ANNUAL REPORT

2010-2011

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

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Annual Report

2010-11
Sri Venkateswara Veterinary University, Tirupari

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FOREWORD

The University was estabilished vide Act No. 18 of 2005 of the Government of Andhra Pradesh and started functioning from the premises of ANGRAU from 15-7-05 and independently with Tirupati as its head quarters from 1-4-2006. This is the 5th Annual Report and I am very pleased to say that the University has made considerable progress in creating / updating infrastructure as well as improving the academic standards of education. During the current year also the staff and student sports, games, cultural & literary meet, NCC and NSS programmes, study tours etc were held. A number of faculty were deputed for PhD studies and symposia/conferences/annual conventions/training programmes etc in India and abroad. The 2nd Convocation of the University was held on 21st April 2011 where Dr.S.Ayyappan, Secretary, DARE and Director General, ICAR, New Delhi addressed the graduates as the Chief Guest.

During the year a total of 21 externally funded schemes with a financial outlay of ` 296.30 lakhs were in operation in Veterinary, Dairy and Fishery Science faculties. Under RKVY, 14 research projects are under different stages of implementation for which an amount of ` 600.00 lakhs was released by the Government. Screening of flavonoids (Phytochemicals) against bovine mastitis pathogens *In Vitro,* Monitoring of Drug Residues and Environmental Pollutants in livestock products, E - content generation for the courses of LPM and Animal Genetics and Breeding, Research on bluetongue in sheep, Separation of bioactive compounds in certain Indian herbs etc were some of the important areas of focus on research front.

The University continues to have collaborative agreements with institutions of repute within and outside the country by entering into MOU with many institutions of repute for collaborative research and education.

Supply of superior germplasm of various breeds of livestock, fodder slips, radio/TV programmes, trainining programmes for capacity biliding of farmers and field functionaries, development of multimedia modules in veterinary, dairy and fishery sciences etc have been the regular features of University extension services.

I extend my sincere thanks to each and every teaching and non teaching staff and students of the University for their dedicated contributions for the growth and development of the University. I compliment them for the achievements of the University and wish them well.

(V. PRABHAKAR RAO)
Vice-Chancellor

CONTENTS

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 sciences in the State of Andhra Pradesh. The University is the 7 th of its kind in the country with three faculties i.e. Faculty of Veterinary Science, Faculty of Fishery Science and Faculty of Dairy Science and started functioning independently at Tirupati from 1-4-2006.

The University serves the farming community of the state through Education, Research and Extension activities in Livestock, Dairy Technology and Fishery sectors. 5 Veterinary Colleges, 1 College of Dairy Technology, 1 College of Fishery Science, 1 Dairy Technology Programme, 10 Animal Husbandry Polytechnics, 1 Fisheries Polytechnic, 2 AICRPs i.e. on Pigs and Poultry, 10 Livestock Research Stations and 3 Fisheries Research Stations, 1 KVK and 2 Veterinary Hospitals spread all over the State are the constituent institutions of the University.

A brief account of the activities of the University during 2010-11 is presented hereunder.

ACADEMIC PROGRAMMES

The University offers UG & PG degree programmes in the three faculties while PhD programmes are offered only in Veterinary Sciences. The University has implemented the Veterinary Council of India, 2008 regulations for B.V.Sc & AH course from the Academic year, 2008-09. The UG curriculum and regulations as prescribed by the IV Deans' Committee of ICAR are being implemented from the Academic year 2008-09 onwards for B.F.Sc and B.Tech (Dairy Technology) Programmes. The University also offers two year Diploma programme in Animal Husbandry and also in Fishery Science for rural youth after 10 th class 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, M.F.Sc in Aquaculture and in Fish Processing Technology, M.Tech (Dairy Technology), M.Sc (Dairy Microbiology) and PhD in 16 disciplines of Veterinary Sciences. 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 at the 7 thAcademic Council Meeting. The MVSc programmes in Veterinary Parasitolgy and Animal Reproduction, Gynecology and Obstetrics were extended to NTR CVSc., Gannavaram during the period under report.

SCHOLARSHIP

Monetary assistance was provided to UG students in the form of BC, SC, ST, EBC student scholarships, NTS, ICAR post matric scholarships, stipend for final year students undergoing internship/ inplant training/work experience and also stipend for PG/PhD students. This facility was availed by 1204 students to the tune of ` 220.34 lakhs during 2010-11.

ENDOWMENTS

During the current year, three more endowments were instituted taking the total number of endowments to 26 in the University.

STUDENTS AMENITIES

LIibrary

The libraries in the constituent colleges of the university have good collection of about 36000 books, 250 journals / periodicals, 13200 back volumes and

65 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.

Computer Centre and Placement Cell

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

Hostels

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

STUDENT ACTIVITIES

The University encouraged student 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 and other important events were celebrated to foster unity and friendship among students.

FACULTY DEVELOPMENT

The University has a policy for improving faculty competence by deputing teachers for higher studies within and outside the University. The faculty are also permitted to attend workshops, seminars, summer/winter schools and other HRD programmes to update their skills. A total of 87 faculty members were deputed to various summer schools, workshops, symposia, seminars, annual conventions of professional organizations etc during the year under report.

RESEARCH ACTIVITIES

The research activities are taken up as part of PG/PhD research in teaching departments and also situation specific, farmer oriented research activities are taken up at the Livestock and Fishery research stations of the University. During the reporting period, 21 research projects with a financial outlay of ` 296.30 lakhs were taken up with funds from outside agencies like ICAR, DBT, CSIR, MPEDA, DFID (UK) etc. Under RKVY, 14 research projects are under different stages of implementation for which an amount of ` 600.00 lakhs was released by the Government.

Salient Research Achievements

- Standardized the protocol for meiotic maturation of preantral follicles of sheep and buffalo ovaries
- Developed and standardized a reverse transcription –loop mediated isothermal amplification (RT-LAMP) technique for rapid detection of bluetongue virus
- Diagnostic techniques like ELISA for PPR and Immunofluorescent Antibody technique to diagnose Toxoplasmosis were standardized
- Standardized technique for detection of Salmonella typhimurium in livestock products and Microbes of public health significance in shrimps by PCR technique
- Standardized technology for ornamental fish and pearl culture, mass seed production of magur (Clarias batrachus) and induced breeding of Channa straitus.

OUTREACH ACTIVITIES

The important outreach activities include training the Veterinary Assistant Surgeons in disease

diagnosis 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 farmers, unemployed youth, entrepreneurs through mass media such as printed material, television programmes, radio talks, live phone in programmes on AIR and Television, CDs, personal interaction etc.

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

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

AWARDS AND RECOGNITIONS

The faculty and students have received wide recognition and appreciation for their efforts in teaching, research and extension activities in Veterinary, Dairy Technology and Fishery Sciences. 26 faculty members were conferred honors that included State Best teacher award, best research scientist award, best article and best poster awards in the conferences/symposia etc.

PUBLICATIONS

101 research articles and 25 popular articles were published.

CONVOCATION

The 2nd Convocation of the University was held on 21st April 2011 with Dr.S.Ayyappan, Secretary, DARE and Director General, ICAR, New Delhi as the Chief Guest. The Hon'ble Vice-Chancellor, Dr. V.Prabhakar Rao presented a brief report on the significant achievements and activities of the University for the period 1-1-2009 to 31.12.2010. A total of 607 candidates from UG, PG and PhD Programmes were admitted to the Convocation. 34 Gold Medals, 6 Cash Prizes and 2 Book Prizes were awarded to UG & PG students for their academic excellence.

I. ABOUT THE UNIVERSITY

Sri Venkateswara Veterinary University, Tirupati was established vide Act No. 18 of 2005 of the Government of Andhra Pradesh. The then Hon'ble Chief Minister of Andhra Pradesh, Dr.Y.S.Rajasekhara Reddy inaugurated the University at Tirupati on 15-7-05 and it started functioning from ANGRAU, Hyderabad. Later, from 01.04.2006 onwards the University started functioning from Tirupati.

Mandate

The objects of the university among others shall be to impart education in different branches of Veterinary, Dairy and Fishery Science 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 people of the State of Andhra Pradesh.

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)

It is the highest policy making body of the University

Members of BOM

The member of BOM during the period under report is presented in Annexure - I.

Meetings of BOM

Sl.No	No. of Meetings	Date	Place
1	25th BOM	29.06.2010	Conference Hall, 3rd Floor, D-Block, A.P.Secretariat, Hyderabad.
2	26th BOM	16.07.2010	Chambers of Special Chief Secretary to Govt., AH,DD & F Dept., AP Secretariat, Hyderabad.
3	27th BOM	28.07.2010	Chambers of Special Chief Secretary to Govt., AH,DD & F Dept., AP Secretariat, Hyderabad.
4	28th BOM	06.09.2010	Conference Hall, 3rd Floor, D-Block, A.P.Secretariat, Hyderabad.
5	29th BOM	23.11.2010	Mini Conference Hall, Admn.,Office, SVVU, Tirupati.
6	30th BOM	07.02.2011	Mini Conference Hall, Admn.,Office, SVVU, Tirupati.
7	31st BOM	30.03.2011	Conference Hall, Teachers Home, Bhoiguda, Secunderabad.

Meetings of the Academic Council

S.No	Date	Place
1	07.07.2010	S.V. Agricultural College, Tirupati
2	13.09.2010	S.V. Agricultural College, Tirupati

State Level Technical Programme Meeting

The State Level Technical Programme Meeting was held during 26 th – 27 th May 2010 in which all Heads of Research Stations, Principal Investigators of externally funded research projects, University Head of Departments, University Officers and the Hon'ble 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.Mohd.Hafeez	Vice-Chancellor i/c	01-4-2010	26.10.2010
2	Dr.V.Prabhakar Rao	Vice-Chancellor	27.10.2010	Continuing
3	Dr.S.Umamaheswara Rao	Registrar	01-4- 2010	05.10.2010
4	Dr.M.Ranganadham	Registrar i/c	06.10.2010	Continuing
5	Dr.K.Somasekhar Reddy	Dean of Veterinary Science	01-4- 2010	31.05.2010
6	Dr.M.Ranganadham	Dean of Vetry. Science i/c	01.06.2010	Continuing
7	Dr.K.Subramanyam Naidu	Dean of Student Affairs	01-4- 2010	30.06.2010
8	Dr. P.V.V. Satyanarayana Reddy	Dean of Student Affairs i/c	01.07.2010	31.12.2010
9	Dr.M.Ranganadham	Dean of Student Affairs i/c	01.01.2011	Continuing
10	Dr.M.Ranganadham	Dean of Fishery Science i/c	01.4.2010	Continuing
11	Dr.Md.Hafeez	Director of Research	01-4- 2010	20.01.2011
12	Dr.M.Ranganadham	Director of Research i/c	21.01.2011	Continuing
13	Dr. P.V.V. Satyanarayana Reddy	Controller of Examinations i/c	01-4- 2010	25.01.2011
14	Dr.M.Ranganadham	Controller of Examinations i/c	26.01.2011	19.02.2011
15	Dr.K.Venugopal Naidu	Controller of Examinations	20.02.2011	Continuing
16	Dr. P.V.V. Satyanarayana Reddy	Director of Extension	01-4- 2010	25.01.2011
17	Dr. M.Ranganadham	Director of Extension i/c	26.01.2011	Continuing
18	Dr. M.Ranganadham	Comptroller i/c	01.04.2010	15.04.2010
19	Sri P.Srinivasulu Naik	Comptroller	16.04.2010	Continuing
20	Sri.G. Ramanjaneyulu	Estate Officer	01.04.2010	Continuing

Constituent units of the University

(A) Colleges

1) College of Veterinary Science, Rajendranagar, Hyderabad (Established : 1946)
2) College of Veterinary Science, Tirupati (Established : 1955)
3) NTR College of Veterinary Science, Gannavaram (Established : 1998)
4) College of Fishery Science, Muthukur, Nellore Dt. (Established : 1992)
5) College of Veterinary Science, Proddatur, Kadapa Dist (Established : 2008)
6) College of Veterinary Science, Korutla, Karimnagar Dist (Established : 2008)
7) College of Dairy Technology, Tirupati, Chittoor Dist (Established : 1983 & elevated to college status from 2-7-09)
8) Dairy Technology Programme, Kamareddy, Nizamabad Dt (Transferred to SVVU in 2008)

(B) Animal Husbandry Polytechnics

1. Palamaner, Chittoor Dt. (Estd. 1999)
2. Ramachandrapuram, East Godavari Dt. (Estd. 2003)
3. Madakasira, Anantapur Dt (Estd. 2005)
4. Mahabubnagar, Mahabubnagar Dt. (Estd. 2005)
5. Venkataramannagudem, West Godavari Dt. (Estd. 2005)
6. Garividi, Vizianagaram Dt. (Estd. 2005)
7. Karimnagar, Karimnagar Dt. (Estd. 2005)
8. Siddipet, Medak Dt (Estd. 2007)
9. Rapur, Nellor Dt. (Estd. 2007)
10. Mamnoor, Warangal Dt. (Estd, 2009)

(C) Fisheries Polytechnic

1. Bhavadevarapalli, Avanigadda, Krishna Dt. (Estd. 2007)

(D) Research Stations

(i) All India Co-ordinated Research (AICRP) Projects

1. AICRP on Pigs, Tirupathi. (Estd. 1971)
2. AICRP on Poultry Breeding, Rajendranagar, Hyderabad. (Estd. 1972)

(ii) Livestock Research Stations

1 Livestock Research Station, Palamaner, Chittoor Dt. (Estd. 1954)
2 Livestock Research Station, Guntur. (Estd. 1964)

3	Livestock Research Station, Garividi, Vizianagaram Dt.	(Estd. 1989)
4	Livestock Research Station, Mahaboobnagar	(Estd. 1993)
5	Livestock Research Station, Mahanandi, Kurnool Dist.	(Estd. 1992)
6	Buffalo Research Station, Venkataramannagudem, W.G.Dist	(Estd. 1999)
7	Livestock Research Institute, Hyderabad.	(Estd. 2001)
8	Net work project on Buffalo improvement, Anthargaon Karimnagar Dist	(Estd. 2008)
9	Livestock Research Station, Siddarampuram. Anantahpur Dist (Transferred to University from AH Department)	(1-4-2009)
10	Livestock Research Station, Mamnoor, Warangal Dist (Transferred to University from AH Department)	(1-4-2009)

(iii) Fisheries Research Stations

1.	Fisheries Research Station, Palair, Khamma Dt.	(Estd. 1977)
2.	Fisheries Research Station, Kakinada, East Godavari Dt.	(Estd. 1980)
3.	Fisheries Research Station, Undi, West Godavari Dt.	(Estd. 2001)

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

1.	Warangal	(1-4-2009)
2.	Visakhapatnam.	(1-4-2009)

V. Krishi Vigyan Kendra

1.	Mamnoor, Warangal	(Estd. 2009)

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	298	192	96	288	810	438	1248
B.F.Sc	35	20	11	31	63	25	88
B.Tech (Dairy Tech.)	60	37	11	48	127	44	171
M.V.Sc	93	89	32	121	120	54	174
M.V.Sc (Biotechnology)	01	0	0	0	0	0	0
PhD	24	10	04	14	15	12	27
MFSc	08	3	8	11	3	9	12
M.Tech (Dairy Technology)	0	0	0	0	0	0	0
Diploma in Animal Husbandry	205	105	103	208	181	153	334
Diploma in Fisheries	30	24	4	28	52	10	62
Total	**754**	**480**	**269**	**749**	**1371**	**745**	**2116**

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	210	196	406
2	College of Veterinary Science, Rajendranagar	3	210	120	330
3	College of Veterinary Science, Gannavaram	2	144	96	240
4	College of Fishery Science, Muthukur	2	60	24	84
5	College of Veterinary Science, Korutla	Rented Buildings	55	20	75
6	College of Veterinary Science, Proddatur	Proddatur Milk Factory quarters	53	25	78
7	College of Dairy Technology, Tirupati	1	33	-	33
8	Dairy Technology Programme, Kamareddy	Under construction	50	15	65
9	Animal Husbandry Polytechnics at Garividi, Madakasira, Venkataramannagudem, Karimnagar, Siddipet and Rapur	Boys and girls hostels have been constructed	144	144	288

S.No.	Name of the College/Institution	No. of hostels	Accommodation available		
			Boys	Girls	Total
10	Animal Husbandry Polytechnics at Palamaner, Mahaboobnagar, Mamnoor	Construction of boys and girls hostel is in progress.			
11	Fisheries Polytechnic, Bhavadevarapalli	Boys and girls hostels were constructed	18	12	30

I & II year U.G class rooms were modernized with false roofing, wall paneling and ceiling mounted LCD Projector at a cost of ` 8.00 lakhs and work was started to modernize the III and IV year class rooms also on similar lines at a cost of `10.00 lakhs at NTR, CVSc, Gannavaram..

At College of Veterinary Science, Proddatur, teaching and learning resources such as CDs, charts, models, laminations, power point presentations were developed and the class rooms were equipped with LCD projectors. Sports and games facilities including gym facilities were created. The hostels were provided with the required cots, chairs, tables, TVs, R.O system etc and repairs to student hostels were taken-up with ` 7.10 lakhs. An amount of ` 1.20 crores was allocated for creation of infrastructure facilities including model class rooms and laboratories to satisfy VCI regulations and 4.75 crores was allocated for the construction of new college building.

At College of Veterinary Science, Korutla, sports goods were purchased for ` 82,198.00 and ` 82,431/- was spent towards different student activities.

All Polytechnics were provided with well developed playground for games like cricket, volley ball, shuttle badminton, ball badminton, tennicoit, table tennis etc.

Health Services

Student health care is taken care by qualified doctors 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
- The University has taken up initiative to link with all Sate Agricultural Universities of the country through National Knowledge Network (NKN) which will 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 inlant training programme and BFSc 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.

Extra and co-curricular activities

Sports & games

The IV sports, games, cultural and literary competitions for teaching & non-teaching staff was held at NTR CVSc, Gannavaram during 4.4.2010 to 6.04.2010.

The IV Intercollegiate sports, games and cultural meet for students was held at Tirupati from 27th to 31st October, 2010

Students of the University have participated in the 12th All India Inter Agricultural Youth Festival 2010-11 held at Anand Agricultural University from 17.01.2011 to 21.01.2011 and in the Inter University Meet held at Kerala Agricultural University, Thrissur from 08.02.2011 to 22.02.2011.

Sports Day was celebrated on 24.02.2011 in connection with college and hostel day celebrations at College of Veterinary Science, Proddatur.

Student counseling and placement cell

The placement cells are active in all constituent Colleges of the University to cater to the needs of counseling for further education and placement of the students. The information on job opportunities in various organizations like M/s. Breeders and Hatcheries Pvt. Ltd., Hyderabad, Horlicks (GSK), Rajahmundry, Akshayakalpa Farms and Foods Pvt. Ltd., Tiptur, Karnataka, Radha Raman Health Care Ltd., Hyderabad and information on JRFs, SRFs and RAs required in different wings of ICAR and other agencies was brought to the notice of graduates through placement cell. In addition, information on opportunities for higher education with in and outside the country was provided to the final year students. Four final year students of College of Fishery Science, Muthukur got placement in Rudhra Feed Company and Kargil Feed Company through campus interviews. At A.H.Polytechnic, Karimnagar, 16 diploma holders were selected by private firms through campus interviews. Seven students of B.Tech (DT) were selected in campus interview and obtained placement in Hatson Dairy, APDDCF and Creamline Jersey

NCC Activities

College of Veterinary Science, Rajendranagar

A total of 160 cadets from the I and III year B.V.Sc. & A.H. were enrolled in the NCC. 14 cadets have passed 'B' certificate and 3 cadets passed 'C certificate. As part of the NCC, the cadets were imparted training during the regular parades held from July 2010 to December, 2010. The topics covered during the classes were drill, weapon training, leadership, disaster management, social service, health and hygiene, adventure activities, environment and ecology, self defence, posture training etc. In addition, the cadets were trained in specialized activities like animal management and equitation, shoeing, saddle fitting etc. Four annual training camps were conducted from 26-7-2010 to 4-8-2010, 7-10-2010 to 16-10-2010, 13-11-2010 to 22-11-2010 and 23-11-2010 to 2-12-2010 at Bison Training grounds, Secunderabad in which a total of 71 cadets have participated. Maj. K. Sudhakar and Lt. KCS Reddy were the NCC Officers.

NTR College of Veterinary Science, Gannavaram

A total of 76 cadets were enrolled in the B (49 cadets) and C (27 cadets) certificates programmes out of which 15 & 41 cadets have appeared in the respective examinations. The College has 3 (A) R & V Regiment functioning since 2003-04 with 80 cadet strength in an academic year. The unit has 6 horses.

College of Veterinary Science, Tirupati

The R &V unit was established in College of Veterinary Science, Tirupati during 2002. During the year under report, 106 students (91 boys and 15 girls) of I B.V.Sc & AH, 84 students (53 boys and 31 girls) of II B.V.Sc & AH were enrolled under NCC. 23 cadets in B certificate and 18 cadets in C certificate exams were successful

NSS activities: 24 NSS units are allotted to the University and the details of activities are furnished hereunder.

NSS units allotted	24
Volunteers enrolled	2400
Villages/slums adopted	24
Special camps	23
Saplings planted	5062
Blood donation camps	15
Units of blood collected	101
Mega work / animal health camps	80
Pulse polio immunization programme	3
HIV/AIDS awareness programmes	22

NSS activities of NTR College of Veterinary Science, Gannavaram

ollege has two NSS units, each with 100 volunteers, supervised by NSS Programme Officers, Dr. K. Suresh, Asst. Professor (Veterinary Clinical Medicine) and Dr. V. Devi Prasad, Asst. Professor (Veterinary Surgery & Radiology).

Sri. Kolusu Parthasaradhi, Hon'ble Minister for Animal Husbandry, Dairy Development, SVVU and Fisheries and **Sri. Dasari Balavardhana Rao**, Honorable Member of Legislative Assembly, Gannavaram constituency at the NSS camp at **VEERAVALLI** Village of Bapulapadu Mandal on **02-09-10**

The following activities were taken up by the college involving the NSS volunteers.

- Clean and green programme was held on third Saturday of every month and plantation was carried out.
- NSS special camps were conducted for a period of 7 days from 02-09-10 to 08-09-10 in different villages of Krishna district. Final year NSS volunteers participated enthusiastically. During these camps, activities such as treatment of sick animals, deworming, awareness programmes on improved management of livestock, Rythusadassus etc were taken up.
- Celebrated Zoonoses day on 6-07-2010, Sadbhavana Diwas on 20–8-10, International Peace Day on 15-09-10, NSS Day on 24-09-10, Mahatma Gandhi Jayanthi on October 2nd 2010, National Youth day on January 12th 2010.

NSS activities of College of Veterinary Science, Proddatur

World Veterinary Day on 24-04-10 and Anti Terrorism Day on May 21st, 2010 were observed.

NSS volunteers of NTR CVSc at AIDS awareness rally on 1-12-10 on the eve of World AIDS day

The NSS Unit, College of Veterinary Science, Proddatur organized a 7 day NSS Special Camp by involving the NSS Student Volunteers and Staff with the support of State AH Dpartment.

Clean and Green Programmes were organized on 18-09-2010, 20-11-2010, 18-12-2010, 19-02-2011and12-03-2011.

NSS activities of College of Veterinary Science, Rajendranagar

The NSS volunteers participated in all the general activities such as blood donation camps, AIDS awareness campaigns, tree plantation camps etc. Apart from these regular activities, the NSS volunteers organized professional activities like mass vaccinations, deworming programmes, animal health and gynaec camps etc to serve the needy resource poor farmers. One special NSS camp was organized in Nizamabad district, involving final year BVSc & AH students.

NSS activities of College of Veterinary Science, Tirupati

Four NSS Units are functioning in the College with 468 (288 Boys and 180 Girls) student volunteers. During the year, 4 special camps were organized from 1-9-2010 to 7-9-2010 in Nimmanapalli, Madanapalli, Vayalpadu and Punganur mandals. A total of 14,329 cases were treated (Gynaec-2934, Medical-1552, Surgical-173, deticking – 8096 and deworming-1574.). 2600 half kg mineral mixture packets were distributed to farmers and 8 rythu sadassulu were organized.

Three blood donation camps were organized in which 22 units of blood were collected. Animal health camps in the adopted village were held regularly and in addition a mega health camp was conducted at Kongaravari palli on 18-9-2001, Bhimavaram and Gangudupalli on 3-3-2011 and at Mallavaram, and Guttivaripalli on 24-3-2011.

World Veterinary Day on 24-4-2010, World Zoonoses day on 6-7-2010 and NSS day on 24-9-2010 were celebrated. On world zoonoses day, free anti rabies prophylactic vaccination was done to about 600 dogs.

NSS activities of College of Veterinary Science, Korutla

Blood Donation Camp on 30-10-2010 and Veterinary Health Camp on 08-12-2010 were organized as part of NSS Programmes

NSS activities of College of Fishery Science, Muthukur

A 7 day NSS special camp was conducted during the last week of June, 2010 at the Adopted village, Eguvamitta (Ipur) in which the Final Year BFSc students participated. Medical Camps, Animal Health Awareness programmes, plantation of saplings, cleanliness drive etc were taken up during the programme.

NSS Activities carried out by Volunteers of Polytechnics

Animal Husbandry Polytechnic, Palamaner

A 7 day special NSS camp was held as part of the Work Experience Programme of II Year, II Semester

students from 14 th-20th May, 2010 at Gangavaram Mandal, Chittoor Dist. In which 3,899 animals were covered through various activities such as 1628 deticking, 791 deworming , 173 gynecological and 1307 general cases under the supervision of teaching faculty.

NSS volunteers have actively participated in the campus improvement program like planting and watering of plants etc. Various activities like cleaning the village premises, chlorination of drinking water tanks, awareness programmes on general sanitation and cleanliness were taken up is the surrounding villages.

Animal Husbandry Polytechnic, Mahabubnagar

19 regular and 1 special NSS camps were held during the year in which animal health camps were conducted.

Animal Husbandry Polytechnic, Ramachan drapuram

12 regular and 1 special NSS camps were held during the year and activities such as Clean and Green, Pulse Polio Immunization Programme, Anti Terrorism Day, Aids Awareness Camps, Literacy Awareness Camps, HS & BQ mass vaccination during Special Camp etc were taken up. During the NSS Special Camp (25-4-2011 to 01-05-2011) 2362 animals were vaccinated against BQ while 1870 animals were vaccinated against HS.

Animal Husbandry Polytechnic, Madakasira

Under NSS Special camps from 25.04.2011 to 01.05.2011, eight free animal health camps were held in the villages of Bullasamudrum, Velloti Villagae, Chatram, Jakkepalli, Y.B Halli, Gundumalla, D.Gollahatti, E.Gollhati and a total of 12613 animals were attended to for various activities like treatment, deworming, vaccination etc

Library: All constituent colleges and polytechnics have libraries and the University central library is located along with the Library of College of Veterinary Science, Tirupati. The particulars of books and other materials in the libraries:

Particulars	No.
Total Number of Books	35563
Periodical and Monthly Journals	568
Journals with online Access	22
e-books subscribed	60
Students benefited	31564
Staff benefited	2851
Outsiders benefited	1064
Total Back Volumes	13181
Video Lessons	79

Library at College of Veterinary Science, Proddatur

The libraries provided reprographic (Xerox) facilities, E-Library and internet facilities to the staff and students during the year. EBSCOHOST and Science Direct were used for literature search.

The *CERA* (Consortium for Electronic Resources of Agriculture) is being utilized fully by the students and staff.

The library at College of Veterinary Science, Rajendranagar continued to provide email alerts on important Veterinary portals, forthcoming conferences and other websites pertaining to Open Access Journals and Open Access Books etc.

Scholarships: The details of different scholarships availed by students:

Name of the Scholarship	No. students	Amount (` in lakhs)
BC, SC & ST students scholarship availed by UG students . ` 912 PM per student for 10 months	601	54.81
National Talent Scholarship ` 1000/- PM per student for 10 months.	51	5.12
Stipend during internship /In plant training / Work experience programme for UG ` 5000/- PM per student for 6 months.	256	76.80
Stipend during work experience programme for diploma students ` 720/- PM per student for 5 months.	187	6.21
Stipend for PG studies ` 7000/- PM per student for 10 months.	98	68.60
Stipend for PhD studies ` 8000/- PM per student for 10 months.	11	8.80
Total	1204	220.34

Student outturn

S.No.	Name of the College	Course	Boys	Girls	Total
1	CVSc, R'nagar.	BVSc.& A.H	51	21	72
2	CVSc, Tirupati	BVSc.& A.H	50	25	75
3	NTR CVSc, Gannavaram	BVSc.& A.H	23	08	31
4	CVSc, Proddatur	BVSc.& A.H	—	—	—
5	CVSc, Korutla	BVSc.& A.H	—	—	—
		Total	124	54	178
6	CFSc, Muthukur	BFSc	20	06	26
7	College of Dairy Technology, Tirupati	B.Tech (Dairy Technology)	7	1	8

S.No.	Name of the College	Course	Boys	Girls	Total
1	CVSc, R'nagar.	MVSc	44	11	55
2	CVSc, Tirupati	MVSc	14	09	23
3	NTR CVSc, Gannavaram	MVSc	—	—	—
4	CVSc, Proddatur	MVSc	—	—	—
5	CVSc, Korutla	MVSc	—	—	—
		Total	58	20	78
6	CFSc, Muthukur	MFSc	—	—	—
7	College of Dairy Technology, Tirupati	M.Tech (Dairy Technology)			

S.No.	Name of the College	Course	Boys	Girls	Total
1	CVSc, R'nagar.	Ph.D	5	1	6
2	CVSc, Tirupati	Ph.D	5	4	9
	Total		10	5	15

S.No.	Name of the College	Boys	Girls	Total
1	A.H.P, Palamaner	7	4	11
2	A.H.P, Venkataramannagudem	6	13	19
3	A.H.P, Garividi	12	10	22
4	A.H.P, Mahaboobnagar	12	3	15
5	A.H.P, Madakasira	19	20	39
6	A.H.P, Ramachandrapuram	12	07	19
7	A.H.P, Karimnagar	12	8	20
8	A.H.P, Rapur	14	4	18
9	A.H.P, Siddipet	11	11	22
10	A.H.P, Mamnoor	—	—	—
11	Fisheries Polytechnic, Bhavadevarapalli	18	8	26
	Total	**123**	**88**	**211**

Student and Staff Achievements

- Dr A Anand Kumar, Associate Professor, Dept of Pathology, CVSc., Rajendranagar acted as Associate Organising Secretary in Organization of International Course on ''Descriptive Veterinary Pathology for 5 days at VIMTA Labs.
- Dr.B.Sreedevi, Assoc.Prof., Department of VEPM, College of Veterinary Science, Tirupati underwent NAIP training in "Molecular Diagnostics" at Poultry Diagnostic and Research Centre, Georgia University, USA during 15-03-2010 to 13-06-2010
- Dr.P.Sankar, Ph.D. scholar in the Department of Vety. Surgery and Radiology was awarded the Young Surgeon Award at the National Conference and Symposium of Indian Society for Vety.Surgery at Puducherry
- The Department of Vety. Surgery and Radiology, College of Veterinary Science, Tirupati received Gold Medal in large animal surgery at the National Conference and Symposium of Indian Society for Vety.Surgery at Puducherry
- Mr. G. SOMASEKHAR with an OGPA of 8.48 and Miss. D. SAMHITA with an OGPA of 8.37of 2006 batch were selected for NEO MEC PROJECT SHIKSHA Award for the best out going student of B.V.Sc. & AH from the NTR College of Veterinary Science, Gannavaram
- Dr. V.G.N.V. Prasad of 2005 Batch with an OGPA of 8.4 was awarded with Dr. C. Krishna Rao Endowment Trust Gold Medal for the best out going student of B.V.Sc. & A.H from the NTR College of Veterinary Science, Gannavaram.
- 10 BFSc students of College of Fishery Science, Muthukur were awarded All India ICAR-JRF and got admission into MFSc course. Two students went abroad (USA) for higher studies.

RESEARCH

Research activities in the University are taken up as part of PG and PhD degree requirements of the students besides the research activities of the research stations. The faculty also obtain research projects from various external funding agencies. 14 research projects are being implemented under Rashtriya Krishi Vikas Yojana and the University also sanctions funds for situation specific, farmer oriented research from the block grants.

The implementation of the technical programme and work done by research station to achieve the objectives and of the the externally funded research schemes is evaluated at the annual State Level Technical Programme (SLTP) meeting. The SLTP meeting was held on 26-27th May, 2010 to review the work done during 2010-11 and to approve the technical programme for 2011-12.

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.

Externaly Funded Research Projects

During 2010-11, a total of 21 externally funded schemes with financial outlay of ` 296.30 lakhs were in operation in Veterinary, Dairy and Fishery Science faculties as detailed below.

Sl. No.	Title of the Project	Name of the PI	Funding Agency	Funds released during current year (`)
1	Effect of Tulasi (*Ocimum sanctum*) and Turmeric (*Curouma longa*) Herbal preparations on E.coil Pathogenicity in Broilers.	Dr.Y.Ramana Reddy, CVSc, R'nagar	ICAR	61,482/-
2	All India Network project on Blue Tongue Disease	Dr.Y.Narasimha Reddy, CVSc, R'nagar	ICAR	7,16,241/-
3	Monitoring Drug Residues and Environmental Pollutants	Dr.G.Srinivasa Rao, NTR, CVSc, Gannavaram.	ICAR	8,00,000/-
4	Serological diversity and molecular characterization of Dichlobacter no dusus and development of vaccine against virulent footrot.	Dr.D.Srinivasulu, CVSc, Tirupati.	NAIP-ICAR	10,05,447/-
5	Value chain model for bio-ethanol production from sweet sorghum in rainfed areas through collective action and partnership.	Dr.N.Nalini Kumari, CVSc, R'nagar	NAIP-ICAR	10,35,581/-
6	A value chain for clean meat production from sheep.	Dr.M.Venkateswarulu, CVSc, R'nagar	NAIP-ICAR	49,40,997/-

Sl. No.	Title of the Project	Name of the PI	Funding Agency	Funds released during current year (`)
7	Development of e-course for B.Tech (Dairy Technology) Degree Programme.	Dr. V. Padmanabha Reddy, CDT, Tirupati.	NAIP-ICAR	28,04,600/-
8	A Milk value chain for the Un-organized Sector	Dr. V. Padmanabha Reddy, CDT, Tirupati.	NAIP-ICAR	19,78,388/-
9	A value chain in production and utilization of Indian major carps and prawn from aquaculture system.	Dr. G.Vidya Sagar Reddy, CFSc, Muthukur.	NAIP-ICAR	7,10,487/-
10	Improving livelihood security of women self help groups (WSHGs) involved in livestock rearing through capacity building in gender awareness	Dr. D.Thammi Raju, CVSc, R'nagar.	DFID	50,000/-
11	Determination of Fipronil Residues in Bovine Milk	Dr.Y.Ravindra Reddy, CVSc, Tirupati.	Pfizer (Pvt.)Limited	7,63,500/-
12	Diagnosis of Respiratory Diseases in Poultry with reference to Avibacterium paragallinarum and Ornithobacterium rhinotracheale	Dr. P. Anand Kumar, NTR, CVSc, Gannavaram.	Intervet (Pvt.,) Limited	1,20,000/-
13	Development, standardization and field evaluation of thermo stable New-castle diseases vaccine strains for use in village chicken.	Dr.B.Sridevi, CVSc, Tirupati.	DBT, New Delhi	8,25,000/-
14	Separation and purification of bioactive principles of certain Indian herbs by membrance technology (Ayush)	Dr.K.Kondal Reddy, CVSc, R'nagar.	DBT, New Delhi	7,16,838/-
15	E-content generation for the courses on livestock production and managem-ent and (ii) e-content generation for the courses on Animal genetics and breeding.	Dr.R.M.V.Prasad,, CVSc, Gannavarm	MHRD, New Delhi	16,50,000/-
16	Dietary modulation of Zinc in buffaloes effect on growth, immune response and ovarian follicular dynamics.	Dr.D.Nagalakshmi, CVSc, R'nagar.	DBT, New Delhi	18,51,000/-
17	Development and evaluation of acellular biomaterial of marine origin for tissue repair in bovine.	Dr.Makkena Sreenu, NTR, CVSc, Gannavaram	DBT	3,35,700/-

Sl. No.	Title of the Project	Name of the PI	Funding Agency	Funds released during current year (`)
18	Development of enzyme formulation for improving the poultry and pig feed.	Dr.K.Kondal Reddy, CVSc, R'nagar.	DBT	15,98,465/-
19	Development of captive Brood stock Bank of Giant Freshwater Prawn, Macrobrachium rosenbergii (Scampi) Fish Farm, CFSc, Nellore	Dr.O.Sudhakar, CFSc, Muthukur	NFDB, Hyderabad	49,42,000/-
20	Experimental Neurolathyrism in Goats	B.D.P.Kala Kumar, CVSc, R'nagar.	Ministry of Health & Family Welfare GOI.	6,00,000/-
21	Evaluation of herbal residues and nutraceuticals as alternatives to antibiotics for improving theperformance of pigs.	Dr.M.V.A.N.Suryana-rayana, AICRP on Pigs Tirupati.	DBT, New Delhi	21,24,000/-
			TOTAL	**2,96,29,726/-**

Research Highlights:

The high lights of research work conducted as part of PG and PhD research, Department research projects funded by external agencies and projects under state plan are briefly presented in the following sections.

Animal Biotechnology

- A research project on **Development and evaluation of acellular biomaterial of marine origin for tissue repair in bovines** funded by Department of Biotechnology (DBT), New Delhi was under taken at Dept. of Surgery and Radiology, NTR CVSc., Gannavaram. Under this project, preparation of Acellular Swim Bladder (ASB) by treating the fish swim bladder with 0.5 % TritonX 100 +1M NaCl along with mechanical agitation was done. TritonX-100, SDS at 1%, 1.5% and 2% concentrations completely removed the cells which were confirmed by histological evaluation. Reconstruction of abdominal wall with acellular swim bladder showed the acceptability of the material. Studies on transplantation of ASB on to osophagus, Urinary Bladder and Skin defects in rabbits are in progress. The acellular material (fish swim bladder) was tested for it's reactivity with host immune system. The experiment was designed to asses the levels of IL-1 and TGF â2 during wound healing. The exudates were collected from the healing wounds at different time intervals (7, 14, 21, and 28 days) from rabbits and the collected exudates were stored at -20°C till further use. The study is in progress.

Work on a DBT funded research project on **Development of enzyme formulation for improving the poultry and pig feed** is under progress at Department of Livestock Products Technology, CVSc., Rajendranagar. It was found that supplementation of exogenous

enzymes (cellulase-420 IU, xylanase -4025 IU and pectinase - 53 IU / kg) and proteolytic enzymes (Protease-5000 U to 8000 IU/ kg) to high fibre diet resulted in significantly (P<0.05) improved weight gain in broilers. Addition of mannase to low energy and high fibre diet resulted in significantly enhanced body weights of broilers with superior feed conversion. A cocktail of enzymes (cellulase, xylanase, protease, lipase, phytase, pectinase, hemicellulase, amylase, â-mannanase and â-glucanase) was supplemented to negative control diet (high fiber i.e. 6.7% and low energy i.e. 2500 kcal NE) of growing pigs and the average daily gain of enzyme supplemented piglets (438 g) was comparable (P>0.01) with the positive control group (499 g) but was significantly higher (P<0.01) from the negative control group (420 g). The cost of feed per one kg body weight gain in enzyme supplemented group of piglets was much lower (7.67%) than the other two groups.

- **Separation of Bioactive compounds in certain Indian Herbs:** One per cent solutions of five herbal extracts were subjected to nanofiltration process in an attempt to study the decolorization and separation and purification of bioactive principles present in them. The aqueous extract of ***Glycyrrhiza glabra*** has given excellent results for color reduction with nearly 18 nanofiltration membranes with different levels of color reduction (up to a maximum of 91% with NFT-50 membrane). The methanolic extract of ***Ocimum sanctum*** has also shown good response to color reduct *ion with seven* nanofiltration membranes, with a maximum reduction of 82% in a single cycle processing with PS-10 membrane. The color reduction in ***Andrographis paniculata*** methanolic extract was up to 83% wit *h NF-10 membrane, while Bacopa monnieri* extract has shown 70% and 55% with NF-10 an *d PES-10 KD (Ni*shotech) membranes respectively. However, no color reduction was observed in case of ***Coleus Forskoh lii*** methanolic extract with any membrane.

The rejection or permeation behavior of bioactive principles (active compounds) by nanofiltration processing of the herbal extracts was interesting. Different membranes exhibited different levels of rejection/permeation of bioactive molecules. In the herbal extracts, where more than one active principle is present, some membranes have rejected/ permeated the active principles to various levels. This differential rejection behavior of active principles in ***Andrographis paniculata, Ocimum sanctum*** and ***Bacopa monnieri*** may be utilized to separate / purify a group 14 or individual principles in any extract for studying their specific activity or utilizing them for specific application.

Animal Health

- **Characterization of Canine Parvo virus:** The study was undertaken to isolate canine parvovirus from faecal samples by passaging in CRFK and MDCK cells. Further characterization of the isolates was attempted. Of the 10 isolates, 9 belonged to type 2a while one belonged to 2b strain by specific PCR. Tests like Haemagglutination (HA), PCR and immunochromatographic tests were compared. PCR and HA were comparable while immunochromatographic test was less sensitive.
- **Typing of bluetongue virus isolates by genetic methods standardised**: With the type specific primers, the isolates Tirupati, K8, K3 and KMN07 isolates were typed as BTV-2, 9, 10 and 21, respectively. The N15 isolate which was previously typed as BTV-15, was retyped by this assay as BTV-10. On analyzing the sequence of N15 isolate VP2 gene, it showed 98% homology with that of BTV-10 USA serotype. But the homology is only 89% with that of BTV-10 South Africa reference strain. This signifies the origin of BTV-9 from USA.

Animal Production

Research work on "Evaluation of Maize Spent Liquor" was carried out as part of PG research in the Department *of Animal Nutrition* to explore the possibility of using the agro-industrial by-product that is newly available in Andhra Pradesh state from alcohol industry. The study indicated that maize spent liquor can be incorporated up to 6 L in the rations of buffalo bulls for maintenance without any adverse effect thus, reducing the cost of feeding.

Basic and Applied Research

- An educational multimedia resource center (EM_2RC) was established for transfer of technology and dissemination initiatives.
- *Studies on estrus synchronization in sheep* was undertaken at Livestock Research Station, College of Veterinary Science, Rajendranagar and also in field flocks with the collaboration of Department of Animal Husbandry, Andhra Pradesh. The research project studied the parameters such as percentage of expressed estrus, duration of estrus, exhibition of estrus, the endocrine profiles, percentage of conception, lambing rate, augment multiple births in ewes, serum progesterone profiles, 15 biochemical and haematological levels before, during and after the treatment with vaginal sponges. A total of 100 healthy, parous, normal cyclic (60 days post partum) ewes were divided into five groups of 20 ewes. Four groups were treated with 30 mg of flurogestone acetate (FGA), 30 mg of FGA + 400 IU of PMSG (Folligon), 30 mg of FGA for 12 days and 600 IU of PMSG; 30 mg of FGA + 600 IU of PMSG + 200 IU of HCG (Chorulon), spectively and one group was a control group. Incidence of estrus exhibition was 50% in control group, whereas in all other groups it was 100 percent during breeding season. While in non breeding season, the incidence was 40% in control group and 80% in Group 2 and 3 and 100% in Group 4 and 5. Estrus synchronization in sheep was helpful for enhancing the reproductive efficiency in terms of inducing larger percentage of animals to exhibit estrus producing twins as compared to singles in normal life cycle and also in advancing the onset of estrus during non breeding season.
- **Research on bluetongue in sheep:** 31 outbreaks were reported during the year. Eighteen blood samples were collected from the outbreaks during the year. The samples were processed in chicken embryos and fifteen samples which caused lesions in embryos were further passed in BHK21. Embryo fluid at 3rd passage from two samples (1NLG/10, 5NLG/10) were RT-PCR positive for NS1 gene. Two samples of previous years (K1/08, K23/08) from Khammam showed cytopathic effect in the cell culture and were confirmed as BTV based on segmented RNA pattern by agarose gel electrophoresis. These have been sent for typing to the Typing centre of the project at CCS HAU, Hissar. A total of 922 sheep sera samples collected from nine districts of Andhra Pradesh were screened by indirect ELISA kit supplied by IVRI, Mukteshwar. Of these 701 sheep sera were positive for BT antibody giving a positive 16 percentage of 76.0%. BTV-9, BTV-10(Originally typed as BTV-15), BTV-2, BTV-21 were identified Blue tongue virus isolates.
- **Research on Rabbits:** Selective breeding of rabbits for improvement in body weight and litter size at birth is being continued at Department of Animal Genetics and Breeding, CVSc., Rajendranagar. A total of 239 bunnies were produced and 73 were sold to farmers as breeding stock. The stock increased to 192 from 152 during the year. About 23% mortality was reported. The overall mean litter size at birth was 5.46±0.07 and ranged from 2-10 bunnies while the overall mean litter size at weaning was 4.01± 0.06 and ranged from 3.77 to 4.63. The overall mean body weight at birth 1,2,3, 4 and 5 weeks age was 43.71±0.24, 124.74±0.68, 192.38±1.05, 271.16±1.48, and 414.47±2.26g, respectively

while at 6,8,10,12,14, and 16 weeks, it was 605.60, 795.86, 1038.07, 1196.53, 1460.54, and 1551.13g, respectively.

Livestock Production

A MHRD Research project on E - content generation for the courses of LPM and Animal Genetics and Breeding, under the Principal Investigator ship of Dr. R.M.V.Prasad, Assistant Professor and Dr. P.Jaya Laxmi, Associate Professor, NTR C.V.Sc, Gannavaram is in operation during the year with a total budget outlay of ` 16.5 lakhs.

A research project on **Monitoring of Drug Residues and Environmental Pollutants** funded by ICAR is under progress at Department of Veterinary Pharmacology & Toxicology, NTR CVSc., Gannavaram.

For performing depletion kinetic studies in fish (fresh water carps), standardiz ation of a bioassay was done with three different sensitive microorganisms *Escherichia coli* (ATCC 25922), *Escherichia coli* (MTCC 739) and *Aeromonas hydrophoila* (MTCC 646). In the absence of HPLC, bioassay was performed as alternative to continue envisaged work. *Escherichia coli* (MTCC 739) was finaliz ed after standardiz ation for depletion kinetic studies of enrofloxacin/ciprofloxacin in fish.

Bristol-Myers Squibb Fellowship Post Graduate Student Research Work

Curcumin and quercetin are flavonoids present in plant derived foods and are reported to be inhibitors of breast cancer resistance protein (BCRP) that is involved in excretion of ciprofloxacin, an antimicrobial fluoroquinolone used both in human and veterinary practice. Pretreatment of curcumin and quercetin for enhancing bioavailability of ciprofloxacin in rats were investigated. Both curcumin and quercetin significantly increased the plasma concentrations of ciprofloxacin and its elimination half life. The findings suggest that pretreatment of curcumin and quercetin will enhance the ciprofloxacin concentrations in plasma that may help the efficacy of ciprofloxacin, an antimicrobial fluroquinolone in rats.

State Plan Research On "Screening Of Flavonoids (Phytochemicals) against Bovine Mastitis Pathogens *In Vitro*"

Antibacterial activity and MIC for quercetin, morin, cinnamic acid and anisic acid against major bacterial pathogens of mastitis was determined. A formulation was prepared which gave promising results in *invitro* studies

SAILENT FEATURES OF RESEARCH WORK DONE IN RESEARCH STATIONS OF THE UNIVERSITY

1) AICRP ON POULTRY BREEDING, RAJENDRANAGAR

This project was established during 4th five year plan in the year 1971 with an objective of evolving a strain/strain-cross of poultry, capable of laying not less than 220 standard sized eggs in 500 days of age, with a multi-disciplinary approach. Presently the objective is to evolve strain Cross capable of producing not less than 305 standard sized eggs in 500 days of age.

A. Livestock position

Stock on 01-04-10	Additions				Deletions					Total as on 31.03.11
	Hatched	Purchased	Other	Total	Died	Sold	Slaughtered	Others	Total	
1063	6797	-	-	7860	3562	648	-	-	4210	3650

During the period under report, the IWD strain completed 28 cycles of selection and the IWF strain completed 27 cycles of selection. 29 and 28 generation population of IWD and IWF are in progress.

A total of 6,827 chicks were produced during the year 2010-11 comprising 3,491 chicks from IWD (S29) strain, 3,196 chicks from IWF (S28) strain and 140 chicks from Control Population. All the chicks were produced in six hatches. The present generation pure line birds were obtained from the parents that were selected as per the technical programme. Presently the strain IWD(S29), IWF(S28) and control population are pre- layer stage.

The overall percentage of mortality on total base population (IWD, IWF and Control) was 6.76%,12.83% and 2.85% in chicks; 23.75%, 27.10% and 21.52% in growers. The mortality particulars during the year 2010-11 pertaining to IWN (S1) generation and three way cross (IWNxDxF) upto 40 weeks of age was 19.6% and 20.00% respectively.

The IWD, IWF and Control population recorded egg production of 112±0.22, 114±0.30 and 96±0.96 at 40 weeks ; 231 ±0.50, 243±0.57 and 215±0.83 at 64 weeks age. Egg production was 280±1.03, 290±01.45 at 72 weeks of age in IWD and IWF strains respectively. The present generation egg production has increased in both the strains at different ages.

Egg production in IWN (S1) generation and three way cross (IWN with DxF strain) population was 106 and 107 at 40 weeks of age, respectively.

Body weight in IWD and IWF strain was in 1242±3.11 and 1168±3.79 at 16 weeks; 1400±3.71 and 1321 ±4.74 at 40 weeks and 1374 ±4.13 and 1363±5.94 at 64 weeks respectively. The age at first egg was 150 and 148 days in IWD and IWF strains. The average age at first egg was comparable with previous generations and adhere to values in literature.

The average egg weight (g) was 46.78+0.08 and 46.3+0.09 at 28 weeks ; 51.24+0.08 and 50.4+0.10 at 40 weeks and 54.2+0.07 and 53.5+0.07g at 64 weeks age in IWD and IWF strain respectively and egg weights remained constant during this generation compared to previous generation.

Revolving fund project on Backyard Rural Poultry Production

Objectives

To develop a coloured layer bird which is capable of laying 160-180 eggs up to 500 days of age with an average egg weight of 55g at 40 weeks of age and which is hardy for surviving under harsh climatic conditions and backyard system

Stock on 01-04-10	Additions				Deletions					Total as on 31. 03.11
	Hatched	Purchased	Other	Total	Died	Sold	Supplied	Others	Total	
4032	4404	-	-	8436	909	2875	-	-	3784	4652

During the year the fifth generation body weight was 1090± 6.78g ; 1657 ± 7.27g and 1767± 6.78g while, egg weight was 34.1±0.11g; 51 ±0.31g and 56.0±0.21g at 20,40,64 weeks of age respectively. AFE was 154±0. 20 days. Egg production was 78.0±0.76; 150±1.49 at 40, 64 weeks of age respectively.

Mortality was well with in the permissible limit during chick phase and growing phase while it was slightly high during laying phase. Most of the deaths were due to Upper Respiratory Tract infections and Ranikhat disease.

During the report period, a total of 62,488 days old chicks, 579 growers and 1967 adult birds were supplied to the farmers from various districts.

Technology Generated:

RAJASRI – A colour bird suitable for backyard rearing under scavenging conditions was developed.

"Aseel" a World Famous Game Bird - Its Conservation and Utilisation in Evolving Synthetic Varieties of Backyard Poultry.

An elite flock of Aseel at AICRP on Poultry Breeding, Rajendranagar was established and used to produce a new synthetic variety suitable for backyard rearing. AICRP on Poultry Breeding, Rajendranagar will be the first centre to initiate steps for conservation of 'Aseel' in Organiz ed Farm in Southern India. It is a unique initiative aimed to develop a designer fowl suitable for backyard production with Aseel inheritance

Breed	Genetic Group I	Genetic Group II
Aseel	25%	25%
WLH	25%	-
Synthetic variety (Rajasri)	-	25%
Black Austrolarp	50%	50%

Performance Particulars of Rajasri and Genetic groups I and II

	RAJASRI	Genetic group I	Genetic group II
Body Weight (g)			
16wks	1090± 15.47(503)	1196± 11.52(160)	1167± 14.57(161)
40wks	1657±7.27(465)	1784±19.94(138)	1931±20.92(141)
64wks	1767±6.78(452)	2042±20.61(110)	2022±20.36(91)
Average Age at first egg (d)			
154±0.20(484)	161±0.90(151)	161±0.88(152)	
Egg Weight (g)			
EW28	34.1±0.11(390)	35.2±0.13(103)	35.7±0.13(101)
EW40	51.0±0.31(286)	53.4±0.41(63)	54.6±0.40(286)
EW64	56.0±0.21(225)	59.1±0.28(62)	60.4±0.22(78)
Egg Production (No.)			
EP40	78.0±0.76(397)	83.0±1.38(146)	80.0±01.28(136)
EP64	150±1.49(389)	158±2.96(126)	143±2.38(143)
Mortality (%)			
0-8 wks	1.52	1.62	2.03
9-16 wks	5.89	5.13	6.43
17-40wks	7.55	14.83	12.96
41-64 wks	10.97	12.96	29.08

2) ALL INDIA COORDINATED RESEARCH PROJECT ON PIGS, TIRUPATI

The All India Coordinated Research Project on Pigs, Tirupati started functioning from 20.3.1971, with the main objective of studying the performance of Large White Yorkshire pigs under optimum managemental conditions. During the VI Five Year Plan, research work was conducted to study the performance of indigenous pigs under improved managemental conditions and for genetic improvement through selection. During the VII Five Year Plan, research work was initiated on crossbreeding of indigenous pigs with boars of Large White Yorkshire to decide about the optimum level of exotic inheritance best suited to local conditions and is in progress. Studies on indigenous pigs were discontinued from the year 1985-86 and presently performance of only 75% crossbreds by interse mating is being studied (18 th generation) and breeding of 50% crossbreds was discontinued from 2009-10.

Objectives:

- To study the performance of crossbred pigs of 75% LWY under optimum managerial conditions
- To produce crossbreds by inter-se mating
- To evolve economic pig ration(s) with locally available feed ingredients, conventional or unconventional

- To assess performance of pigs of 75% LWY with faster growth on economic rations(s) to produce superior strain of improved pigs
- To study the incidence of various diseases in pigs and suggest areas for undertaking research to provide optimum health cover

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.

Targets and achievements:

During the period under report, 31 farrowings were recorded with an average litter size of 7.16±0.39, with average litter weight at birth of 8.26±0.38 and a litter size of 6.93±0.42 at weaning. A total of 222 births were recorded with a preweaning mortality percentage of 3.60% and post weaning mortality of 6.54%. A total of 223 live piglets were sold during the year to the needy progressive farmers.

Livestock 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
75% LWY	33	60	**93**	250	248	**498**	161	217	**378**	118	95	**213**

Performance of 75% cross bred (LWY x Desi) Pigs (18th generation II crop)

S.No	Characteristics	Male	Female	Total
1	Litter size at birth (no.)	3.64±0.27 (31)	3.51±0.37 (31)	7.16±0.39 (31)
2	Litter weight at birth (kg)	4.52±0.27 (30)	3.88±0.37 (30)	8.26±0.38 (31)
3	Litter size at weaning (no.)	3.51±0.25 (31)	3.41±0.38 (31)	6.93±0.42 (31)
4	Litter weight at weaning (kg)	33.18±2.24 (30)	32.09±3.53 (30)	63.17±4.01 (31)
5	Avg. individual weight at birth (kg)	1.20±0.01 (113)	1.10±0.01 (109)	1.15±0.01 (222)
6	Avg. individual weight at weaning (kg)	9.13±0.05 (109)	9.17±0.09 (105)	9.15±0.05 (214)
7	Number of days for weaning	56	56	56
8	Pre weaning mortality rate (%)	3.53 (113)	3.66 (109)	3.60 (222)
9	Pre weaning growth rate (gm/d)	141.61±1.07 (109)	144.18±1.62 (105)	142.28±0.96 (214)
10	Post weaning mortality rate (%)	5.50 (109)	7.61 (105)	6.54 (214)
11	Post weaning growth rate (gm/d)	158.01±1.51 (100)	141.72±4.75 (57)	152.10±2.06 (157)

Values in brackets indicate number of observations

S.No.	Characteristics	Male	Female	Total
12	Overall growth rate (*upto 4 m*) (gm/d)	140.88±0.94 (113)	136.08±1.39 (109)	138.53±0.85 (222)
13	Body weight (kg) 1 month	6.00±0.03 (113)	5.98±0.04 (108)	5.99±0.02 (221)
	2 month	9.13±0.05 (109)	9.17±0.09 (105)	9.15±0.05 (214)
	3 month	13.88±0.07 (100)	13.56±0.13 (57)	13.76±0.06 (157)
	4 month	18.08±0.12 (23)	18.18±0.24 (6)	18.10±0.10 (29)
14	Age at slaughter (d)	293.80±14.92 (15)	320.06±17.49 (15)	306.93±11.55 (30)
15	Weight at slaughter (kg)	82.73±4.19 (15)	74.53±2.54 (15)	78.63±2.52 (30)
16	Carcass Length (cm)	72.63±1.03 (11)	69.25±1.01 (12)	70.86±0.79 (23)
17	Back Fat Thickness (mm)	1.26±0.19 (11)	1.14±0.06 (12)	1.20±0.09 (23)
18	Meat Bone Ratio	2:1 (15)	2:1 (15)	2:1 (30)
19	Feed conversion efficiency	3.92±0.13 (12)	3.81±0.15 (12)	3.87±0.26 (24)

Values in brackets indicate number of observations

Achievements under RKVY, if any: The research project on "Establishment of a pig unit for the supply of elite germ plasm to the farmers" is under implantation.

During the year 2010-11, 68 farrowings were reported resulting in the birth of 553 piglets out of which 420 piglets were supplied to the needy farmers taking the total number of piglets supplied to 1140 since the start of the research project

- To accommodate breeding stock, 4 new pig sheds were added.
- A one day training programme was conducted under RKVY on profitable pig rearing in which 25 enterprising pig farmers participated.

3) LIVESTOCK RESEARCH STATION, LAM FARM, GUNTUR

The Livestock Research Station, Lam farm, Guntur has been in the service of farmers since 1926. Prior to 1960 it gained popularity as a buffalo breeding farm. It was transferred to APAU during 1967 and in 1972 this farm was selected by ICAR, New Delhi for locating a unit of AICRP on cattle for cross breeding of Ongole cattle with HF, Brown-Swiss and Jersey. Recognizing the importance of native genetic resources, the ICAR in 1986 selected LAM farm for conservation of Ongole breed of cattle. A high pedigree nucleus herd of Ongole cows and bulls was located at LAM farm and parallelly two associate herds were also located at LAM and at Mahanandi

Objectives:

i. To study the genetic and phenotypic variances in milk and co-variances 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/draught and milk.

ii. To undertake testing and selection of bulls for bringing genetic improvements in population involved.

To provided superior germplasm for utilization in development program for improving draught and milk production

Livestock position:

A. Germplasm Unit

Opening Stock	Additions				Deletions					Closing Stock
	Born	Purchased	Others	Total	Died	Sold	Slaughtered	Others	Total	
Females 285	24	0	8	32	2	15	0	13	30	287
Males 38	40	0	9	49	0	37	0	0	37	50

B. Data Recording Unit

Opening Stock	Additions				Deletions					Closing Stock
	Born	Purchased	Others	Total	Died	Sold	Slaughtered	Others	Total	
Females 285	63	0	26	89	4	52	0	16	72	302
Males 38	67	0	0	67	3	58	0	0	61	44

Body Weight (kg)

Location	Sex	Birth	3months	6months	12months	18months	24 months
GP Unit	Male	27.73 ± 0.39 (40)	77.5 ± 2.08 (32)	115.81 ± 2.1 (30)	157.82 ± 7.94 (11)	228.4 ± 11.13(5)	268.67 ± 1.86 (3)
	Female	26.04± 0.24 (24)	71.29± 2.94(20)	111.6± 2.61(20)	166.23±5.67 (20)	219.21± 5.23 (14)	257.21 ± 3.7(14)
LRS	Male	27.32 ± 0.3 (68)	73.49 ± 1.48(63)	110.64 ± 1.66(58)	110 ± 0(1)	-	-
	Female	25.56± 0.22(63)	71.04± 1.48(55)	112.78± 1.71(52)	169± 3.41(44)	206.03 ± 3.89(30)	254.4 ± 2.36(21)

Values in parenthesis indicate number of observations

Production Performance of Ongole Cattle - GP Unit

Parity		3	4	5 & above	Overall
Lactation	N	3	5	52	60
yield	Mean	1007.37	1061.58	1005.36	1010.15
(Kg)	SE	28.63	36.08	15.79	14.12
Lactation	N	3	5	52	60
length	Mean	218	232	233	232.17
(days)	SE	19.7	11	3.17	3.01
Milk yield	N	3	5	52	60
300 days	Mean	1007.37	1061.58	1005.36	1010.15
(kg)	SE	28.63	36.08	15.79	14.12
Dry	N	6	5	52	64
period	Mean	280	187.6	193	199.61
(Days)	SE	44.11	13.86	11.34	10.57
Peak	N	3	5	51	59
Yield	Mean	6.1	6.2	5.77	5.82
(K.G.)	SE	0.44	0.58	0.17	0.16

Production Performance of Ongole Cattle - LRS Unit

Parity		1	2	3	4	5&above	Over all
	N	**38**	**26**	**25**	**11**	**28**	**128**
Lactation yield (kg)	Mean	690.81	747.1	799.81	757.15	710.14	733.46
	SE	23.22	18.44	24.8	88.52	25.57	12.12
Lactation length	N	38	26	25	11	28	128
(days)	Mean	200.29	213.81	213.8	198.73	201.86	205.88
	SE	6.96	5.76	5.87	12.2	8.89	3.43
	N	38	26	25	11	28	128
Milk yield 300 days	Mean	690.81	747.1	799.81	757.15	710.14	733.46
	SE	23.22	18.44	24.8	88.52	25.57	12.12
	N	30	18	14	6	31	99
Dry period (Days)	Mean	315.3	254.5	255.36	231.17	231.52	264.43
	16.91	1.35	13.88	32.29	14.96	9.01	11.81
	N	37	23	23	11	28	122
Peak yield (kg.)	Mean	5.21	5.1	5.33	5.37	5.19	5.22
	SE	0.13	0.16	0.16	0.18	0.15	0.07

Reproduction performance of Cattle - G.P.UNIT

		Parity					
Traits		1	2	3	4	5	Over all
Service period	N	0	1	6	5	52	64
(days)	Mean	0	47	193.17	191.8	161.59	165.12
	S.E	0	0	26.15	36.36	13.1	11.41
Calving interval	N	0	1	6	5	52	64
(days)	Mean	0	348	491.83	449.4	439	443.34
	S.E	0	0	24.96	20.93	12.15	10.49

Reproduction performance of Cattle - LRS Unit

Traits		Parity					
		1	2	3	4	5	Over all
Age at calving	N	28	-	-	-	-	-
(Months)	Mean	53.39	-	-	-	-	-
	S.E	1.33	-	-	-	-	-
Service Period	N	31	17	14	6	31	99
(days)	Mean	212.71	180.59	165.64	133.83	144.29	264.43
	S.E	18.65	1.23	15.91	21.17	16.64	9.01
Calving	N	31	18	14	6	31	100
Interval	Mean	527.45	467.06	447.79	455	421.74	468.31
(days)	S.E	22.71	0.74	28.96	24.74	10.43	10.11

LRS, MAHANANDI

The farm was established in 1952-53 by AP Animal Husbandry Department and was transferred to APAU during October, 1992 and was later brought under the control of SVVU during 2005. The technical programme was implemented as per the guidelines by recording the data on growth, production and reproduction parameters.

The RCC mangers used for feeding at LRS, Mahanandi

Technical Programme:

1) To study the genetic and phenotypic variances in milk and co variances 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.
2) To undertake testing and selection of bulls for bringing genetic improvement in population involved.
3) To provide superior germplasm for utilization in development programme for improving draught and milk production.

HERD STRENGTH

Sl. No.	Category	Opening Balance	Additions		Disposals			Closing Balance
			Birth	Transfers	Deaths	Trans-fers	Surplus	
1	Calves < 3 months	10	34					12
	3-6 months	9						8
	6-12 months	13				1		16
2	Heifers 1-2 Years	20				10		25
	2-2.5 Years	10						16
	> 2.5 Years	42			2			25
3	Cows Dry	59			1	13		57
4	Cows in Milk	32						43
	Total	195	34		3	24		202
MALES								
1	Calves < 3 months	6	31					01
	3-6 months	12			04			06
	6-12 months	10				19		15
2	Young Bulls 1-2 Years		12			20		00
	> 2 Years	3						3
3	Breeding Bulls					6		0
4	Bullocks	2						2
	Total	45	31		04	45		27
	Grand Total	**240**	**65**		**7**	**69**		**229**

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 240 comprising 195 females and 45 males. During the year 34 females and 31 males were born, 3 female and 4 male died. 6 young bulls were transferred for breeding purpose to cattle project Lam farm, Guntur. 24 females and 39 males were sold in public auction. The herd strength as on 31-12-2010 was 22930 comprising of 202 females and 27 males.

The average birth weight, height, length and heart girth of female calves born during this year were 27.53 ± 0.50 Kg, 66.97 ± 0.79 Cm, 61.82 ± 0.61 cm and 69.09 ± 0.33 Cm respectively. While those

for male calves were 27.50 ± 0.25 Kg, 68.45 ± 0.23 Cm, 61.35 ± 0.34 Cm and 69.26 ± 0.48 cms respectively.

The production parameters of lactation yield, Lactation length, Milk Yield in 300 days, Dry period and Peak milk Yield were 560.01 ± 41.15 kg, 249.25 ± 41.15 days, 550.97 ± 36.64 kg, 314.47 ± 35.56 days, 3.07 ± 0.16 kg respectively. The Reproduction parameters of service period, Inter calving period and Age at calving were 255 ± 28.38 days, 541 ± 28.65 days and 54 ± 1.39 months respectively.

During this year 155 Artificial Inseminations were done and 70 animals were conceived with a conception rate of 45.16%. The total quantity of milk produced during the year was 34,024.35 Kg. Out of which 21,037.85 Kg of milk was sold and 12,986.50 Kg of milk was fed to calves. The total quantity of green fodder of 1000.00 MT, concentrate of 80.50 MT and dry fodder of 24.50MT were fed to the cattle apart from the daily open grazing of 6 to 8 hours throughout the year.

BUFFALO RESEARCH STATION, VENKATARAMANNAGUDEM, WEST GODAVARI DT

The Buffalo Research Station, Venkataramannagudem was started on 04.11.1999 with both Plan and Non-Plan schemes

Objectives

1. To undertake genetic improvement and conservation of Murrah buffaloes.
2. To undertake work on physiology and behavioral aspects of buffalo for better management.
3. To undertake studies on nutrition and feed resources\

Stock on 01-04-10	Additions				Deletions					Total as on 31. 03.11
	Born	Purchased	Other	Total	Died	Sold	Supplied	Others	Total	
237	45	-	-	282	29	74	-	-	103	179

Work done:

117 doses of semen was inseminated in buffaloes using the semen of 2 different Murrah Buffalo bulls. Among the buffaloes inseminated, 50 buffaloes conceived with a conception rate of 42.73%. After the IX Scientists 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 form Hisar and distributed among the field units for insemination and 32 daughters were born. The total number of calves born during the year was 45 out of which 24 were males and 21 were females

Body weight of buffaloes

Age (Months)	Females			Males		
	N	Kg	SE	N	Kg	SE
Birth	21	28.12	0.21	24	31.25	0.03
3	20	53.12	0.14	15	59.61	0.21
6	15	89.71	0.32	11	97.23	0.77
12	12	171.63	0.17	13	193.87	0.83
18	16	256.21	0.22	17	291.21	0.91
24	29	343.21	0.41	13	403.27	2.57
Adult	83	553.01	5.11	15	616.22	7.17

Production performance of Lactating Buffaloes

Loctation No.	Milky yield (Kg)	Lactation Length (Days)	305 days milk yield (Kg)	Average peak yield (Kg)
1st	1821.71± 21.23 (5)	270.12± 3.12 (5)	1821.71± 21.23 (5)	7.31± 1.26 (5)
2nd	2023.53± 112.16 (7)	293.51±21.67(7)	2023.53± 112.16 (7)	9.41 ± 0..35 (7)
3rd	2413.12± 212.21(2)	301.64± 20.21 (2)	2413.12± 212.21(2)	8.31±0.81 (2)
4th	2331.86±216.14 (8)	297.21± 9.37(8)	2331.86±216.14 (8)	7.26±2.16 (8)
5th	2126.52±137.52 (6)	281.31±5.47 (6)	2126.52±137.52 (6)	6.81± 1.12(6)
6th & above	1947.27± 206.21 (3)	263.40± 8.43 (3)	1947.27± 206.21 (3)	5.61±0.60(3)
Overall	**2107.54±112.61(31)**	**287.51± 9.61(31)**	**2107.54 ± 112.61 (31)**	**7.70 ± 0.27(31)**

(Figures in parenthesis indicate number of observations)

Targets and achievements

S.No.	Trait	Target	Achievements
1	Av. Age at first service (months)	26	28.1
2	Av. Age at first calving (months)	40	38
3	Av. Age for initiating training for bulls (months)	20	29
4	Av. Age at first collection (months)	30	41
5	Av. Service period (Days)	150	121
6	Calf mortality (0-3 months)	Less than 8%	26%
7	Wet Average	> = 7	6.32
8	Herd Average	26	28.1

9.0 lakh fodder slips of Hybrid Napier (APBN-1) and Guinea grass (Tanzania and Mumbasa) were supplied from this station to the farmers from various parts of the state of Andhra Pradesh. Under the Revolving Fund Scheme, 16.30 tonnes of concentrate mixture were sold to 140 local farmers and also to LRS, Garividi.

Productivity at the farm

a. Average yield of milk produced at the farm – 5.75 kgs/Animal/day

b. Average cost of milk production – Rs.26/kg

REGIONAL BUFFALO DEVELOPMENT AND RESEARCH STATION ANTHERGAON, RAMAGUNDAM, KARIMNAGAR DIST.

On 18.7.2009, permission orders were given by SVVU to start the unit at Anthergaon and one Scientist was posted at this station in the month of November, 2009

OBJECTIVES

I. To establish an elite herd of pure Murrah buffaloes

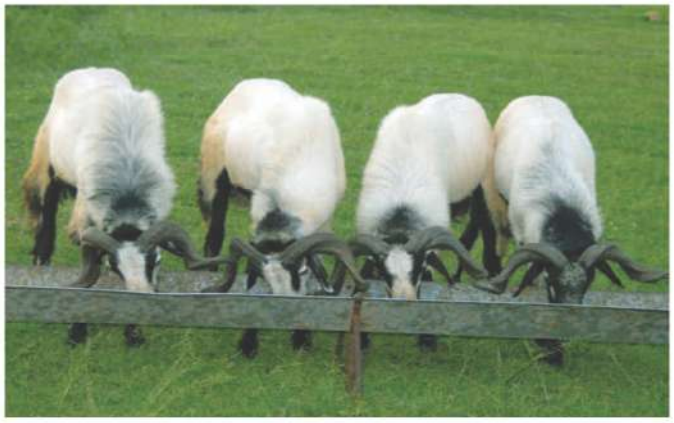
II. To Produce PT bulls for upgrading ND buffaloes of the region

III. To carry out research in feeding, management, and health care of buffloes

IV. To transfer the advanced technologies from Lab to Land

The implementation of the technical programme has not yet started

LIVESTOCK RESEARCH STATION, PALAMANER



The Livestock Research Station, Palamaner was started on 13.08.1954 by the Animal Husbandry Department, Govt. of A.P. with the specific objective of improving & reviving "Punganur" the world's shortest breed of cattle, native to Chittoor District.

This Research station was transferred to the Andhra Pradesh Agricultural University in the year 1967 from the Animal Husbandry Department.

The main objectives are:

- To study the breed characters of Punganur cattle
- To study the productive and reproductive performance of Punganur Cattle
- To conserve the Punganur breed of cattle

ICAR Network Project on Nellore sheep Improvement

Network Project on Nellore Sheep Improvement (ICAR) based at Livestock Research Station, Palamaner was started initially during VIII Plan as field unit in 1991. It was later converted to farm based unit from the year 1993-94. The selective breeding of Nellore sheep came into operation under Network Project on Sheep Improvement, with the main objective of improving the genetic potential of Nellore sheep.

The main objectives of the project are

1. To improve the productivity of Nellore Sheep (Jodipi strain) by selective breeding

2. Distribution of superior Nellore Jodipi ram lambs/ rams to farmers for genetic improvement of their stock.

Livestock position

Dairy Section

Stock on 01-04-10	Additions				Deletions					Total as on 31-03-11
	Born	Purchased	Other	Total	Died	Sold	Supplied	Others	Total	
Punganur Cattle :										
110	8	0	0	118	5	0	7	0	12	106
NATP Punganur Cattle										
15	4	0	0	19	0	0	0	0	0	19
Total Punganur Cattle										
125	12	0	0	137	5	0	7	0	12	125
HF-Crossbred										
31	4	0	0	35	1	0	32	0	33	2
Jersey Cow										
1	0	0	0	1	0	0	0	0	1	1
Stallion										
1	0	0	0	1	0	0	0	0	0	1

Sheep Section

Stock on 01-04-10	Additions				Deletions					Total as on 31.03.11
	Born	Purchased	Other	Total	Died	Sold	Slaugh-tered	Others	Total	
Nellore jodipi										
596	248	-	-	844	57	84	-	53	194	650
Nellore Palla										
110	-	-	-	-	5	3	-	102	110	0
Nellore Synthetic										
18	3	-	-	21	8	-	-	1	9	12

Reproductive performance

Lambing Season	Ewes available for Breeding	No. of ewes tupped	Tupping %	Lambings			No. of ewes died between breeding & lambing	Lambing % based on	
				Male	Female	Total		Breedable ewes available	Ewes tupped
Off Season	224	123	54.91	61	58	119	8	53.13	96.74
Main Season	178	149	83.71	67	62	129	4	72.47	86.58
Overall	297	272	91.58	128	120	248	12	83.50	91.18

Targets and Achievements

Trait	Target	Achievement
Body weight at birth (kg)	3.0	3.20 ± 0.02
Weight at weaning (kg)	15.0	13.67 ± 0.12
6 months body weight (kgs)	19.0	Not reached 6 months of age as on 31-3-2011
12 months body weight (kgs)	25.0	Not reached 12 months of age as on 31-3-2011
Lambing % on the basis of Ewes available	80	83.50
Mortality up to 1 year	<10%	3.71
Mortality in Adults	<8%	4.33
Culling up to 1 year	<10%	0.46
Culling in Adults	<8%	8.49
Replacement rate	30%	28.95

A total of 84 Nellore rams were sold to farmers for genetic improvement of their flock

Punganur cattle

A total of 12 Punganur calves were born with an average birth weight of 11.13 kg. During the report period, 11 Punganur animals completed the lactation period. The average lactation milk yield was 526 litres with a lactation length of 236 days. The daily average milk yield and peak yield were 2.18 and 2.5 litres, respectively. The average age at first calving, service period and gestation period were 1703 days, 142 days and 285 days, respectively.

LIVESTOCK RESEARCH STATION, MAMNOOR, WARANGAL

Sanctioned vide G.O. Ms. No 5 Feed & Agri Dept Dt. 2-1-1961 and started on 02-01-1961 at Narasampet which for shifted to Mamnoor vide G.O.Ms.No. 2285 F&R Dept dt. 15-09-1964 and Transferred to SVVU vide G.O. Ms. No. 45, AHDD&F (AH-II) dept. dt. 12-06-2008 and taken over by the SVVU on 01-04-2009 vide Circ. Memo No 5964/SC/2009 dt.31.3.209 of SVVU, Tirupati.

Objectives of the Research Station:

I. Production of the Elite Murrah Young bulls for supply to APLDA for artificial insemination and to farmers where A.I. facilities are not available.

II. Production of Nellore Brown Breeding Rams for supply to the shepherds for up-gradation of the local stock.

III. 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.

IV. Training Programmes

- Training Programmes were organized farmers on Sheep & Dairy husbandry, fodder cultivation and their utility for improvement of economic condition.
- Internees & polytechnic students were also exposed to various farm activities.
- Awareness Programme to health workers on the zoonotic diseases.

Livestock

Stock on 01-04-10	Additions				Deletions					Total as on 31.03.11
	Born	Purchased	Others	Total	Died	Sold	Supplied	Others	Total	
Murrah 105	34	20	—	159	11 (Mort-ality 6.47%)	—	—	—	11	148
Sheep 603	188	—	—	791	56 (Mort-ality 7.0%)	238	—	—	294	497

Work done during the current year (Targets & Achievements)

Dairy Section :

Sl. No	Particulars	Progress of Work
1	Total no of Stock	148
2	Breedable population	50
3	No. of Calvings	44
4	Milch Average (Kg)	7.12 Liters
5	Herd Average (Kg)	3.72 Liters
6	Birth weight (Kg)	Male 35
		Female 33

PERFORMANCE INDICATORS:

- Avg. Age at First Service - 34 Months
- Avg. Age at First Calving - 44 Months
- Avg. Calving Interval - 16 Months
- Herd Average - 3.72 Lts
- Milch Average - 7.12 Lts

Sheep Section:

1	Total no of Stock	497	
2	Lambings	188	
3	Average Birth Weight (Kg)	Male	3.00 Kg
		Female	2.75 Kg

Fodder Production & Extension Activities

Sl. No	Particulars	
1	Silage	100 MTs
2	Green Fodder	900 MTs
3	Fodder Slips	
	• Supplied	4 Lakhs
	• Farmers Covered	60
	• Area Covered	150 Acres

LIVESTOCK RESEARCH STATION, MAHABUBNAGAR

Mahabubnagar buck

Livestock Research Station, Mahabubnagar was transferred from Sheep Breeding Farm, Dept. of Animal Husbandry on 1-1-1993 along with land, buildings & Machinery

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 their flocks.

- To study and improve the reproductive and productive performance of goats which thrive under hot and harsh climatic conditions where the vegetations is sparse and poor.
- To carryout studies on the relative merits of intensive, semi-intensive and extensive sheep rearing systems.
- To conduct on farm and off farm training programmes to small and marginal farmers and shepherds in sheep husbandry activities. To give trainings for veterinary & Para veterinary staffs engaged in sheep developmental activities by refreshing their knowledge.
- To study and demonstrate different fodder conservation methods.
- To develop and establish mixed farming techniques like Silvi-Pasture System, Silvi Horti Pasture System and Horti-Pasture Systems for optimizing sheep production.
- To develop improved packages of practices in sheep husbandry for adoption by shepherds, small and marginal farmers and business entrepreneurs.

Mahabubnagar Local Goat

Livestock Position

Stock on 01-04-10	Additions				Deletions						Total as on 31.03.11
	Born	Purch-ased	Others	Total	Died	Sold	Slaugh-tered	Publlic auction	E.A	Total	
Sheep 261	121	-	-	382	97	42	-	-	37	176	206
Goat 22	31	-	-	53	2	-	-	-	-	2	51
Total: 283	152	-	-	435	99	42	-	-	37	178	257
RKVY 140 Sheep	5	-	-	145	-	-	-	-	-	-	145
										Grand Total	**402**

Selective Breeding programme in Deccani breed of sheep to study the performance characteristics

- Selective breeding Programme was done by undertaking single trait multi stage selection with designated matings to improve the breed at farm level and to supply the elite Deccani Breeding Rams to the farmers.
- The animals were reared under semi intensive system with 8 hours grazing along with green fodder and concentrate feed after grazing.
- The avg. weight at birth, weight at weaning, weight at 6 months of age and weight at 1 year for male lambs during the present year were recorded as 3.00 ± 0.21 kgs., 11.50 ± 0.28 kgs., 18.00 ± 0.30 kgs. and 25.00 ± 0.26 kgs. respectively.
- The avg. weight at birth, weight at weaning, weight at 6 months of age and weight at 1 year for female lambs were 2.80 ± 0.23 kgs., 10.50 ± 0.29 kgs., 16.50 ± 0.28 kgs. and 23.00 ± 0.25 kgs. respectively.

- The lambing percentage was 96%.

Studies on the performance characteristics of Mahabubnagar local 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 3.50 ± 0.10 kgs. while at weaning was 15.30 ± 0.23 kgs. at 6 months age was 20.40 ± 0.23 kgs. and 1 year body weight was 30.40 ± 0.26 kgs.
- The average birth weight in female kids was 3.10 ± 0.10 kgs. while at weaning was 11.60 ± 0.19 kgs. at 6 months age was 18.10 ± 0.21 kgs. and and 1 year body weight was 25.60 ± 0.23 kgs.
- The animals have shown good reproductive performance i.e., kidding 172%.

The twinning percentage recorded was 42%.

a. SUPPLY OF SUPERIOR GERMPLASM, FODDER SLIPS / SEEDS ETC.

1. Supply of Superior germplasm :

- Supply of elite Deccani breeding rams to the farmers is one of the main objectives of Livestock Research Station, Mahabubnagar to enable to improve the hardy Deccani breed in farmer's flock.
- 38 breeding rams were supplied to the farmers during the year 2010-11.

2. Supply of fodder slips :

- The Forage crop museum was established at L.R.S., Mahabubnagar with 20 varieties of grasses and legumes suited to rain-fed and irrigated conditions for demonstrations to farmers.
- Different pasture systems were established for demonstration to farmers like Silvipasture System, Silvi Horti Pasture System & Horti Pasture System models suited to rain-fed conditions for small ruminant productions.
- These models and fodder crop museum are serving as demonstration centres and resource centers to different farmers, shepherds, NGOs, Adharsha rythulu, Gopalamitras, progressive farmers etc.
- The rooted grass slips like APBN –1, Guinea grass, Cencherus ciliaris are supplied to the small and marginal farmers and shepherds who are dependent on dairy, sheep and goat production for their livelihood.
- The high yielding fodder varieties like APBN-1, Guinea grass Cencherus ciliaris suitable to rainfed and irrigated conditions were introduced for different livestock production systems.

Now, this research station has the capability to supply the APBN-1 fodder slips every year for 40 acres area. 1, 40,000 APBN-1 fodder slips are supplied during the year 2010-11.

LIVESTOCK RESEARCH STATION, GARIVIDI

Livestock Research station, Garividi was established during October 1989 as state plan scheme.

Genetic improvement of the local sheep by selective breeding is the main objective

Vizianagaram Ram

Livestock position

Particulars	Opening balance			Additions			Deletions			Closing balance		
	M	F	T	M	F	T	M	F	T	M	F	T
Cattle	3	5	**8**	3	-	**3**	5	1	**6**	1	4	**5**
Sheep	38	150	**188**	36	67	**103**	31	38	**69**	36	186	**222**
Sheep (RKVY)	-	53	**53**	48	84	**132**	2	7	**9**	46	130	**176**

Performance of Vizianagaram local sheep.

- The data was recorded for the total strength of sheep flock at Livestock Research station, Garividi by obtaining periodical body weights like birth weight, weaning weight,6 months body weight, one year body weight and adult body weight based on single trait selection.
- Lambing percentage was recorded as 77 % during the year 2010-11.
- Lambing pattern

Season	Lambs born		Total
	Ewe Lambs	Ram Lambs	
Summer	9	4	13
Autumn	4	2	6
Winter	34	30	64
Total	**47**	**36**	**83**

- Productive performance

Birth weight		Weaning weight		6 Months weight		One year weight		Adult weight	
Ewe Lamb	Ram Lamb	Ewe Lamb	Ram Lamb	Ewe Lamb	Ram Lamb	Ewe Lamb	Ram Lamb	Ewe Lamb	Ram Lamb
2.69 ± 0.04	2.84 ± 0.05	8.60 ± 0.18	11.24 ± 0.23	15.45 ± 0.23	17.27 ± 0.27	20.39 ± 0.05	26.01 ± 0.05	26.31 ± 0.15	35.43 ± 0.26

MORTALITY (%): 8.3

CHARECTERIZATION OF NORTH COSTAL SHEEP

COLOUR :

WHITE WITH BLACK PATCHES ON FACE, ABDOMEN AND PARTLY ON LEGS.


BODY SIZE : MEDIUM


EARS : TUBULAR, RUDIMENTARY AND BROAD


HORNS : 2 TO 3 CURLED HORNS AND PRESENCE OF RIDGES ON HORNS

LEGS : STRAIGHT AND STRONG

TAIL : THIN AND SHORT

PROMINENT BULGING OF OCCIPITAL REGION IS AN UNIQUE FEATURE IN RAMS

APRONED RAM

BIOMETRY

Body conformation (in cm)

Height at withers	72-78
Length	67-74
Chest girth	88
Paunch girth	84-88
Ear length	10-15
Tail length	10-13

Particulars of supply of superior germplasm, fodderslips

- Supplied APBN-1, Coloneal guinea fodder slips to 32 farmers to cover an extent of 16 acres
- 24 breeding rams were supplied to the needy farmers.

Achievements under RKVY:

No. of elite farmer flocks identified: 170 (Vizianagaram 100 + Srikakulam 70)

- 137 breeding rams were introduced into 137 elite flocks. Covered 5480 ewes.
- Insured 90 breeding rams through National Assurance Company Ltd.,
- Purchased 132 breedable ewes and maintained the flock at Livestock Research Station, Garividi as demo unit.
- The data were generated for 50 flocks. The average birth weights of ewe lambs was 2.2 kg and ram lambs was 2.8 k.g.
- Supplied 12 tonnes of feed to the selected flocks.
- Supplied deworming agents and medicines to the selected beneficiaries.
- Organized three training programmes to the selected beneficiaries

Lambs born under RKVY

RKVY Flock

Beneficiary with breeding ram

Distribution of feed and medicine under RKVY

LIVESTOCK RESEARCH INSTITUTE, COLLEGE OF VETERINARY SCIENCE, RAJENDRANAGAR

Livestock Research Institute, Rajendranagar was formed during April, 2001 by merging Non-plan schemes (Dairy Experimental Station (DES), Forage Production Farm (FPF), Economics of Milk Production (EMP) and Livestock Experimental Station (LES) under one umbrella. Earlier these stations were in the respective Departments of College of Veterinary Science, Rajendranagar. Later during 2005, Poultry Experimental Station was separated from Livestock Research Institute and formed part of the Department of Poultry Science.

Objectives of Dairy Experimental Station:

- To carry out research on livestock with an approved technical programme.
- To cater to the teaching and demonstration needs of the under graduate students of CVSc R'Nagar
- To provide infrastructure facilities for carrying out P.G. students research programmes and other projects
- To disseminate transfer of technology

Live stock Position:

Stock on 01-04-10	Additions				Deletions					Total as on 31.03.11
	Born	Purchased	Others	Total	Died	Sold	Slaugh-tered	Trans fers	Total	
Murrah 105	34	20	—	159	11	—	—	—	11	148
Graded Murrah 88	63	13	-	164	08	-	-	03	11	153
Deoni Cattle 60	75	19	-	154	5	-	-	-	5	149
C.B. Cattle19	16	03	-	38	-	-	-	1	1	37
Total 272	188	55	-	515	24	-	-	04	28	488

Conservation and improvement of Deoni Cattle

Deoni cattle is a dual purpose breed. Conservation of Deoni cattle is a continuous activity of the farm.

Objectives

- To develop pure bred of Deoni cattle
- To study the growth, productive and reproductive performance of Deoni cattle
- Selective breeding based on the dams milk yield

BODY WEIGHT (KG) OF DEONI CALVES

Age	Male			Female		
	2010-11	2009-10	2008-09	2010-11	2009-10	2008-09
At Birth	24.42 ±0.82 (n=6)	23.35 ±0.3 (n=13)	25.83 ± 0.25 (n=9)	22.5 ±0.5 (n=7)	21.05 ± 0.5 (n=10)	24.44 ± 0.31 (n=8)
3 months	46.5 ±1.24	45.31 ± 0.7	47.29 ± 0.24	43.9 ±0.71	42.8 ± 0.7	44.36 ± 0.28
6 months	66.82 ± 0.5	65.06 ±0.7	67.2 ± 0.46	63.38 ±0.63	62.7 ± 0.9	62.08 ± 0.57
9 months	96.5 ± 0	95.64 ±0.6	93.67 ± 1.12	91.87±0.55	91.25 ± 0.7	90.80 ± 0.93
12 months	-	119.5 ±2.2	113 ± 0.01	-	-	107.75 ± 0.52

The average lactation yield was **840.65 ± 87.88 kg** and average lactation period was **282.82 ± 30.41 days**.

Technology Generated:

- Complete diets utilizing crop residues for growing and milch animals
- Developed a prototype of grinder cum mixer for preparing complete diets.

(ii) FORAGE PRODUCTION FARM :

Area under cultivation during the year

Kharif Season : 25 ha.

Rabi season : 14 ha.

Summer season : 10 ha.

Jowar and Maize are being grown in all three seasons with staggered sowings. Perennial grasses like Hybrid Napier and Para grass are cultivated and maintained throughout. Subabul and Hedge Lucerne are also grown in waste land not suitable for cultivation.The farmers have been impressed with the performance of the APBN-1 and there is lot of demand for the supply of planting material. Area under APBN-1 is steadily increasing.

Livestock Position:

a) Supply of fodder silips/seeds are supplied to the farmers.

About 8,86,400 No. of slips of APBN-1 were supplied to the farmers .

(iii) LIVESTOCK EXPERIMENTAL STATION :
Before 1970, this farm was under control of State Government as "Wool Technology Laboratory". Later it was transferred to College of Veterinary Science, Rajendranagar

Breed	Stock as on 1-4-10	Additions				Deletions					Total as on31-03-11
		Born	Purch-ased	Others	Total	Died	Sold	Slaugh-tered	Others	Total	
SHEEP											
Deccani	77	24	—	—	101	12	6	—	-	18	83
Nellore Brown	22	01	—	—	23	01	14	—	—	15	08
Nellore Jodipi	07	02	—	—	09	01	02	—	—	03	06
Nellore white	06	02	—	—	08	01	—	—	—	01	07
Awassi	01	—	—	—	01	—	01	—	—	01	—
GOATS											
Osman-abadi	51	15	01	—	67	05	25	—	—	30	37
Jakhrana	01	—	—	—	—	—	01	—	—	01	—
Jamuna-pari	04	01	—	02	07	—	—	—	—	—	07
Black	—	01	—	02	03	—	—	—	—	—	03
Bengal Telly-	07	04	—	—	11	—	01	—	—	01	10
cherry											
Boer	06	—	—	—	—	02	01	—	—	03	03
MBNR Local	06	01	—	7	7	01	01	—	—	02	62
goats											
SWINE											
L.W York Shire	15	06	—	—	06	—	06	—	—	06	15
Grand Total	**203**	**57**	**01**	**61**	**297**	**27**	**101**	**—**	**01**	**129**	**235**

Livestock Research Station, Siddarampuram (V), Anantapur District

This farm was acquired from AH department and it serves as a demonstration unit and also to produce Nellore Brown rams for upgradation of local sheep of farmers.

Objectives

- To produce Nellore Brown Rams and to distribute among the Breeders for upgradation 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.
- To advocate innovative feeding systems of sheep rearing to take up at farmers end.
- To educate the farmers on the recent advances in sheep husbandry practices.
- To pass on research results to the farmers in the sheep husbandry.
- To impart training to the farmers on various cultivation practices of important fodders required for sheep and cattle

Livestock Position

Stock on 01-04-10	Additions				Deletions					Total as on 31.03.11
	Born	Purchased	Others	Total	Died	Sold	Slaughtered	Others	Total	
Sheep										
530	106	—	—	636	40	61	—	—	101	535
Goats										
56	19	—	—	75	—	19	—	—	56	56

Targets and achievements during the year :

SL.No.	Item of work	Targets for 2010-11	Achievement for 2010-11
1	Carrying capacity of the farm	600	635
2	Lambing percentage	70%	50%
3	Age at 1st lambing(months)	18	20
4	Breeding stock to be supplied	80	61 Breeding Rams + 20 adult Ewes
5	Mortality percentage:		
	a) Young stock :	10%	5%
	b) Adults :	5%	4%
6	Culling percentage :		
	a) Young stock :	5%	
	b) Adults :	20%	-
7	Green fodder product in (Mts)	400	500 Mts
8	Dry fodder production(Mts)	30	20
9	Silage to be made	-	-
10	Fodder slips to be supplied	1 lakh	20 thousand
11	No. of demonstrations to be conducted	10	8
12	No. of farmers trained	60	128
13	Stylo Hamata Pasture	-	100 acres

FISHERIES RESEARCH STATION, KAKINADA

This Fisheries Research Station, earlier known as the Department of Fishery Science, was established by the Acharya N.G Ranga Agricultural

University (Formerly APAU) in the year 1976. The Department of Fishery Science was renamed as Fisheries Research Station, Kakinada in January 1981.

The objectives of the farm are:

- To develop and propagate Aquaculture in Andhra Pradesh
- To evolve Scientific aquaculture techniques suitable to the local conditions
- To conduct research on seed production of brackish water fish species
- To disseminate improved culture methods and seed production techniques
- To conduct studies on fish production trends and socio economic conditions of fishermen

Livestock position:

Stock on 01-04-10	Additions				Deletions				Total as on 31.03.11
Fish	Born	Purchased	Others	Total	Died	Sold	Others	Total	
Mugil cephalus	-	-	1000	1000	250	500	-	750	250
Lates Calcarifer	-	2000	1000	3000	2000	250	-	2250	750
Chanos Chanos	-	—	2000	2000	500	500	—	1000	1000
Liza parsia	-	-	1000	1000	750	100	-	850	150

RKVY projects: 1. Survey on prevalence of important fish diseases and development of Best Management Practices (BMPs) for their control and prevention as a Principal-Investigator and 2. Inland aquaculture sustainability- Profitability for Socio-Economic growth with appropriate location specific alternate native species to Indian Major Carps as a Co-Investigator are being carried out in the research station.

The salient research findings are:

Hatchery production of M. Malcomsoni was initiated.

A dietary protein level of 20 % was found to be optimum for growth and survival of *Mugil cephalus* (Grey mullet).

The constraint of seasonal availability of *Chanos chanos* seed from natural resources can be overcome by Modular technology, till the time hatchery seed production technology is standardized in India.

The studies on the effect of Probiotic (*Bacillus spp.*) and immunostimulant (3-â glucan) or their combination revealed that a combination of 0.8% probiotic and immunostinulant promoted higher growth rate of P.monodon.

Two fish species of brackish water i.e. *Chanos chanos* and *Liza parsia* are identified as alternate species for propagation in brackish water / marine areas.

Growth performance (length: cms)

	Initial length in cm	15th day	30th day	45th day	60th day	75th day	90th day
Male	6.0	7.0	8.5	10.0	12.0	14.0	16.5
Female	4.0	5.0	7.0	8.5	10.0	12.0	13.5

Growth performance (Weight: gms)

	weight in gm	15th day	30th day	45th day	60th day	75th day	90th day
Male	12.0	14.0	17.0	20.0	24.0	28.0	33.0
Female	8.0	10.0	14.0	17.0	20.0	24.0	27.0

Studies on brood stock management and seed production of riverine prawn *Macrobrachium malcomsonii*

FISHERIES RESEARCH STATION, UNDI

Indian mojor carp

The station was shifted from Kovvali, West Godavari Dt. on 25-8-2001 along with staff and budget and is at present located in the ground floor of KVK building.

Objectives

- Standardiz ation of sustainable culture methodology of carps, striped catfish and alternate species.
- To study the nutrition, feed and feeding management practices of carps, striped catfish and alternate species.

- To develop better management practices for the culture of carps, striped catfish and alternate species.
- To study diseases and health management of carps, striped catfish and alternate species.
- To conduct extension programmes and produce extension literature

Mash feed Sinking pellet

Particulars	Additions				Deletions					Total as on 31. 03.11
Fish	Born	Purch-ased	Others	Total	Died	Sold	Slaughtered	Others (book transfer)	Total	
Rohu (Fingerlings)	—	2000	7950	9950	250	5000	—	—	5250	4700
Catla (Fingerlings)	—	800	1250	2050	60	600	—	—	660	1390
Anabas	—	—	350	350	50	—	—	—	50	300
Macrognathus aculeatus	—	—	—	280	—	—	—	80	80	200
M. aculeatus (Seed)	—	—	7000	7000	2000	—	—	4000	6000	1000
Prawn										
M. rosenbergii (seed)	—	—	8000	8000	850	7150	—	—	8000	Nil

Salient features of research work

- Evaluation of the relative efficiency of mash- and pelleted supplementary feed for pond cultured Indian major carps revealed that pelleted feed was superior to feed in mash form.

MASH FEEDING

PELLET FEEDING

ICAR mega seed project: Under this project 4,64,000 scampi post larvae, 65,000 Magur fry and 40,000 Murrel fry were produced.

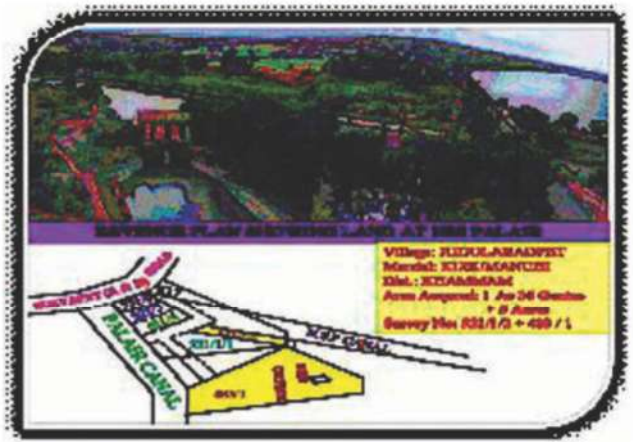
RKVY Project: Recorded occurrence of bacterial and parasitic diseases in pond culture of Indian major carp (Rohu), catla and pangus and also Identified important diseases such as red disease in rohu and catla, bacterial gill diseases in rohu, mixosporiasis, paradactylogyrosis in catla and red disease in pangus and gill fluke in Indian major carps and pangus under the RKVY Project ***"Survey on prevalence of important fish diseases and development of best management practices for their control and prevention"***

Productivity of the farm :

- Average fish production Indian major carps 5277-8160kg/ha/yr. Pangus 7488-10488 kg/ha/yr.
- Average cost of production of fish Rs. 25 per Kg.

FISHERIES RESEARCH STATION, PALAIR, KHAMMAM (DIST)

This premier institution was established in the year 1956 and transferred to APAU from State Department of Fisheries during 1977 with an objective of research on Air breathing fishes in particular and development of reservoir fish in general and quality fish seed production for supply to farmers.



Objectives:

- To develop & standardize cage farming methods in reservoirs.
- To improve breeding methodology & seed production of Air breathing fishes.
- Studies on nutrition, formulation of feeds & management.
- Health management of cultured fish.
- Extension activity.

Particulars	Opening Balance			Additions during the Year			Deletion during the Year			Closing Balance		
	M	F	T	M	F	T	M	F	T	M	F	T
Channa striatus	1020	1310	2330	14250	12600	26,850	14150	13,150	27,300	1020	860	1880
Channa marulius	2	-	2	-	-	-	-	-	-	2	-	2
Channa punctatus	-	2	2	-	-	-	-	-	-	-	2	2
Magur (Clarias batrachus)	280	240	520	35,200	30125	65,325	35000	30035	65,035	480	330	810
Catla catla	15	15	30	-	-	-	-	-	-	15	15	30
Labeo rohita	41	29	70	-	-	-	-	-	-	41	29	70
C.mrigala	22	28	50	-	-	-	-	-	-	22	28	50
Common carp	80	70	150	-	-	-	-	-	-	80	70	150
Grass carp	-	1	1	-	-	-	-	-	-	-	1	1

Work down:

Project I: Studies on all male culture of exotic carp, *Cyprinus carpio*.

1. 4000 hatchlings of common carp are categorized in to 2 groups as control and experimental in duplicate
2. Fed with plankton twice daily for week.
3. They are now under rearing in cement nurseries administered with 17á methyl testosterone at 100ppm/ day

4. Growth parameters of common carp are 1.2 g & 4 cm and 0.54 g & 3cm in treatment pond and control pond respectively.
5. It is under progress and will be harvested in the month of August and sex differentiation will be carried out

Project II: Studies on the weaning and formulation of different farm made feed for Channa striatus

1. Channa Striatus larvae of 0.8- 1.2 cm & 0.01-0.15 g are stocked at 100/cement cisterns
2. Weaning of the feeds from live to particulate is carried out in 3 sets in duplicate for 45 days with Artemia, plankton and formulated feeds.
3. The larvae fed early with non motile feeds are adapting to formulated feeds more readily than larvae fed with live organisms
4. The III set (larvae with gradual feeding of live and formulated) attained better survival & growth

ICAR Project

Project I: Mass seed production of magur,*Clarias batrachus*.

1. Induced breeding of magur is carried out from 20.06.10 to 05.10.10 in 20 batches/cycles.
2. A fry of 65,000 are obtained.
3. An amount of Rs. 48,750 remitted to ICAR accounts.

Seed production of Clarias batrachus (magur)

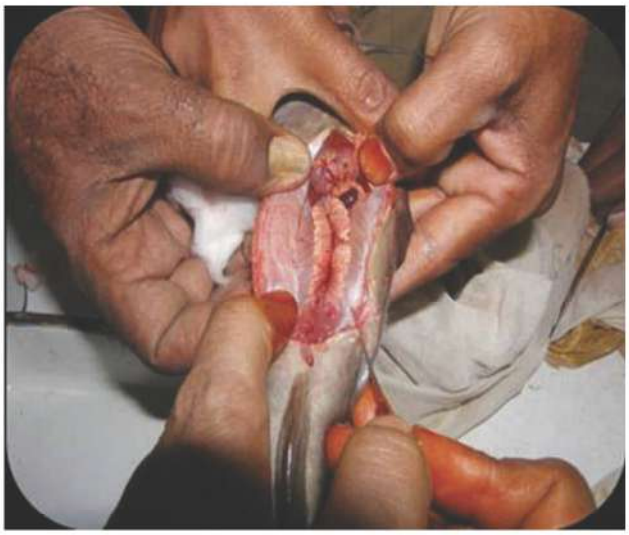
Female

Male

Breeders

Injecting

Dissecting



Testes

Cut in to Pieces

Sperm suspension ppn.

Stripping

Fertilized egg

Spawn

Fry

Sprinklers system

Fingerings

Sale of Seed

RKVY

Project I: Inland aquaculture sustainability –profitability for the socio economic growth with appropriate location, specific alternate native species to Indian major carps

1. Appropriate location specific alternate fishes are identified region wise.
2. Fresh water species like magur, murrels and Anabas sp are identified for Telangana and west Godavari districts.
3. Brackish water fishes like *Liza partia*, *Chanos chanos* and *Lates calcarifer* are identified for East Godavari district.
4. The experimentation with the region wise selected species is under progress.
5. Brood stock management (Anabas: FRS, Undi, Murrel & Magur: FRS, Palair,*Liza partia* & *Lates calcarifer*: FRS, Kakinada) is under process.
6. The fish are fed with pelleted feed containing 28-32 % protein at a feeding rate as per the body weight.
7. Induced breeding of magur & murrel carried out.
8. The seed of 2.0-3.5 cm & 0.2-0.6 g produced through induced breeding is stocked at 10/sq.m for larval rearing in earthen ponds, mud bottom cement nurseries & cement nurseries and fed with trash fish of 15.20% body weight. Water quality parameters recorded are temperature 26-35 ^{0}C, pH 7.5-8.5, dissolved oxygen 5.0-6.5 ppm, alkalinity 120-180 ppm and Ca hardness 80-120 ppm. The growth parameters recorded fortnightly. The growth rates of murrel fry are 21.5 cm & 78.5gms and 19.7 cm & 57.3 g/7months and that of magur are 11.2 cm, 13.4 g and 11.3 cm and 12.5 g/5 month mud bottom cement nurseries and cement nurseries respectively.
9. Seed of murrel & magur supplied to farmers and they are under rearing.

Project II: Survey on prevalence of important fish diseases and development of Best Management Practices (BMPs) for their control and prevention

1. Survey on prevalence of important diseases of fresh water fishes & prawns in this region is under process
2. EUS in Channa, dropsy, red disease and myxobolus in carps, bacterial diseases in prawns, Columnaris disease in grass carp and parasitic diseases (Argulus) are identified
3. For the sanctioned amount of Rs. 9.385 lakhs, the purchase of equipment is under process.

Technology Generated

- Induced breeding technology of Channa striatus
- Induced breeding technology of magur, Clarias batrachus

VETERINARY HOSPITAL, VISAKHAPATNAM

(i) No. of Bovine, Feline, Equine, Caprine/Ovine/Avain/others cases treated.

S.No	Species	
1	Bovines	1169
2	Feline/Canine	24006
3	Equine	45
4	Caprine	306
5	Ovine	793
6	Avain	2661
7	Others	184
	Total	**29164**

ii) VACCINATIONS CONDUCTED

NAME OF THE VACCINE	
F & M	—
PPR	—
RDK 1430	
FOWLPOX	—
RDF1	—
ARV 5009	
SEVEN IN ONE	3020
TOTAL	**9459**

iii) SURGICAL CASES ATTENDED IN IP/OP/AC REFERRED CASES

S.No	Species	Major	Minor
1	BOVINES	4	-
2	CANINES	83	95
3	EQUINES	—	—
4	AVIAN	—	01
5	OTHERS	—	01
	Total	**87**	**97**

VETERINARY HOSPITAL, WARANGAL

(i) No. of Bovine, Feline, Equine, Caprine/Ovine/Avain/others cases treated.

Species	
Bovines	3866
Feline/Canine	6131
Sheep and Goats	3575
Poultry	6588
Pigs	88
Total	20248

ii) VACCINATIONS CONDUCTED

NAME OF THE VACCINE	
F & M	560
HS	110
RDF1	6146
ARV	747
TOTAL	8097

iii) SURGICAL CASES ATTENDED IN IP/OP/AC REFERRED CASES

Major : 63
Minor : 127
Total : 190

iv) DEWORMING DONE : 4108

v) No. OF GYNAEC CASES TREATED : 426

EXTENSION

The Teachers of various clinical, para clinical and production departments of the colleges and the scientists in the research stations have actively participated in the Rythu chaitanya yatras, Adarsha Rythu training programme and Rythu sadassus organised by the Govt. of Andhra Pradesh during 17-5-2010 to 2-6-2010. Besides they are serving as subject matter specialists / resources persons for various national institutes viz. MANAGE, NIRD, CRIDA etc

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

(a) Training Programmes Organized for Farmers

- A one day training programme was organized under the RKVY project on **"Technological interventions for improving quality of feed for economical milk and meat production"** at NTR CVSc, Gannavaram in which 32 farmers participated and were trained on utilization of crop residues in complete feed. The preparation of complete feed using crop residues was demonstrated.
- Training programmes on "Low cost feeding of animals utilizing locally available agro-industrial by products" were conducted under RKVY on 11-12-2010, 22-3-2011, 26-3-2011, 28-3-2011 and 29-3-2011 at Department of Animal Nutrition, College of Veterinary Science, Tirupati in which 220 farmers participated. They were demonstrated the preparation of complete feed and its advantages, the benefits of using area specific mineral mixture. Each farmer was given 0.5 kg of area specific mineral mixture during the training session.
- A one day training programme was conducted on 31-3-2011 at Naramakulapalli Village, H/o Vagalla, K.V.Palli Mandal, Chittoor Dt in which about 100 farmers participated. They were trained on preparation of complete feeds using locally available crop residues. The farmers were supplied with manuals prepared in Telugu under RKVY project & also 0.5 kg of mineral mixture free of cost.
- The Veterinary and AH Extension Department, College of Veterinary Science, Rajendranagar organized 12 training programmes that included exposure visits, demonstrations, group discussions in Amangal, Talakondapally and Achempet mandals of Mahaboobnagar as part of state plan project. During the year, the two need assessment workshops were conducted at viz. Kottur, Shadnagar as part of DFID funded DFID project on "Improving the livelihood security of women self help groups involved in livestock rearing through capacity building in gender awareness" and the training needs were identified. Based on the training needs a 2 day training programme was conducted in 2 modes. Off campus at Kottur and on campus at CVSc, R.Nagar. 25 members of five villages of two mandals were covered in the training progrtamme on scientific dairy farming.
- Animal Nutrition and Veterinary & AH Extension Department, College of Veterinary Science, Rajendranagar jointly organized two training programmes of two days duration in Mahaboobnagar district on *Scientific ram lamb rearing for clean meat production* for shepherds as a part of NAIP project "Value chain for clean meat production".
- The Department of Poultry Science, CVSc., Rajendranagar organised two training programmes of 5 days duration on *Emu farming* and 60 enterprising farmers were trained.
- Teaching Veterinary Clinical Complex, CVSc., Rajendranagar organized World Zoonoses Day on 6-7-2010. On this occasion, about 442 dogs were given prophylactic vaccination against Rabies.

- The College of Veterinary Science, Proddatur organized the following training programmes under RKVY in which about 100 farmers participated

(i) Learning contents on cross bred cows – identification and prioritization

(ii) Identification & Prioritization of Fish farming

(iii) Identification & Prioritization of Pig farming

(iv) Identification & Prioritization of Dairy technology practices

- A training programme was organized by the Dept. of Fish Processing Technology, CFSc., Muthukur on "Fish Processing and Value Added Fish Products" (In Telugu), sponsored by N.F.D.B. Hyderabad. In this training programme, around 120 active women from Fisher folk and self help groups in and around Nellore dist. participated
- A training programme for Fishery Development Officers on Fish Preservation & Development of Value Added Fish Products was conducted at CFSc., Muthukur from 24-04-2011 to 20-03-2011 in which 20 FDOs participated

(b) Programmes on Mass Media, Popular Articles, Mass Contact programmes ***Programmes on Mass Media (Radio, TV)***

NTR College of Veterinary Science, Gannavaram

Sl. No	Title of the Programme	Air/TV	Name of the Scientist/Teacher	Date of Broadcast/ Telecast
1.	Care of milch animals against diseases attack during winter season	AIR	Dr. N.Syaama Sundar, Professor, Dept. of Clinical Medicine	10-01-2011
2.	Care of day old poultry chicks	AIR	Dr. K. Nagarajakumari Asst. Professor , Dept. of Poultry Science	03-02-2011
3.	Importance of Livestock insurance	AIR	Dr. B.Subrahmanyeswari, Associate Professor, Dpt. of Vet. Extension	10-02-2011
4.	Meat products preparation	AIR	Dr. B.Eswara Rao Asst. Professor Dept. of LPT	07-02-2011
5.	Rearing of Emu Birds	AIR	Dr. Narendranath, Asst. Professor , Dept. of Poultry Science	08-02-2011

Sl. No	Title of the Programme	AIR/TV	Name of the Scientist/Teacher	Date of Broadcast/ Telecast
6.	Tips to tackle reproductive disorders	TV	Dr. G.Venkata Naidu, Associate Professor Dept. of Gynaecology	26-01-2011
7.	Artificial insemination in buffaloes	TV	Dr. G.Venkata Naidu, Associate Professor Dept. of Gynaecology	29-11-2010
8.	Estrus synchronization in buffaloes	TV	Dr. G.Venkata Naidu, Associate Professor Dept. of Gynaecology	29-11-2010
9.	Management of pregnant animals	TV	Dr. G.Venkata Naidu, Associate Professor Dept. of Gynaecology	29-11-2010
10.	Okaroju kodipillala samrakshna - Interview	AIR	Dr.K.Nagaraja Kumari Asst. Professor, Dept. of Poultry Science	17-02-2011
11.	Emu pakshula pempakam - Interview	AIR	Dr. D.Narendra Nath Asst. Professor, Dept. of Poultry Science	25-02-2011
12.	Seethakalamlo padipasuvulalo vachhu vyadulu	AIR	Dr. N. Syaam Sundar Professor, Dept. of Clinical Medicine	January 2011
13.	"Pasuvulalo vacche vyadhulaku vyadhinirodhaka teekala aavasyakatha"	AIR, Vijayawada	Dr. P. Anand Kumar Associate Professor of Veterinary Microbiology	06 August 2010
14.	Sukshmakrimulavalana pasuvulalo vache mukyamaina vyadulu – Nivarana Interview	AIR	Dr. K. Lakshmi Kavitha Asst. Professor , Dept. of Vety. Epidemiology	09-06-2011 07:15 PM
15.	Mamsa padaardala tayari paddatulu –vaati aavasyakata	AIR	Dr.B.Eswara Rao Asst. Professor Dept. of LPT	13-02-2011
16.	Sastriyapaddatulalo seemapandi maamsa utptti (Telugu) Dept. of LPT	TV	Dr.B.Eswara Rao Asst. Professor	29-06-2011

College of Veterinary Science, Proddatur

Sl. No	Title of the Programme	AIR/TV	Name of the Scientist/Teacher	Date of Broad cast/ Telecast
1	Pashu vigyanam	AIR Live phone - in programme	Dr.K.Sarjan rao	22-01-2010 11-02-2011
2	-do-	AIR Live phone - in programme	Dr.G.R.K.Sharma	09-04-2010 24-09-2010
3	-do-	AIR Live phone - in programme	Dr.P.Anand Reddy	22-10-2010 08-04-2011
4	-do-	AIR Live phone - in programme	Dr.M.Kalyanachakravarthi	12-02-2010 09-07-2010 26-11-2010 25-02-2011 24-06-2011
5	-do-	AIR Live phone - in programme	Dr.A.Anitha	12-03-2010 23-07-2010 12-11-2010 13-05-2011
6	-do-	AIR Live phone - in programme	Dr.N.Sasidhar Babu	26-02-2010 13-08-2010 11-02-2011 27-05-2011
7	-do-	AIR Live phone - in programme	Dr.L.S.S.Vara Prasad Reddy	11-06-2010 10-09-2010 28-01-2011 22-04-2011
8	-do-	AIR Live phone - in programme	Dr.M.N.B.Sukumar	14-05-2010 10-12-2010
9	-do-	AIR Live phone - in programme	Dr.K.Srinivasa rao	25-06-2010 24-12-2010

Sl. No	Title of the Programme	AIR/TV	Name of the Scientist/Teacher	Date of Broadcast/ Telecast
10	-do-	AIR Live phone - in programme	Dr.D.Ashok kumar	27-08-2010
11	-do-	AIR Live phone - in programme	Dr.B.Sreedevi	28-05-2010
12	-do-	AIR Live phone - in programme	Dr.B.Ekambaram	23-04-2010
College of Vety. Science, Tirupati				
1.	Complete diets for livestock feeding	TV	Dr.J.V.Ramana	30-03-2011
2.	Adhika Palu, Mamsam, Digubadula kosam – "Poshanalo Melukuvalu"	AIR	Dr.A.Ravi	30-12-2010
3.	Vesavilo padipasuvula poshanalo Jagratha lu	AIR	Dr. B.Devasena	28-04-2011
4.	Mastitis	TV	Dr.Nalini Kumari	
5.	Zoonotic diseases and their importance	AIR	Dr.Nalini Kumari	
6.	Gorrela pempakam lo melakuvalu	AIR	Dr. Y. Ravindra Reddy	August, 2010
7.	Doodala pempakam lo yajamanyam	TV	Dr. Y. Ravindra Reddy	December, 2010
8.	Mekalu, Gorrela pempakam lo suchanalu	TV	Dr. G. Gangaraju	December, 2010
9.	Adhika pala digubadiki suchanalu	AIR	Dr. D. Suresh Babu	June, 2010
10.	Napiar Pasugrasam pempakam	TV	Dr. S. Sreedhar	May, 2010

Sl. No	Title of the Programme	Air/TV	Name of the Scientist/Teacher	Date of Broadcast/ Telecast
11.	Doodala poshana mariyu yajamanyam	TV	Dr. S. Sreedhar	October, 2010
12.	Jilla lo ne Jersey Sahiwal Avula punaruthpathi	Shakshi	Dr. Y. Ravindra Reddy	24, February, 2011
13.	Infertility management	AIR	Dr.K.Venugopala Naidu	July, 2010
14.	Estrous synchornisation	AIR	Dr.K.Mouli Krishna	August, 2010
15.	Infertility in bovine	AIR	Dr.K.Veerabramhaiah	October, 2010
16.	Pasuvula nunchi manushyulaku samkraminchu vyadulu – nivarana	AIR	Dr.A.Jagadeesh Babu	11-11-2010
17.	Toxins present in animal feed ingredients and measures to control and reduce to toxic effects in feeds	AIR	Dr.P.Eswara Prasad	28-10-2010
College of Veterinary Science, Rajendranagar				
1	Control of Repeat breeding problem in buffaloes	AIR, HYD	Dr. K.Sadasiva Rao, Professor & Head	25-10-2010
2	Repeat breeding syndrome in cattle and its remedies	AIR, HYD	Dr. K. Sadasiva Rao, Professor & Head	26-11-2010
3	Vesavilo Sankara Jathi pasuvula Yajamanyam	AIR, HYD	Dr.K.Ramchandra Reddy, Assistant Professor	25-03-2011
4	Mokkajonna bioliquid vade paddathi	ETV	Dr CH V Seshaiah	14-01-2010
5	Silage preparation	ETV	Dr CH V Seshaiah	24-05-2010
6	Pasugrasala Sagu	ETV	Dr CH V Seshaiah	12-06-2010
7	Gedela Poshana	AIR	Dr CH V Seshaiah	20-10-2010
8	Melaina Padipasuvula yajamanyam	DD	Dr N Rajanna	07-02-2011
9	Vesavilo Padipasuvula yajamanyam	AIR	Dr M Mahender	05-03-2011
College of Fishery Science, Muthukur				
1	Best Management Practices on Vennami Shrimp farming	T.V. Talk, (Eenadu T.V.)	Dr.P.Hari Babu, Associate Professor LRS, Siddirampuram, Ananthapur Dt.	30-03-2011

Sl. No	Title of the Programme	Air/TV	Name of the Scientist/Teacher	Date of Broadcast/ Telecast
1	1. Disease Management Techniques in Milch animals in rainy season 2. Diseases of Cattle, sheep and poultry in winter and their prevention.	Phone in Live programme 25 minutes Prasar Bharathi, All India Radio, Anantapur at 7.15 P.M.	Dr.K.Jalajakshi, Officer in Charge & Vety. Asst. Surgeon	16-06-2011 27-10-2011 .

(c) Extension Publications (popular articles, pamphlet, etc.,)

S.No.	*Title*	*Authors*	*Publication details like name of the journal, volume, news papers with date or any other such relevant information*
1.	Organic animal husbandry importance and its standards in local language i.e. in telugu	Dept. of Vety. & A.H. Extension, NTR CVSc, Gannavaram.	Leaflet
2.	Preventive and management measures to Reproductive disorders of cattle and buffaloe.	Dept. of Gynecology, . NTR CVSc, Gannavaram	Leaflet
3.	Tips to improve and maintain fat content of milk in milch animals.	Dept. of Vety. & A.H.Extn, NTR CVSc, Gannavaram.	Leaflet
4.	Varshakalamlo pasuvulaku sankraminche vyadulu- nivarana margalu	K.Suresh, K.Rajesh, and V. Srinivasulu NTR CVSc, Gannavaram	Rythulokam August 2010:3-5
5.	Kutera parishramalo palapadarthala utpathi	K. Kondal reddy CVSc, Rajendranagar	Annadhatha Nov.2010
6.	Mekalu gorrello eesukupovadam karanalu-nivarana	A.Ashok Reddy, A.Anand kumar CVSc, Rajendranagar	Rythunestam, Sept-10
7.	Pashuvullo garbhakosha vyadula nivarana	Dr. L. Ram Singh, Assistant Professor CVSc, Rajendranagar	Popular Article, 18.05.2011 (Vaartha)

8.	About lion	Dr.P.Bhaskar rao CVSc, Rajendranagar	AP veterinarian June 2010
9.	Padipasuvulaku soke antuvyadulu-nivarana	Dr.P.Bhaskar rao CVSc, Rajendranagar	Annadata Nov-2010
10.	Padipasuvulalo poshana kartchu tagginche mokkjonna bioliquid	Dr Ch. V Seshaiah CVSc, Rajendranagar	Annadata Jan 2010
11.	Azolla-Pratymnaya dhana	Dr.CH.Satyanarayana College of Veterinary Science, Korutla	Saakshi Daily News Paper, 21-12-2010

CVSc, R'nagar

Teachers of the Dept. of Vety. And A.H. Extension published a booklet on *Vyapara Saralilo pasuvula pempakam* in Telugu for the benefit of farming community.

CFSc., Muthukur

Technologies assessed / transferred / patented / commercialized

Complete diet feeding technology has been demonstrated and transferred to the farmers of Marlapalem village in Gannavaram mandal. The advantage of feeding lactating buffaloes with complete diets has been realized by the dairy farmers with increased milk yield and many farmers have started conserving valuable crop residues like maize Stover for feeding of their animals which was hitherto wasted in the field itself.

(d) Activities in the Adopted villages

Each college adopts a village nearby and takes up all activities for development of the village through Livestock Development Programmes / Awareness rallies on issues of socio – economic importance / conducting literacy programmes etc.

- NTR College of Veterinary Science, Gannavaram has adopted Kondapavuluru village, situated at about 10 Km from Gannavaram. Extension activities like Farmer awareness programmes, Farmer-Scientist interactive sessions, Animal health camps, awareness on social issues etc., are being conducted every week by a team of staff and students.
- The College of Veterinary Science, Tirupati has adopted Kayampeta village. The teaching staff of production and clinical departments visit the village once in a week to take up livestock development activities, awareness campaign, transfer of technology etc.,
- The College of Fishery Science, Muthukur has adopted Eguvamitta Village. Activities such as Medical camps, Animal Health Awareness programmes, Plantation of saplings, Rectification of street lights, Erection of compost pits, Cleanliness drives and white washing programmes were taken up in the adopted village, by the NSS Unit of the College.

(e) Information centers

The constituent colleges of the university maintain information centers which attract many visitors and they gain knowledge on various aspects of the livestock production.

Information center, Tirupati

Information center, Gannavaram

- The college information centre at College of Veterinary Science, Tirupati has 9 cubicles in which TVs with facilities for playing multimedia CDs are available. About 600 farmers visited information centre and watched the multimedia CDs on various aspects of livestock production in different species. They were also distributed pamplets, popular articles etc.,

· At College of Veterinary Science, Rajendranagar an Information centre is functioning in the Dept. of Vety. and A.H. Extension to depict different activities of the college and the latest technologies developed for the benefit of farming community. Educational Multimedia Resource Centre (EM2RC) was established at the department under RKVY. The department is in the process of establishing Educational Museum for the benefit of students and farming community with ICAR funding.

· Information centers are also functioning at NTR College of Veterinary Science, Gannavaram and also at College of Fishery Science, Muthukur.

(f) Information kiosk

Information Kiosk that provides vital information to farmers on livestock management and production was developed and installed in Chittoor District. Developed multimedia on all the institutions of the university and their functions which is displayed in the information centre. Multimedia was developed on breeding, feeding, management and diseases for all the livestock species cattle, buffalo, sheep and goat, rabbit, piggery and poultry which are is displayed in the information centre through touch screen information kiosk for the benefit of the farmers.

(g) Extension cum mass contact programmes

The Veterinary and AH Extension department, **CVSc, R'nagar** conducted the following mass contact programmes :

- 18 interaction meetings with dairy farmers of Amangal, Talakondapally and Achempet mandals of Mahaboobnagar as part of state plan project.
- 10 interaction meetings with women members of Kottur and Shadnagar mandals of Mahaboobnagar as part of DFID project
- Interaction meetings with shepherds of Cheryal, Gollagudem, Kalivemula, Kandi, Nizamsagar of Medak District and China Darpalli of Maboobnagar Dist for procurement and development of multimedia modules on sheep production
- Veterinary and AH Extension department staffs have participated in the three quarterly meetings organised by AIR, Hyderabad for finalization of radio topics by the teaching faculty.
- The teaching staff of the University participated in the Rythu Chaitanya Yatra (Farmers Awareness Campaign) organiz ed by

Government of Andhra Pradesh from 17-5-2010 to 2-6-2010. Faculty participated in the above campaigns in all districts , advised the farming community on the scientific aspects of livestock farming and suggested suitable measures for specific problems posed by farmers.

- Subject Matter Specialists belonging to Nutrition, Parasitology, Clinical Medicine, Gynecology, Livestock Production and Management, Animal Genetics & Breeding participated in the farmer interaction meetings organized as part of Kisan Meals in the revenue divisions.
- The teachers of Department of Vety. and A.H. Extension, CVSc., Rajendranagar are coordinating the mass media activities of the College and University by participating in monthly meetings conducted at Office of Commissioner of Agriculture and State Level Committee meetings Chaired by Special Chief Secretary of Agriculture to chalk out programmes on mass media for farmers
- Dr D Thammi Raju, Associate Professor & University Head, Department of Vety. and A.H. Extension, CVSc., Rajendranagar delivered a guest lecture on Information technology enabled extension advisory system at CRIDA, Hyderabad and on ***Change Management in Animal Husbandry*** *at EEI, R.nagar*
- Dr. M. Gnana Prakash, Associate Professor delivered a lecture on "Selection of Sheep, Rams and Lambs" at Nagarkurnool on 14.6.2010 under NAIP Project on "Clean Meat Production from Sheep"

HONORS AND AWARDS

NTR College of Veterinary Science, Gannavaram

Dr. C. Sreedevi and Dr. L. Jeyabal, Assistant Professors Department of Parasitology received the Best Paper Presentation Award at the 21st National Congress of Vety. Parasitology held at Bombay Vety. College, Mumbai.

College of Veterinary Science, Tirupati

- Dr.T.S.Chandrasekhara Rao, Associate Dean was conferred Bharat Rathna Dr.C.Subramanyam Outstanding Teacher Award for the biennium 2007-08 on 16-7-2010.
- Dr.T.S.Chandrasekhara Rao, Associate Dean was elected as Member of the Governing Council of National Academy of Veterinary Sciences
- Dr. D. Sreenivasulu, Professor & Head, Department of Microbiology received the Andhra Pradesh State Best Teacher Award for the year 2010.
- Dr.Ch.Srilatha, Professor and Head, Department of Veterinary Pathology was conferred FNAVS by the National Academy of Veterinary Sciences at Anand, Gujarath
- Dr.M.Alpharaj was conferred Young Scientist award at International Conference on herbal medicinal plants at Sri Venkateswara University, Tirupati.
- Dr.J.V.Ramana, Professor & Head, Department of Animal Nutrition, College of Veterinary Science, Tirupati was awarded the Dr.G.V.Narayankhedkar Memorial Award and he was also selected as Fellow, Animal Nutrition Association.

College of Veterinary Science, Rajendranagar

Dr.D.S.Tirumala Rao was made Fellow of India Society of Veterinary Medicine for significant contributions to Veterinary Medicine

Dr.D.S.Tirumala Rao, Professor & Univ.Head, Dept. Of Veterinary Medicine received the Best teacher award 2010 from the A.P. State Government

Dr.D.S.Tirumala Rao, Dr.P.Nagaraj, Dr.S.Ayodhya, Dr. V.V.V.Amruth Kumar and Dr.K

Satish kumar received the Best Presentation Award(oral & Poster) at the XXIX Annual convention and National symposium of ISVM.

Dr S Bharathi, Dr V Suryawanshi, Dr T Madhava Rao and Dr KBP. Raghavender received the Best Clinical Article award for their publication on Eye disorders in pus – A report of six cases published in the Intas Polivet, Vol no 10(2009) No 10

Dr S Bharathi received the Hyderabad Race Club Gold Medal for the year 2009 for highest OGPA in PhD during the year 2009

Dr. D. Naga Lakshmi received the Punjabrao deshmukh Woman Agricultural Scientist award-2009 from ICAR, New Delhi

Dr. B. Ekambaram received Best Poster award at the ISAGB annual convention for the topic "Breeding and management practices of Mahabubnagar goats under field conditions"

College of Veterinary Science, Proddatur

Dr.K.Sarjan rao, Associate Dean received the State Best Teacher Award from the Government of Andhra Pradesh

CFSc., Muthukur

Dr.G.Vidya Sagar Reddy, Associate Professor received the Best Team Research Award from ICAR, New Delhi for Team Research Work on Marketing Strategies for Fish & Fishery Products

HUMAN RESOURCE DEVELOPMENT

Training (Summer school/short courses / workshop / seminars / national and international courses or symposia) attended

Name and Designation	Title of the programme	Duration	Place
College of Veterinary Science, Tirupati			
Dr.B.Sreedevi	Molecular Diagnostics	15-3-2010 to 13-06-2010	Poultry Diagnostic and Research Centre, University of Georgia, Athens, USA
Dr.M.Alpha Raj, Assistant Professor	AP Science Congress	18th to 20th Nov, 2010	JNTU, Hyderabad
Dr.M.Alpha Raj, Assistant Professor	SIVPT national symposium on Recent trends in Ethanopharmacology & monitoring of Environmental and food toxicants	2nd to 4thDec. 2010	College of Veterinary Science, Jabalpur, M.P
Dr.M.Alpha Raj, Assistant Professor	International symposium on medicinal plants & herbal products	27th to 29th Dec. 2010	S.V.University, Tirupati
Dr.M.Alpha Raj, Assistant Professor	NAIP sponsored training programme on "Recently techniques in Proteome analysis	10 to 30th March,2011	NDRI, Karnal

Name and designation	Title of the programme	Duration	Place
B.Punya Kumari and G. Triveni	Advances in concepts of Animal welfare, Health and Animal Husbandry and XI Annual convention of IAWV	January 6 to 8, 2010	College of Veterinary Science, Tirupati
B.Punya Kumari Practice	Bio-Statistics- Theory and	February 17 to 19, 2011	Sri Venkateswara University, Tirupati
Y. Ravindra Reddy and B.Punya Kumari	International conference on energizing Animal Health for better livestock production under WTO Regime	June 9th to 11th, 2010	Veterinary College, Tirupati
A.Jagadeesh Babu	Winter school on recent concepts in veterinary laboratory diagnosis	12-10-2010 to 01-11-2010	College of Vety. Science, Ludhiana
Dr.D. Raniprameela	International symposium and work shop programme on diagnosis of leptospirosis	08-12-2010 to 13-12-2010	RMRC, ICMR, Portblair, Andaman and Nicobar Islands
College of Veterinary Science, Rajendranagar, Hyderabad			
Dr.D.S.Tirumala Rao Professor and Univ Head	XXIX Annual convention and National symposium of ISVM.	17th – 19th February 2011	College of Vetry. Science, Mumbai.
Dr .K. Satish Kumar Asst. Professor	XXIX Annual convention and National symposium of ISVM.	17th – 19th February 2011	College of Vetry. Science, Mumbai.
Dr .K. Lakshmi Asst. Professor	XXIX Annual convention and National symposium of ISVM.	17th – 19th February 2011	College of Vetry. Science, Mumbai.
Dr .K. Lakshmi Asst Professor	National Training programme on Clinical procedures & skill developments in veterinary clinical curriculum.	to 14th Dec. 2010	Madras Veterinary College, Chennai.
Dr. M. Shashi Kumar Associate Professor	Requirements and developments in processed meat sector for better utilization of meat animal resources	5 days	National Research Centre on Meat, Chengicherla, Uppal, Hyderabad
Dr.K.Sudhakar Reddy, Professor & Head	"Stress Management Strategies for enhancing the efficiency and effectiveness at Work place"	3 days	NAARM, Hyderabad.

Name and designation	Title of the programme	Duration	Place
Dr.K.Kondal Reddy, Professor	"Stress Management Strategies for enhancing the efficiency and effectiveness at Work place"	3 days	NAARM, Hyderabad.
NTR College of Veterinary Science, Gannavaram			
Dr. V. Rama Devi Associate. Prof. & Head	Descriptive Veterinary Pathology Sponsored by Armed Forces Institute of Pathology & CLDavis DVM Foundation of USA Hyderabad, India	2nd to 6th April, 2010	VIMTA Labs, Hyderabad.
Dr. P. Annapurna Assistant Professor	Descriptive Veterinary Pathology Sponsored by Armed Forces Institute of Pathology & CLDavis DVM Foundation of USA Hyderabad, India	2nd to 6th April, 2010	VIMTA Labs, Hyderabad.
Dr. C. Sreedevi Assistant Prof. & Head	XXI NCVP on Application of research in Parasitology for End users	5th to 7th, January 2011	Bombay Veterinary College, Mumbai.
Dr .L. Jeyabal Assistant Professor	ELISA detection of Immune responses of chickens immunized with Coccivac	01-07-10 to 20-8-10	National Animal Protozoa Laboratory, College of Veterinary Medicine, China Agril.l University, **Beijing, China.**
Dr . L. Jeyabal Assistant Professor	XXI NCVP on Application of research in Parasitology for End users	5th to 7th, January 2011	Bombay Veterinary College, Mumbai.
Dr. D. Srinivas Kumar Assistant Professor	7th Binomial Conference of ANA	17th to 19th December	Bhubaneswar
Dr. K. Raja Kishore Assistant Professor	7th Binomial Conference of ANA	17th to 19th	Bhubaneswar
Dr. T. Srinivasa Rao Assistant Professor	Recent Concepts in Veterinary Laboratory Diagnosis	October 12th to November 1st 2010 Science, Ludhiana	Veterinary Pathology, College of Veterinary

Name and designation	Title of the programme	Duration	Place
Dr.T. Srinivasa Rao Assistant Professor	Comprehensive Disaster risk management Frame work	26th July 2010 to 4th September 2010	National Institute of Disaster management, New Delhi (Online course)
Dr.G. Venkata Naidu Assoicate Professor	Estrus synchronization in cattle and buffaloes	24.04.10	On the eve of World Veterinary day at Vet.Poly clinic Kakinada.
Dr.G. Venkata Naidu Assoicate Professor	Augmentation of fertility under field conditions	23.08.10 Guntur	AD.AH, Narasaraopeta,
Dr. D. Narendra Nath. Assistant Professor	XXVII Annual Conference and National Symposium of Indian Poultry Science Association (IPSACON 2010) on "Novel Technolo gies to Mitigate Climate Change on Poultry Production"	16th- 18th Sept., 2010.	Madras Vetry. College, Chennai
Dr.D.Narendra Nath Assistant Professor.	Challenges and constraints in Poultry production and their mitigation	24-11-2010 to 14-12-2010	Veterinary college and research institute, Namakkal
Dr.K.Nagaraja Kumari, Asst.Professor	Wealth from waste of Poultry farm, Livestock farm and poultry meat processing plants	22-09-2010 to 12-10-20109	Veterinary college and research institute, Namakkal
Dr.K.V. Subramanyam Assistant Professor	India Distinguished Visiting Fellowship by University of Nottingham, UK	12th April 2010 to 10th July 2010	Veterinary School, Sutton Bonington campus, University of Nottingham, UK
Dr.R.N.Ramanipushpa Assistant Professor	India Distinguished Visiting Fellowship by University of Nottingham, UK	12th April 2010 to 10th July 2010	Veterinary School, Sutton Bonington campus, University of Nottingham, UK

Name and designation	Title of the programme	Duration	Place
Dr.T.Prasada Rao, Assistant Professor	Programme on Recent Advances in Endocrine Control of Livestock Production	15th March 2010 to 6th April 2010	Division of Veterinary Physiology, IVRI, IZATNAGAR.
Dr.B.Eswara Rao Asst.Professor	Changes and constraints in poultry production and their mitigation	24-09-2010 to 14-10-2010	Vety.College&RI Namakkal
Dr.B.Eswara Rao Asst.Professor	Novel technologies to mitigate climate changes in poultry production	3 days	Madras Veterinary College
College of Fishery Science, Muthukur			
Prof.B.Chamundeswari Devi, Associate Dean and Dr.P.Hari Babu, Associate Professor	Asian Pacific Aquaculture 2011 and Giant Prawn 2011 (an International Symposium)	17th to 20th January, 2011	Cochin, India (Conducted by Kerala Agricultural University Cochin and World Aquaculture Society Asian Pacific Chapter)
College of Veterinary Science, Korutla			
Dr. S. Sai Reddy, Assistant Professor,	Annual convention of ISAGB and National Conference	20-01-2011 and 21-01-2011	IVRI, Izatnagar
College of Veterinary Science, Proddatur			
Dr. M. Kalyana Chakravarthi Assistant Professor	Livestock business and market intelligent	28-1-2011 to 17-2-2011	Winter school
Dr.A. V. N. Siva Kumar Assistant Professor	Physiological capacity building in live stock under changing climatic scenario	11-11-2010 to 13-11-2010 XIX Annual International conference	IVRI Izatnagar Bareilly

Seminar / Workshop / Summer Schools / Training Programmes organised

Sl.No.	Title of the programme	Place	Duration	Sponsoring agency	No. of participants
College of Veterinary Science, Rajendranagar					
1	Workshop on Live stock development during 12th Plan through Rashtriya Krishi Vikas Yojana (RKVY)	CVSc, R.nagar	One day	University	40
2	International Course on Descriptive Veterinary Pathology	VIMTA LABS, Hyderabad	5 days	Armed Forces Institute of Pathology & CL Davis Foundation, USA	48
3	Sterilization of Dogs	CVSc, R.Nagar	3 days and 4 batches	Greater Municipal Corporation of Hyderabad	
4	Scientific rearing of ram lambs for clean meat production	Mahaboobnagar Rajendranagar Chengicherla	Two days	NAIP	30
NTR College of Veterinary Science, Gannavaram					
1.	Slaughter house improve ment for better quality meat and safer environment	Dept. of LPT, NTR CVSc, Gannavaram	One day 28.08.2011	IICPT, Tanjavur	100
College of Veterinary Science, Proddatur					
1.	Slaughter house improve ment for better quality meat and safer environment	Dept. of LPT, NTR CVSc, Gannavaram	One day 28.08.2011	IICPT, Tanjavur	100
College of Fishery Science, Muthukur					
1	Technologies for Fish Preservation & Development of Value Added Fish Products. (National level)	CFSc., Muthukur (by Dr.G.Vidya Sagar Reddy, Associate Professor	24-02-2011 to 02-03-2011	NFDB	Twenty (20) (Assistant Director FDOs, Extension Officers)
LRS, Siddiramapuram					
1	Climate change and itseffects on agricultural crops and livestock	Livestock Research, Station Siddiramapuram Anantapur	August, 2011	Agril. Research Station, Rekulakunta, . Anantapur	60 participants

Sl.No.	Title of the programme	Place	Duration	Sponsoring agency	No. of participants
2	Sheep Management and Control and Prevention of Contagious Diseases	Livestock Research Station, Siddiramapur-am Anantapur	July,2011 Septemebr, 2011	Agril.Research Station, Rekulakunta, Anantapur	40 participants

PUBLICATIONS

S.No	Title	Authors	Publication details like names of the journal, volume, news papers with date or any other such relevant information
CVSc., Tirupati			
1	Different cell types in thymus of pre and postnatal buffalo	P. Jagapathi Ramayya, Opinder Singh and K.S. Roy.	Indian Vety. Journal 2011. 88(2) 63-65
2	Electron microscopic studies on thymus of buffalo	P. Jagapathi Ramayya, Devender Pathak and K.S. Roy.	Indian Vety. Journal, 2011: 88(3) 52-54
3	Involution of thymus in Buffalo.	P. Jagapathi Ramayya, Opinder Singh and K.S.Roy.	Indian Vety. Journal. October 2010: 1020-1022
4	Histochemical studies on thymus of prenatal buffalo	P. Jagapathi Ramayya, Opinder Singh and K.S. Roy.	Indian Journal of Animal Sciences, Sept 2010: 877-879
5	Training manual in Animal Nutrition	Dr.J.V.Ramana and M.Parthasarathy	Publisher under RKVY scheme
6	Evaluation of cardio protective and anti oxidant actions of Tinospora cardifolia against isoproterenol induced myocardial damage in rats	M.Alpha Raju. Venkateswarlu K.Adilaxmamma	Inventi Rapid Ethanopharmacology Vol:1 Issue 2; Published on Web: 29-8-10 www.inventi.in
7	Evaluation of anti inflam matory activity of Stem Boswellia ovalifoliolata in rats	P.R.Sakunthala Devi K.Adilaxmamma j G.Srinivasa Rao Ch.SrilathaM.Alpha Ra	Inventi Rapid Ethanopharmacology Vol:1 Issue 2; Published on bark of Web: 28-9-10 www.inventi.in

S.No	Title	Authors	Publication details like names of the journal, volume, news papers with date or any other such relevant information
8	Evaluation of herbal Methionine and mangifera indica against lead induced organ toxicityin broiler chickens	D.Udayalakshmi K.Adilaxmamma A.Gopala Reddy V.Vykunta Rao	Toxicology International Vol:18 Issue 1: pp 58-61
9	Effect of herbal meionine and Mangifera indica in lead toxicity in broilers	D.Udayalakshmi K.Adilaxmamma A.Gopala Reddy	Indian Vet J Vol:88(3):25-27
10	Effect of Dietary of Vanaspati alone and in combination with stressors on sero-biochemcal profile and immunity in white leghorn layers	M.Alpha Raj A.Gopala Reddy A.Rajasekhar Reddy K.Adilaxmamma	Toxicology International Vol:18 Issue 1: pp 31-34
11	Effect of some non-genetic factors on the reproductive traits of crossbred pigs	B.Punyakumari and D. Sreenivasa Rao.2010	Tamil Nadu Journal of Veterinary and Animal sciences. 6(1): 1-4.
NTR CVSc., Gannavaram			
1.	Effect of yeast culture supplementation on nutrient utilization in Graded Murrah buffalo bull calves.	D. Srinivas Kumar J. Rama Prasad, E. Raghava Rao & K. Sarjan Rao.	2010 Livestock Research for Rural Development. 22: 1 - 6
2.	Influence of diet supplementation with Saccharomyces cervisiae on intake and nutrient utilization in Graded Murrah buffaloes.	D. Srinivas Kumar J. Rama Prasad & E. Raghava Rao.	2011 Veterinary world. 4: 22 – 24.
3.	Effect of MilQx – a commercial rumen specific probiotic on milk yield and milk composition in Holstein Friesian cows under tropical condition.	D. Srinivas Kumar E. Raghava Rao, R. Sowjanya & V. Karuna Sri.	2011 Animal Science Reporter. 5: 54 – 58.

4.	Rumen fermentation pattern in graded Murrah buffalo bulls fed on Levucell SC -20 yeast (Saccharomyces cervice-ae CNCM – 1077) culture.	D. Srinivas Kumar. J. Rama Prasad & E. Raghava Rao.	2011 Animal Science Reporter. 5: 43 – 49.
5	Gene expression pattern in different grades of Buffalo (Bubalus bubalis) Oocytes.	Srinivasa Prasad Ch., V.S. Gomathy, A. Palanisamy, G. Dhinakar Raj, A.Thangavel and S. Sathesh Kumar	29(2): 148-153 Buffalo Bulletin, 2010
6.	Prevalence of induced clindamycin resistance in methycillin resistant Staphylococcus aureus from hospital population of coastal Andhra Pradesh.	P. Lakshmana Swamy, T. Srinivasa Rao, Ch. Srinivasa Prasad, P. Raj Kumar, K. Santhisree, L. Cyril Arun Kumar, A. Venkata Subba Rao, and Showkat Ahmed Shah	Archives of Clinical Microbiology. 2(1): 3, 2011
7.	Role of certain flavonoids and vitamin-E against doxorubicin-induced oxidative stress	Raja Kumar Parabathina, E. Muralinath, P. Lakshmana Swamy, V. V. S. N. Hari Krishna and K. Santhi Sree.	J. Chem. Pharm. Res., 3(2):816-834, 2011.
8.	Studies on Ameliorative Effects of Morin, Rutin, Quercetin and Vitamin-E against the Doxorubicin-induced Cardiomyopathy,	Raja Kumar Parabathina, E. Muralinath, P. Lakshmana Swamy, V. V. S. N. Hari Krishna and G. Srinivasa Rao,	Der Pharmacia Sinica. 2011, 2 (2): 285-298.
9.	Effects of vitamin E, Mortin and Queercitin against DOX induced oxidative stress.	Raja Kumar Parabathina, E.Muralinath,. G. Kishore and Kaza Somasekhara Rao	International Journal of Applied Biology and Pharmaceutical Technology 2 (3): April-June-2011
10.	Studies on Protective Effects of Flavonoids Morin, Rutin,, Quercetin and Vitamin-E against the Doxorubicin-induced Cardiomyopathy in Rabbits.	Raja Kumar Parabathina, E.Muralinath, P.Lakshmana Swamy, V.V.S.N. Hari Krishna and G.Srinivasa Rao	International journal of Genetic Engineering and Biotechnology 2 (2): 173-189, 2011

11.	Haematological changes in ovine upper respiratory tract diseases.	Muralinath, E., N.Syam Sundar, V.H Rao and N.A Singari.	Andhra Pradesh Veterinarian July-2010
12	RNA interference and its therapeutic applications	Srinivasa Rao T., Srinivasa Prasad Ch., Showkat Ahmed Shah and Mudasir Ali Rather	Veterinary World Vol.4(5):225-229, 2011
13.	Recurrent deep canine pyoderma: Clinical syndrome, Causative pathogens and treatment protocol	K. Suresh, K. Rajesh, K. Lakshmi Kavitha and N. Syaam Sundar	Animal Science Reporter 2010 : 4 (2) Pp:60-64
14.	Sublingual Sialocele in buffalo-A Case Report	P. Vidya Sagar, K.Rajesh, D.Srinivasa Kumar and K. Suresh	Animal Science Reporter 2010 : 4 (2) Pp:69-71
15.	Acue acalculous cholec-ystitis in dog - case profile	N. Lakshmi Rani, K. Rajesh, K. Suresh, M. Sreenu, and N.Syaam Sundar	Animal Science Reporter 2010 : 4 (2) Pp:72-74
16.	Clinical Management of degree burns in a she buffalo- a case report	P. Vidya Sagar, K.Rajesh, K. Lakshmi Kavitha and K. Suresh	Buffalo bulletin2010 Vol. 29 (1)second
17.	Cardiomyopathy in a dog	K. Rajesh, K. Suresh, K. Lakshmi Kavitha and N.Syaam Sundar	Indian Veterinary Journal 2010 : 87:977-912
18.	Ankyloglossia in an ongole calf	K. Rajesh, V. Devi Prasad, K. Suresh, V.S.C.Bose and N.Syaam Sundar	Indian Veterinary Journal 2010 : 87:1027-1028
19.	Studies on the udder and teat morphology and their relationship with milk yield in Murrah buffaloes	R.M.V. Prasad, K. Sudhakar, E. Raghava Rao, B.Ramesh Gupta and M. Mahender	Livestock Research for Rural Development, 2010
20.	Effect of housing system on milk yield, cleanliness and lameness in Murrah buffaloes	R.M.V. Prasad, K. Sudhakar, E. Raghava Rao, B.Ramesh Gupta and M. Mahender	Buffalo Bulletin, 2010

21.	Studies on the udder and teat measurements as affected by parity and their relationship with milk yield in Murrah Buffaloes	R.M.V. Prasad, E. Raghava Rao, K. Sudhakar, B.Ramesh Gupta and M. Mahender	Buffalo Bulletin, 2010
22.	Effect of housing system on cleanliness, lameness and behaviour of Murrah Buffaloes	R.M.V. Prasad, K. Sudhakar, E. Raghava Rao, B.Ramesh Gupta and M. Mahender	The Indian Veterinary Journal, 2010
23.	Multi drug resistance patterns of Shiga toxin – producing Escherichia coli (STEC) and non – STEC isolates from meats, RTE meat foods, drinking water and human diarrhoeic samples of Punjab, India.	Sriniva Rao,T., Gill J.P.S., Ravikumar GVPPS and Sandeep Ghatak.	Archives of Clin. Microbiol 2:2:3,1-13, 2011
24.	Prevalence and Putative Virulence Genes of Shiga Toxin-Producing Escherichia Coli Isolated from Water, Fish and Human Diarrhoeic Samples in Punjab, India.	Srinivasa Rao T., J.P.S. Gill, G.V.V.P.S. Ravi Kumar, Sandeep Ghatak, K.N. Bhilegaonkar, Mudasir Ali Rather and P.K. Patil	International journal of applied Bio-technology and Bio-chemistry Vol.1:59-70, 2011
25.	Enterotoxigenic profile of Bacillus cereus strains isolated from raw and pasteurized milk.	M.A. Rather, R.S. Aulakh, J P S GillL, R Verma and T S Rao.	Indian Journal of Animal Sciences . 81 (5): 21–00, May, 2011
26.	Genetic studies on production and immune response traits in IWH strain on White Leghorn	P.Jaya Laxmi, B.Ramesh Gupta, R.N.Chatterjee, R.P.Sharma and V.Ravinder Reddy	Indian Journal of Poultry Science 45(1):6-9
27.	Genetic studies on production and immune response traits in IWK strain on White Leghorn	P.Jaya Laxmi, B.Ramesh Gupta, R.N.Chatterjee, R.P.Sharma and V.Ravinder Reddy	Indian Journal of Poultry Science 45(2):123-126
28.	Incidence of mastitis in buffaloes and somatic cell counts.	K. Lakshmi Kavitha, K. Rajesh, K. Suresh, K. Satheesh and N. Syaama sundar.	Animal Science Reporter – 2010

29.	Surveillance of Ongole cattle in an organized farm against TB, JD,brucellosis and IBR / IPV.	K. Lakshmi Kavitha, . K. Babu Rao and K. Satheesh	Indian Veterinary Journal – 2011
30.	Mobitz type II heart block in a Labrador.	K. Rajesh, K. Suresh, K. Lakshmi Kavitha and N. Syaama Sundar.	International Veterinary Medicine-2010
31.	A study on the quality of shell eggs during rainy season	B.Eswara Rao & E.Naga Mallika	Paper presented at IMSACON-III - 2010 Pg No.283
32.	Hygienic Management of Abattoir	E.NagaMallika & B.ESwara Rao	Livestock international - 2010 Page No. 45
33.	Development of Chicken meat papad with different extenders.	E.NagaMallika & B.ESwara Rao	Indian Journal of Poultry science – 2010 Vol.45(3)
34.	Physico-chemical and sensory characteristics of low fat pork sausages and its microbial quality during storage in aerobic and vacuum Package	E.NagaMallika & K.Prabhakar	Animal science reporter - 2010 Vol.4(3) :107-113
35.	Quality of low fat pork sausage containing milk co-precipitate	E.NagaMallika, P.M.Reddy & K.Prabhakar	Journal of food science and technology - 2010 Vol.47(5): 571-573
CVSc., Proddatur			
1	Effect of yeast culture supplementation on nutrient utilization in Graded Murrah buffalo bull calves.	Dr.K.Sarjan rao	Livestock research for rural development 22(7):2010
2	Nutrient utilization of Azolla and sheanut cake in Nellore sheep under different management systems	Dr.K.Sarjan rao	Indian Journal of small ruminants, 2011 17(1):59-63.
3	Study on the reproductive performance of sheep in migratory and semi mig-ratory production system.	Dr.K.Sarjan rao Dr.A.Anitha	Indian Journal of animal production and management, 2010 26(3-4): 114 – 117

CVSc., Rajendranagar			
Sl.No.	**Tital**	**Authors**	**Publication details**
1	DDT and HCH Residues in Muscle and Organs of Buffaloes	Sudhakar Reddy K, Reddy KK,	J.Meat Sci., 7(1) : 32-36 in 2011
2.	Effect of feeding Pedio-ccous acidilactici and Saccharomyces boulardii as probiotics in lambs,	Reddy KK, Kumar MS	Indian J. Small Ruminants, 17(1) : 53-58, 2011
3.	Detection of cyclodiene pesticide residues in buffalo meat and effect of cooking on residual level of endosulfan	Sudhakar Reddy K, Reddy KK	J Food Sci. Technology 47 (3) : 325 – 329, in 2010
4.	Standardization of Kapoorkand prespartation and study of shelf life	Reddy KK, Reddy KS	Indian Journal of Dairy Science, 63 (1) : 16-21 in 2010`
5.	Effect of B mannose and protease in corn soya based diet on broiler performance	Reddy KK	IJPs, Vol.45 (3) December, 2010
6.	Effect of supplementation on enzymes and probio-tics on performance of broiler chicken	Reddy KK, Kumar MS	IJPs, Vol.45 (3) December 2010
7.	Organochloride pesticides residues in chicken muscle and organs	Sudhakar Reddy K, Reddy KK	IJPs, Vol.45(#) December 2010
8.	Effect of Ammonium hydroxide on different physicochemical and histological characteristic of Buffalo Meat chunks.	Naveena B Maheswarappa M. Kiran K. Sudhakar Reddy,	ICOMST 2010, 56th International and congress of MSc & Tech August 15-20. 2010 Korea DO92
9.	Performance of lactating Murrah buffaloes on sheanut cake (villetaria paradoxa)	Kishan Kumar, M., Sudhakar, K., Nagalaxmi, D., and Mahendra, M.	Indian Journal of Animal Nutrition 27(4) 2010

10.	Effect of thermo tolerant probiotic yeast (Saccharomyces cervisae) based complete diets in Nellore ram lambs	Harikrishna, Ch. And Mahender, M.	Indian Journal of Animal Production and Management 26 (3-4), pp 111-113
11.	Influence of feeding complete diets supplemented with different levels of thermo tolerant yeast in ram lambs	Harikrishan, Ch. And Mahender, M.	Indian Journal of Animal Production and Management 26 (3-4), pp 111-113
12.	Effect of feeding yeast culture (Saccharomyces cervisae) based complete diets on rumen fermentation in Nellore ram lambs	Mahender .M and Prasad, V.L.K	Indian Journal of Animal Production and Management 26 (3-4), pp 111-113
13.	Effect of feeding graded levels of poultry slaughter waste on performance of Labrador pup	Vijay,K. and Mahender, M	Indian Journal of Animal Nutrition, 27 (4) 2010
14.	Studies on udder and teat morphology and their relationship with milk yield in Murrah buffaloes	Prasad, R.M.V., . Sudhakar, K., Raghavarao, E., Ramesh Gupta,B. and Mahender,M	Livestock Research for Rural Development Vol 22 (1) 2010
15.	Housing systemes for Murrah buffaloes	Prasad,R.M.V., Sudhakar, K., Raghavarao, E., Ramesh Gupta,B. and Mahender, M.	Indian Vet J 87 pp 1134-1236
16.	Factors affecting pre body weights and growth rates in cross bread pigs	Sai Prasanna, J., Gnanaprakash, M., Ramesh Gupta, B., and Srinivasa Rao,D	Indian Journal of Animal Res weaning 4(3) pp 157-167
17.	Studies on the temperament and behavioural responsiveness of Murrah buffaloes in different locations	Prasad, RMV., Sudhakar, K., Raghavarao, E., Ramesh Gupta,B. and Mahender, M	Proceedings of International Buffalo Conference, Vol. II, 1-4 Feb, 2010 New Delhi
18.	Effect of method of milking on teat condition and somatic cell count in Murrah buffaloes	Prasad,RMV., Sudhakar, K., Raghavarao, E., Ramesh Gupta,B. and Mahender,M	Proceedings of International Buffalo Conference, Vol. II, 1-4 Feb, 2010 New Delhi
19.	Climate change, fodder production and livestock.	Nageswara Rao DVK and Thammi Raju D	In Climate Change Adaptation Strategies in Agriculture and Allied Sectors by GSLHV Prasad Rao Scientific Publishers (INDIA), JODHPUR – 342 001 pp 50-58

20.	Livelihood security of Livestock Dependent Women Self Help Groups in Andhra Pradesh	Thammi Raju, D	In Livelihood Security among Livestock dependent WSHGS in India – Empirical Evidences from Del PHE project Eds Ramakumar S and Rao SVN, RAGACOVAS, Puducherry
21.	Capacity Building of Women self Help Groups (WSHGs) in Dairying – An analysis -	Thammi Raju D and Deepa M	Jouranal of Rural Development, NIRD, Vol.30 (1) Hyderabad, Vol. 91-100
22.	Meat Consumption Pattern In Hyderabad City	Srinivasa Reddy M and Thammi Raju.D	Indian Jouranl of Animal Research, Vol. No 44 (4)
23.	Immune response in LWK strain of White Leghorn under long term selection	Jayalakshmi, P., Ramesh Gupta, B., Chaterjee, R.N., Sharma, R.P., and Ravinder Reddy, V	Indian Vety Journal Vol 88 (6)
24.	Improving socio economic of rural women through the backyard poultry farming with Rajasree birds	Krishna, D and Chinni Preetam, V.	Proceedings of Biennial ANA status Conference
25.	Genetic studies on growth and production traints in two strains of Japanese quails	K. Sakunthala Devi, B. Ramesh Gupta, M Gnana Prakash, S. Qudratullah and A Rajasekhar Reddy	Indian J. of Poult. Scie. 2010
26.	Genetic analysis of Production, Reproduction and Clutch traints in Japanees Quails	K. Sakunthala Devi, B. Ramesh Gupta, M. Gnana Prakash, S. Qudratullah and A Rajasekhar Reddy	Tamilnadu J. Vetv & Animal Sciences 2010
27.	Factors affecting pre-weaning body weights and growth rates in crossbred pigs	J. Sai Prasanna, M Gnana Prakash, B. Ramesh Gupta, D. Srinivasa Rao	Indian J. of Anim Research 2010
28.	Morphological characteriz-ation of Mahabubnagar goats	Ekambaram B, Gupta B R, Prakash M G, Sudhakar, . K and Reddy VR	Indian J. of Ani. Sciences 2011
29.	cDNA characterization & molecular analysis of buffalo MHC Class II gene DRA	D. Sakaram, S.K. Niranjan, Subodh Kumar, Soumen Naskar, S.M. Deb, Abhijit Mitra, Arjava Sharma J.	Applied Anim. Res. 2010

College of Fishery Science, Muthukur			
S.No	**Title**	**Authors**	**journal, volume, news papers with date or any other such relevant information**
1	Importance of Fish in Human Diet	A.Devi Varaprasad Reddy, P.Arya, Piyashi Debroy & Dr.G.Vidya Sagar Reddy	Fishing Chimes, April-2010, Volume-30(1), p:176 to178
2	Marketing System and Efficiency of Indian Major carps in India	B.Ganesh Kumar, K.K.Datta, Dr.G.Vidya Sagar Reddy, Muktha Menon	Agricultural Economics Research Review, Volume 23, January – June 2010, p:105 to 113
3	Quality of Ready to serve Tilapia Fish curry with PUFA in retortable pouches	Dr.K.Dhanapal, Dr.G.Vidya Sagar Reddy, S.Basu, B.B.Nayak, G.Venkateswarlu, K.Sharidhan and M.K.Chouskey	Journal of Food Science, Volume-75, Nr.7, 2010
4	Better Management Practives (BMPs) in Shrimp Farming	Dr.D.Ravindra Kumar Ch.Bhanuprakash, Reddy and Dr.G.Vidya Sagar Reddy	Aqua International, December – 2010 p:35 to 37
5	Marine Sea Food Toxins	S.Vijay Kumar Reddy, A.Devi Varaprasad Reddy & Dr.G.Vidya Sagar Reddy	Aquatech, January – 2011, Volume 9(12), p:74 to 79
6	Importance of Sea weeds as Foods	A.Devi Varaprasad Reddy, S.Vijay Kumar Reddy, K.Madhavi, Dr.K.Dhanapal &Dr.G.Vidya Sagar Reddy	Aquatech, March – 2011, Volume 10(2), p:68 to 70
7	Disease Transmission from Fish and Shrimp Products	A.Devi Varaprasad Reddy, Dr.G.Vidya Sagar Reddy, K.Thammi Raj, R.Jeya Shakila, G.Jey Sekaran	Aquatech, March – 2011, Risks Volume 10(3), p: 77 to 83
AICRP ON POULTRY BREEDING, RAJENDRANAGAR			
1	Performance of two genetic groups with aseel inheritance evolved for backyard production system	Dr.S.T.Viroji Rao Dr.V.Chinni Preetam and J.Narasimha	XXVII Annual Conference and National Symposium of Indian Poultry Science Association. 2010

LIVESTOCK RESEARACH STATION, GARIVIDI			
1	Studies on the reproductive performance of sheep in migratory and semi migratory production systems	Dr.K.Ananda Rao. Dr.K.Sarjan Rao, Dr.S.Jagadeeshwara Rao,	Indian Journal of Animal Nutrition, 2010-11
AICRP ON PIGS, TIRUPATI			
1	Effect of phytase supple bean diets on nutrient digestibility, nitrogen, calcium and phosphorus retention and excretion in finisher pigs	Suryanarayana, mentation to maize-soy-	Indian Journal of Animal Nutrition, 2010
2	Effect of dietary supplementation of sodium formate on growth performance, nutrient utilization, nitrogen balance and carcass characteristics in cross-bred pigs	Suryanarayana, MVAN., Ravi, A and Suresh, J	Indian Journal of Animal Nutrition, 2010
3	Diversification of Aquaculture through culture of murrels & magur	Dr.T.Suguna	National Seminar On "Diversification of Aquaculture Through Locally Available Fish Species (DALAF-2010)" from August 27-28th at CIFE, Kolkata centre August, 2010
4	Catch composition and production of fresh water prawn in Palair Reservoir, Andhra Pradesh, India	Dr.T.Suguna	Asian Pacific Aquaculture January, 2011
5.	Effect of dietary protein levels on the growth and survival rate of Channa striatus (Bloch) (fry & fingerlings)	Dr.T.Suguna	Asian Pacific Aquaculture January, 2011

SERVICES RENDERED

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

- About 5000 APBN fodder slips were supplied to farmers in and around Proddatur town
- A total of 63 Emu chicks, 49,003 Quail chicks and adults, 33,748 QRF chicks, , 1339 turkey poults and adults, 183 ducks and ducklings, 1499 broiler chicks and adults and 139 guinea fowls and 73 breeder rabbits were supplied by Department of Animal Genetics and Breeding and by the Dept. of Poultry Science, CVVSc.,. Rajendranagar to the farmers during the period under report.
- During the year 124 piglets were suppled to farmers by AICRP on pigs, Tirupati
- 38 Deccani breeding rams were supplied to the farmers during the year 2010-11 at LRS, Mahoobnagar and also supplied APBN-1, Coloneal guinea fodder slips to the 32 farmers for fodder development in about 16 acres
- 24 breeding rams were supplied to the needy farmers by LRS, Garividi.

B) Other services

College of Veterinary Science, Tirupati

(i) Cases treated

Name of the Department	Cases treated	Diagnostic aids	AI
Department of Surgery	3535	No. of X-rays =117	
		No. of Ultra scans = 56	
		No. of Surgeries performed = 143	
TVCC	7001	Ultrasound scans = 70	326
		Operations performed = 25	
		Endoscopy = 5	
Gynaecology and Obstestics	307		90
Department of clinical medicine	2130		
Ambulatory Clinic, Thondawada	2440		

(ii) Vaccinations done

Name of Vaccine	No of vaccination
HS vaccination	124
ET vaccination	40
FMD vaccination	163
PPR vaccination	104
RD vaccination	140

(iii) Post mortem examination

Species	Number	Significant findings
Bovine	26	Ethmoid tumor, bracken fern poisoning, Pneumonia
Ovine	12	Sheep pox, ET, PPR, Parasitic enteritis
Caprine	5	Coccidiosis, Pneumonia, Pasteurellosis
Canine	3	Adenocarcinoma of mammary gland, Lymphosarcoma
Porcine	109	Swine fever, Pasteurellosis, Lymphosarcoma
Rabbit	23	Pasteurellosis, Coccidiosis, Mange
Poultry	125	Infectious coryza, RD, Aspergillosis in Emu, Aflatoxicosis in Emu, E.Coli infection, Pasteurellosis
Zoo animals	19	Mesothelioma, Lymphosarcoma, haemangiosarcoma, pneumonia, suppurative endometritis, chronic pyelonephritis, Uterine cancer

College of Veterinary Science, Rajendranagar

(i) Cases treated

	Canines	Caprines	Ovines	Equines	Bovines	Poultry	Felines	Rabbits	Grand total
TVCC, Bhoiguda	**24270**	**3092**	**784**	**24**	**182**	**1082**	**335**	**102**	**29331**
Campus Vety. Hospital, and Veterinary Ambulatory Clinic, Mylardev pally of TVCC,	**4517**	**15670**		**1209**	**3068**				

(ii) Details of gynaec cases treated

Particulars	Large animals	Pet animals	Sheep & Goat	Total
Anestrum	110	220	465	795
Endometritis	202	-	-	202
Metritis	170	160	225	555
Pyometra	20	425	201	646
R.O.P.	115	-	1056	1171
Uterine Prolapse	18	-	122	140

Dystocia	36	122	1007	1165
Repeat Breeding	240	-	122	362
Cystic ovarian degeneration	25	-	-	25
PCL	55	-	-	55
Pseudopregnancy	-	172	-	172
Cystic endometrial hyperplasia	-	36	-	36
Misalliance	-	221	-	221
Tumors	-	120	-	120
Pregnancy Toxaemia	-	-	120	120
Hermphroditism	-	-	57	57
Miscellaneous	182	-	-	84
Total	**1095**	**1480**	**3600**	**6175**

(iii) Vaccinations done at the TVCC, Bhoiguda

Name of vaccine	No. of vaccinations
1) Anti Rabies Vaccine	6,842
2) Distemper	11,015

The staff of the Dept. of Vety. Epidemiology, CVSc., Rajendranagar have carried out vaccinations against HS (163), BQ (100) and FMD(180) regularly for the livestock at Dairy Experimental Station during the year. Similarly all sheep and goat at LES of the college were vaccinated against PPR (115), ET and (113). In addition, all the cattle brought to the campus hospital during pre monsoon season were vaccinated against HS & BQ

(iv) No. of deworming done: Cattle = 175 and Small ruminants = 448

(v) Specimens examined

	Feces	Blood	Skin scrapings	Total
Sheep & Goat	456	85	27	568
Cattle	250	79	10	339
Dog	123	76	54	253
Poultry	283	28	1	312
Total	**1112**	**268**	**92**	**1472**
Ultrasonography of abdomen : 6				
Radiography : 134				

vi) Surgical cases attended

The details of various major and minor operations done at the TVCC, Bhoiguda

Major operations		Minor operations		
Canines	Caprines	Canines	Caprines	Total
307	28	125	68	528

(vii) The species wise parasitic diseases diagnosed during the year under report are:

Sheep, goat and cattle : Fascioliosis, Amphistomosis, Schistiosomosis, Taeniosis, Moniez iosis, Strongylo*sis*, Microfilariosis, Haemonchosis, Setariosis, Trypanosomosis, Babesiosis, Theileriosis, Balantidiosis, Coccidiosis, Mange, Myiasis

Dogs: Toxocariosis, Ancylostomiosis, Erlichiosis, Amoebiosis, Mange, Myiasis Ticks and other ectoparasitic infections among animals. etc,

Poultry: Toxoplasmosis, Coccidiosis, *Ascaridia galli*, tape worm infections etc.

The Department of Veterinary Parasitology is catering to the diagnostic needs of various Government and Non governmental organizations like Nehru Zoological Park, National Police Academy, Hyderabad Race Club, Military diary farm and Veterinary hospitals of the College located at Bhoiguda, Mylardevpalli and Campus Veterinary hospital and other private farms.

(viii) Details of modern diagnostic facilities available

- The Ultrasound Scanning Machine, Veterinary Video Endoscope, C-arm Image intensifier, Phaco Emulsification Unit, Keratometer and Opthalmoscope are available at the TVCC, Bhoiguda for diagnosis of various diseases.
- The facilities to diagnose the*Toxoplasma gondii* infection in poultry and animals by the Fluorescent antibody technique are available in the Dept. of Veterinary Parasitology.

(ix) Post-mortem examinations

Species	Number	Significant findings
Bovine	21	Renal failure, Rupture of internal organs & Shock, Asphyxia, Pneumonia,
Equine	07	Rupture of internal organs & Shock, Septicaemia
Ovine	38	Sero fibrinous pneumonia (Pasteurellosis), Hemorrhagic enteritis, Heat stroke
Caprine	29	Asphyxia, Pneumonia, Jaundice
Canine	02	Pneumoconiosis, Pneumonia
Porcine	03	Endocarditis, Twist in intestine
Lab. Animals(Rabbit)	232	Suppurative pneumonia, Hemorrhagic shock, Toxaemia
Avian/ Poultry	6455	Coccidiosis, Ranikhet disease, Tracheitis, Aspergillosis, Heat stroke, IBD

NTR College of Veterinary Science, Gannavaram

(i) Cases treated

	Canines	Caprines	Ovines	Equines	Bovines	Poultry	Felines	Others	Grand total
TVCC,	1765	481		-	5294	1016		29	
Mass		77			368	8			453
animal									
health									
camps									

(ii) Details of gynaec cases treated

Name of the disease	No of animals treated
In heat (inseminated)	1314
Anoestrum	712
Silent heat	60
Endometritis	303
Repeat breeders	284
Pregnancy diagnosis	654
Positive for pregnancy	280
Negative for pregnancy	120
Cystic ovarian degeneration	32
Dystocia	37
Prolapse of genitalia	4
Cervico vaginal Prolapse	3
Uterine prolapse	1
Septic metritis	10
Retention of afterbirth	3
Total	**3817**

(iii) Vaccinations conducted species wise

Species	Vaccine	2010-11
Cattle	HS	400 doses
	FMD	500 doses
Sheep	ET	50 doses
	HS	1100 doses
	PPR	100 doses
	Sheep Pox	50 doses
Poultry	RD	400 doses
	FP	500 doses
Dogs	Rabies ARV	300 doses

A mass campaign against prophylaxis against rabies vaccination was under taken on 06.07.2010 at the premises of Teaching Veterinary Clinical Complex and a total of 250 dogs were protected against this dangerous disease.

(iv) No. of deworming done: Calves: 229 & Sheep and Goat : 6800

(v) Surgical cases attended :

S.No	Name of the operation	No. of animals operated	Percentage
Soft tissue surgeries			
1.	Ovariohysterectomy	17	18.25
2.	Cystotomy & cystorrhaphy	6	6.25
3.	Castration	2	2.41
4	Intestinal anastomosis	2	2.41
5	Herniorraphy	5	5.30
6	Excision of tumors	8	8.16
7	Docking	4	4.08
8	Caesarean section	7	7.14
9	Oesophagotomy	1	1.3
10	Tracheotomy	1	1.3
11	Evisceration of orbit	2	2.41
12	Gastrotomy	2	2.41
Orthopedic surgeries			
1	Intramedullary pinning	9	9.18
2	Amputation of limb	3	3.06
3	Plaster of paris application	8	8.16
4	External coaptation splints	8	8.16
5	Dynamic compression plating	1	1.3
6	Circlage and hemicirclage wiring	2	2.41
7	Exodontia	2	2.41
1	Ingluviotomy	1	1.3
2	Tracheal anastomosis	1	1.3
3	Oesophageal anastomosis	1	1.3
	TOTAL	**93**	**100.00**

Large animals

S.No	Name of the operation	No. of animals operated	Percentage
1	Amputation of horn	33	32.04
2	Caesarean section	32	31.07
3	Evisceration of orbit	3	2.91
4	Amputation of tail	2	1.94
5	Oesophagotomy	2	1.94
6	Scrotal ablation	3	2.91
7	Castration	5	4.85
8	Patellar desmotomy	5	4.85
9	Abomasotomy	1	0.97
10	Rumenotomy	2	1.94
11	Cystotomy & urethrotomy	8	7.77
12	Repair of hernias	3	2.91
13	Excision of tumors	3	2.91
14	Hygroma	1	0.99

(vi) Postmortem examination:

Species	Number	Significant findings
Sheep	1	Broncho Pneumonia & Catarrhal Enteritis
Pig	1	Catarrhal Enteritis
Dog	1	Gastro enteritis
Goat	1	Broncho Pneumonia
She buffalo	2	Fibrinous Pericarditis & Pleuritis, Pneumonia
Poultry	16	Pasterellosis, Enteritis, Salpingitis Omphalitis

FINANCE :

Sl.No.	Particulars	Receipts (Rs. In Crores)	Expenditure (Rs. In Crores)
(1)	State Funds		
	(i) Salaries	40.00	43.73
	(ii) Contingencies	48.75	50.96
(2)	I.C.A.R.		
	(i) Developmental Grants	3.01	4.02
	(ii) Network Projects	1.88	1.95
	(iii) Modernization of Agricultural University Farms	3.60	3.45
(3)	R.K.V.Y. (GOI)	2.79	4.56
(4)	Research Projects Funded by External Agencies	3.26	2.67
(5)	Direct Receipts Reaslized	6.86	
	Total Rs. :	**110.15**	**111.34**

Annexures

Annexure – I

Members of Board of Management

1	Dr.Md.Hafeez Vice-Chancellor, SVVU, Tirupati	Chairman
2	Sri Shripad Bhale Rao, IASSpecial Chief Secretary to Government, AH DD & F Department, Govt. of AP, Hyderabad	Member
3	Dr.Manmohan Singh, IAS Commissioner of Fisheries, Govt. of AP, Hyderabad	Member
4	Dr.M.V.Reddy Director of Animal Husbandry, Govt. of AP, Hyderabad	Member
5	Sri M.Subrahmanyam Deputy Secretary to Government, Finance Department, Govt. of AP, Hyderabad	Member
6	Dr.C.S.Prasad Assistant Director General (ANP)ICAR, New Delhi	Member
7	Dr.P.Raghava Reddy Vice-Chancellor, ANGRAU, Hyderabad	Member
8	Sri I.Y.R.Krishna Rao, IAS Executive Officer, TTD, Tirupati	Member
9	Dr.A.V.Krishnam Raju / Dr.I.Venkateswara Rao Vice-Chancellor, NTR Health UniversityVijayawada	Member
10	Dr.T.Harikrishna Elected Member, AP State Veterinary Council Hyderabad	Member
11	Dr.S.Umamaheswara Rao Registrar, SVVU, Tirupati	Secretary

Annexure – II

Academic Council Members

1	Dr. D.V.G. Krishna Mohan, Vice-Chancellor	Chairman
2	Dr. S.Umamaheswara Rao, Registrar	Member - Secretary
3	The Vice-Chancellor, NTR University of Health Sciences, Vijayawada	Member
4	The Vice-Chancellor, ANGR Agricultural University, Rajendranagar, Hyderabad	Member
5	The Director of Animal Husbandry, Government of AP, Shanthinagar, Hyderabad	Member
6	The Commissioner of Fisheries, Government of AP, Mutsya Bhavan, Hyderabad	Member
7	The Executive Officer, Tirumala Tirupati Devasthanams, Tirupati	Member
8	Dr.V.Prabhakar Rao, Registrar (Retired), ANGRAU, 202, Ravi Kiran Apartments, 3-6-492, Himayatnagar, Hyderabad – 500 029	Member
9	Dr.K.T.Sampath, Director, National Institute of Animal Nutrition and Physiology, Adugodi, Bangalore – 560 030	Member
10	Dr.J.Muralidhara Reddy, Professor & Head (Retired), Department of Physiology, 10-3-78, Prakash Enclave, Plot No.601, East Maredipalli, Secunderabad – 500 026	Member
11	Dr.Y.Ramana Reddy, Associate Professor, Department of Animal Nutrition, College of Veterinary Science, Rajendranagar, Hyderabad	Member
12	Dr. V.Jayarama Krishna, Former Dean, Faculty of Veterinary Science, ANGRAU, Hyderabad	Member
13	Sri. Ch.V.Surya Rao, Kakinada, East Godavari District	Member
14	Dr.K.Somasekhar Reddy, Dean of Veterinary Science, S.V. Veterinary University	Member
15	Dr.Md.Hafeez, Director of Research, S.V. Veterinary University	Member
16	Dr.P.V.V.Satyanarayana Reddy, Director of Extension, S.V. Veterinary University	Member
17	Dr.M.Ranganadham, Dean of Dairy Science, S.V. Veterinary University	Member

18	Dr.K.Subramanyam Naidu, Dean of Student Affairs, S.V. Veterinary University	Member
19	Dr.T.S.Chandrasekhar Rao, Associate Dean, College of Veterinary Science, Tirupati	Member
20	Dr.P.Ameer Hamza, Associate Dean, College of Veterinary Science, Rajendranagar	Member
21	Dr.B.Chamundeswari Devi, Associate Dean, College of Fishery Science, Muthukur	Member
22	Dr.K.Sarjan Rao, Associate Dean, College of Veterinary Science, Praddatur – 516 360, Kadapa District	Member
23	Dr. S.Ravi Kumar, Professor & Officer-in-charge, College of Dairy Technology, TIRUPATI	Member
24	Dr. K.Ranga Rao, Officer-in-charge, Dairy Technology Programme, KAMAREDDY – 503 111, Nizamabad District	Member
25	Dr.K.Babu Rao, Professor Principal Scientist, Department of Animal Reproduction, Gyneacology & Obstetrics, Livestock Research Station, LAM FARM, Guntur	Member
26	Dr. D.S.Tirumala Rao, Professor University Head, Department of Clinical Veterinary Medicine, Veterinary Hospital, Bhoiguda, SECUNDERABAD – 500 003	Member
27	Dr. Syed Qudratullah, Professor, Department of Poultry Science, College of Veterinary Science, Rajendranagar,	Member
28	Dr. M.Parthasarathy, Professor (CAS) & University Head, Department of Animal Nutrition, College of Veterinary Science, Tirupati	Member
29	Dr.K.Sudhakar Reddy, Professor (CAS) & University Head, Department of Livestock Products Technology, College of Veterinary Science, Rajendranagar	Member
30	Dr.P.Eswara Prasad, Professor & University Head, Department of Veterinary Biochemistry, College of Veterinary Science, Tirupati	Member
31	Dr.V.Hanumantha Rao, Professor & University Head, Department of Veterinary Physiology, College of Veterinary Science, Tirupati	Member

32	Dr. D.Srinivasulu, Professor & University Head, Department of Veterinary Microbiology, College of Veterinary Science, Tirupati	Member
33	Dr. Ch.Srilatha, Professor & University Head, Department of Veterinary Pathology, College of Veterinary Science, Tirupati	Member
34	Dr.B.Ramesh Gupta, Professor & University Head, Department of Animal Genetics and Breeding, College of Veterinary Science, Rajendranagar, Hyderabad	Member
35	Dr. T.Madhava Rao, Professor & University Head, Department of Veterinary Public Health, College of Veterinary Science, Rajendranagar, Hyderabad	Member
36	Dr. A. Gopal Reddy, Professor & University Head, Department of Veterinary Pharmacology & Toxicology, College of Veterinary Science, Rajendranagar, Rajendranagar, Hyderabad	Member
37	Dr. S.Jagadeeswara Rao, Professor & University Head, Department of Livestock Production & Management, NTR College of Veterinary Science, Gannavaram	Member
38	Dr. K.B.P.Raghavender, Professor & University Head, Department of Veterinary Surgery & Radiology, College of Veterinary Science, Rajendranagar, Gannavaram	Member
39	Dr.V.Padmanabha Reddy, Professor (CAS), Department of Dairy Microbiology, College of Dairy Technology, Tirupati	Member
40	Dr.I.Shankara Reddy, Professor (CAS), Department of Dairy Chemisry, College of Dairy Technology, Tirupati	Member
41	Dr.Y.Kotilinga Reddy, Professor (CAS), Department of Dairy Technology, College of Dairy Technology, Tirupati	Member
42	Dr.D.Thammi Raju, Associate Professor (CAS), Department of Veterinary & AH Extension, College of Veterinary Science, Rajendranagar, Hyderabad.	Member
43	Dr. M.Uday Kumar, Associate Professor (CAS) & University Head, Department of Veterinary Parasitology, College of Veterinary Science, Rajendranagar, Hyderabad	Member
44	Dr.B.Sredevi, Associate Professor & University Head, Department of Veterinary Epidemiology and Preventive Medicine, College of Veterinary Science, Tirupati	Member

45	Dr.K.Venugopal Naidu, Professor (CAS), Department of Animal Reproduction, Gynaecology & Obstetrics, College of Veterinary Science, Tirupati	Member
46	Dr.P.R.Srinivasa Murthy, Professor (CAS), Department of Livestock Products Technology, College of Veterinary Science, Tirupati	Member
47	Dr.P.Sudhakara Reddy, Professor (CAS), Department of Poultry Science, College of Veterinary Science, Tirupati	Member
48	Dr.V.Ravinder Reddy, Professor (CAS), Department of Poultry Science, College of Veterinary Science, Rajendranagar, Hyderabad	Member
49	Dr.K.Nalini Kumari, Department of Clinical Veterinary Medicine, College of Veterinary Science, Tirupati	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 Vety., 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 out side the university (To be invited by 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 Vety. 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 Dean

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

VI One teacher in the cadre of Asst. Professor

Annexure - IV

CATEGORY WISE STUDENTS ON ROLLS

COLLEGE OF VETERINARY SCIENCE, TIRUPATI																						GT
B.V.Sc &	OC		BC		SC		ST		VCI		NRI		DEF		PH		SP		KM		TOTAL		
A.H	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	
I YEAR	21	10	07	10	05	04	05	02	08	01	11	03	-	-	01	-	-	-	01	-	59	30	89
II YEAR	13	12	12	03	03	06	-	-	05	-	-	02	-	-	01	-	-	-	-	-	34	23	57
II YEAR(B)	02	-	02	01	-	01	-	-	02	-	-	01	-	-	-	-	-	-	01	-	07	03	10
III YEAR	20	13	07	05	03	04	02	01	01	-	01	01	-	-	02	-	-	-	-	-	36	24	60
IV YEAR	18	14	10	08	04	03	01	03	04	-	09	03	-	-	01	-	-	-	-	-	47	31	78
V YEAR	24	17	08	05	06	03	02	-	06	-	04	-	-	-	-	-	-	-	-	-	50	25	75
TOTAL	98	66	46	32	21	21	10	06	26	01	25	10	-	-	05	-	-	-	02	-	233	136	369

COLLEGE OF VETERINARY SCIENCE, RAJENDRANAGAR																						GT
B.V.Sc &	OC		BC		SC		ST		VCI		NCC		NRI		PH		DF		KM		TOTAL		
A.H	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	
I YEAR	29	14	11	05	05	06	-	01	13	-	-	02	09	07	02	-	-		01	01	70	36	106
II YEAR	21	10	01	06	01	-	02	01	03	-	-	-	-	02	01	-	01	01	-	-	30	20	50
II YEAR(B)	05	-	01	-	01	01	01	-	03	-	-	-	04	02	-	-	-	-	-	-	15	03	18
III YEAR	22	13	11	03	04	02	06	01	05	-	-	-	03	04	-	-					51	23	74
IV YEAR	15	07	09	07	05	03	03	03	11	-	-	01	05	01	01	01					49	23	72
V YEAR	13	06	16	07	06	03	04	03	07	-	-	-	06	01							52	20	72
TOTAL	105	50	49	28	22	15	16	09	42	-	-	03	27	17	04	01	01	01	01	01	267	125	392

2010 - 2011 ACADEMIC YEAR

COLLEGE OF VETERINARY SCIENCE, GANNAVARAM																			GT
B.V.Sc &	OC		BC		SC		ST		VCI		DEF		NRI		PH		TOTAL		
A.H	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	
I YEAR	22	14	09	09	05	07	01	02	08	-	-	-	12	02	-	-	57	34	91
II YEAR	14	10	07	10	04	03	01	01	02	-	-	-	-	-	-	-	28	24	52
II YEAR(B)	-	-	02	02	-	-	-	01	-	-	-	-	03	02	-	-	05	05	10
III YEAR	13	10	09	09	04	06	02	01	01	-	-	-	-	-	01	-	30	26	56
IV YEAR	09	07	23	05	09	04	-	-	-	-	-	-	-	-	01	-	42	16	58
V YEAR	14	10	10	14	04	03	01	-	-	-	-	-	-	-	-	-	29	27	56
TOTAL	72	51	60	49	26	23	05	05	11	-	-	-	15	04	02	-	191	132	323

COLLEGE OF VETERINARY SCIENCE, PRODDUTUR																			GT
B.V.Sc &	OC		BC		SC		ST		ICAR		DEF		NRI		NCC		TOTAL		
A.H	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	
I YEAR	03	03	10	04	03	01	-	-	-	-	-	-	-	-	-	-	16	08	24
II YEAR	03	03	07	03	03	03	03	02	-	-	-	-	-	-	-	-	16	11	27
III YEAR	02	05	06	09	08	01	-	-	-	-	-	-	-	-	-	-	16	15	31
TOTAL	08	11	23	16	14	05	03	02	-	-	-	-	-	-	-	-	48	34	82

2010-2011 ACADEMIC YEAR

COLLEGE OF VETERINARY SCIENCE, MUTHUKURU																			GT
B.F.Sc &	OC		BC		SC		ST		VCI		DEF		ICAR		KM		TOTAL		
	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	
I YEAR	01	01	07	04	03	02	05	01	-	-	-	-	04	01	-	-	20	09	29
II YEAR	01	01	03	01	04	04	02	01	-	-	-	-	04	-	-	-	14	07	21
III YEAR	02	01	01	02	02	04	06	02	-	-	-	-	02	01	-	01	13	11	24
IV YEAR	03	-	03	01	02	01	02	-	-	-	-	-	04	-	-	-	14	02	16
TOTAL	07	03	14	08	11	11	15	04	-	-	-	-	14	02	-	01	61	29	90

COLLEGE OF VETERINARY SCIENCE, TIRUPATHI																			GT
B.Tech.	OC		BC		SC		ST		VCI		DEF		ICAR		KM		TOTAL		
	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G	
I YEAR	01	03	09	01	02	02	-	01	-	-	-	-	03	-	-	-	15	07	22
II YEAR	06	02	04	06	02	-	01	-	-	-	-	-	04	-	-	-	17	08	25
III YEAR	09	04	09	02	-	-	-	-	-	-	-	-	-	-	-	-	18	06	24
III YEAR(B)	04	02	02	01	01	-	-	-	-	-	-	-	02	-	-	-	09	03	12
IV YEAR	04	01	05	01	02	-	-	-	-	-	-	-	-	-	-	-	11	02	13
TOTAL	24	12	29	11	07	02	01	01	-	-	-	-	09	-	-	-	70	26	96


SRI VENKATESWARA VETERINARY UNIVERSITY, TIRUPATI
SECOND CONVOCATION


National Service


WORLD AIDS DAY
AWARENESS CAMPAIGN BY
NTR COLLEGE OF
VETERINARY SCIENC
GANNAVARAM
01/12/2010