine, CVSc, Tirupati - 517 502.	Member
33	Dr.A.Rajasekhar Reddy, Professor & Univ.Head, Dept. of Poultry Science & Animal Genetics & Breeding, CVSc, R'nagar, Hyderabad.	Member

34	Dr.D.Srinivasa Rao, Prof & Univ. Head, Dept. of Animal Nutrition, CVSc, R'nagar, Hyderabad.	Member
35	Dr.K.Kondal Reddy, Prof & University Head, Dept. of Livestock Production Technology, CVSc, R'nagar, Hyderabad.	Member
36	Dr. P.Eswara Prasad, Professor & University Head, Dept. of Veterinary Biochemistry, CVSc, Tirupati - 517 502.	Member
37	Dr. V.Hanumantha Rao, Professor & University Head, Dept. of Veterinary Physiology, CVSc, Tirupati - 517 502.	Member
38	Dr.Y.Narasimha Reddy, Professor & University Head, Dept. of Veterinary Microbiology, CVSc, R'nagar, Hyderabad.	Member
39	Dr. Ch.Srilatha, Professor & University Head, Dept. of Veterinary Pathology, CVSc, Tirupati - 517 502.	Member
40	Dr. A. Gopal Reddy, Professor & University Head, Dept. of Vety. Pharmacology & Toxicology, CVSc, R'nagar, Hyderabad.	Member
41	Dr. K.B.P.Raghavender, Professor & University Head, Dept. of Vety. Surgery & Radiology, CVSc, R'nagar, Hyderabad.	Member
42	Dr.B.Chamundeswari Devi, Principal Scientist & University Head, Dept. of Aquaculture, Fisheries Research Station, Kakinada.	Member
43	Dr. S. Ravi Kumar, Professor (CAS) & University Head, Dept. of Dairy Engineering, College of Dairy Technology, Tirupati - 517 502.	Member
44	Dr.I.Sankara Reddy, Professor (CAS) & University Head, Dept. of Dairy Chemisry, College of Dairy Technology, Tirupati - 517 502.	Member
45	Dr.Y.Kotilinga Reddy, Professor (CAS) & University Head, Dept. of Dairy Technology, College of Dairy Technology, Tirupati - 517 502.	Member
46	D.Pramod Kumar, Assoicate professor (CAS) & University Head, Dept. of Anatomy & Histology, CVSc, R'nagar, Hyderabad.	Member
47	Dr.D.Thammi Raju, Associate Professor & Univ. Head (CAS), Dept. of Vety. & AH Extension, CVSc, R'nagar, Hyderabad.	Member

48	Dr. M.Udaya Kumar, Associate Professor (CAS) & University Head, Dept. of Vety. Parasitology, CVSc, R'nagar, Hyderabad.	Member
49	Dr. O.Sudhakar, Associate Professor & University Head, Dept. of Fishery Engineering, CFSc, Muthukur - 524 344.	Member
50	Dr.T.Suguna, Senior Scientist & University Head, Dept. of Fisheries Resource Management, Fisheries Research Station, Palair.	Member
51	Dr.P.Hari Babu, Associate Professor (CAS) & University Head, Dept. Of Aquatic Animal Health Management, CFSc, Muthukur - 524 344.	Member
52	Dr. D. Muni Chandra Reddy, Assistant Professor & university Head, Dept. of Fishery Extension, CFSc, Muthukur - 524 344.	Member

Annexure III
Members of Faculty Board

Faculty of Veterinary Science

- a. Dean of the Faculty concerned
- b. Deans of other Faculties
- c. Dean of Student Affairs
- d. Director of Research
- e. Director of Extension
- f. Controller of Examinations
- g. Associate Deans
- h. All Professors
- i. Principal Scientists
- j. University Heads of Departments
- k. College Heads of Departments in the faculty
- l. Two eminent scientists from outside the University to be invited by the Dean
- m. Three representatives of the faculty of whom two in the cadre of Associate professor and one in the cadre of Assistant professor to be nominated by the Vice-Chancellor.

Faculty of Dairy Science

- 1) Dean of Dairy Science
- 2) Dean of Fishery Science
- 3) Dean of Veterinary Science
- 4) Dean of Student Affairs
- 5) Director of Research
- 6) Director of Extension
- 7) Controller of Examinations

II. Professors in the Faculty

1. Dr. S. Ravi Kumar
2. Dr. V. Padmanabha Reddy
3. Dr. I. Shankar Reddy
4. Dr. Y. Kotilinga Reddy

III. Two Eminent Scientists from outside the university (To be invited by the Dean)

IV. Two representatives of faculty (to be nominated by the Vice-Chancellor)

Faculty of Fishery Science

1. Dean of Fishery Science
2. Dean of Veterinary Science
3. Dean of Dairy Science
4. Dean of Student Affairs
5. Director of Research
6. Director of Extension
7. Controller of Examinations

II. Associate Dean

III. Professors, University Heads of Departments and college Heads of Departments

IV. Two eminent scientists from outside the University to be invited by the Dean

V. Three representatives of the faculty (to be nominated by the Vice-Chancellor)

VI. One teacher in the cadre of Assistant Professor

Annexure-IV
Category Wise Students on Rolls

COLLEGE OF VETERINARY SCIENCE, TIRUPATI.																						G T	
B.V.Sc & A.H.	OC		BC		SC		ST		VCI		NRI		DEF		PH		NCC		KM		TOTAL		
	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B		G
I YEAR	16	14	07	11	04	07	04	01	15	0	02	01	0	0	02	0	0	0	0	0	50	34	84
II YEAR	16	08	10	09	06	06	0	02	02	0	05	02	01	0	0	0	0	0	0	0	40	27	67
III YEAR	11	09	16	10	03	05	05	02	06	0	0	0	0	0	0	0	0	0	01	0	42	26	68
III YEAR (B)	02	0	01	0	0	0	0	0	01	0	0	0	0	0	0	0	0	0	0	0	04	0	04
IV YEAR	13	12	10	02	04	07	0	0	04	0	0	0	01	0	0	0	0	0	0	0	32	21	53
IV YEAR (B)	04	01	04	01	01	01	01	0	03	0	0	0	0	0	0	0	0	0	0	0	13	03	16
V YEAR	19	14	05	06	0	07	02	01	0	0	0	0	0	0	0	0	0	0	0	0	26	28	54
TOTAL	81	58	53	39	18	33	12	06	31	0	07	03	02	0	02	0	0	0	01	0	207	139	346

COLLEGE OF VETERINARY SCIENCE, RAJENDRANAGAR.																							G T
B.V. Sc & A.H.	OC		BC		SC		ST		VCI		NRI		DEF		PH		NCC		KM		TOTAL		
	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	
I YEA R	1 0	1 3	1 4	1 3	0 3	0 5	0 3	0 2	1 0	0 2	0 2	0 2	0 1	0 1	0 1	0 1	0 1	0 1	0 1	44	4 0	8 4	
II YEA R	0 5	0 3	1 3	1 5	0 7	0 4	0 5	0 3	0 5	0 0	0 7	0 3	0 1	0 1	0 1	0 0	0 2	0 0	0 0	42	31	7 3	
III YEA R	0 5	0 7	2 3	0 6	0 6	0 4	0 5	0 2	0 8	0 0	0 2	0 5	0 0	0 0	0 0	0 0	0 1	0 0	0 0	52	25	77	
III YEA R (B)	0	0	0 1	0	0	0	0	0	0	0	0 2	0	0	0	0	0	0	0	0	03	0	0 3	
IV YEA R	2 0	1 2	0 6	0 1	0 1	0	0 2	0	0 2	0	0	0 1	0 1	0	0 1	0	0	0	0	33	14	4 7	
IV YEA R (B)	0 2	0	0 2	0	0 2	0 2	0	0	0 1	0	0 4	0 1	0	0	0 2	0	0 1	0	0	14	03	17	
V YEA R	1 9	1 3	1 8	0 3	0 5	0 2	0 7	0	0 3	0	0 2	0 4	0	0	0	0	0	0	0	54	22	7 6	
TOT AL	6 1	4 8	7 7	3 8	2 4	1 7	2 7	0 7	2 9	0 2	1 9	1 6	0 1	0 2	0 5	0 2	0 4	0 1	0 1	24 2	13 5	3 77	

2012-2013 ACADEMIC YEAR

COLLEGE OF VETERINARY SCIENCE, GANNAVARAM																					
B.V.Sc & A.H.	OC		BC		SC		ST		VCI		NRI		DEF		PH		NCC		TOTAL		G T
	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	
I YEAR	13	11	15	09	03	08	00	03	00	05	00	09	02	00	01	02	00	00	46	36	82
II YEAR	13	18	11	05	04	04	02	01	00	03	00	05	00	00	00	00	00	00	38	28	66
III YEAR	20	14	09	08	03	06	00	02	00	07	00	06	02	01	00	01	00	00	47	32	79
IV YEAR	13	11	05	12	04	03	01	01	00	01	00	00	00	00	00	00	00	00	24	27	51
IV YEAR(B)	00	00	02	00	00	01	00	02	00	00	00	04	01	00	00	00	00	00	06	04	10
V YEAR	17	10	09	12	07	04	02	01	00	01	00	00	00	00	01	00	00	00	37	27	64
TOTAL	76	64	51	46	21	26	05	00	17	00	24	04	03	00	03	02	00	00	198	154	352

COLLEGE OF VETERINARY SCIENCE, PRODDUTUR																			
B.V.Sc & A.H.	OC		BC		SC		ST		VCI		DEF		PH		NCC		TOTAL		G T
	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	
I YEAR	03	06	07	08	01	02	01	0	0	0	01	0	01	0	0	0	14	16	30
II YEAR	02	08	06	04	02	02	0	01	0	0	0	01	0	0	0	0	10	16	26
III YEAR	03	01	10	04	03	01	0	0	0	0	0	02	01	0	0	0	17	08	25
IV YEAR	02	03	08	01	05	0	03	01	0	0	0	01	01	0	0	01	19	07	26
V YEAR	04	06	04	08	09	0	0	0	0	0	0	0	0	0	0	0	17	14	31
TOTAL	14	24	35	25	20	05	04	02	0	0	01	04	03	0	0	01	77	61	138

COLLEGE OF VETERINARY SCIENCE, KORUTLA																				
B.V.Sc & A.H.	OC		BC		SC		ST		PH		DEF		NRI		NCC		TOTAL		G T	
	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G		
I YEAR	03	03	07	08	03	01	01	01	01	-	-	-	-	-	-	-	15	13	28	
II	0	01	07	07	04	02	02	01	-	-	-	-	-	-	-	-	17	10	27	

YEAR	4																		
III YEAR	02	-	14	04	07	-	07	01	-	-	-	-	-	-	-	-	30	05	35
IV YEAR	03	02	07	06	01	01	-	-	-	-	-	-	-	-	-	-	11	09	20
TOTAL	12	06	35	25	15	04	10	03	01	-	-	-	-	-	-	-	73	37	110

2012-2013 ACADEMIC YEAR

COLLEGE OF FISHERY SCIENCE, MUTHUKUR.																			
B.F.Sc	OC		BC		SC		ST		DEF		PH		ICAR		KM		TOTAL		G T
	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	
I YEAR	02	06	03	07	02	0	05	0	01	0	01	01	0	0	0	0	14	14	28
II YEAR	01	02	09	03	04	01	06	0	0	0	0	0	0	02	0	0	20	08	28
III YEAR	0	0	07	03	02	01	03	03	0	0	0	0	02	01	0	0	14	08	22
IV YEAR	01	01	04	01	03	05	04	01	0	0	01	0	04	0	0	0	17	08	25
TOTAL	04	09	23	14	11	07	18	04	01	0	02	01	06	03	0	0	65	38	103

COLLEGE OF DAIRY TECHNOLOGY, TIRUPATI.																			
B.Tech	OC		BC		SC		ST		VCI		DEF		ICAR		KM		TOTAL		G T
	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	
I YEAR	05	01	09	05	03	02	01	0	0	0	0	0	01	0	0	0	19	08	27
II YEAR	06	04	10	0	04	02	02	0	0	0	0	0	03	0	0	0	25	06	31
III YEAR	02	04	13	01	01	0	01	0	0	0	0	0	03	0	0	0	20	05	25
IV YEAR	07	03	05	07	02	0	0	0	0	0	0	0	03	0	0	0	17	10	27
TOTAL	20	12	37	13	10	04	04	0	0	0	0	0	10	0	0	0	81	29	110

DAIRY TECHNOLOGY PROGRAMME, KAMAREDDY																			
B.Tech	OC		BC		SC		ST		VCI		DEF		ICAR		KM		TOTAL		GT
	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	
I YEAR	05	01	11	01	02	02	03	0	-	-	-	-	-	-	-	-	21	04	25
II YEAR	06	0	10	01	02	01	01	01	-	-	-	-	-	-	-	-	19	03	22
III YEAR	04	01	09	01	02	01	01	0	-	-	-	-	-	-	-	-	16	03	19
IV YEAR	06	01	05	02	0	02	0	0	-	-	-	-	-	-	-	-	11	05	16
TOTAL	21	03	35	05	06	06	05	01	-	-	-	-	-	-	-	-	67	15	82

